FOOTPRINTS IN PARADISE

Ecotourism, Local Knowledge, and Nature Therapies in Okinawa

Andrea E. Murray
For my grandparents, Jo and Winston Murray,
who taught me the value of good old-fashioned hard work
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Social and political life on small subtropical islands is frequently shaped by the economic imperative of sustainable tourism development. In Okinawa, “ecotourism” promises to provide employment for a dwindling population of rural youth while preserving the natural environment and bolstering regional pride. In this volume, I consider how new subjectivities are produced when host communities come to see themselves through the lens of the visiting tourist. I further explore how Okinawans’ sense of place and identity are transformed as their language, landscapes, and wildlife are reconstituted as cherishable yet vulnerable resources.

I present a case study of how local ecological knowledge moves inter-generationally (between Okinawan elders and youth) and cross-culturally (between Okinawan nature guides and international and mainland Japanese tourists, the latter being often also considered “foreign”). By tracing the formal and informal social networks through which specific attitudes, beliefs, and sensibilities about the environment are circulated and reproduced, I demonstrate how nature-based therapies marketed to tourists for stress relief and lifestyle rehabilitation (e.g., forest therapy, dolphin therapy, and coral gardening) also influence Okinawan attitudes toward health and wellness. These kinds of activities reconfigure human relationships with nonhuman animal species: creatures previously “good to eat” (Harris 1985) are now even better to heal.

Sustainability in Okinawa always begins with the question of military bases. The ecotourism concept poses a compelling, if problematic, economic alternative to the expansion of U.S. bases into northern Okinawa, the hub of environmentally oriented conservationist, educational, and tourist programs on the main island. My analysis of the ecological and cultural effects of sustaining the tourism industry in Okinawa speaks to small islands facing similar economic and environmental challenges in East Asia, the Caribbean, Oceania, and beyond.
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INTRODUCTION

“We WANT THEM TO KNOW NATURE!!”

Our guide’s impassioned explanation of his primary objective was lost on most of the sunburned ecotour group I had joined for an afternoon of mangrove kayaking in Higashi, one of Okinawa Island’s northernmost villages. We sat in a circle on straw tatami mats, sheltered at last from a blazing July sun by the red-tiled roof of a traditional Okinawan house built on sturdy stilts to welcome rare cool breezes blowing through. An exhausted, hungry group of ecotourists dug eagerly into a bowl full of saataa andaagii, black sugar and pineapple-flavored “Okinawa donuts,” and chugged hibiscus tea. Our guide, “Cha-chan,” a twenty-something Okinawan outdoor enthusiast nicknamed after brown tea leaves for his year-round tan, told us about his desire to “teach” nature, along with a bit of Okinawan history and culture, on every tour he conducted.

His boss, Mr. Miyagi, a generation or two older and noticeably less tan, sat on the opposite side of the floor table we were gathered around. Miyagi interjected that the Higashi Nature School’s goals were also practical: “Of course, our first objective is to improve the economic health of the area. Agriculture does not appeal to the younger generations, so we bring in third sector business and industry to retain and attract young people.”

Cha-chan was one of many self-declared “nature lovers” I met during fifteen months of fieldwork in the Japanese prefecture of Okinawa. He spoke of the need to retain the rich biodiversity of northern ecosystems, symbolically including himself when he told me: “I never want to be separated from this place!” His boss, director of the Higashi Tourism Promotion Association, was also a nature enthusiast but focused more on how to sustain the livelihood of young guides like Cha-chan by continuing to attract the twenty thousand mainland Japanese tourists who annually visit his hometown of Higashi, a village with only two thousand permanent residents. Since the late 1990s, the Higashi Nature School has grown to become northern Okinawa’s model of success in promoting the “ecotourism” concept to visiting
Miyagi’s description of the dramatic shift in local labor away from the sun, sweat, and dirt afforded by the primary experience of farming, toward the more tertiary sun, sweat, and dirt supplied by guiding ecotours, indicates that tourists are not the only population to experience something profoundly new and different when they don a wetsuit to dive deeper into the ocean, or enter a subtropical forest to listen for the call of rare birds. When I asked him whether the growth of ecotourism in Higashi had changed local attitudes toward nature, Miyagi replied without hesitating: “Not much. It hasn’t yet. The locals only see the money. It’s easy to see business. Then again, people have begun to really want to show a nice clean town to visitors for profit purposes, and this has had a good effect on the environment. The attitudes will change from now on.”

This book is an attempt to see, notice, and know how “Nature” is constructed and reconstituted as a cultural, economic, and touristic resource in Okinawa. Looking through the lens of Japanese and international ecotourists while tracing the footprints of their Okinawan nature interpreters, I present a case study of how knowledge about the environment is localized, packaged, and reproduced for tourist consumption in northern Okinawa as part of a much larger Japanese state project promoting village revitalization. The economic and social transformation of the northern Yambaru Area of Okinawa Island—from an “inconvenient countrysite” and a “harsh place with only mountains” (Ministry of Environment 2008: 2) into a biodiversity hotspot that hosts nearly 25 percent of Japan’s plant species and four of Japan’s twelve endemic animals—redefines the environmental sensibilities of visitors and residents alike.

I consider the touristic, activist, and educational initiatives through which Okinawans express and promote their archipelago’s specific environmental concerns to visitors while forging new touristic enterprises to sustain local economies. The binarizing social and analytical categories of visitor/visited, local/expert, insider/outside, and host/guest frequently deployed in anthropological studies of tourism are both reproduced and transcended in Okinawa. Multiple forms of naturalized touristic encounters between humans and other humans, and between humans and nonhuman forms of life are made visible through ecotourism and other facilitated experiences of nature. The nature of these experiences calls into question the location and limits of the natural environment that local guides and visiting tourists seek to experience, encouraging new theoretical perspectives on why we are compelled to get closer to “green.” In Okinawa, knowing nature—even loving it—is a matter of interpretation.
Locating the Ecotourist: Theoretical Questions

As a typical Japanese tourist in Okinawa, you would probably arrive in January, March, or August with your spouse and 1.25 children, drop your luggage at one of Japan Airlines’ luxurious, all-inclusive beachfront hotels, and instruct your pre-programmed GPS-equipped rental car to take you straight to three of the most popular tourist sites: Okinawa Peace Memorial Park; an enclosed cultural theme park such as Okinawa World; and Churaumi, the world’s second-largest aquarium. You might collect a few kariyushi “happiness” Hawaiian shirts for your co-workers and some pit viper–infused awamori liquor before finally hitting the beach, where you could partake in marine leisure sports such as snorkeling or a one-time fun dive. You would allot approximately 2.5 days to see, do, and buy it all before flying back to Tokyo to return to work, and your fond memories might not include any Okinawans.

For a middle-class family embarking on its first big trip, the practical appeal of taking a “quasi-overseas trip to quasi-foreign, quasi-tropical” (Figal 2012: 122) Okinawa would likely include the ease of speaking Japanese and spending yen, minimal travel time (about four hours by plane from Tokyo to Naha), and affordable amenities.

These stereotypes of Japanese patterns of domestic tourism are well-worn territory, among both tourists (5.7 million visited Okinawa in 2009), and anthropologists of Japan (e.g., Graburn 1989; Hendry 1995; Ivy 1995). Anthropologists have tended to frame their studies of tourism in terms of the ritual and religious origins of tourism (Graburn 1983), the marketing of village tourism to urban Japanese (Ivy 1995; Robertson 1991), or the negative social, cultural, and environmental effects of village tourism (Moon 1997, 1998). Whether explaining the historical roots of contemporary Japanese modes of travel (Graburn 1983) or analyzing the relationship between nostalgia and national identity at play in domestic village travel (Robertson 1988), anthropologists of Japan have tended to study domestic tourism from the perspective of the tourist guest. Common scholarly assumptions that tourism has been “imposed on locals, not sought, and not invited” (Stronza 2001: 262) have impeded a full understanding of why host communities engage in tourism in particular ways. Studies of recipient communities have criticized the deleterious social and environmental effects of tourism caused by the commodification of nature (Moon 1997: 222) without fully considering the financial, cultural, and community benefits that locals may also derive from actively studying their surroundings and sharing certain aspects of their lives with outsiders.

Marilyn Ivy points out that “those who are living continuously in the place where they were born do not call that place furusato [old village or native place]” (Ivy 1995: 103). I contribute to the anthropology of Okinawa by asking how nostalgia operates for Okinawan hosts engaged in ecotourism.
in northern towns such as Ōgimi, where a giant carved banner greets visitors: “Welcome to the long-living furusato!” Chris Nelson’s (2008: 24) ethnography of Okinawan popular performers provides insight into how the trope of the idyllic Okinawan past both attracts visitors “in search of an authentic experience of a lost Japan” and incites the postwar “will to memory” among the performers. Okinawan nature interpreters (including young novices and experienced retirees) also reify these discourses of loss through storytelling and performance when leading tours.

The existing literature on Japan provides useful theoretical frameworks for understanding how domestic tourism supports rural areas struggling with depopulation and stagnant economies (Ivy 1988, 1995; Moon 1997; Siegenthaler 1999) and creates educational opportunities for tourist “pilgrims” (Graburn 1983). Yugo Ono’s (2005) study of Ainu ecotourism and cultural heritage advocacy in Hokkaido demonstrates how one of Japan’s ethnic minority groups can mobilize the natural resources of the countryside to supplement previously established rural industries such as rice cultivation, fishing, and logging. While recent scholarship dedicated to the political ecology of global tourism begins to cover more territory (cf. Mostafanezhad et. al 2016), ecotourism in East Asia has been largely overlooked by social scientists. Previously one had to journey to a Tanzanian island marine park (Walley 2004), a Costa Rican rainforest (Vivanco 2006), or an Indonesian island (Lowe 2006) to find a critical ethnographic examination of the commodification of the environment (Walsh 2012) through ecotourism.

Ecotourism is most commonly associated with the hyper-naturalized imaginary of the “Global South” (this term refers to countries such as Costa Rica, Kenya, and Brazil), but over the last twenty years national parks and nature preserves throughout the United States, Europe, Australia, and Japan have also begun to adopt the concept. Through a politics of nature Laura Ogden (2011: 96) regards as “ecological fame-making,” northern Okinawa’s Yambaru forests, for example, are now comparable to Costa Rica’s Monte Verde, a veteran “biodiversity hot spot” (Vivanco 2006: 10) that contains 5 percent of the world’s floral and faunal species. Every ten square kilometers of Okinawa is more than “twenty times richer” (McCormack 1999: 262) than equivalent areas elsewhere in Japan.

Anthropologists have studied tourism as a transnational vector for the commodification of culture (Greenwood 1989); as route for and producer of globalization (Enloe 2014; Stronza 2005); as a mediator of insiders’ and outsiders’ sense of community and belonging (Smith 1989: 5; Waldren 1996); as a colonialist holdover (Urry 1990); as a source of environmental degradation and exploitation (Bundy 1996; Vivanco 2006); even as a form of governance (West and Carrier 2004). As a result, Amanda Stronza (2005: 263) suggests, we know “practically nothing” about the impacts of tourism
on tourists themselves. How are they affected by what they see, do, and experience during their travels?” Paige West and James Carrier (2004), in their case studies of ecotourism in Jamaica and Papua New Guinea, find that the dominant hopes and desires of Western tourists can be gleaned from the behaviors of host countries. They argue that ecotourism “encourages a particular way of knowing people and things in pertinent parts of the world” (2004: 485) and further develop Carrier’s term “virtualism” (Carrier and Miller 1998) to explain how ecotourism, a quintessentially neoliberal business concept, moves and grows in similar ways despite being implemented in diverse cultural contexts.

Virtualism explains some of the contradictions inherent in ecotourism: that it tends not to preserve valued ecosystems, but rather creates landscapes that conform to Western fantasies about Nature through a rationalized “market-oriented nature politics” (West and Carrier 2004: 485; cf. Sivaramakrishnan 1998); or that the local (“traditional”) values that ecotourism host communities intend to preserve tend to be replaced by capitalist commercial values (West and Carrier 2004: 486). One of the most common fantasies disseminating from the so-called Global North is the “rescue of Nature from anthropogenic destruction” (Keller 2015: 8), a discourse driven by the rise of industrial capitalism and an underlying belief that Nature is (or at least should be) kept separate from humanity (West and Carrier 2004: 485). My key questions include: How are these discourses mobilized in a non-Western, non–Judeo-Christian context? Is there a Japanese equivalent to the Nature rescue fantasy? If so, how does it manifest in “Tropical Paradise Okinawa” (Figal 2012: 8)?

Clifford Geertz (1997: 20) writes that the study and management of tourism requires that it be conceptualized as an “extended field of relationships, not readily disentangled from one another, not easily sorted … into clear-cut and exclusive, opposing categories.” Such oppositional categories include host/guest, inside/outside, local/global, we/they, and here/there. Studies of ecotourism in the early twenty-first century must also address binaries such as human/non-human, North/South, Western/non-Western, and rich/poor. Accordingly, this study of the political ecology of ecotourism in Okinawa demonstrates that “green development” (Adams 1990) is not limited to developing equatorial nations, and challenges the binarizing discourses of the Global North and Global South. Ecological appreciation of one form or another is becoming a “positive national characteristic” (Vivanco 2006: 10) in many countries, but cultural expressions of this cosmopolitan sentiment are both historically and geographically contingent. This ethnography contributes to sustainable development literature by providing a case study of ecotourism in Okinawa—among the poorest prefectures of one of the world’s wealthiest nations.
I began my fieldwork planning to focus on the experiences of mainland Japanese tourists. However, the first few ecotours I joined helped me realize that the local (“host”) experience of ecotourism, while it does not involve travel per se, affects Okinawan perceptions of the environment that move well beyond the socioeconomic motivations identified by Mr. Miyagi in the opening ethnographic anecdote. Engagement in tourism-related activities that encourage Okinawans to view their proximate natural environments as unique and even healing shapes local participants’ sense of place and sense of self. In the process of embracing, reappropriating, and responding to the early twenty-first-century set of political and economic constraints, which I label collectively as the “tourism imperative,” Okinawans also come to view their biophysical surroundings like a tourist.

**Authenticity and Power**

I hate travelling and explorers. Yet here I am proposing to tell the story of [their] expeditions.

—Claude Lévi-Strauss, *Tristes Tropiques*

The tourist can be defined as “a temporarily leisured person who voluntarily visits a place away from home for the purpose of experiencing a change” (Smith 1989: 1). Valene Smith’s classic definition is broad enough to include virtually all kinds of tourists seeking multiple forms of change (geographic, climatic, psychological, or spiritual). Amanda Stronza argues that these leisured people are actually “key protagonists in processes of globalization” (2005: 171). Are all tourists today mere pawns in a multibillion-dollar global industry, or do participants in small-scale forms of alternative tourism develop a sense of ethical responsibility to the places they visit? In 2012, 2 percent of all human carbon emissions came from airplane travel (McGrath 2016). If ecotourists are concerned with the protection of the natural environment, then why not curb the carbon footprint and “staycation” at home?

While “sun, sex, sea, and sand” (Crick 1989: 307) form highly visible components of most island tourism, leisure travel in Japan is often characterized as including an explicitly educational element as well (Kato 1994). Gotoh et al. (2008) find that changes in Japanese demand for marine tourism can also be linked to larger nationwide sociological trends: growing demands for leisure time, greater quality of life, and extended leisure activities—as opposed to short periods of socializing around work—are all changing the nature of domestic tourism in Okinawa. The authors suggest that ecotour-
ism (sometimes referred to as “green tourism”) favors “the environment and environmental consciousness over sightseeing” through its promise of a “richer holiday experience through deeper interaction with a community” (2008: 31).

Until 2015, The International Ecotourism Society (TIES) offered a simple definition of ecotourism: “responsible travel to natural areas that conserves the environment and improves the welfare of local people.” The updated definition reveals the importance now given to the role of the local interpreter: “responsible travel to natural areas that conserves the environment, sustains the well-being of the local people and involves interpretation and education [of staff and guests]” (TIES 2015). Center for Responsible Tourism Director Martha Honey’s vision of ecotourism is even more ambitious: beyond promoting low-impact, small-scale travel to fragile, pristine, and usually protected areas, ecotourism also “helps educate the traveler; provides funds for conservation; directly benefits the economic development and political empowerment of local communities and fosters respect for different cultures and for human rights” (Honey 2000: 33). These idealized definitions warrant unpacking; ecotourism is the fastest growing segment of the tourism industry, with global expenditure estimates ranging from US$30 billion (Honey 1999: 9) to US$1.2 trillion (West and Carrier 2004: 483; cf. Butcher 2007; Gössling 2003; Gössling and Hall 2006; Hill and Gale 2009; Holden 2000). This ethnography builds on Noel B. Salazar’s (2010) study of power in tourism by moving away from one-sided studies of the impacts of the global tourism imperative on hosts or guests and instead analyzes the stories and experiences of local guides, interpreters, and other primary mediators of “Tourist Okinawa” (Figal 2012: 15), a carefully curated and mutually constitutive tropicalized space.

Ecotourism is an idealized travel concept that often emerges in discourses of sustainable tourism development, but perhaps due to its inherently localized scope, the movement lacks internationally agreed upon standards of implementation and offers few comparative or comprehensive metrics that can be used to determine its effectiveness. Likewise, the genuine ecotourist can hardly be identified by his or her rucksack and reusable canteen. Rather, ecotourism researcher Robert Fletcher suggests, the ecotourist might be more easily identified by the strenuousness of leisure activities pursued. According to Fletcher (2009: 276), unlike “conventional mass tourism where the object is typically to relax and pamper oneself, the aim of ecotourism is to engage in strenuous physical exertion and experience uncomfortable—if not expressly unpleasant—conditions.”

Debates about the problem of authenticity pervade social science literature on tourism. Erve Chambers (2000) emphasizes the source of agency as
the key measure of authenticity in host communities. Gerald Figal’s (2012: 89) work on heritage tourism in Okinawa builds on Chambers’s theory of authenticity by not equating the real/traditional/authentic with “always and only things of the past one strives to reproduce faithfully under conditions of modernity” (cf. MacCannell 1999). My objective in studying ecotourism development in Okinawa is neither to “condemn hoaxes nor to award diplomas of genuineness, but rather to understand a moral and social phenomenon which is especially peculiar” (Lévi-Strauss 1955: 18).

West and Carrier (2004: 485) demystify another contradiction inherent in ecotourism—the apparent ethical contradiction between conservation and travel—by demonstrating that the authenticity of a traveler’s experience is judged through the framework of “Nature and the frontier” rather than the messages of conservation biologists or anthropologists. Primordial Nature, with its host of exoticized plants, animals, and (in some cases) people, can only be reached by “being here” (Geertz 1988: 130). We can begin to understand ecotourism’s peculiar mix of leisure, fantasy, and activism by first studying its proponents and practitioners—those who are already “here,” navigating with great passion the future of tourism development on Okinawa.

Ecotourism is meant to change the nature of encounters between hosts and guests in destination communities and ecosystems around the world (Stronza 2005: 171). This ethnography focuses on the experiences of “educationally oriented” Okinawan and mainland Japanese travelers (Smith 1989: 5). The consumer profile of the ecotourist is different from that of the middle-class Japanese tourist who, since the 1960s, has desired Tropical Paradise Okinawa. However, Akinori Kato finds that the difference is more likely a matter of degree than kind. The educational component of ecotourism is important not only to Japanese vacationers who seek to camouflage or at least justify the purely recreational element of their trips with an educational (or religious) component (Kato 1994: 57–59); improving environmental education about Okinawa is also a top priority for many of the nature guides I met during fieldwork. By examining the touristic reciprocity that shapes host-guest encounters at Okinawa’s natural sites, I hope to complicate our understanding of the motives and desires of those who preserve, maintain, package, and present these places for outsiders—and for themselves.

By studying ecotourism in Okinawa, I complicate the narrow view that most educationally oriented travelers who participate in ecotourism, whether as paying customers, guides, or planners, are also members of a very narrow demographic: “namely, white, professional-middle-class members of post-industrial Western societies” (Fletcher 2009: 271). According to Robert Fletcher, these professionals tend to be people who practice (or were raised by practitioners of) “relatively well-paid white-collar professions” (271)
such as teaching, journalism, business, and law. While Japanese people have been problematically characterized as “Honorary Whites” or even “Honorary Europeans” (Adachi 2010; cf. Beasley 1987; Kawasaki 2001), Fletcher’s generalizations about the ethnic, cultural, and geographic backgrounds of most ecotourists lose traction when considered in the Okinawan context. In Okinawa, racialized discourses of difference constructed vis-à-vis the idea of the dominant mainland Japanese ethnic group unsettle hemispheric divides (cf. Keller 2015; Lowe 2006; Tsing 2005) that inform much of the existing scholarship on ecotourism.

Nature has always been a resource in Okinawa, but Yambaru’s recent economic transformation from supplier of lumber for postwar reconstruction in the south to recipient of vacationers (from southern Okinawa Island, mainland Japan, the United States, and beyond) has dramatically altered the region’s economic makeup. This transformation has also spurred new discourses of ecological uniqueness that influence local residents’ regard for the everyday rivers, forests, and oceans that constitute the northern landscape. By bringing this landscape to life in a dynamic new way, ecotour guides re-conceptualize their own and their customers’ practical, physical, emotional, and spiritual relationships with biophysical nature.

This book is a parallel endeavor. Rather than presenting the biophysical world in snippets of colorful ethnographic details to evoke the scene of primary human-human interactions and events, I place forests, oceans, rivers, and their array of nonhuman inhabitants centrally in my narrative. I employ “landscape ethnography,” which Laura Ogden defines as “an approach to writing culture that is attentive to the ways in which our relations with non-humans produce what it means to be human” (2011: 28). My objective is to provide new interpretations of a few key interspecies relationships cultivated through Okinawan ecotourism today. These relationships are clearly influenced by, but not reducible to, the profound social, political, and environmental consequences of colonization and war, and the attendant discourses of death, loss, violence, and invasion so superbly articulated by other anthropologists of Okinawa (e.g., Angst 2003, 2008; Nelson 2008).

I attempt to expand scholarship on Okinawa by including nonhuman animal histories, without which critical Okinawan perspectives on the environment cannot be usefully incorporated into the literature on tourism-dependent islands, sustainability, and ecotourism. In addition to rendering legible the lasting ecological consequences of nineteenth-century Japanese colonialism, of the devastating 1945 Battle of Okinawa, and of the postwar U.S. occupation of Okinawa (1945–72), I conduct a hopeful analysis of Okinawan responses to the tourism imperative through new forms of engagement with nature.
Fieldsites and Methods

I conducted the first half of my fieldwork (August 2009–April 2010) from Ginowan, a central Okinawan city about a twenty-minute drive north of the capital city of Naha where close to 90 percent of Okinawa’s population resides (see Figure 0.1). I chose to move to Ginowan because it put me just a short drive away from the University of the Ryukyus, where I was affiliated and audited a variety of courses on ecotourism, sustainable tourism development, and environmental education over the course of my fieldwork. Ginowan, located next to the town of Chatan (where I completed my open-water scuba diving certification in 2009), is one of the primary sites for coastal coral transplanting activities described in Chapter 4. The bulk of my training dives were conducted with members of Reef Check Okinawa, a nonprofit organization (NPO) in the southern city of Itoman.

For the second half of my fieldwork (December 2010–May 2011), I moved north to Nago, the largest city in the Yambaru Area. The name “Yambaru” (山原) combines the Chinese characters for “mountain” and “field,” refers to the area’s geographic characteristics. The Yambaru Area includes Nago City and the three villages of Kunigami, Higashi, and Ōgimi (see Figure 0.1). From Nago, I was able to frequently visit the Wellness Center in the town of Motobu and the Churaumi Aquarium, as well as the Kunigami Forest Therapy Centers, all of which became central sites for my research. Yambaru’s forests are comprised of low hills covered by evergreen oak (Itajii) and subtropical plants, including wild orchids, azaleas, ferns, and mistletoe (McCormack 1999: 267). Protected species include the Ryukyu robin, Scops owl, Pryor’s woodpecker, Okinawa rail, and rare amphibians, reptiles, and insects.

Throughout my fieldwork I was a visiting scholar in the University of the Ryukyus’ Department of Tourism Sciences (DTS) and at the International Institute for Okinawan Studies (IIOS). I worked primarily with sustainable tourism planning and environmental education specialist Professor Junko Ōshima (DTS) and Katsunori Yamazato, Professor of American literature and Director of IIOS. By guest lecturing in Professor Ōshima’s Ecotourism courses, I gained a sense of the kinds of questions and problems being addressed by tourism researchers. During the second half of my fieldwork, I was also a visiting scholar in Tourism Sciences at Meio University in Nago. Under the auspices of Professors Yūji Arakaki and Sumiko Ōgawa, I had the privilege of presenting my findings at the Okinawa Ecotourism Promotional Association’s annual conference in 2011. These kinds of intellectual exchange opportunities provided invaluable networking opportunities and helped me to refocus my scope of inquiry over the course of my fieldwork.
Introduction

With the help of my advisers, I gained introduction to a variety of government agencies and NPOs that generously facilitated my participation in the majority of activities described in this book. At the Okinawa International Center in Urasoe, I attended weekly lectures and training sessions on ecotourism and sustainable tourism development sponsored by the Japan International Cooperation Agency (JICA), a Japanese government organization frequently compared to USAID. JICA sponsors tourism industry professionals from the Caribbean Community (CARICOM) countries and Oceania to engage in sustainable tourism training workshops and site visits ranging from six weeks to six months in length. By following these groups, actively participating in their brainstorming sessions, and serving as a discussant during presentations of their project summaries, I became familiar with the discourses of sustainability and development that pervade the tourism sector of islands currently receiving Overseas Development Aid (ODA) from Japan.

By following and riding on the official JICA bus, I learned which nature-based tourism sites are considered most important by the Okinawans who organized our visits. Sites included the Churaumi Aquarium, the Zamami Whale-Watching Association, the Ufugi Nature Museum, and Kunigami’s Forest School, all of which are discussed in the chapters that follow. JICA and the Okinawa International Center worked in conjunction with NPOs such as the Okinawa Environment Club (OEC) and the Kunigami and Higashi Tourism Associations to organize experiential training fieldtrips that fostered discussion and debate between international participants on the relative merits and disadvantages of how ecotourism is conducted in Okinawa. With permission from key administrators of these training tours, I participated in ecotourism activities and observed how sustainable tourism in Okinawa is produced for tourist consumers, local residents, and tour staff. The interviews included in this book were conducted as formal and informal semi-structured conversations with the government officials, academics, nonprofit directors and affiliates, guides, tourists, and museum employees who were kind enough to answer my questions before, during, and after tours.

I also attended Okinawa Prefecture–sponsored conferences on topics ranging from biodiversity, conservation, and slow living to long-stay tourism and community building. Much of the data I include was gleaned from comprehensive presentations and handouts provided by lecturers at these talks. A presenter at one of these conferences outlined some of the common socioeconomic characteristics of ecotourists: “They are mostly women in their twenties, of the highest educational background.” He went on to list a few sub-categories profiling the typical ecotourist:
• Socially Aware (politically active)
• Visible Achiever (interested in material success)
• Young Optimist (age 18–24)

I quickly determined that I was the Young Optimist (or at least, that I had been when I began graduate school). Having my demographic mirrored back to me so succinctly made me squirm, and reminded me to avoid broad generalizations about my informants wherever possible. Castaneda and Wallace (NAPA Tourism Workshop, 19 November 2008) acknowledge some common challenges associated with studying tourists, a category most anthropologists have probably occupied at some point during their time in the field: “One runs the risk of studying her/himself being a tourist participant. … Studying tourism, especially tourists, can lead to uncomfortable introspection without a path through the maze of self-interpretation.” The theme of “uncomfortable introspection” that runs throughout this book is an unintended consequence of my methodological approach, which can be summarized as participating in ecotours and other nature-based tourist activities; observing the ways that guides and tourists interacted with each other and with the nonhuman life forms they sought; and conducting informal, semi-structured interviews with the ecotourism advocates and local participants whose lives and livelihoods are affected most directly by the expansion of alternative tourism activities in the north.

This book represents my attempt to create a path through the “maze of self-interpretation” that concerned me as an ethnographer, but also held clear significance for Nago Museum and Ufugi Nature Museum affiliates, Forest and Dolphin Therapy participants, and perhaps most of all for the Japanese and Okinawan nature interpreters who, like me, linked their identities directly to their interpretive work. My research contributes to anthropological perspectives on tourism, inter- and intra-subjectivity, and the environment by probing the ways in which discourses of vulnerability, loss, and disaster shape the politics of island tourism development and produce new forms of environmental affect in guides and participants. I bridge the existing anthropological literature on the small island “vulnerability paradigm” (Moore 2010), “hosts and guests” (Smith 1989), and interspecies (or “post-human”) relationships by focusing on the organized natural and touristic encounters that bring these discourses into the same frame.

I begin my inquiry by asking: How do people become ecological stakeholders through participation in forms of travel idealized as sustainable? What kinds of performative acts serve to destabilize and reconstitute the economic, political, and social categories oversimplified by the labels Tourist, Expert, and Local? I consider broadly what is at stake in our ability to
cultivate and support affective relationships with nonhuman forms of life—a need that increasingly manifests in the form of nature-based tourism.

The pages that follow will take you on a series of ethnographically rendered ecotours and other touristic animal encounters that re-create the complexity of experience I saw, touched, and felt when following guides and their tourists into the woods, under the sea, and into the town halls, conference rooms, and museums where they discussed what these forays into nature mean to them.

Figure 0.1 • Map of Okinawa Island, Okinawa Prefecture, Japan
Notes

1. All informants’ given names and nicknames have been changed. All Japanese and Okinawan names are presented throughout the text as follows: [First Name] [Family Name] in accordance with standard English language practice.

2. Noel Salazar (2010: 139) grapples with the politics of naming social actors in host communities, considering “passive” terms favored by other scholars: “visitee,” “travelee,” and “touree.” Salazar favors the more agentive “tourate” for his multi-sited study of foreign tourist guides in developing countries. Because this ethnography explores the fluidity of identities within domestic tourism and across multiple social frames (cultural, occupational, political), I do not favor any one descriptor for Okinawans involved in the tourism industry. Rather, I adopt the language used by my informants to describe their work.

3. While the focus of this ethnography is Japanese domestic tourism, it is worth noting that, according to the World Tourism Organization, in 2005 roughly a quarter of international “tropical island tourists” came from Australia, Japan, and Indonesia (Picard 2013: 17). For a discussion of translation, knowledge, and nature-based Japanese tourism in Canada, see Satsuka (2015).

4. Raymond Williams (1983) observes that the word “Nature” is “perhaps the most complex word in the [English] language” (219). Following Anna Tsing (2005) and Eva Keller (2015), I capitalize “Nature” when emphasizing a particular related discourse or definition such as “singular global system uniting all life” (Tsing 2005: 91). I do not capitalize “nature” when using the term to convey its many other meanings. For a groundbreaking history of a similarly problematic term, “Wilderness,” see Cronon (1995).

5. These are Crick’s often cited “4-S’s of tourism” (1989).

6. Courtesy of the University of Texas Libraries, The University of Texas at Austin.
Chapter 1

OKINAWA’S TOURISM IMPERATIVE

Introduction

A basic familiarity with Okinawa’s history and political economy is essential to understanding the prefecture’s tourism industry in the early twenty-first century. In this chapter, I provide a brief overview of the historical circumstances that have produced tourism dependency in Okinawa. I trace the development of Okinawa’s tourism imperative to explain the contemporary practice and presentation of ecotourism in northern Okinawa.

Island Geographies, Populations, and the Politics of Naming

Okinawa is Japan’s southernmost prefecture. The formal prefecture consists of roughly 160 islands encompassed by a longer chain of islands collectively known as the Ryūkyū Archipelago (琉球諸島), about forty of which are inhabited by people. The Ryūkyū Archipelago stretches over a thousand kilometers, extending southwest from Kyushu (the southernmost island of Japan’s four main islands) to Taiwan. The archipelago is usually divided from northeast to southwest and includes four geographic subgroupings: Okinawa, Miyako, Yaeyama, and Senkaku Islands. The prefecture’s capital city, Naha, is centrally located on Okinawa Island (Okinawa hontō), by far the largest of the Ryūkyū Islands and the primary site of my fieldwork.

Okinawa’s political history can be examined through the lens of language, which is also deeply linked to the questions of cultural authenticity, exoticized otherness, and regional pride that continue to shape touristic representations of the island today. The former semi-autonomous Ryūkyū Kingdom operated centrally in an expansive trading system that began during the seventh century, connecting the archipelago with China from the fourteenth
century, and Japan from the fifteenth century, until the late nineteenth century, throughout which the Ryūkyūan government paid tribute to both powers (Zabilka 1959: 15–17).

The name, according to the Chinese, is of Chinese origin, for the word “Lew-k’ew” [Ryūkyû] means “hanging beads” and refers to the fact that this island chain is like a string of tassels on the skirt of China. But though the Japanese have allowed their own pronunciation of this name to stand, they favor the name “Okinawa” or the “long sea rope” which stretches as a cable between Japan and Formosa [Taiwan], and thus makes these islands and Formosa an integral part of Japan proper. (Gast 1945: 12)

The expansionist Japanese government formally annexed Okinawa in 1872, establishing Okinawa Prefecture in 1879. Americans referred to the same group of islands as “Ryukyu” from their first involvement in the mid nineteenth century until the end of the post–World War II U.S. military occupation (1945–72).

The Okinawan-language term for Okinawa is *Uchinaa*. There are many ways to refer to the Okinawan language, each carrying a different political valence. In Japanese, the now dominant language of Okinawa Prefecture (and the language in which I conducted the bulk of my fieldwork), one is most likely to hear the terms *Okinawa-go* (Okinawan) or *hōgen* (dialect of Japanese). In Okinawan, however, *Uchinaaguchi* (literally “mouth of Uchinaa”) denotes the umbrella language that was spoken throughout the island, with some regional variation, until Japan’s forced assimilation policies systematically eradicated it from classrooms and other public spheres during the early twentieth century.

Linguists such as Rumiko Shinzato have recently established that *Uchinaaguchi* is not, in fact, a dialect of Japanese. While the two languages are genealogically related, Okinawan is less than 70 percent cognate with standardized Japanese and the two are mutually unintelligible (2003: 284). Shinzato (2003: 284-291) identifies the following six distinct periods over the course of less than one century, a period during which the Okinawan language was purged from daily life but eventually emerged as a key marker of cultural pride and difference:

1) Before the creation of Okinawa Prefecture (1879): Okinawan exists as an independent language of the Ryûkyû Kingdom
2) From 1879 until the start of First Sino-Japanese War (1895): Okinawan is gradually marginalized through the “top-down” imposition of Japanese-language–only schools and conversation training centers for monolingual adults
3) From 1895 until Japan invades China again, effectively beginning the Second World War (1937): Japanese becomes the language of education through a period of more grassroots standardization, while Okinawan is still spoken at home.

4) 1937–45, a period which spans the Second Sino-Japanese War and World War II: Okinawan is denigrated as a dialect, the use of which is punishable in increasingly militarized schools during a period of extreme Japanese nationalism.

5) 1945–72, the period of the formal U.S. Military occupation of Okinawa: Okinawan declines rapidly under postwar U.S. policies designed to propagate English and squelch the rise of pro-Japanese sentiment.

6) 1972–present (Reversion to Japan in 1972): Okinawan resurges as a point of prefectural pride following Okinawa’s political reversion to Japan.

Until 1879, Okinawan monolingualism was standard throughout the Ryūkyū Kingdom; today, Okinawans under age sixty speak and understand Okinawan-accented standard Japanese. The Japanese (and later, the U.S.) government’s political conquest of Okinawa was achieved in part through “linguistic conquest” (286), and I very briefly summarize these periods to historicize one of the most intensive processes through which Uchinaanchu (people of Okinawa) have come to regard themselves as “Okinawan” and, to a lesser degree, “Japanese.” Okinawan-language greetings such as Haisai! (Hello) and Menso-re! (Welcome) are much more likely to be directed at sunblocked tourists than spoken between Okinawans in everyday conversation.

Okinawans also have many names for mainland Japan: Yamato (which indexes the ancient Japanese capital of Nara and the dominant Japanese ethnic group, known in Okinawan as Yamatonchu), Naichi (a relic of the Japanese colonial period that indexes the main islands as the “internal” or “home” territories), and occasionally even just Nihon (today’s most commonly used Japanese language name for Japan). My informants frequently used these descriptors selectively to imply varying degrees of historical, cultural, and linguistic separateness from Japan.

My informants regarded the reclamation and continued use of Okinawan, and of dialects of Okinawan unique to the northern area where I worked, as central to the joint enterprises of revitalizing local pride and strengthening small-scale tourist economies. Whether for the edification and entertainment of mainland Japanese tourists or for the benefit of Okinawans, the preservation of the Okinawan language functions as a strategic claim to authenticity by emphasizing the islands’ cultural and historical difference from Japan.
Okinawa’s “3-k” Economy

Your assignment to the Ryukyu (Ryoo-foo-que) Islands—of which Okinawa is the largest—will place you in pleasant surroundings, face to face with people quite different from those back home. If you have not been in the Far East before, the sights you see and the people you meet will seem strange at first. But you will feel at home once you get acquainted with the Ryukyuan people and make friends with them.

It would be a mistake, in an essentially rural and village country such as the Ryukyus, to expect the dazzling attractions found in Tokyo, London, or Paris. But the Ryukyus have much to offer, not the least of which is the natural beauty of a varied landscape. And wherever you go, you will find the Ryukyuan friendly and hospitable. These winning traits of the people have earned for Okinawa such titles as “Land of Courtesy” and “Isle of Smiles.” Even the most glum visitor will enjoy the good-natured smiles and laughter of the Okinawans . . .

Because of the strategic importance of the Ryukyus, it is essential that you understand the islands’ background and people and the political circumstances under which the United States retains control there. This guide will help you appreciate the Ryukyuan point of view by telling you a little about the Ryukyus, their way of life, their problems, and their aspirations. The more you know about the Ryukyus, the more you will appreciate them and enjoy your tour of duty among them. Take advantage of an unusual opportunity to know at close range these delightful Asian people. (A Pocket Guide to Okinawa, U.S. Department of Defense 1961)

The above excerpt, taken from an early 1960s U.S. Department of Defense “Pocket Guide to Okinawa” written for military personnel, illustrates key aspects of the deep connections between Okinawa’s tourism industry and the presence of U.S. military bases on the island (see Figure 1.1). Glenn Hook and Richard Siddle (2003: 6) reject the image of Okinawans as “non-threatening, laid-back and relaxed ‘exotic’ islander[s], ever ready to burst into song and dance, happily supportive of the status quo and the ‘warm’ relationship with the mainland,” a stereotype reified through similar kinds of pamphlets now directed at mainland Japanese tourists instead of U.S. soldiers.

The formal U.S. occupation of mainland Japan ended in 1952 with the signing of the San Francisco Peace Treaty, which recognized Japan’s “residual sovereignty” (Tanji 2006: 61), but allowed U.S. forces “to be stationed all the time in and about Japan.” Of Okinawa, President Eisenhower proclaimed in his 1952 State of the Union message: “The Ryukyu Islands will be held for an indefinite period,” thus reinscribing the politicized differences between Uchinaa and Yamato described previously. Another twenty years passed before Japan and the United States negotiated the return of Okinawa to Tokyo’s jurisdiction.
On 15 May 1972, seven new laws were implemented to administer the islands, including a law to address “Special Measures for Promotion and Development of the Islands of Okinawa” (Asato 2003: 234). Tourism fell under the rubric of the Promotion and Development Plan, meant to help Okinawa achieve parity with mainland Japan. In 1973 the mayor of Nago City fore-shadowed the issues I explore here when he criticized Tokyo’s industry-driven approach to development: “Human beings have become enslaved to productionism, which results in the destruction of the basis of our existence. Rather, we citizens of Nago should take as our goal the creation of the most favorable life environment” (234). The mayor’s criticism of Okinawans’ postwar development imperatives as “productionism” can be read as a response to the Okinawa Tourism Association’s (OTA) attempts to produce what members called “tourism consciousness” (kankō ishiki) in the prefecture beginning in 1954 (Fugal 2012: 37). Gerald Fugal’s (2012: 39) description of the OTA mission can be understood as a kind of virtualism wherein “Okinawans needed to view physically and conceptually discursively their island in terms consonant with the expectations of outsider visitors.”7 The Tropical Paradise/
Tourist Okinawa mentality expressed by so many Okinawans today had to be learned as an alternative narrative to the all too real “poverty-stricken, foreign-occupied, war-ravaged homeland” (39) Okinawans were forced to contend with in the postwar period.

Once the 1972 Reversion eliminated strict U.S. policies that required passports and visas for travel between Okinawa and Japan, a newly domestic tourism promoting the “subtropical climate, the beautiful ocean, and the exotic city scene” became a major industry (Shinzato 2003: 290). Gavan McCormack (1999: 275) identifies the 1975 Marine Expo as the beginning of mainland Japanese interest in Okinawa’s touristic potential, which led to a decades-long “wave of steel” and concrete in the form of resort development. Tourist visits jumped from 800,000 annually in 1974 to 1.8 million in 1975, 3 million in 1992, and nearly 6 million in 2009.

By the mid 1980s and 1990s, streamlined travel was furthering the spread of a so-called “Okinawa boom” across Japan: Okinawa-themed music, theater, and cinema gained popularity on the Japanese mainland, driving renewed interest in the revival and preservation of the Okinawan language and mainstreaming a renewed sense of Okinawan pride. Domestic tourism continued to rise as things Okinawan grew in popularity and commercial profitability, and the previously stigmatized idea of “Okinawa Time” (a slower, more relaxed pace of life) found new currency among stressed mainland visitors (Nelson 2008: 236).

Now, in the midst of what Hook and Siddle (2003: 6) identify as the “third wave” of the post-Reversion tourism frequently characterized by battlefield tours and organized shopping trips for cheap goods, Okinawans involved in ecotourism are actively resisting the typical travel packages that place visitors in mainland-funded luxury hotels staffed by non-Okinawans.

Tourism forms one leg of Okinawa’s basic economic structure, often referred to as the “3-k” economy, meaning that kichi, kankō, kōkyō jigyō—“bases,” “tourism,” and “public works,” respectively—constitute the main sectors of employment in Okinawa. These three industries frequently come into conflict over questions of aesthetics and environmental health. Hook and Siddle describe how human intervention in the form of widespread U.S. military base construction subjected postwar Okinawa to “the good, the bad and the ugly” (2003: 3). Bases bring at least four major kinds of suffering to Okinawans living nearby: clamor, calamity, contamination, and crime (Gillem 2007: 17). Linda Angst (2003) and Cynthia Enloe (2014) show that Okinawan girls and women are particularly vulnerable to sexual violence perpetrated by U.S. soldiers, who between 1972 and 2001 constituted four percent of Okinawa’s population and were responsible for 1.7 percent of crime (Cullen 2001, quoted in Gillem 2007: 308). Chronic aircraft-related noise pollution, oil spills, accidental jet and auto crashes, and robberies and
murders committed by U.S. soldiers are among the many complaints voiced by Okinawans (Gillem 2007: 48).

Among Japan’s forty-seven prefectures, Okinawa comprises just 1 percent of Japan’s landmass but holds 75 percent of U.S. bases in Japan (Hein and Selden 2003: 5). The United States, which has more overseas military bases than any other country (Enloe 2014: 126), currently maintains fourteen military bases on or near Okinawa Island. These bases occupy close to 20 percent of the island’s landmass and comprise roughly one-third of Yambaru in the form of jungle training areas (McCormack 1999: 267). In 2016, there were roughly 27,000 active-duty service members stationed on Okinawa, a number that doubles when Department of Defense civilians and dependents are included (Narang 2016). The social problems caused by U.S. military bases remain the top priority in contemporary Okinawan politics, and grievances frequently invoke base-related environmental destruction and the loss of natural habitat for Okinawa’s animals.

In 1996 the Okinawa Development Agency’s expansive public works projects constituted more than half of all construction business in Okinawa (Hein and Selden 2003: 4). The “pristine” forests of the north become increasingly valuable when juxtaposed with the “bulldozed and concreted” rivers, beaches, and land, the damage from which feeds into the coastline in the form of red soil runoff, killing coral and other sea life in less obvious ways (5).

Redefining “The Environment” in the Postwar Period

To approach defining a “favorable life environment,” we must first consider how the meaning of the term “environment” has taken shape throughout Okinawa’s history. Okinawa-based scholar Eiko Asato succinctly outlines the development trajectory I explore in this work: the destruction of the natural and social environment, Asato (2003: 236) writes, “began with the devastation of war, was followed by the degradation of the environment through military base construction [and was] followed by industrial and tourism development.”

Shin Yamashiro’s (2005: 51–55) summary of the “critical phases” of Okinawa’s environmental history complements Shinzato’s earlier analysis of Okinawa’s linguistic history:

1) Preparation for War (1940s to October 1944)
2) Direct Impact of the War (1944–45)
3) Aftermath of the War (1945–72)
4) Preservation and Conservation of Natural Resources (1972 to the 1990s and onwards)
During the immediate postwar period, the newly formed United States Civil Administration of the Ryukyus (USCAR) Department of Health, Education and Welfare focused on urgent matters such as sanitation, disease control, and the primary concern of better “health” (52)—better social environments where people could live. During the 1950s, U.S. administrative archives used the term “environment” in reference to other issues such as family planning, water quality, and pest control (52) (likely the control of the rodents, snakes, and mongooses I will discuss in Chapter 2). In 1950s and 1960s Okinawa, concerns for the environment revolved around infrastructure and public health.

The reversion movement for Okinawan “interdependence” was framed as a nationalist, anti-capitalist effort, as was common for decolonization movements throughout Asia and Africa following World War II; and for many Okinawans (and Japanese) the struggle for Okinawan independence represented not only the retrieval of Okinawa for Japan but also a strong assertion of Japanese independence (Tanji 2006: 86). By the 1970s, Okinawa’s environmental administration had shifted from a “human-centered” orientation toward a more comprehensive view that incorporated human and nonhuman species as well (Yamashiro 2005: 52). Yamashiro identifies the 1970s post-Reversion period as the moment of the Okinawan environmental movement’s emergence, a time “through which we can witness how environmental affairs became infused with attempts to protect the endangered natural environment and to preserve Okinawan identity” (52).

In the early postwar period, the tourism industry was seen as an economic sector with “great potential for national economies, opening up opportunities for recreation and leisure for large parts of the population in industrialized countries” (Gössling and Hall 2006: 13). Although the notion of tourism-as-development persists in many countries, the rise of the Green Movement in the 1960s and 1970s raised public interest in issues such as erosion and beach crowding. The confluence of differing attitudes toward the environment by U.S. military and Okinawans produced the milieu of environmental politics that shapes discourses of the environment today. In the 1960s, for example, U.S. military interest in developing central Okinawa’s Ishikawa Beach for recreational purposes led to the discovery that the seawater was severely contaminated by nearby Ishikawa City—a finding that eventually led to the first water and sewage disposal system in Okinawa (Yamashiro 2005: 53–54).

In early twenty-first–century Okinawa, discourses of environment-as-health and environment-as-nature remain intertwined in ways strongly influenced by the tourism imperative. Dolphin Therapy and Forest Therapy, which I discuss at length in Chapters 3 and 4, further naturalize contemporary beliefs that affiliating with nature improves human health and overall well-being.
Tourism in Okinawa Today

Following reversion to the Japanese state in 1972, Okinawa has undergone major economic transformations. The Okinawa Development and Promotion Plan (ODP) (drafted by the prefectural government in cooperation with Tokyo) was designed to reduce the socioeconomic gap between Okinawa and mainland Japan and improve Okinawa's economic self-reliance (Kakazu 1994: 151), primarily through an expansion of domestic agricultural exports and tourist imports. Small islands such as Okinawa tend to suffer from what Kakazu calls "dis-economies of scale": overdependence on external trade and official economic assistance, extremely limited resource bases, high costs of transportation and other infrastructure, extensive out-migration, and vulnerability to natural disasters and environmental disruptions (217). Okinawa's former agriculture (primarily sugar) and manufacturing industries have shrunk rapidly in the face of increasing global competition, and the prefecture depends heavily on the Japanese government for domestic development aid.

Tourism and associated service sector activities constitute the most profound change in Okinawa's economic and geographic landscape post-Reversion. During the U.S. occupation, tourism accounted for only 4 percent of Okinawa's gross prefectural product; by the 1990s tourism had reached 25 percent (Egami 1994: 829), and by 2004 tourism accounted for 20 percent of Okinawa's total external receipts, of which 40 percent is spent on imported goods and services (Kakazu 2011, quoted in Murphy 2011: 16). Toward the end of the U.S. occupation, the Okinawan labor of the "housekeeping force" required for non-tactical, non-operational chores became the "prime pillar" of Okinawa's economy (Morris 1968: 3). Today military bases constitute only 5 percent of Okinawa's GDP, down from 15 percent in 1972 (Gillem 2007: 233). According to University of the Ryukyus economist Tetsuo Umemura (2007 n.d.), in 2006 Okinawa's economic structure by industry was as follows: primary (agriculture, fishery, and forestry) 1.9 percent, secondary (manufacturing and construction) 11.8 percent, and tertiary (services, including tourism) 90.3 percent. The gradual shift from a military-based to a tourism-based economy has also produced the greatest economic boom in Okinawa since 1972: more than ever, Okinawa Prefecture's 1.4 million residents rely on mainland tourists who spend more than JPY400 billion9 (approximately US$4.7 billion) annually—close to a quarter of Okinawa's gross regional product (Kakazu 1994: 5).

The tourism industry grew roughly tenfold from the 1960s to the mid-1990s (Kakazu 1994: 1), yet Okinawans still rank lowest among Japanese in terms of per capita income: a report by the Japan Cabinet Office shows Okinawans earned an average of ¥2,021,000 ($24,000) in 2005, less than half that of the average Tokyo resident. Nonetheless, Okinawa currently has
the fastest-growing economy in Japan (2.6 percent, 2003–2013), and the
prefecture’s population, unlike that of the rest of the Japanese archipelago,
continues to grow.

Tourism has expanded as U.S. military base–related spending has declined,
and the results of this substantial industrial changeover have been mixed. Re-
sort facilities, for example, run the risk of becoming economic fortresses that
never fully integrate with the local economy, even as they vacuum up pre-
cious natural resources to draw mainland visitors. The rapid “resortization of
the Ryukyus” (Kakazu 1994: 151) involves giant Japanese firms edging out
local hotels to build massive resort complexes replete with eighteen-hole golf
courses and multiple swimming pools. Hotel development is always capital-
and space-intensive, but water use statistics are perhaps the most staggering:
while the average Okinawan household consumes 391 liters of water per
day, a typical city hotel and a grand resort hotel respectively use more than
810 and 1,192 liters per guest per day. Mass tourism may ultimately cause
the demise of the beautiful beaches and lush sceneries that make Okinawa
such an ideal place for a luxuriant new resort. Okinawa’s ability to resume
its Ryūkyū Kingdom status as a host of international (touristic) exchange
depends on the preservation of the islands’ most cherished natural resources.

Ecotourism in Okinawa is part of a broader localization movement in-
tended to stem what Hiroshi Kakazu calls the economic “boomerang effect”
of large-scale package tourism, whereby Japanese investment funds quickly
boomerang back to mainland Japan with limited spillover effects on the local
economy (Kakazu 1994: 159). Ecotourists visiting Okinawa would ideally
do a homestay, patronize a local minshuku, or rent a pension for one or two
weeks, during which time they would participate in trekking, snorkeling,
canoeing, and kayaking tours operated by local nature interpreters rather
than spending their money on bus tours run by guides who typically come
from mainland Japan.

The World Tourism Organization (WTO) estimates that by 2020 more
than 1.6 billion tourists will have visited the Asia Pacific region, and Okinawa’s
former governor Hirokazu Nakaima worked to attract at least ten
million of these visitors to Okinawa by 2017 (Murphy 2011: 16). Under
the banners of sustainable rural development, local income generation, and
the preservation of biodiversity, international lending and aid agencies have
pumped millions of dollars into ecotourism projects worldwide since the
late 1970s (Honey 1999: 7). Thus, over the last twenty years the practice
and philosophy of ecotourism has developed in response to the mass tourism
“Big Bang” (Oshiro 2007) that has already hit the Asia Pacific.

Amidst a sprinkling of Taiwanese duty-free shoppers, South Korean golf-
ers, and families of American soldiers, the vast majority (95 percent) of tour-
ists in Okinawa still come from mainland Japan (Okinawa Tourism Direc-
The ODP estimated the “eco-footprints” of an additional one million tourists annually in 2013, a source of major concern and protest among the many Okinawans who would prefer to increase the quality of tourists rather than their quantity. Many residents feel that the islands’ touristic carrying capacity has already been surpassed and do not support former governor Nakaima’s ODP because of the long-term social and environmental risks posed by extensive tourism development in Okinawa.

**Mobilizing Difference: Distinguishing the Exotic**

Anthropologists have noted the “ambivalent valorization” (Nelson 2008: 14) of Okinawa as culturally separate from a Japan that remains invested in discourses of its own ethnic homogeneity (see also Hein and Selden 2003; Molasky 1999). Over the last 150 years Okinawans were often portrayed as racially different from Japanese. This led to social effects with grave material consequences, including poverty and famine, forced labor and migration, and military conscription and occupation (Nelson 2008: 12). Being distinctive, on the other hand, can also mean being desired. In the context of the tourism industry, the cultivation of Okinawa as an exoticized tropical paradise (as opposed to a backward colonial outlier) has sustained the cultural “boom” needed to support the prefecture economically.

During fieldwork my Okinawan informants intermittently referred to their islands as “Japan’s Hawaii” (paradisiacal), the “Galapagos of the East” (biodiverse) (McCormack 1999: 263), and the “Keystone of the Pacific” (strategic) (Zabilka 1959: 21). The latter term adopts the U.S. military’s perspective on the island but has more recently served to promote international business tourism as well. The 2010 Okinawa Tourism Promotion Plan appeals to business travelers incentivized by the prefecture’s exoticized beauty to attend international conferences and conventions held in Okinawa, a place that can be reached within four hours by plane from many major cities in Asia, including Hong Kong, Manila, and Seoul. Emphasizing Okinawans’ unusual longevity and the population’s “overall superior state of wellness” (Willcox et al. 2001: 423), medical anthropologist Craig Willcox even likens the archipelago to “The Real Shangri-La” (healthy) (2001: 1) (cf. Zhang 2017). These kinds of images are what attracted the six million domestic and international tourists who visited Okinawa in 2009.

Upon closer examination, however, each of these highly marketable characterizations of Okinawa contain a much deeper history of the island’s environmental and political vulnerability to outside forces. Ecological wounds inflicted on Okinawa during World War II are today reflected by the absence of certain features of the landscape, such as formerly vibrant villages and
Footprints in Paradise

greenery in the south. The southern half of Okinawa Island was left as a geographic palimpsest in the wake of the Battle of Okinawa; a surface on which the “traumatic erasures” (Daniel 1996) of recent history can still be seen. The obliteration of so many features of the prewar landscape eventually created the space to reinscribe the memory of human life lost during the war. At the Okinawa Prefectural Peace Memorial Museum in Itoman the names of more than 240,000 war dead14 are engraved onto row upon row of black granite walls known as the “Cornerstone of Peace.” More than 100 stones fan out across Mabuni Hill, the location of Japanese military headquarters during the Battle and the site of some of the fiercest fighting at the end of the battle. The stoic memorialization of the wounded dead in this case historicizes an acute instance of violence, while the legacy of defeat keeps Okinawa vulnerable to U.S. military interests decades later.

The war-based “dark tourism”15 (Lennon and Foley 2000) conducted in the south grows stark when juxtaposed with the “green,” nature-based tourism of the north. Taku Suzuki, following Maria Tumarkin (2005), characterizes the postwar “touristification of traumascapes” in southern Okinawa as “neither a gradual nor a linear transformation of a place of horror and sorrow into a place of consumerism and pleasure” (Suzuki 2010: 16). Suzuki articulates the historical push and pull between touristified former battle sites, labeling them as places for “sincere mourning of the victims and serious commitment to pacifism” and as sites of sheer vulgarity (16). Suzuki’s example of the Himeyuri Cenotaph,16 a war memorial visited by more than 800,000 people per year, suggests that battlegrounds shift in meaning and recognition over time, in accordance with tourist popularity and a changing political climate.

J. John Lennon and Malcolm Foley (2000: 11) theorize the popularity of visits to war memorials and battlegrounds in the early twenty-first century as secular pilgrimages made possible by global communications technologies, advertised through the commodification of destinations for their educational value, and ultimately driven by their capacity to introduce visitors to “anxiety and doubt about the project of modernity.” If the tragedies of World War II can be reified through the present-day preservation and commercialization of dark locations, then where and when does the war end? What can a close examination of the places where the Battle of Okinawa did not devastate the landscape—where there is an absence of stone memorials and dated, quantified placards—teach us about the full scope of Okinawa’s traumascapes?

The tourism imperative has shaped the way that human history is told in Okinawa. The legacy of the Battle of Okinawa can also be found in the presence (and preservation) of new features of the landscape, such as accessible highways,17 marked battle sites, and historical museums. The northern
Okuni Forest Road, built between 1977 and 1994, crosses thirty-five kilometers through the heart of Yambaru and has paved the way for the invasion of “hitherto unknown feral animals,” including dogs, cats, and mongooses (McCormack 1999: 269). The next chapter unravels the discourses of vulnerability that have come to shape human-animal touristic encounters in northern Okinawa today.

Notes

1. Unless otherwise noted, when I use the terms “Okinawa” and “Okinawan” I am referring specifically to Okinawa Island and its human inhabitants.
2. I indicate romanized Japanese-language long vowels using conventional macrons (ā, ū, ō, etc.). I present Okinawan-language long vowels differently (aa, uu, oo) to reinforce the linguistic differences between the two languages that my informants unfailingly pointed out to me.
3. Particularly when traveling abroad, many Okinawans will introduce themselves as Okinawan first, and Japanese second, to demonstrate their pride and, as a few of my informants mentioned, because most of the Americans they meet are already familiar with Okinawa owing to the U.S. military connection.
4. When Okinawans speak of mainland Japan (hondo) they are referring to the four largest islands of Honshu, Kyushu, Shikoku, and Hokkaido. (Residents of Hokkaido Prefecture, another relatively late addition to the Japanese state, tend to speak of only the first three as Japan’s “mainland”). In this text, “mainland” indicates the Okinawan perspective unless otherwise indicated. Within Okinawa Prefecture, Okinawa Island is considered the main island of the Ryūkyū Archipelago and is referred to as Okinawa hontō.
5. This Department of Defense official publication (DOD Pam 2–50) was created by the Office of Armed Forces Information and Education. Secretary of Defense Robert S. McNamara endorsed the guidebook for use by U.S. military personnel.
6. Courtesy of Megan M. Scheminske.
7. See Thompson (2006) for a more general discussion of island (re)tropicalization and Picard (2011) for analysis of host-community agency within the context of the tourism imperative.
8. For the first half of my fieldwork, I lived about 3 km from U.S. Marine Corps Futenma Air Station in Ginowan (central Okinawa) (see Figures 0.1 and 1.1). The noise blaring from aircraft flying overhead shook the walls of my American-style house a few times each week. I escaped this noise pollution entirely when I moved north to Nago.
9. Due to constant fluctuations in the exchange rate between Japanese yen and U.S. dollar, I quote most monetary figures in yen. At the time I conducted my fieldwork (2009–2011), the average exchange rate was JPY85 to US$1. (Hereafter currency will be represented as “¥” for Japanese yen and “$” for U.S. dollar.)
10. Minshuku translates roughly as “peoples’ lodgings” or “staying with the people.” This form of lodging is popular throughout Japan: Okpyo Moon discusses the mutual benefits of such an arrangement in her case study of Hanasaku (Gunma Prefecture) (Moon 1998: 117–18).
11. Honey (2000: 30) defines nature interpreters (discussed at length in Chapter 5) “well-trained, multilingual naturalist guides with skills in natural and cultural history, environmental interpretation, ethical principles, and effective communication,” and key agents of ecotourism’s success.

12. Following Eva Keller (2015), I recognize that “the tropics” is both an imaginative and an empirical concept. Because the notion of the tropical is deeply embedded in discourses of European colonial expansion in the eighteenth and nineteenth centuries (some, but not all, of which resonate with the Japanese colonial project during the same time period), in this ethnography I avoid using the language of tropicality except where I am quoting secondary sources.

13. According to 1996 World Health Organization and Japan Ministry of Health and Welfare statistical data, Okinawans ranked first in the world for longevity, with an average lifespan of 81.2 (compared with 79.9 in mainland Japan) (Willcox et al. 2001: 2). By 2008, however, researchers at the University of the Ryukyus found that Okinawan female longevity had declined slightly while male longevity had dropped from first place to twenty-sixth out of Japan’s 47 prefectures (NIH 2008 n.d.).

14. This figure includes military and civilian deaths across nationality and ethnicity, and also accounts for the war-related deaths of Okinawans in other parts of Japan and abroad. While the name “Cornerstone of Peace” alludes to the U.S.-Japan security agreement, the inclusion of the names of all non-Okinawan casualties is meant to express a more universal and transcendent “philosophy of peace” (Hein and Selden 2003: 69). Sociologist Masaie Ishihara describes this philosophy as “a kind of habitual way of life born of Okinawan historical experience” (Ishihara 2001, quoted in Hein and Selden 2003: 69).

15. A competing term coined to encompass the phenomenon of morbid tourism is Tony Seaton’s thanatourism. Seaton (1996: 236) defines thanatourism as “travel to a location … motivated by the desire for actual or symbolic encounters with death.”

16. The Himeyuri Cenotaph memorializes the gas bombing deaths of the Himeyuri Nurse Corps, a group of 211 high school girls who cared for wounded Japanese soldiers during the Battle of Okinawa.

17. The construction of an extensive network of highways across Okinawa in lieu of trains during the U.S. occupation made the island susceptible to the global politics of gas and oil in an unprecedented way, and precluded the rebuilding of the old railway system in the age of the automobile. Since 2003 a monorail has run throughout Naha City, but Okinawa remains the only prefecture in Japan without a sophisticated railway system.
Chapter 2

SLOW VULNERABILITY IN OKINAWA

Introduction

Vulnerability is often understood as a condition of defenselessness to the surrounding environment. To be vulnerable is to be susceptible to physical or emotional harm. Human beings may find themselves vulnerable in the context of violent warfare, in the presence of provoked venomous snakes, and in the throes of global economic instability. Yet there is no satisfactory verb to describe the act of being made vulnerable. “Vulnerability” is rather conceived of as a state or a quality, comparable to a noun such as “powerlessness” or an adjective akin to “defenseless.” In Japanese, a person can be easy to wound (傷つけられやすい) and a group of people can be characterized as socially vulnerable (社会的弱者). However, both the English and Japanese languages could be vitalized by a verb that describes more fully the process of being made vulnerable or “vulnerabilized.” In this chapter, I argue that social, political, and environmental vulnerability in Okinawa is not static; rather, vulnerability is a processual phenomenon that must be situated historically to be properly understood. This chapter reconsiders the relationship between violence and vulnerability by attending to the problem of time. Temporality is crucial to understanding the long-term effects of colonization and war, the experiences of those who are vulnerabilized, and the expression of this vulnerability in Okinawa today.

Animals, Violence, and Vulnerability

Forests full of Itajii (Castanopsis sieboldii), numerous valleys and flowing rivers, and the sea surrounded by Inoo (lagoon). … Stretching from north to south and with only a short distance from the mountain recesses to the sea, Yambaru consists of diverse environments that change in a variety of ways. The creatures
of Yambaru use various environments in intelligent ways and live closely linked together. The nature of Yambaru supports human beings too, who are also closely connected to other creatures and the natural environments.

—Exhibit caption on “The Nature and Creatures of Yambaru”
Ufugi Nature Museum, Kunigami

Vulnerability in Okinawa is expressed through animals. Since it was first formally described by scientists in 1981, the Okinawa rail (in the Okinawan language, Yanbaru/Yambaru kuina), has become the cultural, touristic, and conservationist mascot of northern Okinawa’s Yambaru region. The Okinawa rail is a rare flightless bird endemic to the main island, an area famous for its natural beauty and rare semitropical forests. The rail’s inability to defend itself against both “natural” predators such as the venomous habu (pit viper), and “unnatural” predators, primarily the mongoose (an invasive species), make the bird particularly powerful as a symbol of Okinawa’s environmental vulnerability. More recently, human automobile drivers have also killed the nocturnal bird known for crossing rural roads at dawn.

I first learned about the rail, the habu, and the mongoose while hiking on group forest treks in the northern Yambaru Area of Okinawa Island. Our guides’ lively moralized stories about these three animals’ relationships to the landscape, to humans, and to each other are what first led me to think about nonhuman animals as agents of environmental change in Okinawa. The nature of the human-animal “close connections” alluded to in the epigraph can be more fully understood by combining two histories that are often told separately: (1) the mongoose’s environmental colonization of Yambaru, and (2) Japan’s political and economic colonization of Okinawa.

In this chapter, I argue that the sensationalized “violence” enacted between a pit viper and a mongoose in a contemporary, touristic context reflects a much larger history of economic violence. This violence began when Japan’s development of an expansive sugar industry on Okinawa Island during the late nineteenth century thrust Okinawa into a volatile global economic system. Sugar quickly became a quintessential vulnerabilizing cash crop that intensified the links between humans and animals during this period—both intimately, to each other, and to the larger economic and environmental imperatives that prompted new forms of interspecies contact on the island.

The environmental vulnerability produced by the “sugaring” of Okinawa exploded into an acute crisis during the 1945 Battle of Okinawa, which destroyed much of the southern and central part of Okinawa. Compared with the overwhelming environmental devastation wrought by World War II, sugar’s relatively protracted agricultural “assault” on the Okinawan landscape may appear insignificant. Even so, Okinawa’s current economic structure
and environmental challenges cannot be adequately understood without attending to historical processes large and small, and to violent forces fast and slow. Stories of the habu, the mongoose, and the Okinawa rail can be told in many ways; in this version, I emphasize time as the narrative vector that connects Okinawa’s nineteenth-century political economy with today’s tourism imperative. Through the creation of a multispecies narrative history we can begin to understand the legacy of colonization and war on Okinawa’s “untouched” northern landscape, and how this history continues to shape the “conditions of possibility” (Foucault 2002) for contemporary island tourism.

Animal Actors

Mr. Uchihara, a cheerful man in his mid-sixties, jumped on stage wearing amber-colored glasses, a tropical Okinawan kariyushi shirt, and a headband reminiscent of an Okinawan eisaa drummer. Welcoming about a dozen visitors to the habu-mongoose show at the Izumi tourist rest stop in Nago (see Figure 2.1), he encouraged us to take pictures before things had even started.

Figure 2.1 • Advertisement for Habu-Mongoose Show, Nago
“Did you know that a pit viper can survive without food for six months?!” Uchihara asked, warming up the audience by sharing some bits of trivia about the snake we were there to see. A few months earlier, I had seen an entirely computer-simulated habu-mongoose show at a nearby cultural theme park. After hearing that these shows were no longer “real,” I was unsure what to expect.

Suddenly he surprised us all by whipping the lid off a large plastic garbage can tucked in a corner of the room to produce a real live yellow- and white-splotched snake. Of the four poisonous snake species on Okinawa Island, he assured us, this was not one. He enticed a few nervous children to go up on stage and try on the harmless “boa” for size. “Click! Click! Click!” went their parents’ mobile devices. “Remember to use your flash!” he repeated, clearly concerned with the quality of our photos. I did not desire this particular memory, not even for fieldwork. Was it too late for me to flee on the grounds of animal cruelty? As though reading my mind, Uchihara singled me out as the only non-Japanese tourist present, and stated that my foreignness made it doubly important for me to enjoy the experience. He brought the snake closer, suggesting that I hand my camcorder to my neighbor for a photo opportunity. I shuddered, and was immediately embarrassed by my reflexive recoil. I very tentatively grazed the snake’s skin with my fingertips, then placed the luckless creature back in its garbage can.

“And now, for the real thing!” Uchihara shouted merrily as he used a shiny metal hook to scoop out a habu from an adjacent can. He squeezed the base of the snake’s head, forcing its jaws open to reveal a sharp pair of fangs. He swung the snake around effortlessly, manipulating its poses like a master puppeteer. There were a few squeaks and tremors from the audience, but most people appeared to trust him to keep us alive through the end of the show. Pointing to the snake’s brown-grey triangular head, Uchihara taught us that head shape is the easiest way to determine whether a species is poisonous, and commanded, “Repeat after me: I will not touch this outside.”

After a few more minutes of showing the habu, Uchihara returned the snake to its plastic lair and pulled down a giant projector screen. He stood before us and began recounting the history of the live habu-mongoose show we were not about to see: “It’s funny, isn’t it? It’s okay for dogs to fight dogs, and for bulls to fight bulls. And people fight people, right? But to pit one animal against a different species is illegal. This is a very unusual law. They say Japan is the only place in the world with a law like this.” I was surprised by his disapproval of what seemed to me like a fairly reasonable (if imperfect) moral delineation, but as he continued I began to understand his logic: “It’s okay for a human to kill a mongoose, and it’s okay for a human to kill
a habu. These animals are exterminated! But it’s not okay for us to let them kill each other. The fine for doing this is ¥1,000,000 [$12,000]!”

Anticipating a tinge of disappointment from those of us who had hoped to see a live show, he reassured us that we were still in for a rare treat, because this “precious” film could only be seen at his habu house. The film was about four minutes long, and this version was indeed on the “real” end of the violence spectrum. After opening with an aerial view of Yambaru’s lush green forests full of chirping birds and leaping frogs, we were plunged into the midst of a battle: an angry-looking snake stared us down, accompanied by an ominous surging soundtrack reminiscent of the film *Jaws*. Then a vicious-looking mongoose appeared, swaying to the mesmerizing beat of Indian tabla drums that invoke its geographic homeland. The mongoose panted and hissed and the habu darted wildly around it, both angling to strike. For a while things looked promising for the snake, but the mongoose was victorious.

The lights came back on, and set before us was the real live champion. “Meet Michiko!” Uchihara cried. Michiko was a twelve-year-old fighting mongoose that Uchihara described dotingly as “undefeated” despite her smaller stature. He kneeled down and cooed to her, “Oh, Michiko…,” making everyone laugh. Her medium brown fur was surprisingly fluffy, and she yawned and stretched as she cleaned herself within the confines of her small metal cage. As with the habu, nobody was allowed to touch Michiko. Her eyes danced curiously around the room while Uchihara spoke. After we met Michiko, the show quickly devolved into a sales pitch for habu-derived male potency pills and other snake by-products.

At the close of the show I approached Uchihara and Michiko to introduce myself. The stench of urine emanating from the newspaper that lined her cage was overwhelming, and made it difficult for me to imagine her as anything much scarier than a guinea pig. Up close she was even cuter, though her rhythmic shimmying turned into a nervous circular pace as I approached. I asked Uchihara a few more questions about his views on habu-mongoose fights, and he explained that he and his colleagues had been running these shows for over thirty years: “This is our *work,*” he reiterated. Shortly thereafter he tried to recruit me to talk to the prefectural government on his behalf, saying, “You’re a student! Maybe they’ll listen to you.” I politely excused myself to purchase some snake oil.

Staged performances such as the habu-mongoose show described here are naturalized and sensationalized in Okinawa for a variety of profit-driven and political purposes. These animals are framed as natural enemies by the tourism industry, through local conservation initiatives, on postcards and in cages; their actual recorded histories belie a much more complicated biological and political relationship.
Animal Actors in situ: “And now, for the real thing!”

Okinawa Rail

The Okinawa rail has not always been endangered, and it has not always been restricted to the forests of northern Okinawa. As a sixty-year-old Yambaru retiree put it: “That bird was so common it hardly had a name. We used to eat it.”4 First formally described by Japanese ornithologists in 1981, the rail has many official monikers: Okinawa rail (English), Gallirallus okinawae (Linnaean), Yambaru kuina ヤンバルクイナ (Okinawan), and 山原水雉 (Japanese).5

The rail’s population was estimated at around 1,800 in 1986, but by 2004 this number had dropped to somewhere between 700 and 1,000. The bird’s transformation from an unremarkable forest dweller to an endangered species and national treasure began when two Japanese researchers from the Yamashita Institute of Ornithology published an article based on a dead specimen they discovered in the northern village of Kunigami. Until World War II, the bird could be found in many parts of Okinawa Island, but much of its forest habitat was destroyed during the Battle of Okinawa and, to a much greater extent, through postwar urban reconstruction. Jun Ui, a leader in Japanese environmental studies, estimates that 90 percent of Okinawa’s “pristine nature” has been lost since the 1972 Reversion (McCormack 1999: 270). Both these events were catastrophic for the bird, driving it farther and farther north until, according to an administrator I met from the Ministry of Environment, it could no longer accurately be called the “Okinawa” rail. Thus, it came to be known by its current northern habitat as the national protected species: Yambaru kuina.

The kuina can run fast, jump high, and flutter, but it cannot fly. It roosts in trees, especially Itajii (evergreen chinquapin), and forages for small frogs, snails, and lizards on the forest floor. Its eggs commonly fall prey to forest crows and the habu. The pint-sized bird which weighs around 430 grams and has a wingspan of about fifty centimeters, is also eaten by mongooses, abandoned stray dogs, and feral cats.

Habu

Habu is the Japanese term for a variety of native venomous pit vipers found in Okinawa. Adult Okinawa habu (Trimeresurus flavoviridis) and Hime habu (Ovophis okinavensis), the two species most commonly found on Okinawa’s main island, are between 120 and 150 centimeters long. Like the kuina, the
habu is nocturnal, but its habitat is much more diverse: it can live in forests and fields, on mountains, and near small bodies of water. One may even encounter a habu seeking shelter (or rodents) in old sheds and around family tombs. The habu often resides somewhere between open palm forest and cultivated farming areas, increasing its likelihood of contact with humans.

**Mongoose**

The small Indian mongoose (*Herpestes javanicus*) was introduced to Okinawa Island in 1910 as a “biological pesticide,” a chemical-free alternative to controlling the habu and the black rat (*Rattus rattus*), both of which are detrimental to sugarcane farming. The mongoose prefers drier forest and scrublands, but it can tolerate areas with fairly dense human populations and is notorious for raiding chicken and egg farms. It is an opportunistic feeder that ranges from 50 to 65 centimeters in length. Mongooses subsist on insects but also eat amphibians, reptiles, birds, and bird eggs.

The Japanese term for “invasive species,” *gairaishu* (literally “species that comes from the outside”), can also be translated as “introduced,” “non-native,” “foreign,” or “alien” species. English-language literature on the mongoose (cf. Yamada and Sugimura 2004) commonly refers to the animal as “invasive,” owing to the degree of harm it is perceived to cause in its new environment. The politics of naming, labeling, and categorizing animal species according to their geographic origin greatly influences discourses of natural heritage, biodiversity, and vulnerability in Okinawa. Moralized discourses of the villainous mongoose, the pathetic kuina, and the dangerous habu are brought to life for Okinawan and tourist consumption and contrived through performances such as habu-mongoose shows. The commoditized versions of their “cultural biographies” (Kopytoff 1986) and interrelationships—as natural or unnatural, right or wrong, funny or tragic, fair or unfair—are couched in an environmental politics that elides much deeper historical connections.

During fifteen months of fieldwork in Okinawa, I saw plenty of kuinas: stuffed, drawn, carved, sculpted, and sold. Only once did I manage to see a live kuina as it paced frantically behind the glass walls of a cage at NeoPark Okinawa, an animal park in Nago City. One of my ecotour guides pointed out its loud, distinctive morning call while we were hiking, but the Ufugi Nature Museum’s taxidermic version, complete with recorded vocals, brought me as close as I could get to the bird without receiving special permission to visit a kuina rehabilitation center. When I asked one of the museum’s employees why it was so difficult to find a live kuina, she asked me in return why I expected it to be easy: “They are, after all, still wild.”
Type-casting

Aside from when the kuina becomes front-page news following a gruesome roadkill incident, or darts successfully across the road in a streak of good timing, most people in Okinawa experience the rare bird as caricature (see Figures 2.2a–2.2d).

**Figure 2.2a • Giant Yambaru Kuina, Churaumi Aquarium, Motobu**

**Figure 2.2b • Kuina in Training, Tourism Welcome Center, Kunigami**
**Figure 2.2c** • Cuddly Kuina Mascot at Waterfowl Festival, Naha

**Figure 2.2d** • Crying Kuina, Kunigami
Whether it is wallowing in a pool of its own tears, nurturing its young in the form of a gigantic Chia Pet, pumping iron for self-protection, or bumbling around as a playful children’s mascot, in Okinawa the kuina has become an icon of all things endangered. The Ministry of Environment and nonprofit organizations such as the Kunigami Tourism Association regularly invoke the kuina in the promotion of conservationist agendas. Its “cuteness” has also made it extremely marketable on t-shirts, postcards, posters, and as stuffed animals sold at tourist hubs across Okinawa.

Habu are not considered endangered, and most farmers attempt to kill them on sight because of the health hazard they pose. Today, habu bites are not usually fatal if medical care is sought immediately, but they occasionally cause paralysis. (Bodily risks are compounded if one is unfortunate enough to be bitten multiple times.) According to Uchihara, the master of ceremonies at the habu-mongoose show I attended, until an effective serum became available in 1963, 75 percent of people bitten died within twenty hours (96% if bitten a second time, 99% if bitten a third time). Colorful habu warning signs are frequently posted near forested hiking trails, on university and lower school campuses, and around popular tourist attractions.

Habu warnings are much more likely to be encountered than the snake itself. Most Okinawans I spoke with have happened upon a live habu once or twice, and I was often told to avoid parks after dark to prevent contact with habu. I once saw a dead habu sprawled on the side of the steep winding road that leads to Kunigami’s Yonabaru Forest, but most encounters I had with live habu were through glass. The first time I saw a habu, it was preserved in a jar of clear alcohol and for sale on International Street (Kokusaidōri), Naha’s main tourist strip.

Habu are hunted primarily for extermination purposes and to produce habu-shu, a snake-infused version of the popular Okinawan distilled rice liquor awamori. Hunters can be paid more than ¥5,000 ($40) per snake. Habu-shu is considered a gourmet souvenir and sells for anywhere from ¥10,000 to ¥80,000 yen ($85 to $700), depending on the size of the snake and the quality of the alcohol.

Unlike the kuina and the habu, the diurnal mongoose can be seen crossing the road by people living in Yambaru. Outside a museum or theme park, I saw a mongoose only once and nearly mistook it for a small feral cat when it darted in front of me near my apartment in Nago. Like the kuina and the habu, the mongoose is most commonly witnessed in the abstract (see Figures 2.3a and 2.3b).

The mongoose was imported to combat pests on sugarcane plantations in southern Okinawa, but it was unexpectedly prolific; by the 1990s it had spread throughout the central part of the island and was encroaching on the north. Okinawa Prefecture and the national Ministry of Environment
FIGURE 2.3a • “Mongoose Northward Prevention Fence,” Yonabaru Forest, Kunigami

FIGURE 2.3b • Ministry of Environment “Mongoose Busters” Extermination Program Logo6
have jointly sponsored the “Yambaru Mongoose Busters,” a volunteer-driven program based in the north that aims to eradicate the mongoose from the prefecture. Imagery generated in connection with these efforts reifies the interspecies morality play described in popular accounts. The Mongoose Busters logo (Figure 2.3b) presents the mongoose and the kuina together in a stark, abstracted manner that emphasizes the “batsu” (incorrect) nature of their unnatural relationship. (The red x in Figure 2.3b is a symbol commonly used to flag mistakes and errors; here x marks this particular animal dynamic as wrong.) The mongoose is the banned aggressor, depicted in black, while the kuina is the innocent victim in white.

Paired images of the mongoose and the habu imply a similar kind of power imbalance, but they are completely different in tone. The habu-mongoose show sign in Figure 2.1 celebrates the violence of the foreign mongoose against another of Okinawa’s native species and exploits it for profit at ¥300 ($2.50) per ticket.

**Legendary Propaganda**

A legend is a story coming down from the past, one popularly regarded as true, but not historically verifiable (see Figure 2.4). Kay Milton (2002: 150) discusses myth in the “popular sense that it is false,” and in the anthropological sense: “that it is believed in and dogmatically asserted because it protects particular interests and ideologies.” Legends can also be thought of as myths of recent origin. In this sense, the habu-mongoose fight is doubly legendary: a recent myth, whose persistence maintains certain Okinawan ideologies of indigenousness and invasion.

In addition to the moral and narrative dimensions already described, popular perceptions of species vulnerability in Okinawa are shaped by the kinds of images provided this chapter. The kuina falls prey to both the habu and the mongoose, yet the relationship between the habu and the kuina is considered natural because these two animals are both Okinawan. As an invasive species, on the other hand, the mongoose is subject to much greater scrutiny and more aggressive extermination tactics because it does not “belong.”

The habu-mongoose dynamic in Okinawa can also be regarded as “unnatural” because of the animals’ opposing activity cycles. Without human intervention, they would only rarely encounter one another in the wild and should therefore be considered “legendary” rather than “natural” enemies. Furthermore, though it possesses immunity to viper venom, the small Indian mongoose has to be trained to eat snake meat through regular pre-fight exposure to its smell and taste. Nor is the fight evenly matched—the mon-
goose wins more than 90 percent of the time, sustaining little more than a temporary limp if bitten.

Habu-mongoose interaction has been symbolically naturalized by spectacles that pit one animal against the other in a death match. These shows were held live until 2000, when they were outlawed as Okinawa fell under intense
international scrutiny while hosting the G8 summit. The subsequent shift in narrative is reflected in an English-language handout I was given explaining a “swimming competition” I watched between a sea snake and a mongoose at the theme park Okinawa World: “Now, the death match is replaced by a friendly swimming competition, promoting love and peace.” According to Uchihara, as of 2011 the bloody live version can only be found on Amami Ōshima, a small Ryukyu island north of Okinawa that belongs to Kyushu Prefecture.

Theodore C. Bestor (1989: 2) distinguishes between tradition understood as historical continuity and tradition understood as traditionalism, which he defines as “the manipulation, invention, and recombination of cultural patterns, symbols, and motifs so as to legitimate contemporary social realities by imbuing them with a patina of venerable historicity.” The manipulation and antagonizing “recombination” of the habu and mongoose can be imagined as a traditionalistic performance: these animals are cultural symbols for “native” and “invader” in a contemporary Okinawan social reality shaped by powerful discourses of vulnerability, heritage loss, invasion, and endangerment.

By way of critiquing Eric Hobsbawm’s “invention of tradition” hypothesis (Hobsbawm and Ranger 1983), Marilyn Ivy (1995: 21) resists analytical binaries such as invention/authenticity, fiction/reality, and discourse/history. Ivy settles instead on the term “phantasmatic” to characterize the late twentieth-century reinscription of Japan’s cultural and historical erasures in response to popular anxieties over the loss of national identity. For Ivy, the phantasm is “an epistemological object whose presence or absence cannot be definitively located” (1995: 22). The historical origins of the phantasmatic event can never be sufficiently pinpointed; rather, the origin of an event “emerges as such only through its displacement” (22). In the habu-mongoose fight, the animals and the show event itself are “displaced” in what Ivy calls the “second event”—as opposed to the first fight, which took place somewhere between the Okinawan imaginary and South Asia. The habu and the mongoose represent the “nature that culture uses to make second nature” (Taussig 1993, quoted in Ivy 1995: 21), through the production of a second event. Digitally simulated and (re)produced clips of staged habu-mongoose fights might then be regarded as a “third event”—the mimesis of a mimesis.

Today, habu-mongoose shows in Okinawa are comprised of filmed reproductions and computer simulations replete with dim lights and dramatic soundtracks. The virtual simulation of an always already simulated fight perpetuates the legend in a manner that further collapses the distinction between reality and representation, real and imaginary (Baudrillard 1994: 3). To be sure, the actual habu-mongoose fight is only “really real” (Geertz 1973: 443) to the animals. When placed in a ring together, the two will fight, and at least one (usually the snake) will die. Their antagonistic relation-
ship can also be described as “hyperreal,” Jean Baudrillard’s (1994: 1) term for the “generation by models of a real without origin or reality.”

And yet, as Clifford Geertz observes in a study of the Balinese cockfight, these matches invoke important cultural themes that also pervade contemporary life in Okinawa, including death, loss, and vulnerability. The habu-mongoose fight presents one view of the “essential nature” of these dominant discourses, “rendering ordinary, everyday experience comprehensible by presenting it in terms of acts and objects” (1973: 443). Here the metaphorical finds dramatic, violent expression in the bodies of two animal actors—“actors” who can be viewed jointly as dramatic performers, and as nonhuman agents of social change (cf. Latour 2004). What caused this fight? Is there a really real story? The history that follows reveals the material origins of this mythical pairing.

Setting The Scene

One version of the story begins like this:

In 1910, a leading Japanese biologist could not ignore the fact that hundreds of Okinawans died every year from venomous snakebites. He decided to apply the natural enemy theory, and released 17 mongooses in Okinawa, where they are not an indigenous species. In 1981, a new species of bird called the Okinawa rail was discovered in the Yambaru, the northern forest area of the island. Almost at the same time, researchers for the first time realized that the original population of 17 mongooses had increased to about 30,000, thus placing the Okinawa rail and other indigenous species on the verge of extinction. Today, the foreign predators are conquering the Yambaru, the safest haven of the Okinawa rail.

—Yas Mamemachi (Detour Japan n.d.)

“The Mongoose Conquers Indigenous Species in Okinawa”

Detour Japan website editor Yas Mamemachi begins his posting in an online series on “The Fear of Foreign Species” by summarizing the history of the specific interspecies relationship that troubles many Okinawan and mainland Japanese conservationists today. Literature from biology, history, and anthropology shine light on social, political, and environmental vulnerabilities. Newly shuffled sources narrate a re-contextualized story of the factors that have gradually led to the kuina’s demise, and offer alternative plotlines often drowned out by presentist cries of “Save the kuina! Kill the mongoose!”

While many foreign species are introduced accidentally, the mongoose’s forced “invasion” of Okinawa Island was deliberate and well documented. Describing the seventeen mongoose pioneers, wildlife biologists Fumio Yamada and Ken Sugimura (citing Kishida 1931) write that “six males, six
females and five individuals of unknown sexes were trapped in what is now Bangladesh and taken to Okinawa Island by Dr. S. Watase” (Yamada and Sugimura 2004: 118). These individuals reached sexual maturity at around four months and expanded their range rapidly (by approximately one kilometer per year) from their original site of release in Naha.

The kuina has been designated one of Japan’s Natural Monuments, but the mongoose is not without its titles. In 2000 the International Union for Conservation of Nature identified it as one of the “World’s 100 Worst Invasive Alien Species” (IUCN 2000; Yamada and Sugimura 2004: 118). The mongoose has earned this title in part because there is no clear evidence that it actually preys on the snakes it was introduced to combat (Yamada and Sugimura 2004: 120). Furthermore, in addition to eating (and thus in a sense creating) Japan’s “exotic species,” it causes even more damage to taro, sweet potato, melon, and sugarcane—the very crops that it was brought in to protect.

The predator mongoose is easy to hate but hard to kill. In addition to relying on volunteer efforts, the Ministry of Environment incentivized trappers with a bounty of $45 (up from $20 in 2000) per mongoose killed in 2003. Despite the combined efforts of Okinawa Prefecture and the national Ministry of Environment, only 1,290 mongooses were captured between 2000 and 2003 (Yamada and Sugimura 2004: 122). As I observed when hiking on ecotours, current methods of trapping over large areas are cumbersome and frequently capture the wrong animal.

Most mongoose narratives emphasize 1910 as the moment of rupture in Okinawa’s environmental history, eliding important connections between the mongoose “invasion” and Japan’s earlier colonization of the archipelago. The wildlife biology articles I consulted for information about the mongoose in Okinawa (e.g., Gosling 1989; Kishida 1931; Simberloff 2001; Yamada and Sugimura 2004) mention the nineteenth-century development of plantation agriculture, and historians explain the problem of snakes that drove the animal’s introduction to the island.

Follow the Snakes

The bite of a habu should be lanced, and a tourniquet applied above the wound as soon as possible after the snake has struck. The blood should then be drained from the area of the bite and the wound washed with potassium permanganate or treated with sulphur and heat. After bandaging, the patient should be immobilized and kept warm. The serum must be administered to snake-bite victims as soon as possible.

—Gladys Zabilka, Customs and Culture of Okinawa
The Japanese government wanted to tackle the problem of snakebites in Okinawa by non-mammalian means, as well. In 1905, Charles Leavenworth, a visiting history professor from Shanghai’s Imperial Nanyang College, published a pamphlet describing a visit to the “Loochoo [Ryukyu] Islands.” In a section entitled “The Snakes,” Leavenworth (1905: 44) writes, “A number of persons are bitten every year, and of these some die and others are injured for the rest of their lives, as a result of the poison.” Leavenworth recounts his tour of a government-established snake laboratory where “the poison has been carefully investigated and a Serum Antivenomicum, prepared by the Japanese Government Serum Institute of Tokyo, is provided there for dealing with the snake-bites” (44).

Leavenworth’s colorful description frames the habu in a familiar way: “seven hundred hissing monsters were there in wire cages … An actor might have practiced there, as Demosthenes did before the sea waves, for a chorus of hisses could be heard on all sides” (44–45). These caged snakes were no more a threat to him than the pickled ones I encountered on Naha’s touristic International Street in 2011: “As one passed along the rows, hideous snakes would rise and dart at one, until striking against the metal barrier, they would fall back in harmless inaction” (45). A bounty was offered for snakes at this time, too, but for a purpose predating the habu liquor market. Fifty sen (former Japanese currency also used in Okinawa) was paid for a live habu “specimen,” five for a dead one. Leavenworth alludes to the abundance of snakes on the main island, adding that “this … was not an offer for an unlimited supply, but only for those which were needed for scientific work, for at that rate to all comers the treasury of the institution might be exhausted much sooner than the snakes.” The historian concludes poetically: “It is an ill-wind, however, which blows no good and the writer was informed … that the snakes do one useful service by eating the rats, which otherwise might do great injury to the stalks of the sugar cane” (45).

**The “Spirit” of Okinawan Sugar**

In early March 2011, a Nago Museum researcher, Mr. Yamato, invited me to join him at a museum-sponsored community volunteer sugarcane harvesting and pressing event. At this early juncture in my research, the kurozatō (black sugar) that is today ubiquitous on the dining tables of Okinawan homes, and at every tourist venue, meant little more to me than a breath mint. While driving along Okinawa’s many winding country roads I had learned to recognize sugarcane fields, some of which bumped right up against major traffic arteries on the drive south to meet my scuba diving club at Odo Beach in Itoman City (see Figure 0.1). I had eaten molasses-flavored black sugar
chunks at all kinds of social gatherings, but I had no idea how it was made. Yamato convinced me to participate by insisting, “By doing this you will understand the Okinawan spirit.”

He picked me up near my apartment in Nago and drove me and his nephew Fumitaka, who was visiting from Tokyo for spring break, to a small sugarcane farm in the neighboring town of Motobu. The basic history he provided as we drove began with sugarcane being grown as a cash crop in the late nineteenth century, by the direct order of the Japanese Meiji colonial government. Then he quickly fast-forwarded to the 1960s, explaining to my surprise that the prevalence of sugarcane in Okinawa today is a direct result of the Cuban Missile Crisis, during which the skyrocketing international price of sugar prompted many more Okinawan farmers to convert their rice fields into sugarcane fields.

We parked next to the field and I borrowed some rubber boots and gloves from the trunk of his car. Two other volunteers were present—a married couple who also worked for the museum. The couple explained that they participated in these monthly museum-sponsored outings as a form of continuing education to keep them informed about things they identified as “traditionally” Okinawan.

Mr. Arasato, a tan farmer in his late sixties, introduced himself as the owner of the field and handed each of us a rusty machete. We walked single-file toward row upon row of unruly green and brown sugarcane stalks that shot out in all directions. Arasato demonstrated how to hack into the base of the stalk incisively, without injuring oneself. He paid particular attention to me as we practiced. Fumitaka and I were new to sugarcane harvesting but the others dug into their work with vigorous confidence. Arasato also showed us how to recognize and avoid rotting and mouse-ravaged stalks, which were no good for juicing and had to be tossed into a separate junk pile (see Figure 2.5).

The gnarled cane stalks grew close together, flailing wildly, and I had no idea where to begin chopping. I tentatively picked through a few stalks, looking around every couple of minutes to see if the others had some sort of divide-and-conquer strategy for cutting. I wanted to do it right, to be efficient with each strike. After watching me toil for about ten minutes, Arasato came to correct my grip on the machete. He offered some encouragement: “See, it’s easy!” Indeed, the task was not very complicated. Forsaking perfection, I slowly relaxed into the work and began cutting rhythmically. The sound of hacking permeated the field. “This is fun!” I thought as I started to sweat and grew more aggressive toward the cane with each blow.

Just as I was about to carve into some “really real” fieldwork, Arasato was back. He invited me to gather up the severed stalks and carry them to his pickup truck. He made a passing comment about leaving the chopping to the men, “This work is hard . . . ,” which I resented for a moment until
I looked around and realized how much more the others had harvested. I reluctantly relinquished my machete and instead began dragging the long, crooked cane stalks to the truck.

We had only worked for about twenty-five minutes when Arasato began gnawing on a piece of sugarcane rather loudly. He invited us to copy him as he peeled back the tough green skin with his front teeth. “It’s more fun to eat than to harvest, isn’t it? Kids today don’t know how to handle raw sugarcane,” he lamented. He bit further into the pulpy, fibrous, cream-colored meat of the stalk, and juice ran down his chin. I removed my gloves and attempted to peel back a small chunk of the stalk with my bare fingers. When this did not work, I decided to follow suit and bit straight into the thing. The sweet cane juice was refreshing and delicious.

We got back to work, and in less than an hour we had amassed enough sugarcane to fill the bed of Arasato’s truck. We drove a couple of miles back to his house, where he revealed his rugged, rusty sugarcane-pressing machine. The diesel-powered machine choked and sputtered as we began feeding the long stalks through its grinding metal teeth. As the crushed cane emerged on the other side, its murky juice squirted into a pail underneath. I lined up the straightest stalks for insertion, saving the twisted ones for someone more experienced. Arasato warned me to protect my fingers by gently guiding the cane through unforced. We had to stop production numerous times when...
the stalks jammed in the jaws of the machine, but this was easily fixed by a little reverse heave-ho. My eyes traced the only visible power cord to a small generator that appeared to be connected to the truck’s engine. Curious, I asked whether this was the “old-fashioned” way of pressing cane juice (see Figure 2.6); Arasato smiled and retorted that the truly old-fashioned method involved a cow pushing a cart in a circle.

**Figure 2.6 • Agrotourists Operate Sugarcane Press, Itoman**
After we had filled two large jugs with the dark amber-colored liquid, Arasato led us into his shed, where he had stoked a small fire. We sat on tree stumps encircling the fire pit while he served us hot black tea from a thermos. One of the other volunteers had washed some fresh potatoes and put them in a vat to boil. We munched on the hot potatoes sprinkled with Okinawan salt and chatted about the freezing weather, which was roughly 10° Celsius that day (50° Fahrenheit).

During a lull in conversation, I asked Arasato what he thought about the future of farm tourism on the island. He told me about his plan to begin hosting student groups over the next three years, predicting that a mixture of traditional farming and agrotourism (known in other parts of Japan since the 1970s and 1980s by the village revitalization catchphrase “Nōgyō to Kankō” or “Agriculture and Tourism” [Moon 1997: 221]) would be the most viable option in the future. I handed him my business card and invited him to email me with any upcoming farming volunteer opportunities. “Yes, my daughter has been meaning to set up my computer …” he replied. I apologized, embarrassed, and pointed to my phone number instead. He sent me home with a recycled PET bottle full of the raw juice and reminded me to boil it first before drinking.

**Becoming “Sugar Islands”**

To understand the Japanese government’s increased attention to snakebites in the early twentieth century (and hence the introduction of the mongoose as one possible solution to the problem), we must turn the clock back even further. Okinawa’s history of agricultural development in the context of colonization is crucial to understanding the changes that led farmers to spend substantially more time working in rapidly expanding, rodent-ridden cane fields and being bitten by habu.

Sugarcane (satōkibi) was never grown on a large scale for local consumption. The traditional Okinawan diet is based on sweet potatoes (rather than rice), which were first introduced from China’s Fukien Province around 1605 (Kerr 1958: 560). Sugarcane was cultivated in Okinawa long before more advanced production technology was introduced in 1623, but it was typically consumed raw or ground and boiled into a syrupy sweet liquid.

The Japanese government formally annexed the Ryukyu Islands in 1872, but Okinawa Prefecture was not established until 1879. What was Okinawa like before it became a formal colony of Japan? One traveler’s romantic mid-nineteenth-century account reads as follows:

The prospect, as ships near the land in approaching the harbor of Napha [Naha], is beautiful. From the beach to the summit of the long and gently ascending
slope, nearly the whole surface seems to be in the highest state of cultivation. The different shades of green presented by the different winter crops; the uniform, terraced hills; the groves to relieve the uniformity of cultivated fields, and on the distant and even line of the summit of the ridge, the peculiar pines, with their limbless trunks and flat, broad, spreading tops, under which the deep-blue sky is seen, all conspire to form a most rich and highly cultivated rural landscape. (Gast 1945: 19)

This excerpt comes from agriculturalist James Morrow’s “Report Made to Commodore Perry on the Agriculture of Lew Chew” (7 February 1854) for the 1853 United States Japan Expedition.14 Morrow’s rendering of mid-nineteenth-century Okinawa suggests an agricultural abundance: “Every foot of ground appears to be carefully cultivated, unless from situation or barrenness cultivation would be unprofitable” (19). In addition to sugar, his report describes beans, rice, and patches of red and white sweet potatoes that “meet the eye in every direction” (20).

Historian George Kerr’s (1958: 402) depiction of Okinawa in the 1880s paints a much less paradisiacal portrait of the island: “Okinawa had no potential wealth to exploit, and Tokyo did not have surplus wealth to invest in a profitless regional economy.”15 Japan’s policies toward Okinawa differed from those regarding Hokkaido (another recently annexed island in the northernmost part of Japan), where abundant forests, fisheries, and mines drew greater administrative and financial investment. Kerr describes Okinawa as “of secondary importance, merely an economically unrewarding territorial link between Japan proper and the new ‘treasure island’ [Taiwan]” (423), which Japan acquired following the Sino-Japanese War in 1895. Lacking any “material assets of value” (402), late nineteenth-century Okinawa was viewed by Tokyo as an underutilized landscape in need of development.

Neither Morrow’s nor Kerr’s representation of Okinawa is sufficiently complex, but together they offer opposing perspectives that shed light on Okinawa’s transition from a semi-independent Ryukyu Kingdom to a “profitless” colony of Japan in the decades following Perry’s 1854 visit. Once a part of the Japanese Empire, Okinawa came to be viewed as lacking in comparison to a much larger colonial sphere that grew to include Taiwan (1895), Korea (1910), Manchuria (1931), and beyond.

In Okinawa, sugar was deemed the most profitable product for mainland Japanese brokers and shippers. Between 1890 and 1910 the Ministry of Agriculture organized administrative agencies such as the Okinawa Prefectural Sugar Improvement Bureau to transform the modes of production and monitor the quality of the product (Kerr 1958: 431). This attracted further investment from capitalists in Osaka and Tokyo, as well as government support for experimental farms designed to increase Okinawa’s competitiveness in a growing global market.
By 1915, all the assets of the Sugar Improvement Bureau were controlled by the Okinawa Sugar Company, followed by the even larger and more powerful Taiwan Sugar Corporation, whose principal shareholders included Japan’s imperial household and the Mitsui and Mitsubishi corporations (432). Thusly, Kerr writes, “control of Okinawa’s basic agricultural industry passed entirely out of Okinawan hands.” As the bulk of profits derived from Okinawan sugarcane boomeranged back to the mainland, a high percentage of Okinawa’s farming population “became entirely dependent upon the metropolitan markets, which left them extremely vulnerable to price fluctuations caused by conditions in Formosa [Taiwan] or in Japan proper” (431). The rapid expansion of the Okinawan sugar industry produced an insidious form of economic vulnerability.

Historian Wendy Matsumura (2007: 39) describes this shift through biography, drawing on the firsthand observations of Noboru Jahana, a bureaucrat who, as one of the first Okinawan students sent to be educated in Tokyo, became an intellectual export. When Jahana returned to Okinawa in 1891:

He observed that the poor peasantry, who depended on sweet potato for their food source, was being pushed to the brink of starvation because they had no energy or land left over to grow their food supply after converting most of their lands into sugar cane fields. As a response to the twofold problem of decreased self-sufficiency and increased indebtedness that emerged from the conversion of lands to sugar cane fields, [he] proposed encouraging higher yield planting and manufacture methods rather than increasing the total area over which cane is cultivated. (Matsumura 2007: 154)

Instead of expansion of the acreage devoted to cane cultivation, Jahana encouraged the production of new technologies that would increase overall yield through improved planting and manufacture methods. Jahana recognized what Matsumura describes as the peasantry’s “vulnerability to starvation” (154), and advocated for more balanced crop production.

Okinawa’s economic vulnerability was both created and maintained through Japan’s colonial influence. Writing in 1933, economic geographer Yukuo Uyehara characterizes Okinawa’s sugarcane production as inferior to that in places such as Cuba and Hawaii, where the plantation system of agriculture was better established. In the early 1930s, Okinawa had only five of the smoky sugar refineries described by Jahana in the previous excerpt. Uyehara describes the “very primitive” modes of labor in Okinawan “home factories” (1933: 403), some of which I witnessed during my time as an agrotourist:

These fields are operated by the families in a way similar to that of the rice fields of the mainland. The men cut the cane and carry it back to the homes on horseback, by hand, or on wagons. On the farmsteads are compressing machines into
which two or three women, sitting on either side of each machine, feed the cane. Compressed juice is then boiled in big pots to black sugar, which is the last stage of nearly all Okinawa sugar. (Uyehara 1933: 400)

This passage from Uyehara’s account of the Ryukyus was written to emphasize that “urgent attention” (403) was needed to improve refining methods in order to raise the income of farmers.

With the influx of Japanese manufactured goods and the rising urban standard of living, the island’s traditional system of bartering for items such as foodstuffs for handicrafts began to give way to a currency-based economy (Kerr 1958: 404). Okinawans were compelled to engage in sugar production because they now had to produce foodstuffs and textiles for themselves and “enough in addition to pay for the new things which they now believed to be necessities.” Perhaps most vulnerabilizing, villagers struggled to maintain the self-sufficient communal landholding arrangements that had supported farming for centuries.

Another form of instability derived from changing consumer tastes. The national demand for sugar shifted from brown to white, and by the 1920s, large capital-backed sugar factories linked to refineries on the mainland had become “major intrusions to the existing landscape of Okinawa” (Matsumura 2007: 154). Matsumura depicts these factories, “whose black smoke filled the island’s skies,” as “unnerving contrasts to the 3,000 or so small brown sugar manufacture huts littered throughout Okinawa’s countryside” (301). The growth of these kinds of commercial-scale refineries further reduced farmers’ home cultivation of sweet potatoes in favor of the more profitable work of supplying sugarcane to factories. The state’s sugar-centered policies, particularly during the early Taisho period (1912–1926), precluded the kind of balanced economy that Jahana envisioned.

By the outbreak of World War I, Okinawa had become a “monocultural producer of a global commodity” (304) and was intricately connected to Imperial Japan and the larger world economy. The limited global supply of sugar ensuing from the destruction of Europe’s beet-sugar factories during the war precipitated the “‘golden years of Okinawa’s brown sugar industry’ [between 1918 and 1919]” (304), but the 1920 Tokyo Stock Market collapse devastated what was by then Okinawa’s primary export commodity just as suddenly. In 1926, sugar was valued at 22% or ¥11,000,000 (approximately $130,000) of the value of all island products and constituted 59% of total exports (Uyehara 1933: 400).

The transformation of sugar from an exotic foreign luxury into a basic necessity of daily life was part of a much larger global trend that began in Europe and the Americas in the mid-seventeenth century. Sidney Mintz’s (1985: 197) trailblazing analysis of the relationship between the commod-
ification of sugar and the history of capitalism and industry in Europe and the Americas traces a growing consumer dependence on “sweetness” during this period: “From 1880 until the onset of World War I—the period when sugar production was technically modernized—the production of centrifugal (‘modern’) sugar rose to more than sixteen million tons.” Between 1900 and 1970, global sugar production increased somewhere between 500 and 800 percent (197).

Celia Lowe (2006: 21) identifies the “archaeological shift in the milieu of reason” that occurred when, at the turn of the nineteenth century, European colonial projects shifted from primarily “extractive trade practices” such as the sugar trade, toward a larger project of governing, educating, and “advancing” colonial populations. In Okinawa, the extraction of sugar grew into a kind of “civilizing mission” with the Imperial Japanese (and later U.S.) government’s investment in pest control. The deep connections between science, public health, and animal control continue to intersect in the bodies of hunted habu, but today are more visible in the form of the “Mongoose Busters.”

Matsumura (2007: 309) details the history of sugar production and economic crisis in Okinawa in terms of a “broader crises of politics and existence” that occurred with the islands’ transformation from a semiautonomous kingdom into a prefecture of Japan. Through the development of the sugar industry on the islands, political colonization became economic colonization (Kerr 1958: 432); moreover, I argue that this agricultural shift produced a form of environmental colonization. The Japanese state’s sugar-producing imperative permanently altered the landscape of Okinawa Island. From 1880 to 1920, the area planted with sugarcane in Okinawa increased more than tenfold. By the early 1930s, 70 percent of Okinawan farmers were invested in this cash crop (Uyehara 1933: 400), provoking a crisis of existence not only for both humans and nonhumans. With the help of the rat-eating and (occasionally) snake-ridding mongoose, sugarcane fields came to dominate the landscape, and this opportunistic “invader” came to dominate the “indigenous” kuina and its shrinking habitat.

**Multi-species and Multidisciplinary Histories**

Scholars have increasingly recognized the need for more integrative research that explicitly connects social and natural histories. In many respects, the structure of Clarence Glacken’s 1955 study of human geography in three Okinawan villages resembles that of a classic anthropological village study. Glacken’s chapters, all written in the simple present tense, fall under static headings such as “The Family System,” “Community Life,” “Agriculture,”
and “Religion.” In a very brief final chapter on “Environmental and Social Change,” however, Glacken calls for precisely the kind of historiography I have attempted here: “If these two histories … here artificially divided—could be written as one, if changes in the physical environment at certain periods could be correlated with known historical events, much would be learned … of the relation of a culture to its environment” (1955: 295). Glacken concludes that “the history of the Okinawan people, like the conjectural [early] history of their land use, demonstrates the importance of culture contact, as a consequence of warlike migrations and invasions or of peacetime trade and travel, in forming the culture as it appears today” (298).

The anthropocentric notion of “culture contact” (Shostak and Nisa 1981: 346) is enriched by a simultaneous discussion of interspecies physical contact, such as biting, hoeing, chopping, fluttering, clawing, pickling, and pouncing. Igor Kopytoff (1986: 67) argues that “biographies of things can make salient what might otherwise remain obscure … in situations of culture contact, they can show what anthropologists have so often stressed: that what is significant about the adoption of alien objects—as of alien ideas—is not the fact that they are adopted, but the way they are culturally redefined and put to use.” The objectified, alien mongoose scratches its biography onto the landscape while pressing northward.

Mary Louise Pratt (1991: 34) complicates the notion of “culture contact,” instead offering “contact zone” as a “term to refer to social spaces where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism, slavery, or their aftermaths as they are lived out in many parts of the world today” (see also Pratt 1992). Laura Ogden (2011: 76) expands the “contact zone” into a “space of knowing,” “where bodies, geographies, biota, and mythologies engage in overlapping mobilities.”

Stefan Helmreich applies Jean and John Comaroff’s concept of “alien-nature” (2001) to invasive species, which Helmreich (2009: 17) regards as “emissaries of … a biotic world of illegitimate, inundating flows called forth by the shifting and contradictory dynamics of globalizing social forces” such as the sugar trade. The “alien” mongoose was adopted and commoditized by Japanese agriculturalists, and put to use in Okinawa for a specific purpose that quickly went awry. The mongoose’s deviation from its intended use has redefined its material and cultural significance from “pesticide” to “predator.”

Biologists such as Yamada and Sugimura (2004) document the species vulnerability that resulted from the 1910 introduction of the small Indian mongoose in Okinawa. Historians such as Kerr (1958) and Matsumura (2007) delineate the human experience of economic vulnerability during the same time period, but little work has been done to explicitly link the
parallel stories of this protracted yet profound transformation of Okinawa’s physical environment.

Temporalizing Vulnerability

For those familiar with the trajectory of the World War II Pacific Theater, “Okinawa” evokes the superlatives of fast violence: the Battle of Okinawa17 (fought early April to mid-June, 1945) is often called the “Typhoon of Steel” (tetsu no bōfū) in reference to the U.S. assault on the island. This phrase vividly characterizes the kind of high-speed destruction witnessed by civilians and soldiers through a battle often remembered as the bloodiest in the Pacific. Somewhere between one-fourth and one-third of the Okinawan population—at least 100,000 civilians—were killed, as were roughly 60,000 Japanese and 14,000 U.S. soldiers (Allen 2002: 33). This fast-paced devastation also set a slower problem in motion: the postwar U.S. military colonization of the main island, by which U.S. bases displaced thousands of Okinawans and came to occupy more than 20 percent of the land on Okinawa (Gillem 2007). Over time, this loss has “compound[ed] the onslaught” (Asato 2003: 229) of the original battle.

The “mongoose invasion” of Okinawa and the U.S. Marine Corps invasion both followed a northward route18 that pushed through Japanese defensive lines. I juxtapose these two historical events not to imply that they are somehow morally equivalent, or similar in terms of the scale of devastation, but rather to illustrate some of the striking narrative and geographical patterns that emerge when equal attention is given to otherwise incomparable events. It took eighty years for the mongoose to travel from southern Okinawa to the north, and for an original population of seventeen animals to expand to roughly 30,000 today. This slow movement with its slow consequences, including the “long dying” (Nixon 2011: 3) of the kuina, represents what environmental activist and literary critic Rob Nixon calls “slow violence” for its subtle perniciousness.

This contrasts sharply with the “spectacular time” of the 82-day Battle of Okinawa in the spring of 1945. Okinawans died at the hands of both militaries, but the Japanese military is notorious in Okinawa for its compulsory, enforced civilian group suicides and policy of non-surrender despite a losing battle. This extreme physical violence is linked to the economic violence of the previous century: in both cases, Okinawan land was viewed by the Japanese state as exploitable, whether for planting sugarcane or as a proxy battleground.

Gladys Zabilka (1959: 19), writing on the Ryukyu Islands under U.S. occupation, characterizes the U.S. military’s efforts after the Battle of Okinawa
as a “mop-up campaign” that began on 23 June 1945: “Cave positions were systematically sealed up by flame throwers and demolitions, with hundreds of Japanese entombed within. Extensive patrolling ferreted out individual Japanese soldiers hiding out in the cane fields and rice paddies. By the end of the month the mop-up had yielded an estimated total of 8,975 Japanese soldiers killed, 2,902 military prisoners taken, and 906 labor troops rounded up” (1959: 20, my emphasis). The United States’ Ryukyus campaign officially ended on 2 July 1945.

Sugar, war, and furry carnivores come together in brief narrative moments such as M. D. Morris’s discussion of the uses of prewar Okinawan sugarcane, all of which was sent to “Japan, the Hungry Ermine” (1968: 144): “Japan used the cane to produce commercial alcohol for torpedoes and engines—war production” (56). Even farms with some access to new technologies were set back tremendously by the battle. Ross Gast (1945: 14) describes the majority of Okinawans as “ill-treated and under-paid sugar cane laborers” in the period leading up to and throughout the war. By the 1950s, not much had improved: Clarence Glacken (1955: 150) finds that “the old Okinawan method of crushing the cane is used in the northern village[s] because machinery destroyed in the war has not been replaced.” The lack of parity between southern and northern Okinawa was determined more by Japan’s postwar investment strategy than by which region was most devastated during the battle, and is still evidenced by the advent of nostalgic agrotourism in the north.

**Mapping Tourism**

Amid the rubble generated by “two competing cultures” (Zabilka 1959: 3)—Japan and the United States—M. D. Morris (1968: 2) describes Okinawa’s postwar landscape as “mountains of systematically stacked steel chemical drums and wood shipping crates range over square miles of depot areas fenced in by mesh and barbed wire. Acres of new vehicles sticky with cosmoline stand ready to be put into motion in convoy caravans.” As early as 1955, the Japanese defensive lines from World War II were beginning to translate into what I call the ecological “beauty lines” that would ultimately determine the kinds of regional tourism practiced in postwar Okinawa:

The recent war was a powerful agent in changing the physical environment of Okinawa. In the south the destruction affected the grasses, shrubs, and the trees, adding to the contrast, which already existed before the war, between the scenery of the south and of the north. The physical beauty of the mountains, the wooded hills sloping to the sea, the pleasant commingling of neatly hoed fields, trees, and
wild-growing shrubs belong to Okinawa north of the Ishikawa-Nakadomari line. (Glacken 1955: 298)

Roughly 60 percent of Okinawa Prefecture was forested before the war, including standing trees and cut areas (Uyehara 1933: 402). Today just 40 percent of the main island of Okinawa is forested, primarily in the north (Yamada and Sugimura 2004: 118). During the battle, 94% of all buildings on Okinawa were also destroyed (Zabilka 1959: 19). Massive postwar reconstruction made southern Okinawa a locus of stone war memorials and marble monuments such as the Peace Memorial, while in the north anything still green and “natural” also became a potential touristic resource.

This ecological, political, and aesthetic borderline has been reinforced by more recent (and largely unsuccessful) attempts to quarantine the mongoose in the south by setting traps and building a fence along what has become known as the Shioya-Taira line. The artificial border formed by the Shioya-Taira (nicknamed the “S-T line”) runs between the two towns located on opposite coasts just north of Nago City. The growth of ecotourism in the north has produced a small-scale economy through which tourists and locals are introduced to each of the species discussed in this chapter. Yambaru ecotourism is itself a creative enterprise built along these beauty lines.

A Kunigami Tourism Association (KUTA) ecotourism promotional booklet I received in 2009 cites one of the few positive environmental effects of the U.S. military presence in Okinawa: The U.S. Marine Corps Jungle Warfare Training Center (JWTC, also known as Camp Gonsalves and the Northern Training Area) had kept ordinary citizens and non-military researchers out of large sections of the forest since its creation in 1958. This restriction left many abundant areas undeveloped and contributed to the relatively late scientific discovery, and ensuing protection, of the kuina. While most people were kept out of the Northern Training Area, some animals still managed to infiltrate the military’s built environment: M.D. Morris (1968: 4) writes that “nature … is in conflict with progress. The habu, the Ryukyus’ resident reptile, perhaps a direct descendant of the one that allegedly disrupted the bliss of Eden, at night often climbs the [U.S. military’s] high-tension towers and while slithering across the cables, short-circuits a whole community’s electric power.”

Continuing the Japanese government’s early twentieth-century attempts to conquer the habu, USCAR (United States Civil Administration of the Ryukyu Islands) built a serum-manufacturing habu station on Amami Ōshima in the early postwar period. In 1951, the station was supplied with 977 habu, many of which came from a special farm in Nago that paid a bounty of ¥100 (then worth about $.80) for each snake captured (Zabilka 1959: 25). The snakes were “milked” for venom, which was then dehydrated,
shipped to Japan for processing, and returned to the Ryukyus as bottled serum (26).

The JWTC, first established as an early Vietnam War counter-guerilla school, was originally roughly eighty square kilometers in area (see Figure 1.1). About half of this land has gradually been returned to the Japanese government since 1996, through a U.S.-Japanese Special Action Committee on Okinawa (SACO) agreement intended to reduce the military burden and release the use of reservoirs that control the flow of drinking water to the south (MOFA 1996). The control and creation of water (through desalination) is affected significantly by these kinds of agreements, which in turn make water use a top priority in debates over tourism and sustainable development in Okinawa. The national protected forests that surround tourist-oriented environmental education centers such as the Forest School (学びの森) and forest therapy programs (both discussed in subsequent chapters) were also returned to the Japanese government beginning in 1996. Following more than twenty years of negotiations, in late 2016 U.S. Secretary of Defense Ashton Carter announced that an additional 9,800 acres (roughly forty square kilometers) of Northern Training Area land would be returned to the Japanese government by year’s end. While Japan has, in turn, agreed to build helicopter landing zones and access roads for continued use as U.S. military training grounds, this agreement marks the greatest land return since Okinawa’s 1972 reversion (Browne 2016 n.d.).

Conclusion

Natural disasters do not exist.
—Ilan Kelman, “Natural Disasters Do Not Exist”

Contemporary touristic narratives of environmental vulnerability between the habu, the mongoose, and the Yambaru kuina have slowly shed the historical context needed to understand broader political and environmental discourse in Okinawa. Stories center on the current state of these three animals, both naturalizing and occluding the human interventions that first brought them together. Problems of scale and temporality, of past, present, and future, shape our interpretations of violence. The relatively unspectacular time of the late nineteenth- and early twentieth-century sugaring of Okinawa amounts to a form of environmental colonization that began in southern cane fields but has migrated to northern forests over the course of the last century.

Following Edward Said, Nixon writes that “struggles over geography are never reducible to armed struggle but have a profound symbolic and narra-
tive component as well” (Said 2001, quoted in Nixon 2011: 7). Okinawa’s slow vulnerabilities are exacerbated by its unstable relationship with the Imperial Japanese state and the U.S. military; and through shifting interspecies dynamics over time. As central actors in this complicated story, the habu, kuina, and mongoose—along with associated discourses of threat, victimhood, cuteness, and nuisance—have been the focus of both science and fable. The legacy of the Japanese colonial project in Okinawa leading up to World War II and throughout the postwar U.S. military occupation of the islands lives on in the forest as much as it does in memorials, museums, and local memory. The infamous story of ravaging mongoose versus innocent kuina (a battle triangulated by the scary habu) is retold and re-created through touristic avenues. Yet this story is truncated, because it elides the larger political picture that unleashed the lesser-known animal invasion of Okinawa.

Economic and environmental vulnerability in Okinawa cannot be understood without careful attention to historical detail. In this chapter, I have responded to Amelia Moore’s (2010: 119) critique of the “vulnerability paradigm” that pervades much of the social science literature on small islands. The environmental history provided in this chapter resists the notion that small islands have inherently, naturally, structurally, and systemically vulnerable societies, economies, and environments (Moore 2010: 122; cf. Kelman 2010, 2015). As the Nature Museum epigraph toward the beginning of this chapter suggests, Yambaru’s “diverse environments” do “change in a variety of ways,” none of which can be adequately understood without analyzing how Okinawa’s vulnerabilization by external forces throughout the nineteenth- and twentieth-centuries. Colonization and conflict, both fast and slow, have shaped the archipelago’s political economy and have influenced the conditions of possibility for natural heritage conservation, as well as the problems of environmental vulnerability and tourism dependency today.

Notes

1. In the context of animal species identification, endemic means “restricted to a locality or region.” “Endemic” is similar to “indigenous” or “native,” but the latter two terms imply that a given species also originated in the place where it is currently found. The habu (pit viper), for example, is considered “native” to Okinawa but can also be found in Taiwan.
2. In Okinawan, kariyushi means “gift of happiness” or “harmonious with nature.” “Kariyushi Wear” refers to the button-down floral-pattern Hawaiian-style shirts frequently worn by Okinawan men. Eisaa is a dance performed for ancestral spirits during Obon, the festival of the dead (Nelson 2008: 20, 191).
3. Not only is it okay—Okinawa Prefecture offers a bounty for both animals.
4. It is more likely that the rail had multiple names (one possibility is Agachi Kimura) that varied along with the dialects of the Okinawan language spoken on different parts of the main island. Nobody eats the rail today. I asked a friend about the name of the “Restaurant Kuina” at a tourist rest stop in Kunigami: “Don’t you get it?,” he laughed. “It’s a pun: ‘Resutoran Kuina’ (literally ‘Restaurant don’t eat [the kuina].’”

5. Japanese scientific nomenclature always uses the phonetic katakana syllabary to describe plant and animal species. This is also the syllabary used to demarcate foreign loanwords, including words from the Okinawan language.


7. This term is also developed by Umberto Eco (1986), whose concept of “hyper reality” is located specifically within the framework of travel. For Eco, the technologically produced replica is so perfect that it replaces and displaces the original, and displaces the value of its irreplaceable and authentic uniqueness such that copies live on with a life of their own.

8. Detour Japan is a self-published website that focuses on “selected local issues that can be shared globally” (n.d.) I cite Mamemachi’s summary of the history of the mongoose not as a source of historical information (though shared details are correct), but because his explanation reflects key elements of the dominant narrative I encountered in Okinawa.

9. Examples of unintentional but consequential alien species introductions include the Africanized honeybee in Brazil and Asian carp in the United States.

10. 天然記念物 (Tennen kinen butsu), a national designation that translates directly as “Natural Commemorative Thing,” encompasses unusual or endangered animals, plants, topographical features, etc. Other Natural Monuments endemic to Okinawa include the Pryor’s Woodpecker, the Ryukyu Long-Tailed Giant Rat, and the Jambar Long-Armed Scarab Beetle.

11. See Chapter 1 for an explanation of alternate historical names for “Ryukyu.”

12. In an amusing, if racist, account of his visit, Leavenworth’s Okinawan boy servant foretells the habu’s eventual touristic transformation from a scientific specimen in a wire cage to a drinkable commodity in a jar: “After we had looked at the squirming, writhing mass for some little time and were turning away with loathing, the writer’s ‘boy,’ who had been observing the reptiles, and wondering why so much trouble should be taken by the management for the comfort of the beasts, queried: ‘They wantchee eat these?’” (Leavenworth 1905: 45).

13. 100 sen = ¥1.

14. Ross Gast, author of the 1945 wartime informational pamphlet from which Morrow’s account is excerpted, labels Perry’s expedition as the United States’ “First ‘Invasion’ of Japan” (Gast 1945: cover page). At the time of its publication, this sensationalized characterization of Perry’s visit would have connected the United States’ impending invasion of Okinawa to a much longer history of U.S.-Ryukyu contact that was less well known to Gast’s widespread American and military readership. The timeliness of the pamphlet is palpable: a last-minute insert reads: “As this booklet is being made ready for the press, Tokyo reports the invasion of the Kerama Islands off the coast of Okinawa. This move has not been confirmed by American authorities, although Admiral Chester Nimitz tells of heavy bombardment of Okinawa by a United States fleet” (1945: 16).

15. Kerr’s Okinawa: The History of an Island People (1958) is still regarded as the most comprehensive English-language text on the history of Okinawa (Nelson 2008: 222). For more recent contributions, see Molasky (1999) and Hook and Siddle (2003).
16. For a comprehensive history and political economy of sugar cultivation in Okinawa, see also Matsumura (2015).
17. The Battle of Okinawa is called “Okinawa-sen” in Japanese and “Uchinaa ikusa” in Okinawan.
18. I have simplified these routes for the purpose of comparison. The mongoose and the U.S. Army Corps pushed south as well, and some U.S. forces changed directions over the course of the battle.
19. This is the title of a chapter in Morris’s book Okinawa: A Tiger by the Tail (1968). Writing during the late U.S. occupation, Morris characterized Okinawa as a “tiger by the tail” for every foreign invested government, wherein each state strives to “maintain a firm grasp on a vital situation from which it would truly rather be free” (8). Other chapters written about Okinawans are “The Gentle People” and “China, the Befuddled Dragon.”
20. This booklet was still being drafted by KUTA during my fieldwork, and the final published version does not include any information about the U.S. military. Rather, it emphasizes the presence of poisonous snakes and the forest’s inaccessibility to “ordinary people,” due to its unusually dense growth and humid subtropical climate, as the primary factors in the survival of Yambaru’s “precious creatures.” The 2008 document draws on information from an Okinawa Prefectural textbook called “The Untouched Forest” (手つかずの森: 沖縄県).
21. For a parallel tale of snakes’ “power” to alter human and nonhuman uses of the landscape, see the Epilogue of Laura Ogden’s Swamplife: People, Gators, and Mangroves Entangled in the Everglades (2011).
Chapter 3

Knowing and Noticing

All knowledge is local, no matter what its pretentions.
—Renato Rosaldo, “A Note on Geertz as a Cultural Essayist”

Local people don’t know, but local people notice.
—Professor Kenji Arasaki
Ecotourism Lecture, 6 January 2011

Introduction

Okinawan scholars, elders, and nature lovers today are self-consciously concerned with the preservation and dissemination of local knowledge.¹ Professor Yokota, an Okinawan scholar who advised me throughout my fieldwork, refers to this phenomenon as jimotogaku or “placeology”: the study of place, based on “the principle that knowledge of place equals knowledge of self.” The question of what constitutes “local” and “knowledge,” and the ongoing negotiation of these intellectual categorizations, are the subjects of this chapter.

Ethnographic study of ecotourism in Okinawa provides a useful lens through which to examine discourses of local knowledge production because ecotourism discourse frequently distinguishes between those who know and those who don’t know. For example, on every tour there are novice customers and expert guides (e.g., peace guides at memorials in the south and nature interpreters in the north). My fieldwork revealed that the “knowers” are not necessarily local residents and the “non-knowers” are not visiting tourists. The fluidity of these identity markers and their associated bodies of knowledge in the context of ecotourism, and with respect to the politics of knowledge production more generally, calls into question the place of knowledge assumed to be local. The shifting positionalities of many of my informants...
blur the classical anthropological distinction between “experience-near” and “experience-distant” (Geertz 1983) forms of knowledge by shrinking the distance, both geographic and conceptual, between the experiences of nearby locals and distant researchers.

In this chapter, I demonstrate the pervasive power of the intellectual distinction often made between these categories of social actor, despite its failure to adequately sort the people making the distinction. I analyze how certain kinds of knowledge about the environment are actively made and kept local through intentional community engagement, and conclude by revisiting the local/researcher binary in order to consider the place of local knowledge within the academy.

When I began my fieldwork, I quickly developed the impression that those who work in ecotourism wear many different hats. I saw ecotour guides at Ministry of Environment–sponsored town hall meetings, and once shared a kayak with the director of the Naha branch of the ministry while on a community-oriented ecotour of the Gesashi River in Higashi Village. One of my senior colleagues at the University of the Ryukyus commuted nearly four hours most days of the week so that she could teach in the Department of Tourism Sciences while living in Yambaru and keep up her activities with the Kunigami Tourism Association and the Forest School. Though each business card I received designated a different occupational title, the collaborations I witnessed suggest that people’s practical roles and functions in these social circles were much more nuanced and frequently overlapped.

Two of the most common categorical divisions I encountered were researchers (scientific experts, often from mainland Japan or abroad) and locals (Okinawans). The following discussion of the intellectuals involved in promoting different aspects of nature-based tourism provides a sense of the intellectual landscape that informs discourses of cultural and natural heritage, as well as environmental knowledge production in Okinawa. The following three conversations reveal how the distinction between local and researcher is problematized by the positionality of the speaker.

Researching Locals

I sat in a white-walled lecture hall at the Okinawa International Center (OIC) in Urasoe listening to Professor Arasaki discuss the roles of various actors in Okinawa ecotourism promotion. His lecture was delivered in English to a group of recently arrived JICA trainees from CARICOM countries including St. Lucia, Grenada, and Belize. The twelve trainees all worked for the tourism industries in their home countries in positions ranging from strategic marketing to parks management.
In his Powerpoint presentation, Professor Arasaki grouped the key players as follows: locals/interpreters, travel agents, administrators, and researchers. His explanation of why researchers are crucial to the development of eco-tourism in northern Okinawa caught my attention: “Local people don’t know, but local people notice.” By this he meant, for example, that Okinawans may not historically have known the Yambaru kuina’s biodiversity significance, “but local people notice”—that is, most people living in Yambaru would be able to tell you roughly where to find one or at least pick out its call amidst the biosymphony of the forest.

Professor Arasaki emphasized the need for collaboration between “noticing” locals and “knowing” researchers who hold critical new and marketable information about the biodiversity and significance of Okinawa’s semitropical forests, oceans, and rivers. Ideally, he explained, researchers, whom he described as academic advisers on local resources and management, would team up with nature interpreters2 to create the most informative, enjoyable tours possible. When describing locals, he explained their value by stating that “they are very near,” as opposed to the others involved. This statement seems obvious when taken literally, but beyond geographic and physical closeness, his words also imply a certain psychological and spiritual intimacy between locals and nature.

Arasaki bridges the role of researcher and local; born and raised in northern Okinawa and educated in Okinawan universities, he became a scholar of tourism science and frequently presents at academic conferences in mainland Japan. His professional objectives are to educate groups of foreigners about Okinawa’s contributions to the practice of ecotourism and to learn about diverse international sustainable tourism development strategies in turn. In short, he is a local who both knows and notices.

In a speech at Nago Museum in March 2011, Mr. Yamato, a researcher and dolphin expert at the museum, made the statement, “We don’t notice but others notice.” At first glance, these words seem to directly contradict Professor Arasaki’s characterization of locals. Both men are highly educated scholars who grew up in Yambaru. By “we don’t notice,” Yamato was lamenting his observation that many residents of the area are unaware of the value of the natural and cultural resources found in their own backyards. In this case, the “others”—those who do notice—are visitors or outsiders who are much more likely to remark on the stunning red blossoms of the Deigo tree (*Pinus luchuensis*, Indian Coral Bean) or be surprised by the sight of what they view as the “cute” mongoose dashing across the road in broad daylight.

Like Professor Arasaki’s work on ecotourism, Yamato’s knowledge of dolphin hunting, a northern Okinawan practice found only rarely in other parts of Japan (discussed in Chapter 4), is what constitutes him as a researcher. By his own definition, his knowing and noticing dolphins, and his formal pub-
lication of that knowledge in a book on the history of whaling in Okinawa, make him less local. Both scholars articulated an affective difference between the environmental sensibilities of a Yambaru resident who has heard of or seen a plant or animal around town, and one who regards the same biota as a meaningful cultural or natural resource to be shared with and preserved for the next generation (and for tourist consumption). Their mutual concern with identifying who is doing the noticing of these resources reifies the distinction between local and researcher also problematized by their own mixed identities.

The Localized Researcher

My experience is different from your experience.
—Dr. Karen Magik, coral activist
Interview, 15 January 2011

Dr. Karen Magik is an American environmental activist, marine biologist, and self-described “scientific consultant” who lived on Okinawa fighting to save coral and *Fukugi* (Garcinia) trees for more than twenty-five years. Magik is well known throughout the island for her vehement proclamations about the need to protect Okinawa’s coral reefs. We met on a sunny winter day at the Churaumi Aquarium, one of Okinawa’s most popular tourist attractions, where she worked as the only foreign researcher in an office full of mainland Japanese and Okinawan marine scientists.

We sat on the steps outside the front entrance to absorb the subtle warmth of the sunshine, and I asked her to tell me more about her lifelong love of diving. She stated confidently that, when underwater, “My experience is different from your experience.” Magik was referring to hobby and tourist divers in general, but she gave the example of Okinawan divers in Onna-son, a relatively tough northern village that is home to many underemployed “hooligans” with bleached blondish hair and even the occasional taboo tattoo. For these divers, she asserted dismissively, the leisure recreation activity was more about showing off their new gear than it was about experiencing the wonders of underwater life “up close and personal.”

Magik did not see all subjective diving experiences as equal. In her view, her qualifications as a researcher—her formal training and academic expertise on coral—are what granted her access to this privileged, awe-struck experience of nature. She had lived in Yambaru longer than most of the local divers had even been alive. She knew where the country back roads went, where to buy the freshest *umibudō* (Okinawan seagrapes, also known as “poor man’s caviar”), and which beaches were least frequented by tourists.
In many ways, this American researcher was a local. But Magik, who delineated a clear experiential hierarchy in relation to scuba diving, identified two salient differences between herself and most Okinawan: 1) level of familiarity with particular forms of scientific knowledge about the natural world and 2) degree of comfort moving in the scholarly communities that generate this knowledge.

The examples of Arasaki, Yamato, and Magik illustrate the clearly constructed yet pervasive distinction between researcher and local in Okinawa. Each of these informants’ worldviews hinged on their acceptance of this categorical divide to express his or her viewpoint—despite embodying elements of both identities. Professor Arasaki constructed his distinction along a dichotomous scale of awareness of a particular plant’s or animal’s physical location versus understanding of its global scientific significance. Mr. Yamato used his knowledge as a researcher to advocate for a grassroots revitalization of characteristically “local” activities, such as dolphin hunting, for the purpose of maintaining a sense of community pride in the city of Nago. And finally, Dr. Magik articulated the local/researcher divide in terms of the quality she attributed to the dive experience.

**Locating “Local Knowledge”**

In December 2009 I attended a *Yuntaku-kai* or “community chat” session in the Hiji neighborhood of Kunigami Village. A Tokyo-based environmental consulting and research group specializing in environmental impact assessment, environmental surveying, and environmental planning and design had been hired by the prefectural office of the Ministry of Environment to coordinate a series of facilitated chats in Yambaru. We met on an unusually stormy night, and the rain beating against the glass windows of the town hall gave the otherwise sterile multipurpose room an almost cozy feel.

I sat at a round table with roughly fifteen male retirees and one woman who had gathered to review a map they had created during a nature walk that fall. The colorful, hand-drawn map was the size of a large poster and was taped to a whiteboard at the front of the room. On the map were tacked cutout images of the plants and animals the group had identified during the walk. Taketo Tsuchiya, one of the consultants from Tokyo, stood next to the map and moved the images around as if to complete Nature’s jigsaw puzzle. The volunteers directed his placement of each piece as they collectively re-created memorable sightings from their walk. Once the many hand-drawn and photographic images of plants and animals were overlaid on the village map, participants were asked to share what they knew about the ecological collage. This discussion did not take the form of a question-and-answer ses-
sion between consultant and local; rather, the participants talked freely to one another by telling stories that inevitably harked back to their youth.

“We used to eat that!”

Over the course of the discussion, one of the most frequently repeated phrases I heard was, “We used to eat that!” One particularly jovial older man told a story about pigs: “We used to use their bladders as volleyballs at end-of-year parties. The only times when anyone could afford meat were big festivals, Obon’ and the New Year. We didn’t throw anything away! We ate everything. There wasn’t much to eat, so we ate it all.” Another man recounted eating the *Ryūkyū Kōmori*, a bat so big its English name is “Ryukyu Flying Fox.” This left everybody rolling in nostalgic laughter.

With these stories emerged a distinct mode of speaking. Many of the participants used the Okinawan names for the plants, animals, and places they discussed, such as *atemoya* (sugar apple) or *goya* (bitter gourd), and included specific northern Okinawan dialect variations such as *hiitu* (short-finned pilot whale), pronounced “*pitu*” elsewhere in Okinawa, and *Kunjan*...
(Kunigami Village). Mr. Tsuchiya wrote frantically on the board to keep track of the local vocabulary as it emerged, and his boss took backup notes from the side of the room. The group debated the etymologies and proper “old-fashioned” usage of these words, and I sensed their bittersweet frustration over trying to recall parts of a language that they had heard as children but could not speak as adults. By the end of the session, the walking map was overwritten with terms from the Yambaru dialect of Okinawan.

As the discussion drew to a close, two participants reflected that the minutiae of their daily lives today were sometimes difficult to remember—but the past was very clear. They jokingly attributed this to the aging process, but in a more serious vein one man added: “This is why it’s especially important to conduct some kind of oral history with the elders, even if they may be going senile.” Another man mentioned the recent loss of a particularly knowledgeable older woman in the community, noting the urgent need for participants to chat with folks even just ten years older than themselves. He wanted to keep this natural history alive for tourists, visiting Japanese student groups, and especially Okinawan schoolchildren. Just as the group fell silent in reflection, a man in his sixties pointed to the only forty-something man in the circle, teasing him: “… because the only thing you’re going to remember is video games!” The laughter continued into the night as we dined on piping hot Okinawan-style oden (a hot pot dish of sweet-salty broth served with pig’s feet, greens, and chunks of giant white radish, flavored with spicy American-style mustard) and muuchi (a bright purple yam- or black sugar-infused Okinawan version of Japanese mochi, pounded glutinous rice cakes).

The participants’ chat expressed the deep linkages they perceived between knowledge of place, in the form of local plant and animal identification, and knowledge of self, through language and history reclaimed. Locals were tasked with first noticing the details of the natural world around them and then providing the experiential context that turns these details into legible cultural knowledge. In many ways, however, the format and framework for discussion felt imported. During a planning meeting for these sessions, a Yambaru Wildlife Center employee expressed concern over the number of English loanwords being used to explain the chatting process to participants past sixty years of age. Examples of potentially obscure words included: ワークショップ (workshop), テーマ (theme), アイデア (idea), コメント (comment), アイスブレイク (icebreaker), マインドマップ (mindmap), and キーワード (keyword), many of which, she pointed out, had perfectly good (if less fashionable) Japanese equivalents. The consultants facilitated the discussion but, as outsiders, were also there to learn. Local knowledge was reconstituted through conversations and cross-comparison of childhood memories, but also benefited outside researchers. The deliberate process by
which this local knowledge is achieved demonstrates how knowledge is kept local, much as scholarly knowledge is self-consciously produced to address more “global” concerns.

**Chatting for the Future**

In March 2011, I attended the fourth and final community chat session in the series sponsored by the Ministry of Environment. About twenty-five residents of Kunigami County gathered to discuss environmental and community health challenges faced by the area. At the top of the list were long-stay tourist recruitment, youth retention, and employment strategies (discussed in Chapter 5). Participants were mostly retired men, but there were also a few women and a few young male public employees.

The approximately three-hour meeting was replete with flow charts, bullet points, and broad objectives related to community growth and sustainability. The assembled group was quiet until one man volunteered the words of his 99-year-old neighbor: “To restore the region is to love the region.” Machiko Kakazu, a Ministry of Environment employee who works at the Ufugi Nature Museum in Kunigami, seamlessly linked community restoration and tourism by building on his comment: “We must take it as our premise that we want tourists to come, and we want their presence to turn into work for the youth.” The retiree nature interpreter who had led me on a Treasure Box tour of the Yambaru forest the year before added, “There is something special about every place, and I really want this island’s people to learn how to speak well about its unique traits.” Each of these reflections advocated a sort of grassroots pro-tourism attitude meant to encourage community members to know their village as a guide does, and to notice their surroundings as a tourist does.

Mr. Oku, director of the Naha Division of the Ministry of Environment, concluded the formal meeting by talking about the importance of implementing environmental regulations in the area: “This is a good place, so let’s protect it. We should take hold of nature as a resource and use it well.” He stressed that his purpose was not to push the Ministry of Environment’s agenda on the area, but rather to listen to the objectives of locals and assist them in taking action by training guides and making rules. He summarized three key themes from the meeting as follows: community power, connections (between rivers, oceans, and mountains), and consensus building.

Afterward I was asked to share my impressions as an outside observer. I noted politely how passionate everyone seemed to be about serving their community, but I later admitted privately to Mr. Chinen (director of the Kunigami Environmental Education Center’s Forest School, also affiliated
with the Kunigami Tourism Association) that I had not really followed the flow of the meeting. The first community chat I attended was much more straightforward in its purpose: to sketch the cultural and natural landscape of the area by creating a walking map of Hiji Village. Chinen took me aside and in low tones told me:

In my opinion, here is what’s really going on: one, the town office’s job is to make money, and two, the Ministry of Environment’s job is to make rules. But no matter what happens, this village will go on. These people are just trying not to lose the wisdom of the area. We are doing this to preserve the knowledge (chie wo nokosu tame ni yatteiru). We have joined up to keep this village going. If you think of it this way, this meeting becomes much easier to understand.

Soon the traditional Okinawan feast that concluded most community meetings I attended appeared, and I knew that people’s tongues would loosen up as they drank beer and awamori. We passed the microphone around the table as we ate, listening to short speeches, individual reactions to the group chatting experience, and a few jokes. Among the most poignant of the sentiments to emerge from this jovial roundtable were “Of course you go crazy when you can’t feel nature! (Yappari, shizen ni furenai to atama ga okashikunaru!),” “We want to keep the population up! Keep the young people here,” and “Let’s work to raise up the village, but without destroying nature.” Mr. Teruya, another Ministry of Environment employee, added, “Most people stay for just one night … we want six-night stays in Kunigami!” A sixty-something woman from nearby Sosu Village chimed in: “Please can someone in charge bring us a bus? There’s no bus between Kunigami and Sosu. We want to improve Sosu, and then visitors can come to Sosu too! It’s an amazing place!” “Aha also has great views!” someone from Aha echoed. One man likened the villages in Kunigami area to the contents of Cup Ramen: “Mixing many different ingredients together makes for an interesting place.”

Soon people were laughing loudly and talking amongst themselves, not pausing to listen to whoever held the microphone. Teruya stood up and declared, over the hum of eager chatter, “Most people think of ecotourism as going into the mountains or looking at a Yambaru kuina, but we at the Ministry of Environment also think about the culture connection. We are concerned with protecting the environment, and one way to do that is to keep people out entirely. Another way is to regard nature as a resource, a tool. Who would destroy their own car? Or house? We must think of nature in the same way.”

Mr. Chinen spoke next, and gave a direct response to what he called my “naive question” about the purpose of the gathering. On the subject of not seeing the “big picture” context for these community meetings, he reflected that “Eight years ago we began talks about building the Forest School,” and at
that time a student had asked, ‘Why is nature important?’ Well, in Yambaru, nature equals culture,” was Chinen’s response. He acknowledged the ups and downs of the nationwide village revitalization movement (mura okoshi undō), but added proudly that “there is no minus for the village caused by the Forest School.” He concluded by calling for a community-based, grassroots approach to revitalization: “It’s not the national government, it’s not the prefectural government—we do it!” Everyone applauded.

Chinen introduced me to Ms. Hamakawa, another mainland Japanese environmental consultant who had been hired to sit in on the meeting. Hamakawa compared Yambaru to the Ogasawara Islands, a UNESCO World Heritage site also combating invasive species. She began speaking in metaphor: “There is something in the wind and the waves, the wind is blowing, you can feel it really strongly, something is lost.” She reached her hand down in front of her chest as if plumbing her core and said, “We need to pull this [spirit] out from our DNA, to get back our unique character for all of Japan.” I encountered the deep feeling that “something is lost” frequently when speaking with informants over the age of fifty, who tended to frame their concerns in reference to the health of the ocean.

Hamakawa never used the term “globalization” to describe the regional and national loss of Japanese character, but she implied that some form of worldwide phenomenon was to blame for this change. When I went to ask her more about what she meant by “unique character,” as if on cue, two young, slightly inebriated town workers interjected with an Okinawan language lesson for me: “Andii-san, ’Icharibachoondi!’ Do you know what it means? ‘Once we’ve met we are siblings.’” In this small moment, through this small gesture, they fought the loss of an endangered language by invoking the informal friendliness often thought to distinguish Okinawans from mainland Japanese.

Though I could not follow every discussion, I found the meetings helpful for conceptualizing the formalized spaces through which residents of Yambaru come together to tackle social and environmental problems in their communities. Chinen’s explanation of the gathering led me to conclude that simply assembling a group of concerned citizens and engaging them in conversation, argument, and laughter with one another was just as vital to keeping the village going as any consensus-based grand conclusion or resolution that might result from the meeting.

**Meta-anthropology**

Is local knowledge production simply a matter of collecting new and old things? By what process does noticing become knowing, and who benefits
from the production of this knowledge? I ask these questions of myself as an outside researcher and of my local informants, who further complicated these social and political categories for me when I noticed them doing my job.

Mr. Yamato invited me to attend what I thought would be a nature walk through the neighborhoods of Nago City. I turned up at the Nago Museum on a Wednesday afternoon in March wearing my yoga pants and a pair of hiking boots. I was ready to experience nature. I entered the lecture hall where everyone was gathering to find neatly ordered rows of chairs filled primarily by older men, a few women, and a few younger males dressed in the light green jumpsuits worn by city workers. Everyone faced forward, glued to a Powerpoint projection at the front of the room that read “Everyone Learns Together in Nago.” Four well-dressed men from the Yambaru villages of Ginoza, Higashi, Oku, and Nakijin sat in the front row, going over their presentation notes.

The meeting was not a walk, it turned out, but a summary review of the last two community walks that had been organized by the museum. We began with a silent prayer for the victims of what would soon come to be known as the Great East Japan Earthquake Disaster,7 which had struck just a few days before on 11 March 2011. Before the prayer, the organizer added that in addition to the tremendous loss of human life, many precious historical archives had been washed away by the tsunami that followed the earthquake in northeastern Japan.

The first presenter opened by asking, “How should we understand this vast Yambaru? Even in our own heads, there are many different ways to think about the area.” This question was surprisingly similar to the one I was formulating: “How do they understand this vast Yambaru? Even in their own heads, there are many different ways.” Strange as it felt to become just one more brain in a room full of placeologists, I was relieved to be in good company.

The neighborhood walking project had been conceived as a grassroots experiment to determine the “scenery we want to pass on 100 years from now,” as well as an opportunity to educate local youth who “don’t notice” the intrinsic or touristic value of their surroundings (although Yamato noted that it was primarily retirees in their fifties and sixties who participated in these kinds of museum events). Volunteer walkers were asked to identify and record the presence of buildings, rocks, and other natural things in their respective villages. Charming historic sites were not the only places of interest; as if in disbelief, one walk leader asked his group, “What is this building doing here?” He pointed toward a new and controversial chain mall just completed in Nago.

In a play on words, these walks were cleverly referred to as “Aruki,” which means both “to walk” and “to write something down.”8 Participants were
encouraged to record the stories of older residents and to borrow the black and white photographs they encountered along the way. They were further asked to determine the types of resources they found and to report back to the museum. The walls of the lecture hall where we sat were covered with these old photographs, alongside photographs of the walk itself. Gazing at the collection, one late middle-aged participant commented wistfully, “All I can say is I’m feeling nostalgic.”

The methods of inquiry the village walkers described are familiar to any social anthropologist: circle the village, borrow the photo albums of people living in the area, and actually go to the place and walk around. One presenter even used an English loanword, calling what they were doing “Fiirudowaaku” (fieldwork). Clifford Geertz (1983: 167) has called ethnography a “to-know-a-city-is-to-know-its-streets approach to things,” and my informants had embraced this technique. I suddenly found myself tasked with constructing a story about people constructing stories about themselves.

During his summary presentation, the Ginoza Village Museum representative stood and remarked, “We’re working to train the imaginations of participants in the walks so they can effectively show how things used to be here.” “We discovered that the resources of this region are still asleep,” the representative from Oku Village added. One of the key concerns voiced was that, in as few as ten to fifteen years, the things they had discovered might no longer be there. One woman suggested transferring their findings to a DVD that also documented their methods, in addition to putting their walking data on the town website as a form of living history. This comment sparked a collective brainstorm that erupted into debate over how to involve more young people: “They use computers, and could listen to the older people’s stories while also teaching them how to use the computer,” another woman offered. Those present agreed that it would be a good chance to share information between different generations who might not otherwise communicate about the past.

A second objective of the walks was to connect Yambaru’s village museums with a broader audience. Yamato reminded everyone that the self-selected group in the room, which included faithful museumgoers and a number of academics, was not typical with respect to its level of concern for and interest in cultural and natural preservation. With this sobering comment, the two hours allotted for formal presentation and discussion were up, and we began rearranging the chairs and tables to allow for the much-anticipated banquet.

In a matter of minutes, and with the help of awamori and Orion Beer, the mood in the room shifted from quiet and contemplative into jovial and joking. As I munched on boiled leeks and juushii fried rice balls mixed with boiled vegetables, a young female museum intern sat down beside me and asked me, “What’s the difference between a museum and a vegetable stand?”
I thought perhaps this was the beginning of a bad joke, but she was suddenly very serious and concerned: "Whether they sell things, and freshness! What do you want to do now? What do you want to know now?" She called Japanese museums “stoic,” and praised American museums for doing a much better job of appealing to a broad range of people, especially children, and for being interactive.

Yamato asked me to introduce myself to the group, and when I mentioned that I was studying ecotourism the conversation quickly turned to a discussion of tourism and museums. One Nago resident argued that, unlike the typical mass tourism scene in the south (he was alluding to Naha and the southern World War II memorial circuit), “Yambaru still has a lot of potential for development.” Yamato quickly interjected: “Yes, but if you do not have a purpose, things become unclear. This purpose is jumpstarting tourism as a resource. We must connect with tourism, but our research, our work must come first. Otherwise, we have nothing to share.”

**Walking as Knowing**

Movement … is not adjunct to knowledge …
Rather, the movement of walking is itself a way of knowing.
—Tim Ingold and Jo Lee Vergunst, *Ways of Walking*

*Aruki* memory walks make strange the familiar by mobilizing village walkers to notice things new, old, and different about their home place. Tim Ingold and Jo Lee Vergunst (2008: 2) argue that a way of walking “does not merely express thoughts and feelings that have already been imparted through an education in cultural precepts and proprieties. It is itself a way of thinking and of feeling, through which, in the practice of pedestrian movement, these cultural forms are continually generated.” Hayden Lorimer and Katrin Lund (2008: 186) similarly emphasize walking as a form of social encounter, a “complex weave where collecting happens on foot in the midst of epistemic ambition, and emotional and embodied response.” For my informants, as for these anthropologists, walking is a profoundly creative and social activity.

*Aruki* village walkers strive to know their own ordinary surroundings by noticing new things amidst an everyday perspective. These walkers collect experiences, memories, and material objects through dynamic movements specific to a particular time and place. By placing them in the role of student, *Aruki* walks and community chats encourage Okinawans to view their own everyday environment like a tourist and, in many ways, like an ethnographer.
Localizing Scholarly Knowledge

Scholarly language can become so local (i.e., specialized) as to require translation across disciplines. Clifford Geertz describes ethnography as a “craft of place” that “work[s] by the light of local knowledge” (1983: 167). If, as Renato Rosaldo (1997) claims in an interpretation of Geertz’s work on cultural interpretation (an intensely local intellectual engagement), all knowledge is local, then under what pretense can the researcher’s “etic” interpretation be integrated with the local’s “emic” experience? As discussed earlier in this chapter: What happens when the researcher is also a member of the community s/he is studying? (cf. Abu-Lughod 1986). Perhaps less commonly, what can we learn about ethnography from a local researcher who is pursuing a parallel endeavor by practicing a comparable methodology? Geertz likens “Being There” to a “postcard experience,” but adds that it is “Being Here, a scholar among scholars, that gets your anthropology read” (Geertz 1988: 130). How do I localize my fieldwork knowledge for you, my scholarly audience? Can I simply circle the library and re-tell the inside jokes of theory? Or is it all just turtles back and forth?

Identifying experience-near versus experience-distant forms of knowledge is as much a question of locating or grounding different perspectives as it is of distinguishing between subjective phenomena (i.e., love, illness) and theorized abstraction (i.e., object cathexis, disease). The scholarly experience of theorizing a social phenomenon also demands an ethnographic context. In Local Knowledge, Geertz (1983: 16) writes that it is from “seeing ourselves amongst others, as a local example of the forms human life has locally taken, a case among cases, a world among worlds, that the largeness of mind, without which objectivity is self-congratulation and tolerance a sham, comes. If interpretive anthropology has any general office in the world it is to keep re-teaching this fugitive truth.” The dual positionalities of Professor Arasaki, Mr. Yamato, and Dr. Magik can be reconciled if we consider them local examples of the forms scholarship has locally taken (and by “we” I mean myself and my imagined community of scholarly readers).

Part of my interest in the politics of place-based knowledge production in Okinawa derives from my anxieties over placing the universally particularized forms of knowledge produced by anthropologists. I bring this discussion to bear on the community practices I observed during fieldwork in order to attempt Geertz’s call for a “largeness of mind” (1983), without which the limits of locality might evade reflexive interrogation. Historian Robert Kohler (2006, quoted in Ogden 2011: 112) develops the term “residential knowledge” to distinguish between the “global” and “particularistic” forms of knowledge that tend to dominate scientistic and rationalized global
discourses of natural history. Residential knowledge creates a space for an “experiential epistemology” that diverges from scientists’ theory-producing knowledge because it can come only from “living in a place”—from “living there.” Ethnographic research, I learned, is not the exclusive purview of the anthropologist; communities can conduct fieldwork that integrates globalizing themes of cultural and biological diversity. Even the most universalizing theory has its place.

**Conclusion**

In this chapter, I have problematized a dominant discourse that informs ecotourism development in Okinawa: that local knowledge is the domain of locals who depend on outside researchers for the verification and valuation of this knowledge in a more global context. Following Celia Lowe (2006: 162), I have tried to avoid the temptation to “read nature and identity as a determining relationship … or as a carceral relationship, for example in the figure of the ‘local person.” I have also tried to transcend the value-laden poles of “science” and “indigenous knowledge” (Walley 2002) by presenting figures who occupy both spheres of thought. Lowe (2006: 163) explains that her informants’ “nature-making” means “tracking emergent rationalities and practices of thought rather than codes found in the mind.” I muddle the binaries of local/non-local, knower/non-knower in a similar fashion by illustrating, from the ground up, the intentional (re)production of these categorical identities and their associated bodies of knowledge.

Sustainable development specialist Tighe Geoghegan’s analysis of community-based resource management discourse offers an important critique of the practices of consulting firms and governing institutions such as the Ministry of Environment. Geoghegan sees a danger in importing outside concepts designed to enhance a community’s capacity for certain forms of tourism development: these models further a misleading discourse of the “global environment”—a world in which “all people have a right to participate in decisions about the future of the world’s natural patrimony” (Geoghegan 2013: 115). Even models designed to increase stakeholder participation, such as the community chats, risk weakening stakeholders’ voices by undermining informal networks in favor of new and less effective participatory organizations (128). While such possible outcomes must be considered, my findings suggest that the community and development models put forth by consultants and Japanese government officials resonated with Okinawan participants’ familiar cultural and commensal practices. Chatters and walkers in Yambaru exercised their agency by personalizing prescribed activities with enthusiasm and a sense of community and personal empowerment.
Knowing and Noticing

Geertz (1983: 58) writes that “the ethnographer does not, and … largely cannot, perceive what his informants perceive. What he perceives, and that uncertainly enough, is what they perceive ‘with’—or ‘by means of,’ or ‘through’ … or whatever the word should be.” By examining the community processes through which local knowledge is aggregated, I have shown how many Okinawans’ self-understanding is shaped (at least in part) by the tourism imperative.

Existentialist Michael Jackson (1998) compares the act of “storying” (chatting) to “journeying” (walking), suggesting that, while storytelling is motivated by “self-expression,” stories are by definition “relational” and intersubjective (Jackson 1998, quoted in Skinner 2012: 14). Self-understanding in Yambaru is cultivated through performative acts of chatting and walking. Placeology in Okinawa is practiced through facilitated engagement with the natural environment, rather than by less fluid factors such as geographic proximity, ethnic background, or educational level. In the next chapter, I explore the problem of creating and negotiating interspecies intimacy through touristic forms of engagement with nature.

Notes

1. “Local knowledge” was most commonly referred to as “local information” (jimoto no chilliki) or “local wisdom” (jimoto no chie).
2. For further discussion of nature interpreters, see Chapter 5.
3. Obon is a Buddhist All Souls Day during which families reunite to honor departed ancestors. Throughout Japan it is generally celebrated for three days in mid-August based on the solar calendar. Okinawans follow the lunar calendar, so their festivities fall at a different time each year.
4. For a description of this community-based ecotour, see Chapter 5.
5. For further discussion of the human need for nature, see the section “Biophilia” in Chapter 5.
6. As of late 2016, Japan’s Ministry of Environment is in the process of registering Yambaru as a UNESCO World Heritage site for natural assets. By 2018, the 17,300-hectare national park should be able to enforce a 790-hectare special protection zone banning plant and animal collection, along with a 4,402-hectare special zone free of building development (Jiji 2016).
7. In Japanese, the 2011 triple disaster (which included an unprecedented 9.1 magnitude earthquake, tsunami, and nuclear reactor emergency) is referred to as 東北地方太平洋沖地震 (Tōhoku-chihō Taihēiyō Oki Jishin). Approximately 20,000 people were killed (CNN 2016).
8. In Japanese, 歩き (aruki) “to walk,” becomes ある記 (also pronounced aruki) “to write something down.” These guided walks are reminiscent of the 1980s student peace education program outlined in an alternative tour book for bases and battlefields called Aruku, miru, kangaeru Okinawa (“Okinawa to Walk, Look At, and Think About” (Figal 2012: 95).
This book, authored by the Okinawa High School Teachers’ Union and the Peace Education Research Committee, was designed for mainland Japanese students on what are now extremely popular, largely standardized school field trips known as “peace study field trips” (heiwa gakushū). Other common destinations include the sites of the World War II U.S. atomic bombings, Hiroshima and Nagasaki.

9. These anthropological concepts have also been construed as inside/outside, first person/third person, phenomenological/objectivist, and cognitive/behavioral (Geertz 1983: 56).

10. Of course, Geertz’s (1973: 29) original allusion to the interpretation of cultures is that it is turtles “all the way down.” Here I change directionality to avoid implying a hierarchical relationship among emic and etic forms of knowledge, whose differences are not meant to be “normative” in the field of anthropology (Geertz 1983: 57).

11. Geertz adopts psychoanalyst Heinz Kohut (1971) terms, “experience-near” and “experience-distant,” when he writes: “An experience-near concept is, roughly, one that someone—a patient, a subject, in our case an informant—might himself naturally and effortlessly use to define what he or his fellows see, feel, think, imagine, and so on, and which he would readily understand when similarly applied by others. An experience-distant concept is one that specialists of one sort or another—an analyst, an experimenter, an ethnographer, even a priest or an ideologist—employ to forward their scientific, philosophical, or practical aims” (Geertz 1983: 56).
Chapter 4
ECOLOGIES OF NEARNESS

Touch ramifies and shapes accountability. Accountability, caring for, being affected, and entering into responsibility are not ethical abstractions; these mundane, prosaic things are the result of having truck with each other. … Touch, regard, looking back, becoming with—all these make us responsible in unpredictable ways for which worlds take shape. … Touch and regard have consequences.
—Donna Haraway, When Species Meet

Introduction

The question of propriety in interspecies nearness pervades ecotourism discourse: How close should we get to animals? How close can we get to nature? How close are we already? This chapter examines tourist and volunteer activities designed to facilitate human nearness to a diversity of marine life to ask how interspecies affective relationships are cultivated through the slippery phenomenological moments we sometimes call “experience.” Sometimes the quest for remarkable experiences entails traveling great distances: Much like humpback whales, tourists from the north migrate south to warmer climes in December and January. The opportunity to watch whales breeding in their natural environment is a seasonal delight available to any ecotourist with seeing eyes and access to Dramamine. Swimming with dolphins, while controversial, gets us even closer because we can watch, touch, feel, and even kiss them, all from the comfort of a human-scale swimming pool. Coral transplanting, on the other hand, is a much more involved activity that takes us out of our terrestrial habitat and plunges us into theirs. The practice is meant to attract the “ethical tourist,” someone who volunteers (and in many cases pays) for the chance to see and touch coral, to transplant new life, and to learn the realities of coral degradation by getting up close and personalizing reefs.
Nearness is not only a problem of achieving physical proximity to another being. As I discussed in Chapter 3, for humans getting close and “being there” (Geertz 1988) entails a psychological, affective, sometimes even spiritual engagement with other life forms. Nature-based tours gain meaning through the anthropomorphism of animals, and by offering interspecies contact predicated on the delicate negotiation of looking, feeling, and touching for experience.

**Proximities of Nearness**

In 1998, a group of visitors to Okinawa climbed and clustered around a giant looking glass tree (an evergreen mangrove with an umbrella-shaped crown and above-ground roots that radiate from its base like wooden ribbons). Tourists wrapped themselves around the tree, leaning up against it and feeling its bark with their bare hands. In 2004, a different group stood near the same tree but were unable to touch it. A small fence had been built around this “arboreal monument” (Ogden 2011: 108) to protect the tree from the thousands of tourists who encircle it every year. Professor Arasaki opened his lecture on ecotourism by comparing photographs of these visits to illustrate how restrictions on tourist access to Okinawa’s natural beauty weretightening as the number of annual visitors rose.

Next, Arasaki showed a promotional video about ecotourism in Higashi to a room full of JICA Sustainable Tourism trainees. The film centered on Keiko, a Nature interpreter who, like many of the guides I met during fieldwork, had transplanted herself from mainland Japan to pursue a more meaningful, “grounded” career. Followed by the camera, she guides two young girls on a rather tame kayaking trip down the Gesashi River. Upon noticing that the girls aren’t having much fun, Keiko paddles closer to the shoreline and shows them how to lean back in their kayaks and glide underneath the mangroves, leaving only a few inches between their faces and a maze of twisting brown roots. Soon the girls are giggling and squealing with delight, as intended.

I was once that bored customer, paddling aimlessly down the river until our guide directed us toward a mangrove and invited us to taste its salty leaves. Upon closer examination, I could actually see the leaf’s color gradation change from green to yellow, indicating how far up the saltwater had been absorbed. It was the taste of the salt that finally alerted my senses and drew me into the tour experience.

You just read an anecdote describing a lecture that contained photographs of trees and a filmed clip of an Okinawan ecotour guide trying to bring her customers closer to nature. Did you feel anything? What was your experience of mine? Surely the jarring impropriety of a “close-up” paragraph...
such as this—one in which I, the writer, directly address you, my reader—is bringing you uncomfortably close to this experience. How close is too close? How close is close enough?

**Experience Near (But Not Too Near)**

How do you convince someone that she is affected by something if she can’t feel it?
How do you teach her how to feel it?
—Dr. Karen Magik, coral activist

When we watch the whales in action, we are very moved or excited.
—Zamami Whale Watching Association, English-language brochure

When I met with Karen Magik at the Churaumi Aquarium, one of the first things she said to me was, “I think the key [to education] is through experience. People don’t care [about an issue] until it affects them.” She spoke broadly about public awareness of the many environmental issues faced by Okinawa: red soil run-off and erosion, ocean pollution, and the loss of biodiversity. Her question about how to “feel” a problem rather than simply studying it or noticing it left me pondering the “world’s largest” circular pane of curved glass that separates visitors from the enormous whale shark (jinbeizame) and manta rays on display at the aquarium. The glass was designed to enable spectators to get closer to the animals, and to simulate the experience of aquatic immersion by providing them with panoramic views from above and below. Of course we could not touch them, but were we close enough to feel them?

According to marine tourism specialist Carl Cater, no. Cater suggests that the experientially oriented “new tourist” (see also Krippendorf 1987 and Poon 1993) seeks a particular form of intimacy premised on the anthropomorphism of certain animals both on and “in our own terms” (Cater 2010: 135). We emphasize the maternal relationship between dolphins and their calves, for example, seeking a sort of mammalian kinship. We want to get closer: psychologically, emotionally, and physically, as we try to understand animals. Despite our substantial differences, charismatic megafauna become “constructed as ‘near’ to us, while those we know little about [are constructed] as the ‘others.’” One of these “others” is coral, a species most of us would struggle to relate to, save for appreciating their natural beauty. Our non-human “others” need not be alien to our everyday life, however the educational experiences afforded by marine aquariums and other sea life in-
interactions may send us home knowing “more about dolphins than chickens” (136).

How do we establish interspecies closeness in the twenty-first century? For many travelers, sightseeing—seeing sights, seeing the sea—is no longer enough. Tourists are increasingly doing things “with their own bodies, with embodied objectives such as fitness, thrill, spirituality, risk, sensual connection, sexuality, taste, inscription and flow” (Franklin 2003: 213). As ecotourists, “sharing a breath with a whale from an observation boat, hearing dolphins communicating underwater while diving, or feeling the warmth in one’s arms after kayaking” (Cater 2010: 138) allows us to feel these experiences.

Watching Whales Watching Us

In Okinawa, there are at least three ways to feel a cetacean: you can watch one, you can play with one, and you can eat one. Perplexed by the merits of Dolphin Therapy and ambivalent about dining on Flipper (I discuss this moral quandary later), at first I opted to simply watch. On a frigid (for Okinawa) Tuesday morning in late January 2011, I joined program coordinators from the Okinawa International Center, Okinawa Environment Club staff, and JICA CARICOM trainees at Tomari Wharf in Naha. We popped our motion sickness pills and boarded a giant ferry headed for Zamami Island, part of the beautiful Kerama Archipelago about 30 km west of Okinawa Island. Our guide met us at Zamami Port and ushered us into their welcome center. “Momo,” a very energetic and sprightly woman in her forties nicknamed for a peach, spoke good English but relied on Weasel (the official JICA interpreter) to explain the remarkable anatomy of the humpback whales (zatō kujira) we were about to see. She held up a stuffed whale toy to illustrate different physical characteristics. Males and females, I learned, are the same size so one has to locate their sex organs to determine which is which (no small task).

Unaware of the rhythmic nature of whale watching, I had always assumed that any sightings were fairly sporadic if not altogether random. I asked Momo how often they fail to see any whales, and she replied that only once in her ten-year career had they missed the whales entirely. They have spotters who watch for familiar whales, who are often annual visitors, and the short boat ride out into the bay is canceled if the whales do not show up on any given morning during the late winter/early spring breeding period. Once the tour group is out in the water, it is fairly easy to predict when—though not where—the humpbacks will emerge. Whale breathing is periodic, and though they can cover quite a lot of territory in the interim, each individual resurfaces every seven, eight, nine or even twelve minutes to take another
breath. To improve our odds of sighting them each time, we divided our boat into quadrants. Half of us stood on one side, half on the other, and as we looked out across the water we shouted, “Twelve o’clock!” or “Five o’clock!” and so on to indicate which direction the others should turn.

Most of the JICA participants were eagerly snapping their cameras in all directions, trying to capture any part of a whale’s breach, the stunning pose where they rise up on their backs and then slam back down into the water. Capturing the experience on film, as opposed to merely watching the whales, appeared central to this experience. For most of this group, the most rewarding and entertaining activity was to capture images of the whales digitally—for immediate sharing with friends, family, and (eventually) for posterity. I found the process of searching for the whales through a camera lens, while balancing on a rocking boat, dizzying and disorienting. I decided just to take in the three solo whales and one pair with my naked eyes, and hoped to remember what I saw.

Each whale that comes to Zamami is assigned a number and given a nickname based on the different patterns and markings on its flukes. Each tail has a unique combination of gray and black patterning with splotches of white, and watching for them was like taking a prehistoric Rorschach test writ large: one individual flashed the pattern of a butterfly, another a fleur de lis. “The Mayor,” so named for the regularity of his visits to the same spot over many years, gave us multiple splashing encores.

We returned to the Welcome Center, our freezing bodies and faces warmed only by windburn, and the Director of the Zamami Whale Watching Association greeted us and gave a short lecture on the activities of Zamami tourism as we thawed. I asked about the most evocative or emotive experience tourists report from their visits, and without hesitating he replied that mother-calf sightings never fail to astound whale watchers. He qualified this statement by adding that it is now illegal to follow these precious pairs because the calves tend to get overly curious about the vessels and often come too close, wanting to play. “It is considered stressful and disruptive, and potentially dangerous for the baby whales that risk getting caught in the engine,” he explained. He said that just seeing the whales breach is enough to bring some people to tears, but the most exciting moments are when the adults come very near the boat, occasionally even swimming underneath it.

“How to watch whales watching the boat.” This loosely translated heading from the English-language Zamami tourist orientation pamphlet I was handed invites watchers to ponder what Jennifer Wolch and Jody Emel (1998) call the “ultimate animal question”—Who’s doing the watching? (quoted in Cater 2010: 144, my emphasis). Whales swimming toward the boat produced a sudden and thrilling nearness—an exhilarating reminder that perhaps we were being watched, too. The whales also wanted to get closer.
Experiencing Dolphins

When I first heard about dolphin therapy in Okinawa, I wondered who exactly was being healed. I tracked down Dr. Nakasone, a diminutive middle-aged man sporting spiked black hair and a white lab coat. He directs the dolphin therapy program at Wellness Village Motobu (Motobu Genki Mura) in northern Okinawa. The Wellness Village offers a variety of dolphin experiences to accommodate a range of time frames and budgets. Activities range from the fifty-minute Training Workshop, where tourists pay ¥3,000 ($35) to watch dolphin trainers do their job, to the fifty-minute Dolphin School, where for ¥6,500 ($75) customers can kiss a dolphin and feed it vitamin-laced fish.

After perusing the list of offerings, however, I still was not sure how this qualified as “therapy.” Noting my confusion, Professor Nakasone explained that two other programs offered: one is the experience (taiken) program; the other is intentionally therapeutic. When I asked him about the salient difference between the two, he smiled and explained that, in fact, “The content is completely identical.” Rather, it is the outcome that varies: “Those in the Experience course might go home and say, ‘That was fun!’ while those in the formal Dolphin Therapy Program might say ‘That was fun and my heart has grown lighter.’”

“In either case,” he continued, “you are only spending 1–2 hours per day with the dolphins, trainer, and psychologist.” (Only the therapy course involves a psychologist.) The most important difference between the two programs is goal setting: Those who choose Experience do not associate their experience with a strategic healing objective, while those opting for Therapy do. Participants’ therapeutic objectives are formally outlined and documented before, during, and after the program.

The dolphin therapy program is also lengthier than the experience course. It lasts five days and costs roughly ¥400,000 ($4,700). I was still unclear; if the content of both programs was the same, then what did Dr. Nakasone mean by “therapy”? His grin widened as he explained that simply being with the dolphins and communicating with them can be therapeutic for autistic and depressed children, and for adults who suffer from mental illness (mentaruteki na byōki). He produced an elaborate photo album documenting the program. I grew a bit teary-eyed when he turned to the image of a small boy who was recovering from the psychological trauma of a car accident. He was petting a dolphin and then coaxing it to jump over a white-and-red stick that he held out over the side of the tank.

The somewhat arbitrary categorical distinction between “therapy” and “experience” became clearer to me when he compared dolphin therapy to horse therapy: “It’s just riding horses, you know.” Dr. Nakasone gestured
playfully like he was taking the pulse and temperature of a dolphin, and then a horse. Or perhaps he was mimicking a dolphin or horse trying to take his temperature? I could not quite tell. “You can’t do this,” he smiled. “You can’t do this kind of [medicalized] therapy with the animals.” He was making light of the directional ambiguity of the phrase “dolphin therapy.” I asked, “What makes this health tourism?” still stuck on the hybrid travel category he had outlined earlier. “Most participants come from outside Okinawa Prefecture and stay at local hotels for the week. That’s why we tack on [call it] ‘Tourism.’ And once the therapy [session] is over they are free.” Adult participants are released to do other sightseeing activities for the rest of the day.

I opted for the “Dolphin Adventure” course, settling on a sort of discount therapy where, for ninety minutes and ¥13,000 ($150), I could experience all of the above as well as the opportunity to be ferried (or, in some cases, dragged) by a docile dolphin across an enclosed swimming tank. At the Wellness Village, a friend and I joined a family of four visiting from the Tokyo area. We changed into the wetsuits and rubber slippers provided and then sat baking in the sun like sea lions as we waited for the program to begin. The thick suits seemed rather cumbersome and unnecessary given the sunny weather in late February. This marine outfitting was a required feature of the Experience.

Our twenty-something guide, who introduced herself as Kokoro (“Heart” or “Spirit”) began the tour by giving us a cursory introduction to small Okinawan sea life. She led us into an artificial wading pool and taught us how to tell the difference between a sea cucumber’s bottom and its mouth. I found myself feeling underwhelmed, but the eight-year-old girl standing next to me was clearly both disgusted and delighted by the prospect of touching the slimy black, sand-filtering loaf.

Kokoro introduced us to a few small banana fish (Gurukun)—popular bright blue and yellow animals that turn a pinkish red when deep fried and are a staple of the northern Okinawan diet—and a few large Deigo trees. She then led us into a lecture room where she pulled out a large colorful chart of “Cetaceans of the World” found in Okinawa. Kokoro held up a small rubber dolphin and challenged us to point out which species we were about to meet. Bottlenose (Bandō iruka) was correct: “Seikai!” she exclaimed, clapping excitedly for the little girl. I stupidly asked where the whale sharks were on the family web, to which Kokoro kindly replied that the animals that had mesmerized me at the aquarium were, in fact, sharks (not whales). There was no applause.

My heart sank as Kokoro enthusiastically explained that all of the dolphins housed at the Wellness Center are transplants from Taiji, Japan. My ears immediately fogged over, and I could hardly hear to her explanation...
of how the dolphins are carefully selected, then wrapped up and shipped south via airplane and boat in what to me resembled crude coffins. Having watched the movie *The Cove* the year before, I was devastated by this revelation. I felt immediately complicit and profoundly ignorant for failing to ask in advance one of the most basic questions: “Where do the dolphins come from?” I lived just a few miles down the road in Nago, where drivers entering the city are greeted with a giant gray marble sculpture of a bottlenose dolphin that reads “Welcome to the Safe Dolphin Village.” I had just assumed that the animals were captured locally. I debated whether I should quit this Experience early and ask for a partial refund, but I did not want to alienate or offend my hospitable informants. I stared at the colorful photographs of shrink-wrapped dolphins being sloshed about by large cranes, and felt a little too guilty a little too late. Kokoro called for me to join the others as they headed toward the dolphin tanks, and I followed.

Kokoro introduced the dolphins individually, calling them forward to tell us their names and asking us to remember them because “each one is different.” First we stuffed vitamins into dead fish and fed them to the dolphins. They did a variety of tricks, each time rewarded with another fish and ample praise. They fetched and bounced balls with their noses, leapt over my outstretched candy cane pole, and clapped their dorsal fins as if mirroring our loud applause. One even surfaced to give me a kiss on the lips, a behavior naturalized in many dolphin depictions across Motobu (see Figure 4.1). The whole time we were with them I felt anxious and confused about what I was doing with (to?) these highly intelligent cetaceans.

The only activity during which I was able to temporarily forget my own quandary, and lose my self-consciousness was the swim. Kei-chan swam up to the edge of the tank and waited for me like a floating taxi. I was elated when I successfully latched on to her dorsal fin by clasping my right hand over my left, and she shot across the pool with me on her back. The little girl in our group needed a lot of coaxing and encouragement, but on her fourth try she grabbed onto Kei-chan and away they went. We emerged from the water and began to towel down. I wrestled with my petite wetsuit, and my conscience. Was there any sense in which this was not cruel? Dolphins are trained through positive reinforcement and motivated by praise and love, just as humans are, we were told.

Swimming with dolphins has been correlated with the relief of depression, but the mammals’ “healing properties” (Antonioli and Reveley 2005: 1233; Frumkin 2001) may derive from the affective boost that humans gain through this unusual sensorial interaction. Marino and Lilienfeld (2007: 243) hypothesize that the therapeutic benefits are attributable less to the presence of the dolphins themselves than to factors such as the size and touch of the animal, and the opportunity for human interaction with them. Autis-
tic children benefit from learning to communicate both with and through dolphins. Curiosity about these kinds of alternative healing programs drew me to researching dolphin therapy, and I would have been content to pursue only the human perspective on such encounters had *The Cove* not suggested that the dolphins might be depressed, too.

### Changing Perspectives: A Tale of Two Films

Our sentimentality toward animals is a sure sign of the disdain in which we hold them. It is proportional to this disdain. It is in proportion to being relegated to irresponsibility, to the inhuman, that the animal becomes worthy of the human ritual of affection and protection … [Ecological] sentimentality is nothing but the infinitely degraded form of bestiality … in which we ridiculously cloak animals to the point of rendering them sentimental themselves.

—Jean Baudrillard (1994: 134)

### The Cove

*The Cove* (2009) is a highly politicized documentary produced by the Oceanic Preservation Society and starring Rick O’Barry, the world-famous dol-
phin trainer and activist. The film won the 2010 Academy Award for Best Documentary Feature for its controversial exposé of dolphin slaughters in the mainland town of Taiji, Wakayama Prefecture. Images of Taiji resemble images of Nago: both towns are chock full of dolphin motifs painted on signs, woven into fences, grown into elaborate flower formations, and prominently displayed in statue form (see Figure 4.1). Unaware of Nago’s history of dolphin hunting when I first arrived, I assumed that the many colorful, caricatured images of dolphins I saw were a celebration of a local animal tourist attraction and an advertisement for the Churaumi Aquarium. My initial impression of Nago matched Rick O’Barry’s in Taiji: “You would think this is a town that really loves whales and dolphins.”

Toward the beginning of the film, O’Barry declares that human beings are entering a new era of human-animal relations: “It’s all about respect now, not exploitation.” One of his primary objections to dolphinariums is that the dolphin’s quality of “self-awareness” makes them unfit for captivity. In contrast, Japan’s International Whaling Commission (IWC) representative Jōji Marushita (who quickly becomes the film’s scapegoat) is quoted as saying: “We have never heard a convincing reason why this species is so special.” Put another way by the Taiji fishermen: “You eat cows. We eat dolphins.” This is precisely the same rationale I heard from the trainer Kokoro at the Wellness Village when I asked her how she felt about the film.

O’Barry became internationally famous for his work training lead dolphins for the popular 1970s US television show Flipper. O’Barry tells the story of how Cathy (one of a few dolphins that played Flipper during the course of the show) “committed suicide” in front of him when she stopped breathing. (Unlike human beings, he explains, dolphins are conscious breathers and can choose to stop at any point). He attributes this act to her unhappiness and suffering while in captivity.

At one point the film attempts to shift perspectives from human to dolphin by pointing out the inadequacy of using a variation of sign language to communicate with dolphins (who have no hands). One trainer asks, “We can teach them, but what about what they can give to us?”

O’Barry even implies that in some senses the dolphins possess greater (self-)awareness than the fishermen: “It’s not about intelligence, it’s about consciousness. They are self-aware, like humans are self-aware. I don’t believe that the fishermen here are aware of that.”

Questions of animal agency and self-awareness (not merely “Who’s doing the looking?” but also “Can they suffer?”) have been explored across time, geography, and disciplines. Philosopher Jacques Derrida, in a treatise criticizing the Cartesian distinction between “thinking human” and “every other living species,” reaches back to the sixteenth century to quote Michel de Montaigne on the problem of perspective in our relationships with animals:
“When I play with my cat … who knows if I am not a pastime to her more than she is to me?” (Derrida and Mallet 2008: 7). In Japanese literature, Sōseki Natsume’s I Am A Cat (2002) offers an equally playful role reversal in which the life story of the owner is told by “his” cat, from the rather haughty cat’s perspective.5

Gregory Bateson’s (2000: 371–72) work on communicational theories argues against the notion that dolphins might possess anything a linguist would call language. Rather, he suggests that, like humans and other mammals, “[Dolphins] are preoccupied with the patterns of their relationships.” Bateson writes: “The cat asks for milk by saying ‘Dependency,’ and I ask for your attention and perhaps respect by talking about whales. But we do not know that dolphins, in their communication, resemble either me or the cat. They may have quite a different system” (372). Bateson’s groundbreaking work on animal communication transcended the language question and paved the way for social scientists to grapple with the problem of cross-species relationships broadly construed.

Sociologist of science Bruno Latour (2004) asks whether animals can intervene in their own representations, while historian of biology Donna Haraway in When Species Meet (2008) philosophizes about dogs and other “companion species” by alluding to Geertz’s turtles: “We are in a knot of species coshaping one another in layers of reciprocating complexity all the way down. Response and respect are possible only in those knots, with actual animals and people looking back at each other, sticky with all their muddled histories” (Haraway 2008: 42). Haraway’s studies of affect between human and nonhuman animals theorizes these relationships as intra-subjective rather than the more conventional inter-subjective; she re-conceptualizes human-animal inter-actions as mutually constitutive “intra-actions” (2008: 262) that are hermeneutical rather than dyadic. This alternative view of non-humans, in which the human species is always already entangled, may be part of why proponents of The Cove interpret respect for dolphins as freedom for dolphins.

**Dolphins and the People of Nago**

The “muddled history” of human-dolphin relations in Okinawa is summarized in a 2010 Okinawan documentary film made for Japan’s Nationwide Whale Forum (Zenkoku Kujira Fuoramu). Dolphins and the People of Nago6 opens with many black-and-white photos of pre–World War II dolphin hunts, rolling through tranquil images of old fish markets and small children helping to pull landed dolphins in to shore with single ropes tied around their tails. Still images then transition into full culinary color as videos of people cooking in groups and dancing in traditional performances that center around ritualized dolphin hunts. Unlike The Cove, which delivers
many fast-paced, bloody action scenes accompanied by a dramatic doomsday soundtrack, the background music in this promotional film is soft and mellow.

First hunted in Okinawa during the Meiji period (1868–1912), dolphins were considered a favor or blessing from God (kami no onkei). Opinions vary as to why Pitu first migrated into Nago Bay, but stranding is the most likely reason. Mr. Yamato (the whaling expert introduced in Chapter 3), is interviewed throughout the film and notes that the people of Nago interpreted this accident of nature as a “yuimun” (in Japanese: yorimono), a gift from god that comes near, that comes to you. The narrator is nostalgic: “We took Nago's rough [stranding] waters as charity from the sea. It was an era in which we took them together, we divided them together, and we used the leftovers to be sold.”

Dolphins follow the Kuroshio (Black Current), a warm Pacific Ocean current that moves northward from the Philippines and passes in and around Okinawa in a northerly flow toward mainland Japan in February and March. Before World War II, Okinawans used the roundup (oikomi) method still used in Taiji to trap dolphins. In the film, Yamato describes this period as one of heroic gestures, including hunting dolphins for survival. The immediate postwar period was, he told me, “a time with no protein.” Thus, dolphin became an even greater luxury.

The whaling industry in Japan developed significantly during the “Golden Age” of the 1950s, as technologies for hunting larger whales improved. The roundup method was outlawed in Okinawa in 1991, in accordance with larger global trends to limit whaling. Today fishermen in Okinawa are required to hunt with a crossbow that allows them to take only one dolphin at a time, which is why therapy and show dolphins are imported from Taiji. Taiji fishermen use the round-up method, allowing for the entrapment of a vastly greater number of animals at one time. As of 2010 only 105 dolphins can be taken annually in Okinawa (the Taiji figure alleged in The Cove is 23,000). Fishermen have difficulty attaining these restricted numbers because, according to Yamato, the dolphins “don't come around as much anymore.”

“It’s a food culture that you can’t enjoy unless you’re from here.”

The latter part of Dolphins and the People of Nago showcases the many ways that dolphin can be prepared. Colorful images showing the dark purple meat being stir-fried, sautéed, and chopped into dolphin rib soup are meant to leave the viewer salivating. The narrator emphasizes the need to find exciting new ways to cook these traditional foods in order to keep young people interested in eating them. Nago’s diverse dolphin food culture must go on for the vitality of the city, the viewer is told. The film concludes with Yamato’s
declaration: “We must manage our resources while advocating for a symbiosis between things we eat and things we observe.”

In pre-war Nago, dolphins were for eating but humpback whales were, as they are today, a sight to behold. According to Yamato, humpbacks that entered Nago Bay were also originally regarded as *yuimun*, but unlike the smaller dolphins this enormous “gift from god” was also regarded as a god that could not be eaten (or, from a more practical standpoint, could not be taken). By the end of the war, however, these whales were “worshipped” for a different reason: Okinawans were starving. This was a time when the post-meal Japanese saying “Gochisōsamadeshita” (literally “I feasted,” but meaning “Thank you for the delicious meal”) was frequently replaced by the Okinawan phrase “Tarajishimashita” (“More please” or “This was not enough”). Hunting technologies had advanced such that hunters could now land the larger whales.

But even a *yuimun* can come too near. In southern Okinawa, fishermen regard dolphins as pests on the order of the mongoose. There is no strong history of dolphin hunting in southern towns because there is no bay in which to trap them easily. Some older divers in the southern town of Itoman told me that dolphins pose a major problem for local tuna fishermen. Sharks will eat one bundle of fish bait (used to catch the tuna) and then move along, but dolphins can hear everything: the clinking of fishing wires as deep as five hundred meters, the approaching fishing boats, humming engines. They recognize these underwater mechanical sounds as “chow time” and follow the boats relentlessly to catch the catch.

In a follow-up interview with Yamato, I asked him what he thought about the future of whaling in Nago. His prediction, that the industry would most likely shift away from hunting and more toward dolphin and whale watching, echoed other stories I had heard about Okinawan fishermen. Some responded to the rapid decline in fish stocks over the last couple of decades by converting their vessels into touring and diving boats. An empty fishing boat might depart and return empty on wasted fuel, but a tourist-filled vessel was sure to provide a reliable “catch.” In the end, Yamato turned my questions back on me: “So, which story do you believe? Mine or theirs?” (referring to *The Cove*). Trying to be diplomatic, I replied that I thought both films made important points about changing dolphin culture in the twenty-first century. “Both?” He balked, incredulous.

On my way home from the museum, I passed an older woman hunched over picking wildflowers next to a placard that described the history of whaling in Okinawa. I could read the Japanese portion, but I asked her to explain the Okinawan expression “Hiitudooi!” (in Japanese: “Irukadazo!”). She told me that when she was small, the whalers would shout this out when a dolphin was spotted. Everybody, including children, would run from their schools, homes, and workplaces toward Nago Bay to help land the animal or
at least catch a glimpse. “So you grew up eating dolphin?” I asked. “Yes, of course. Dolphins are Nago’s specialty,” she replied. Yamato had told me that I should still be able to find dolphin sold in most local grocery stores, but this woman said it was harder to come by these days. I followed up at four supermarkets in Nago but was unable to find any meat labeled “dolphin,” and store employees told me they did not carry it. Even the surf ‘n’ turf menu at Restaurant Flipper—a popular dining establishment with a blissful-looking cartoon dolphin on its sign—was limited to deep fried shrimp and steak (see Figure 4.2).

Figure 4.2 • “Restaurant Flipper” Invokes Okinawan Culinary Tradition, Nago
The purpose of this discussion is not to promote or criticize the practice of whaling or the consumption of cetaceans. I aim only to compare two distinct perspectives on what it means to “respect” nonhuman animal species, specifically whales and dolphins. I divulge my own gut responses to uncomfortable fieldwork experiences to illustrate the surprising and small ways in which tourists and ethnographers are occasionally challenged to reorient pre-existing beliefs and political commitments. The ethics of nearness is complicated, perhaps even defined, by a globalizing environmental politics that influences our attitudes toward certain charismatic animals—or what Jean Baudrillard (1994: 134) would call our disdainful “sentimentality.”

Today the opportunity to touch, ride, and eat a dolphin is a tourist novelty. Dolphin consumption is rare in mainland Japan; when Yamato’s Tokyoite nephew overheard us chatting he blurted out, “You eat dolphins?!” Regardless of whether they are for eating, touching, or watching, dolphins in Okinawa (as with many places) are popularly portrayed as cuddly creatures close to human beings. Indeed, humans and dolphins are both mammals; eat at the same level of the food chain; and respond to whistles. Still, my facilitated encounter at the Motobu Wellness Village only served to increase my awe for these cetaceans. In the next section I consider the pursuit of nearness to a tiny animal so “other” that we have to transform our most fundamental human traits just to get close.

**Aquatic Adaptation**

What does it mean, in the fullest sense of the phrase, to be absorbed by nature?

—Rob Nixon (2011: 185)

All the divers I met during my fieldwork were seeking an unmediated, or at least under-mediated, experience of an underwater world. Some were paying customers in search of the world’s most colorful, fish-filled reefs. Others were volunteers intent on ameliorating the reef damage wrought by human beings and other natural disasters. I talked to Japanese dive guides who had swapped their pantsuits for wetsuits to escape the corporate world in Tokyo, and former U.S. Marines intent on transferring their amphibious reconnaissance skills to the leisure sport of postwar wreck diving.

If you swim too close, however, scuba diving can make you somebody’s lunch. Every time a leisure diver is killed by a shark or pierced by a stingray, we are reminded that we do not, in fact, own the ocean. These shocking news stories remain so because we forget that, when underwater, human beings quickly become “matter out of place” (Douglas 2003). In two years of diving in Okinawa, I was never attacked or harmed by anything underwater.
(the brown reef sharks I encountered stayed hidden in the shadows beneath the coral). All of my cuts and bruises were sustained during the precarious, pre-weightless periods I spent entering and exiting the water amidst protruding shallow reefs. Most diving accidents actually occur before the diver is even in the water, and Okinawan divers typically wear felt-soled booties to prevent slippage on algae during rocky beach launches.

Underwater safety is a matter of preparation. SCUBA, an acronym that emerged in the 1950s, stands for “self-contained underwater breathing apparatus.” Air tanks made from aluminum or steel attach to your back through a buoyancy control device (BCD)—an inflatable vest that regulates above-water floatation and aquatic buoyancy. Rubber fins strapped onto your feet help you propel yourself through the water using the “frog kick.” The wet (or dry) suit simulates seal blubber. During the winter, my wetsuit served the functional purpose of insulating me against the chill of cooler waters. During the summer we were advised to wear a “shortie” (short-sleeved) wetsuit, but were strongly encouraged to continue in our full-length gear for complete protection against the scraping coral and stinging jellyfish down below.

Haraway (2008) does not see these kinds of technological appendages as mere “mediations” or extensions between cohesive beings such as humans, animals, and plants; rather, she writes that “technologies are organs” co-terminous with our physical bodies (Haraway 2008: 249). Our biophysical eyes, our underwater cameras, and our masks all become semiotically active “technological eyes” (250). David Picard (2013: 102) uses a technological metaphor when he compares the disorienting visual experience of diving in “magic” coral gardens to the effect of a high aperture in photography. Objects of different distances come into focus in the same frame, whereupon a group diving experience is enhanced by each diver’s altered sensory perceptions.

Learning to Dive

Of the many forms of nature-based tourism I explored during my fieldwork in Okinawa, coral transplanting was the only activity that required special training. According to the international diving license in my wallet, I am an “advanced intermediate diver” because I have logged more than fifty dives under the supervision of certified scuba instructors. During my open-water certification scuba-diving lessons in the summer of 2009, I was taught never to touch anything living in the water. As a beginning diver, I had unsteady buoyancy and balance, and I was terrified of crushing a living thing with my tank, or underfin. The fish I did not worry about; they came and went freely, quickly darting away before any part of my clunky apparatus could assault them. The poor corals, however, could not escape my plunging clumsiness.
Once I was certified, I joined a Sunday dive club to practice my underwater skills and prepare me for future coral transplanting. I copied the senior divers, many of whom volunteered for the non-profit organization (NPO) Reef Check, and began wearing cheap white cotton gloves on our underwater outings. The gloves appeared to serve a dual purpose: to protect me from the corals and to protect them from me. They certainly did not provide any warmth.

Coral’s sensitivity to human touch is debated. Dan Brendt, one of my American ex-military dive instructors, told me that it is actually quite hard to kill a coral this way (though problems can arise from too many hands lightly touching the same reef on any given day). Divers are taught not to touch anything in order to cultivate a more cautious attitude in the water. In Australia, in fact, gloves are prohibited precisely to dissuade touching. Professional and advanced amateur divers often swim with their arms crossed in front of them, both because they have achieved perfect buoyancy without flailing their arms about (as beginners do), and to remind less experienced divers to keep their hands to themselves.

When one is studying the contents of the ocean, however, the rules of engagement change entirely. By January 2011 I was more advanced, so I began diving with a group that had been diving together for ten years in northern village of Henoko. The leader always maintained that he only dives as a hobby, “because it’s fun,” and claimed to be uninterested in monitoring or reef cleanup activities. Nonetheless, he regularly facilitated the research projects of marine biology graduate students from the University of the Ryukyus, who latched onto him to use his boat and access the resources he provided to the greater diving community in Oura Bay.

When I dove with Diving Team Snack Snufkin (so named for their leader’s resemblance to a Swedish anime character popular in Japan), we all pitched in to help one student with his project examining the eating habits of small conch (tokamuri, a marine mollusk with a spiral shell). We gathered in a shack-turned-meetinghouse in Mr. Snufkin’s backyard at nine o’clock on a cool Sunday morning. The space was littered with miscellaneous dive gear and empty beer cans (for post-dive consumption only) and plastered with fading color photographs chronicling Snufkin’s lifetime of diving adventures. We sat in a circle around a fire pit, introducing ourselves as smiling late-comers rolled in. The day’s leading researcher, Pakuchi (a postdoctoral student nicknamed for his unusual love of cilantro), explained his project. We were each handed a small, lidded plastic jar, a special notepad for writing underwater, and a regular mechanical pencil attached with Velcro. Much to my surprise, most of the materials required for this sophisticated survey were purchased at the hundred-yen (dollar) store. Suddenly thinking better of it, Pakuchi returned to me and asked how many times I had dived. At this point
in my fieldwork the number was about thirty. Everyone else was in the high hundreds if not thousands. As he confiscated my materials, he reassured me, “Maybe next time.” I was both disappointed and relieved not to be skewing his data on my first dive with a new group.

_Fingering Eyes_

Diving with ten marine biologists was wildly different from diving with tourist pleasure seekers. They touched, poked, prodded, and picked things up. They uprooted sea grasses and various other plants, examined them, and replanted them in the sand afterward, glove-free. I found this more “scholarly” approach to ocean life exhilarating and liberating, and reasoned that it might be all right if I touched a few things too. I located a mostly dead-looking sea slug (though they never move much, this one had begun to shrivel), flipped it over and began to gently poke at its belly with my gloved finger. In my excitement, I began touching all kinds of things with the busyness of bumblebee pollinating flowers. Ostensibly searching for live conch, I went willy-nilly round the reef, lightly fondling the spiny tips of green coral and delicately tracing the intricate lined curves of creamy brain coral. I tittered with a child’s delight as bright purple tentacles of clustered sea anemones instinctively shrank down around my probing index finger.

Pakuchi had instructed me to stay close to him and his partner, and fortunately the unusually clear water that day made it difficult to get lost. Once my exploratory spree was over, I returned and watched as the others wrote brief notes to one another on their waterproof pads. I had not managed to locate any conch shells (most of us surfaced empty-handed that day), but I wanted Pakuchi to see the glorious, swirly mountain of gray sand I had found plopped perfectly, like a dollop of soft serve, on the muddy bottom of the bay. Surely this mound housed something of interest! “Unchi,” he scribbled on his pad. I had discovered worm poop.

After the dive we were all freezing. We returned to Snufkin’s house, where the students took turns showering and used an outdoor brick pizza oven to cook _hirayachi_ (a thin, savory pancake-crepe hybrid made with eggs, flour, and green onion), fried shrimp, and vegetable crackers in hot oil. Snufkin drank beer. Nobody reprimanded me for my earlier touching frenzy, but by this time I had started to feel guilty and promised myself I would not do it again.

Perhaps Eva Hayward will forgive me. Hayward’s 2010 article “Fingery-eyes” contemplates the “haptic-optic” of cross-species encounters through a titular, slightly creepy neologism that refers to the “synaesthetic quality of materialized sensation” and “transfer of intensity, of expressivity in the simul-
taneity of touching and feeling” cup corals (Hayward 2010: 580–81). Hayward studies cup corals (Balanophyllia elegans) in part because this species experiences the world non-Visually, and conceives of human eyes as “contiguous with—not divisible from—the body’s sensorium” (582). The ontological status of these “sightless” corals stems from a complex haptic-sensory apparatus comprised of tactile, kinaesthetic, and proprioceptive senses, and Hayward’s fascination with them derives from the fact that they exist without the capacity for sight. Put more simply, “they ‘touch,’ therefore they are” (577). I had to use my finger-eyes to get a grip on coral.

Classifying Coral

Corals are weird, gorgeous, magnificent, perplexing, awe-inspiring, unfamiliar creatures. Marine biologists have established a rigorous taxonomic system for classifying corals, but it can be difficult for the untrained onlooker to discern, based on their appearance, whether corals are rocks, plants, or animals. Coral’s broadest definitions—as a hard stony substance secreted by certain marine coelenterates as an external skeleton, typically forming large reefs in warm seas; or as a sedentary coelenterate of warm seas with a calcareous, horny, or soft skeleton—are of minimal help to non-specialists. The suborders within the broadest scientific classification of coral (Anthozoa) include reef-forming stony corals (order Scleractinia or Madreporaria), soft corals (order Alcyonacea), and horny corals (order Gorgonacea).

Ordering the “Other”

The privileging of the visible and of the sense of sight over others in the creation of knowledge is powerfully articulated in Michel Foucault’s (2002) critique of Linnaeus’s taxonomic classification of plants and animals in The Order of Things. Foucault describes the field of natural history as “nothing more than the nomination of the visible” (144), a field in which “sense of touch is very narrowly limited to the designation of a few fairly evident distinctions (such as that between smooth and rough); which leaves sight with an almost exclusive privilege, being the sense by which we perceive extent and establish proof.” This ordering of things creates a legible system for accumulating knowledge that simultaneously defines, through its methodology, natural history’s “condition of possibility” (145). The limitations of the predominantly visual mode of inquiry, as Hayward (2010) illustrates, become further apparent when we recognize that eyes come mounted on moving bodies.
Many of my diving companions imagined exploring the ocean as the “next best thing” to space travel as we often imagine it: technologically (oxygen must be regulated), experientially (buoyancy resembles weightlessness), and visually (a host of alien life forms await). Marine anthropologist Stefan Helmreich’s 2009 ethnography *Alien Ocean* highlights the discourses of othering and foreignness associated with marine scientists’ attempts to “apprehend” and ascribe social meaning to marine microbes, among the smallest members of an ocean ecosystem. Such recently discovered microbes elude existing taxonomies and classifications, in part because the “significance of these life forms for forms of life” is poorly understood (Helmreich 2009: 16). Corals’ function in marine ecosystems is likewise complex but can be simplified for human interest as follows: they attract and provide food and shelter for the fish we eat. Coral is not new to taxonomies of the sea, yet its distant, “alien” nature still informs the landlocked human imaginary. Corals are visible to the naked (though generally masked) eye, but still they are hard to comprehend. As one of my instructors put it, “Corals hold and protect squid eggs just as trees hold bird eggs … but because they are not leopards, lions, or pandas, we tend to forget about them.”

Helmreich (2009: 15) finds that “marine mascots” have “scaled down from the nineteenth-century whale to the twentieth-century dolphin to, now … the sensationally odd and not-quite other.” Like marine microbes, corals are “neither charismatically mammoth nor wet and cuddly.” The Yambaru kuina (introduced in Chapter 2), for example, will always be cuddlier than an abrasive stony coral, but NPOs such as Coral Okinawa, Sea Seed Okinawa, and Reef Check are working hard to mobilize this sessile animal for environmental education and conservationist purposes. Corals are anthropomorphized and gain social meaning through the interspecies nearness produced by human underwater intervention.

**Native Transplants**

Transplanters’ efforts are not unambiguously beneficial to the ocean. Okinawa, often referred to as the “Galapagos of the East,” is marked as a biodiversity hot spot because its reefs are comprised of approximately 380 different kinds of coral. (Florida, by comparison, hosts about 30 species.) In the global marine science community, discussions of biodiversity often include discussions of “bioinvasion.” Helmreich (2009) defines marine bioinvasions, intentional or otherwise, as “the human-mediated transport of creatures from one marine ecosystem to another, an activity that frequently has deleterious effects on destination waters” (12). Contemporary coral transplanters are every bit as intentional in their maneuvers as the well-meaning Japanese bi-
ologist who first brought the mongoose to Okinawa (discussed in Chapter 2). However, the impact of the coral reef “bioinvasion” on marine ecosystems is less clear. The species discussed in this chapter, table coral (*midori ishi sango*) from the genus *Acropora*, is native to Okinawa, but even native corals of the same species have different genes. Clustering too many cousin corals together can lead to gene-mixing and spawning that could cause one species to go extinct. Table coral’s role in the ecosystem is well understood, but extensive coral transplanting could nevertheless generate an “alien ocean” comprised of “mixed up lineages” and “those outside, beyond, or within known oceans” (17). The risk of destroying one species by saving another complicates the ethics of promoting reef biodiversity through intervention.

### Accounting for Loss

Have you ever seen deep inside the ocean?
We sea creatures are living in places you’ve probably never seen.
Please protect us.
In return, we’ll give your children a great gift, beautiful oceans.
We the ocean corals wish to coexist with human beings.
Sea Seed Okinawa (NPO)
“Message from in the Sea”

I can’t count them, but I can tell you there’s less fish.
—Dan Brendt, Director of Operations
Reef Encounters International dive school

Okinawan adults who I spoke to about the ocean nearly always began by extolling the rolling beauty of their warm blue-green seas and brilliant coral, but would quickly qualify all claims to paradisiacal beauty with “… but it used to be even prettier.” My informants frequently lamented that their grandchildren and children would never experience the beautiful beaches they had known. Stories of loss and decline pervade discussions about the health of all natural environments in Okinawa, but the fate of the ocean often evokes a peculiar sort of nonspecific sadness—those who had never been scuba diving and only rarely swam in the ocean were well aware that marine ecosystems are degrading rapidly, but their nostalgic descriptions of this loss were often somewhat vague.

The problems of slow vulnerability and temporal difference discussed in Chapters 2 and 3 also pervade coral reef discourse. A 300-year-old coral killed in hours to weeks by abnormally high sea temperatures cannot be fully replaced for centuries (Richmond et al. 2007). The phenomenon known as “coral bleaching” (so named because many corals turn white when stressed),
kills much more slowly; the long-term causes of bleaching are less clear, but researchers often cite climate change and ocean pollution as major contributing factors. During fieldwork I dived with members of the Okinawa chapter of the international NGO Reef Check Research Group (established in 1997) and the locally based Coral Okinawa (established in 2004), an NPO\textsuperscript{10} that harnesses volunteer diver skills and labor to monitor the growth (and regrowth) of six key reef sites on Okinawa’s main island. Volunteer divers quite literally transplant baby coral polyps on top of bleached coral skeletons, using cement and metal cages to protect young corals from common predators such as the crown-of-thorns (a brilliantly colored spiky venomous sea star) and other echinoderms. The effectiveness of such transplanting methods remains debatable (Nishihira 2006: 71), but Reef Check’s ongoing certification of survey divers has greatly improved regional knowledge of fish and coral species in the East China Sea and Pacific Ocean surrounding Okinawa. Detailed assessments of reefs can be obtained through aerial photography and mounted sensors on ships, boats, and submersibles; but the most reliable sources of information about coral reefs are scuba divers themselves (Dimitrov 2002: 63). Organizations like Reef Check and Coral Okinawa are promoting sustainable coral interactions by “transplanting” the divers themselves from typical tourist sites to reef recovery sites.

**Planting Stakeholders**

Coral Okinawa\textsuperscript{11} director Tomohiro Gibu frequently used the English loan-word “stakeholder” (suteekuborudaa) to describe high-level corporate and government coral conservation sponsors. In addition to the Ministry of Environment’s annual contributions, for example, in 2010 Okinawa Prefecture dedicated ¥1 billion ($12 million) to transplanting corals in the Kerama Islands (still considered relatively healthy and vibrant). Roughly ten local businesses, which all use the same stretch of ocean to conduct profit-based activities ranging from dinner cruises to mozuku\textsuperscript{12} harvesting, are official coral stakeholders.

Divers can also become individual stakeholders, and symbolic gestures, such as personifying each transplant with a nickname, are intended to encourage volunteers to grow attached to the reefs and continue monitoring their coral’s growth over an extended period of time. In Okinawa, marine scientists, environmental activists, and volunteer tourist divers have undertaken not only to document and quantify coral losses not readily apparent to landlocked eyes, but to intervene in this slow decline by transplanting new corals atop old.

I call these reef volunteers *diving stakeholders*, in part because they quite literally take a stake in the health of the ocean by hammering large silver
nails into dying reefs to secure young polyps. Nearness achieved through this kind of intervention gives coral an intimate, moral value for volunteer gardeners. Divers’ identities as ecological stakeholders are produced, I argue, through the “slow labor” of harvesting, growing, and transplanting coral reefs over periods of months and years. Their actions are motivated by in an international discourse that considers biodiversity loss an “absolute, universally self-evident evil” that may never be forgiven (Lowe 2006: 158; Wilson 1984). Within this discourse, replacing dead corals with live ones becomes a rational project replete with careful measurements, standardized procedures, and photographic evidence of progress. I emphasize this aspect of coral transplanting because, as I discuss next, the affective rewards of partaking in this activity derive from the act of “coral gardening” much more than from tracking the incremental growth of coral polyps. For coral gardeners, the meaning and the feeling is in the doing.

Stakeholders theory contends that people will protect what they value. The term originated in the business and finance world, but since the 1980s the stakeholders concept has broadened to encompass niche enterprises such as environmentally sensitive tourism intended to educate visitors and local community members (Honey 1999a: 12). Robert Fletcher takes issue with one of the underlying assumptions of stakeholders theory—that the primary incentive for local engagement in conservation initiatives is economic. In the context of ecotourism (and other forms of nature-based tourism), “stakeholding” circulates as a discourse with a “relatively coherent and culturally specific set of beliefs, values and assumptions” that entails a host of non-material motivations as well (Fletcher 2009: 271). Following Martha Honey (1999), Fletcher argues that for the typical ecotourist (described in the Introduction as young, highly educated, middle-class), “genuine’ ecotourism must go beyond simply selling an encounter with ‘nature’ to provide economic, social and environmental benefits” (Fletcher 2009: 272). The “condition of possibility” (Escobar 1995; Foucault 2002) for creating value and meaning through ecotourism is shaped by a particular cosmopolitan cultural perspective shared by this elite demographic.

What is this perspective? One feature is an emphasis on the consumption of experience as a form of class distinction (Bourdieu 1984), or what Fletcher (2009: 276) calls the “promotion of a post-industrial approach to natural resource use, wherein rural landscapes are seen [as] a site for the the production and consumption of experiences more than the production and consumption of commodities characteristic of an industrial resource regime.” As Karen Magik, argued, such experiences are the key to education—another shorthand term used by ecotourism planners to justify the value of their labor, and of conservation projects more generally, to local people (Fletcher 2009: 280). Environmental education (what Celia Lowe [2006] might sub-
sume under an “analytic of knowledge”) becomes an umbrella term for the conveyance of what can appear to be straightforward facts and figures related to conservation. This kind of learning promotes a particular set of ideologies about nature that tend to be naturalized by members of the ecotourist demographic, which includes me and most likely you, too.

Lowe (2006: 23) writes that “thinking of humans as subjects constituted by knowledge, rather than unconstrained individuals who possess and control knowledge, is useful for comprehending the identities that emerge from projects to conserve biodiversity.” In a similar vein, Hayward (2010: 593) theorizes that the coral organism’s “responsiveness with an environment are the conditions of its emergence.” This ontological model applies to coral transplanters as well. Volunteer divers emerge as ecological stakeholders as they carry corals and ferry reef data between wet and dry worlds. This kind of liquid mobility also becomes a “strategy for claiming territory” (Ogden 2011: 90)—a strategy for both humans and nonhumans to stake claims in reef territory.

Coral Gardening

The essential Trobriander … is first and foremost a gardener … He experiences a mysterious joy in delving into the earth, in turning it up, planting the seed, watching the plant grow, mature, and yield the desired harvest. If you want to know him, you must meet him in his yam garden, among his palm groves or on his taro fields. You must see him digging his black or brown soil among the white outcrops of dead coral and building the fence, which surrounds his garden with a “magical wall,” which at first gleams like gold among the green of the new growth and then shows bronzed or grey under the rich garlands of yam foliage. (Malinowski 1935: xix)

Coral Gardens and Their Magic, Bronislaw Malinowski’s 1935 account of agricultural economy in the Trobriand Islands, can stimulate in the reader a deep “yearning for the physical sensuousness of a wet and blue-green Earth” (Haraway 1999: 50). The descriptive contrast of blacks and browns, greens and golds against the dead white of dead coral makes me want to delve deep, to plant and grow new life.

However, Malinowski’s ethnography is concerned foremost with the materiality of coral primarily as a lens on Trobriander life. Like the islands of Okinawa Prefecture, the Trobriand Islands (currently known as the Kiriwina Islands, a chain of atolls located off the eastern coast of New Guinea) are comprised of coral. Malinowski’s Trobriander informants scraped small chunks of coral from the outer ridge of their atoll and used them as an ingre-
dient in what could be likened to magical fertilizer for yams and other crops. This practice provides an ethnographic basis for his discussion of magic and rationality in Trobriander daily life. In short, Malinowski followed the coral to get near the people.

I never found an “essential” Okinawan of the sort Malinowski characterized in his ethnographic present, but I was intrigued by the “mysterious joy” (1935: xix) of the coral transplanter, whose work, I can now say with confidence, can prove infinitely frustrating and unrewarding. An early detractor from so-called “armchair anthropology,” Malinowski asserted that a particular form of interactive nearness (conventionally known today as participation-observation-interaction) is key to understanding Trobriander ways of life. Malinowski’s famous trumpeting call for the ethnographer to “put aside camera, notebook and pencil, and join in himself in what is going on” (Malinowski 1922: 21-22, quoted in Geertz 1988: 76-77) is by now canonical advice for anthropologists and standard fieldwork practice. To even attempt underwater participant observation amongst Okinawan coral transplanter and reef surveyors, however, these were precisely the participatory tools I had to take up.

Monitoring and Maintenance

In late February 2011, I joined the NPO Coral Okinawa for an orientation and training course that would enable me, at long last, to join them on one of their monthly monitoring trips. We met on a crisp Wednesday morning at the Ginowan Marine Support Center and were soon joined by six graduating students from the Okinawa Well Sports Technical College. Most of these 18–22-year-olds expressed an interest in pursuing some sort of sports fitness career, and all of them were experienced divers. I perused blue plastic tanks full of baby coral transplants warming under heat lamps in their watery nursery. Mr. Gibu called us to gather around him, and began a sort of review session by quizzing the students on what exactly we were protecting the corals from with the green metal cages he had amassed. He held one up, and I recognized it as a half-moon shaped upside-down hanging flower basket, also from the hundred-yen shop. He asked the group: “Who eats the coral?” “Onihitode (crown-of-thorns),” one student replied. Gibu continued: “What else does?” “Reishigai (dog winkles),” the group chorused.

Most students were returning to do maintenance (mentenansu) and monitoring (monitooringu) on corals they had transplanted the previous month. Both of these key words were borrowed from English, and when Gibu asked them what monitoring meant in Japanese the giddy bunch went silent. Even-
tually he conceded and told them: “Keikakansatsu” (literally “progress observation”). His translation was met with a vigorous nodding of heads. He later explained that he preferred to use the English loanword version of these basic words in his explanation of international standard transplanting procedures because many of the training manuals and literature he drew on were published in English. Gibu selected one of the more experienced students to explain the basic transplanting procedure to me. The tools laid out before us included the familiar white gardening gloves, a coarse wire brush, a mallet, thick silver nails, clear zip ties, two varieties of mud-like dark grey glue, and the inverted flower basket cages. The student gave a quiet, very tentative overview of how each of these tools was used to secure the adolescent corals atop the reef. After another brief moment of silence, Gibu jumped in to elaborate on the protocol we were to follow once submerged:

1) Select an appropriate reef on which to build (we relied on Gibu’s marine biologist assistant to do the choosing).
2) Use the wire brush to scrape the surface of the reef vigorously and clean off algae and other accumulated particles.
3) Mix the two glues together into golf ball-sized lumps, taking care never to touch the glue out of water.
4) Remove the planting corals from their plastic container and press the square base firmly into the glue mixture, taking care to secure all four corners.
5) Press the coral transplants into the reef such that each fits snugly underneath the canopy of the wire cage.
6) Secure the cage on top of the corals, ensuring that none of the polyp branches protrude to invite fishy nibblers. (Note: author’s translation)
7) Use the zip ties to anchor the basket atop the corals.
8) Secure zip ties to the reef by carefully hammering four nails around the perimeter of the cage without shattering the underlying reef.
9) Adjust until zip ties are taut.

After rehearsing the process twice, we were sent to prepare the materials. I scooped globs of the dark and light grey glues from a large tub using household rice scoopers. The glue resembled black sesame ice cream, a popular Japanese dessert, but the sticky stuff made it difficult to transfer into our smaller containers. I removed the hanging cords from the wire basket planters, completing their transformation from aboveground garden accessory into underwater coral safe haven.

Mr. Gibu then led us outside to the adolescent coral nursery (these larger specimens had been incubating for about six months). Each table coral,
one of the most proliferous and commonly transplanted species, was rubber-banded to a roughly 1.5-inch square base comprised of ground up and recycled coral fragments. He asked us to carefully choose six corals that we estimated would all fit inside a protective cage. We tenderly lifted them out of their shallow, filtered seawater nurseries and placed them side by side into clear plastic tubs and fastened lids on top. After a short bus ride to the shoreline we all unloaded and began donning our gear. I quickly fell behind and was still adjusting my fins while everyone else waded into the water for a shore launch. A teasing student voice rang out: “Andy, you’re pretty slow!”

**Shallow Encounters**

Not all transplanters are divers. One need not even get wet. I attended a number of family-friendly shoreline maintenance and monitoring events where participants could wade just a few meters out toward a shallow reef to check on the growth of their coral, or to plant a new polyp. The first time Gibu invited me to participate in a transplanting session, he just told me to meet him at nine in the morning at the Ginowan Marine Support Center, giving no further details. I turned up in late January 2010 with my wetsuit and all of my diving gear in tow and was immediately handed a “Staff” badge and given an official NPO Coral Okinawa sweatshirt to wear. My job was unclear, so I stood guard next to the nursery and tried to look confident.

Soon a large tour bus arrived and unloaded about ninety volunteers. I was surprised to see that a “typical” tourist guide, outfitted with heels and a flag, was leading the group. I noticed that a few of the volunteers were wearing t-shirts that read “We ♥ Okinawa,” a tourism promotion campaign I had noticed across the island. The group gathered around Gibu, who briefly explained the philosophies and procedures he had taught me the first time I attended one of his lectures. The We ♥ Okinawa representative gave him precisely twenty minutes to explain his NPO’s activities. Gibu later told me that he was very frustrated because he needed at least forty minutes to explain what they do and why they do it. His speech began:

Why should anyone care about coral? First of all, because they’re alive. They are small animals. Coral are like underwater trees—they are inhabited by fish like birds inhabit the forest. Coral is their habitat. But 90 percent of Okinawa’s reefs have died in the last fifteen years. Looking from above or outside nothing has changed, Okinawa’s sea is still unusually beautiful. But inside it’s changing. The coral could be gone in fifty years.
He touched on the devastation of El Niño in 1998, concluding that transplantation would help at least “a little bit.” He closed with a call to “return Okinawa’s reefs to their pre-’98 condition.” When Gibu was finished speaking, the tour guide summarized his comments as follows: “Without beautiful, clean water we can’t make good beer!” Only then did I realize that this coral tour was actually an Orion Beer–sponsored event, and that our volunteers were just stopping in on their way to a brewery in Nago.

In just one hour on this sunny Sunday morning, ninety people migrated toward the coral nursery, listened to Mr. Gibu’s brief explanation of his work, secured a broken branch of coral onto a square base with a rubber band, then wiped their hands with the corporate towels generously provided by Orion (see Figure 4.3a). Then they jumped back on the bus and off they went, completely dry. After incubating for about 2–3 months (see Figures 4.3b and 4.3c), the corals would attach to their square bases and would be ready for transfer by an experienced diver (see Figure 4.3d).
FIGURE 4.3b • Coral Polyp Transplants (3 months)

FIGURE 4.3c • Coral Polyp Transplants (6 months)
Diving Deeper

In March 2011, I accompanied Mr. Gibu and five professional dive instructors on a coral transplanting mission to Kamiyama Island, about a half-hour boat ride due west from Miegusuku Port in Naha. By now I had transplanted coral about six times. The pressure to get it right mounted when Gibu, only half joking, pulled me aside and said, “Andy, today we’re not taking care of you. Everyone here is a pro. You’re on your own.” Aware that I tended to move slowly, he asked me to start setting up my gear at least twenty minutes before everyone else. I tried to act cool and confident, stealing sidelong glances at the other divers to make sure none of my gear was assembled backwards or upside down. I struggled to pull up my wetsuit, hopping on one foot and bouncing up and down as if on a pogo stick. Trying to appear at ease, I casually asked him about the origins of today’s batch of corals. He told me that after permission was obtained from the prefectural government, baby table corals were harvested from donor corals collected specifically for this transplanting. He added that every May the sea turns briefly but intensely red when corals release their eggs for fertilization, a phenomenon I had watched on the news but never managed to see live. Eggs and sperm are then harvested and combined to make new corals. On this occasion we were planting only five corals each because, Gibu informed us, “The point is to do it cleanly and properly.”

When we arrived on Kamiyama, we did a quick review of materials and objectives, lined up and leapt into the chilly water one at a time (left hand on
mask, right foot pointed straight out in military marching fashion). Despite
the foreboding, nauseating waves and grey storm clouds we had encountered
on the way out, we all entered the water with relative ease. We deflated our
BCD vests, gave each other the thumbs down sign, sank down to about
fifteen meters, and began swimming due east. I followed behind the others,
imicking their relaxed and leisurely graceful frog kicks with my black rub-
ber fins, and practiced reading my compass. Then my mask began to fog over
and I realized I had forgotten to spit on the hard plastic lens. I lifted the
mask, allowing the cool seawater to rush in and wash the inside of the lens.
I cocked my head back, angled the mask away from my face, and purged the
water with an equine nasal snort.

Perhaps for the first time since I had begun diving, I actually recognized
where I was. The reef was small, and on our previous mission I had taken
for granted that I would be able to recall where my corals were located. Such
was not the case, and I was grateful for the individualized nametags zip-tied
to each cage. Without names, they all looked the same. I began surveying
the reef for a smooth, bare spot ripe for transplanting. One of the other
divers swam up behind me and handed me two baseball-sized balls of the
grey glue; another followed with my five transplants. I had found a reason-
ably flat spot nestled in a crevice of the reef and surrounded by rusting and
algae-covered cages from past plantings. I began to scrub away with the wire
brush, recounting the planting protocol steps in my head. My buoyancy
shifted as I gradually depleted the air in my tank, and soon I had to jam my
neoprene-padded knee into the crevice to stabilize my position. I hesitated
to hammer the nails into the compromised reef, which cracked with each
strike.

After about twenty minutes I had completed my task and began looking
around for something else to do. The divers were scrubbing algae off the
cages of older coral (maintenance), so I joined in until they began signaling
that it was time to go. Gibu hovered behind us to do the monitoring, which
included photographing the corals and recording their few centimeters of
growth over the past few months. Soon I heard the faint, tinny clanking of
pointer-on-tank, which signaled that it was time to head back. By the time
I arrived back below the boat the other divers were all doing their safety
stops, floating in lotus position, perfectly suspended in the water, looking
peaceful.

On the ride back to Naha, I asked Gibu what the day’s activities had actu-
ally cost Coral Okinawa. He puffed carefully on a cigarette, taking care to tap
the ashes into a glass jar to prevent them from floating off into the water. He
told me that a local dive shop had donated the boat, and, save for the glue,
virtually all of the materials used were from the 100 yen store. Most expenses
were incurred in the growing and harvesting of corals prior to transplant. To
the eight thousand corals he was actively monitoring we had added fewer than thirty—but at least this small action was cost-free.

After docking, we unloaded all of our gear and gathered in a circle to review the day’s events. He asked each diver to give a three-minute impression of their experience, asking: What went right? What could have gone better? What did you learn? What does this mean to you? Most of the responses were on the mild side, displaying commonplace Japanese public modesty: “I think I might have helped a little bit,” or “I’d really like to do this more often.” I asked Gibu a more specific question about the consequences of hammering into one dying coral to plant a new one on top. In between thoughtful drags, he replied that the damage done to corals by typhoons far outweighs the damage we do with our hammers, and insisted reassured me that our methods followed the international guidelines they had adopted in 2004.

His comments left me wondering whether our contributions were merely a drop in the salty sea bucket. If our efforts could be thwarted any time the sea temperature surpassed thirty degrees Celsius, or whenever a tsunami blew through, and if every seventy years the reefs are taken over by the crown-of-thorns anyway, then why bother? He countered my cynicism: “For policy, we need this [protocol] as a policy. More than new technology, we need good policies.” This is how Gibu and his volunteer transplanter take stakes in coral.

**Conclusion**

When we think of getting near to nature, we might imagine childhood projects such as butterfly and rock collections, or perhaps even seashells and coral fragments once collected to decorate our bathrooms and gardens. But not all nature collections involve removing the object of interest from its ecosystem: diving stakeholders collect coral colonies by adding to the marine population and naming individual transplants. This form of collecting involves monitoring and maintaining corals, and recording the names of fish and other species that inhabit them. Instead of acquiring natural trinkets such as sand dollars, the take-home from this kind of coral counting and collecting is data, accumulated and recorded on waterproof notepads and later elaborated in personal dive logs. In addition to chronicling basic details such as the temperature of the water, depth and length of each dive, logbooks (a form of “recreational book-keeping” [Lorimer and Lund 2008: 197]) always include a section for the diver to sketch any remarkable sightings. In Chapter 3, village walkers and community chatters gathered local cultural and ecological knowledge by collecting objects such as rocks, flowers, memories, and photographs. In the context of coral transplanting, the experience of monitoring and maintenance is collected rather than the coral itself.
Hayden Lorimer and Katrin Lund (2008: 185) problematize a common trope in outdoor travel and exploration through the figure of novelist John Fowles. Fowles firmly believed in the possibility of a “pristine encounter” with nature: “[Fowles’] message was clear: for as long as the conceptual urge to classify, document, list and tick prevailed, our common response to nature would be much the poorer.” In Fowles’s view, expressed most eloquently in his essay “The Blinded Eye” (1984), amongst collectors an “elevated appreciation” of nature is too commonly subordinate to “a much diminished, lesser form of knowing”—a knowing based on drawing, measuring, and counting (Fowles 1984: 77, quoted in Lorimer and Lund 2008: 186). The capacity to see, and, in the case of coral transplanting, to touch one’s collection, is central to the act of coral gardening. Lorimer and Lund (2008: 186) articulate shared qualities in the experience of collecting nature, where “tasks of judgment, organization, inspection, preservation, re-inspection and comparison happen as a series of correspondences between nimble hands and discriminating eyes.” Diving stakeholders’ “epistemic ambitions” are gratified through haptic (involving the sense of touch) and optic intervention in local coral reefs, as well as through the simultaneous proprioceptive (bodily) experience of underwater movement through diving.

Our need to feel nature may derive from an overall trend identified by Bryan Turner (1996: 1) as the turn to a “somatic society,” wherein the body becomes part of a “self-project” wherein individuals express their emotional needs through specific acts of bodily construction. Through this process of embodiment, the individual body “is connected into larger networks of meaning at a variety of scales” (Cresswell 1999: 176). The range of spatial scales can be imagined through interactions with whales, dolphins, and coral.

The ecologies of nearness explored in this chapter consider affective, therapeutic, moral, and scientific forms of intimacy between and among human and nonhuman animal species. In Okinawa, ecological stakeholders emerge through the use of natural tools—fingers, eyes, brains, and kisses—and also through technological extensions of these tools: nomenclatures, notepads, cages, harpoons, cameras, tanks, masks, and hammers. These tools bring us close to nonhumans through a nearness that also constitutes us as human. Chapter 5 considers what else is lost when we lose our sense of place in nature.

Notes

1. For further discussion of touristic labor as the entry point to “authentic” nature, see Chapter 5.
2. When I asked my informant whether he would prefer the use of a pseudonym, he chose this one.
3. While they do endorse much of the research showing depressed patients’ positive responses to animals, mental health specialists Aaron Katcher and Gregory Wilkins (1993: 178–79) dispute many of the exceptional claims regarding dolphins and autism. They write: “Press reports of autistic children miraculously responding to the presence of captive dolphins … are the result of uncontrolled clinical studies and the suggestive influence of the cult that has evolved around dolphins and other cetaceans. Equally spectacular results have been noted with cats, dogs, birds, and even a small turtle.”

4. In a remarkable 2013 announcement, India’s Ministry of Environment and Forests Central Zoo Authority rejected various tourism development groups’ proposals to build a commercial dolphinarium because “cetaceans in general are highly intelligent and sensitive … [and] dolphin should be seen as ‘non-human persons’ and as such should have their own specific rights and [it] is morally unacceptable to keep them captive for entertainment purpose” (Ministry of Environment and Forests 2013).

5. The Japanese title of this novel is 吾輩は猫である, and uses honorific language to elevate the cat’s position relative to the owner.

6. Pitu to Nagunchu.

7. In Japanese: Gondo kujira. The short-finned pilot whale is a small cetacean comparable in size to the bottlenose dolphin. Okinawans refer to this particular species as “ikura” (dolphin).

8. A body of literature already addresses the politics of cetacean hunting and consumption (for a small sample see Blok 2008; Catalinac and Chan 2005; Watanabe 2006).

9. Oura Bay is famous in Okinawa as a site where the relatively rare species blue coral was first discovered, but is perhaps better known as the home of the endangered dugong—a charismatic animal resembling a manatee. Anti-U.S. military base protestors rally around these and other symbolically valuable species to prevent the expansion of heliports into the northern village of Henoko (see Figure 1.1).

10. In Japan, “NGO” refers to international non-governmental organizations, while “NPO” refers to domestic non-profit organizations. Similar coral transplanting volunteer groups have also been created on more than thirty islands outside Japan.

11. Coral Okinawa is one of four coral-transplanting NPOs on the main island. The organization annually receives ¥20,000,000 ($235,000) from the prefectural and national governments, and also has about twenty private sponsor companies (including the Japan Travel Bureau, which donates ¥5,000,000 [$60,000] every year).

12. The popular Okinawan dish mozuku (Nemacystis decipiens) is an algae-like seaweed served in a vinegary sauce.

13. This is my term, appropriated from Malinowski’s ethnography. While I never heard any Okinawans refer to coral transplanting (sango no ishoku) as “gardening,” NPO Sea Seed Okinawa’s official website (www.seaseed.com) does refer to the practice as “coral farming.”

14. Dog winkle or rock shells are thumb-sized, purplish, predatory sea snails.

15. Coral bleaching is a well-documented consequence of rising sea temperatures that has plagued Okinawa’s reefs since the major El Niño bleaching of 1998. The summer of 1998 marked the strongest El Niño on record, during which the complete absence of typhoons in Okinawa Prefecture rendered the temperatures of the East China Sea warmer than at any time in the previous ten years. Hurricanes and typhoons are actually critical to the survival of Okinawa’s reefs because the intense winds churn up and cool down the shallower ocean waters in which many heat-sensitive coral species reside. Experts from the Ministry
of Environment have also been tracking a severe bleaching from 2007; these events are predicted to occur annually by 2050 (Harvey 2017). A 2016 reef survey conducted in Okinawa’s Sekisei Lagoon finds that 90 percent of coral has bleached, and that 70 percent of Japan’s largest reef has died. It is worth noting that bleaching coral reefs can recover with time and favorable conditions.

16. Many broken coral branches wash ashore following typhoons, but it is illegal to remove them from the shore as some may survive being beached and return to a coral colony with low tide.

17. In dive-speak, thumbs down and thumbs up indicate one’s intention to descend or ascend.

18. Spitting in one’s mask is a low-tech anti-fog technique employed by divers worldwide, as is urinating in one’s wetsuit to generate warmth.

19. “Safety stop” means pausing for a few minutes at a shallower depth before surfacing, giving the body a chance to equalize and avoid a potentially fatal air embolism also known as “the bends.”

20. The meaning of environmentally friendly (kankyō ni yasashī) transplanting practices is contested. Sea Seed Okinawa advocates transplanting by drilling holes into dead corals and securing baby polyps with the Okinawan sponge gourd Naabeera (Hechima in Japanese) rather than using chemical glues. A New York Times article on the world’s largest government-led “coral transplant surgery” project on Sekisei Lagoon Reef (Okinawa) describes a range of other methods being tested by reef scientists that could be used elsewhere to rescue reefs endangered by overfishing, pollution, and global warming (Fackler 2009).
Chapter 5
HEALING AND NATURE

Nuchigusui: This is the healing forest. This is the healing village of Kunigami.
—Kunigami Forest Therapy
English-language promotional brochure

No one in his right mind looks at a pile of dead leaves
in preference to the tree from which they fell.
—E.O. Wilson, Biophilia
Introduction

_Nuchigusui_ is an Okinawan term that means “to be healed from the heart” (_kokoro kara iyaseru_) or “medicine for life” (_inochi no kusuri_). I became interested in health claims associated with the forest after hearing stories about a local man who had left Okinawa but returned home when he fell sick. The forest, with its “delicious water,” cured his cancer. This kind of testimonial was often invoked by residents and nature guides living in Yambaru as evidence of the intrinsic value of their forests.

What makes an environment “healing”? In this chapter, I discuss the relationship between healing and nature in the context of ecotourism by introducing the practice (and practitioners) of forest therapy and other forms of “intraspecies” (Haraway 2008) encounters in northern Okinawa. Participants in these activities are taught to cherish nature through their engagement in guided outdoor activities designed to evoke a specific kind of transformative sensory experience. The nature of these experiences, however, is not easily defined. I begin by analyzing the external structure of the tours. Expanding upon the themes of localization, movement, and perspective introduced in Chapter 3, the first part of this chapter explains how nature-based tourism is promoted to northern Okinawans as a promising new economic sphere at community meetings and through samplings of state-supported, entrepreneur-driven ecotours. I examine the labor of organizing and implementing ecotourism used by the Kunigami Tourism Association (KUTA) and the Ministry of Environment to encourage residents of Yambaru to see their surrounding biophysical environment as a tourist does—as unique, precious, and ultimately worth exploring and protecting. These tours are simulated, in the sense that they are conducted to give locals a sense of how ecotourism catered to outside visitors provides one strategy for unlocking the economic and community healing potential of the forest.

The middle section of the chapter focuses on guides, whose work is to bring the forest to life through a prescribed set of outdoor, nature-based activities meant to shift the balance of participants’ everyday perceptual tools from primarily visual to tactile and aural. The nature interpreters (_neichaa intaapuritaa_) and forest therapy guides I encountered often claimed to offer privileged access to “real” nature, and many of them derived their sense of authority, expertise, and belonging from their ability to bring ecotourists closer to it. Questions of authenticity in nature frequently emerged when guides discussed their own personal biographies. As I discussed in Chapter 3, for some guides, being native to Okinawa is much more a matter of mindset than place of birth.

We learned in Chapter 1 that nature interpreters are ecotour guides who distinguish themselves from other kinds of tour guides by claiming to have
an especially deep familiarity with nature that enables them to interpret the natural environment for others. In Japanese, the term “guide” (gaido) typically connotes a young woman, dressed in hose and high heels and carrying a small flag, leading a group of agreeably passive late middle-aged sightseers on a rigidly scheduled bus tour generally allowing only short stops to photograph scenic spots. A good Okinawan friend of mine who had worked as a tour bus guide in her early twenties joked about having visited the Churaumi Aquarium at least two hundred times; but for her this had been a temporary job, and little more. She did not link her sense of being Okinawan with her scripted narration of popular tourist sights. Nature interpreters, on the other hand, self-consciously claim authenticity and sincerity in their work—an authenticity and a nearness to nature not pursued by more conventional tour guides. Nearness is what qualifies them to interpret nature: They can bring Ishikawa’s frog and the deigo tree new meaning for the ecotourist or student of environmental education by locating these species in the forest, and by explaining their roles in supporting the ecosystem. This authenticity claim is generally linked to the interpreter’s multilingual breadth of local knowledge about indigenous, endemic, and invasive species.

In distinguishing themselves from typical guides, the nature interpreters I interviewed emphasized the hundreds of hours they had spent studying the Yambaru Forest and its denizens. Most, though born and raised in northern Okinawa, did not naturalize themselves as inherently nearer to nature by virtue of their geographic origin. The distinction between native and non-native interpreter becomes clear in the explanation of a self-described “invasive species” interpreter: rather than relying on a passive birthplace-based claim to authenticity, a native interpreter approaches intraspecies nearness by reclaiming or reconstituting lost or fading knowledge about the area. Interpreters often expressed a desire to (re)connect with the forests of Yambaru. As one of my twenty-year-old informants put it when describing his affinity for the Forest School and surrounding area: “I don’t want to be separated from this place.” The nature interpreters I met pinpointed the location and defined the limits of their nature externally, by scrutinizing the origins of certain plants and animals, as well as their own geographical and cultural roots. Whether local or visitor, participants’ nearness to nature was mediated by their interpreters: through plants and animals introduced, senses heightened, and stories told.

Nature interpreters can also be seen as “human technologies” or as “diverse agents of interpretation, agents of recording, and agents for directing and multiplying relational action” (Haraway 2008: 31). Similarly, Noel Salazar’s ethnography of the politics of international tourism refers to expert tour guides as “mechanics of glocalization” (2010: 173) to emphasize the labor-intensive work of highly skilled guides responsible for localizing
global concepts circulated by tourists, and for globalizing local stories and attractions through their tours. Through their embodied actions (walking, talking, diving), the Aruki village walkers and community chatters discussed in Chapter 3, and the coral-transplanting stakeholders from Chapter 4, engage in the parallel endeavor of documenting intraspecies encounters.

In this chapter, I draw on E. O. Wilson’s biophilia hypothesis and Marc Augé’s concept of the supermodern “non-place” to ask a fundamental question: Why do we endeavor to get close—sometimes dangerously close—to nature? The people I joined on the ecotours discussed next were expecting to have fun, but some discovered medicine for life.

**Cherishing Nature**

I first met Mr. Oku, head of the Naha division of the Ministry of Environment Nature Conservation Office when I was seated behind him in a two-person kayak on the Gesashi River. We paddled downstream, surrounded by a gaggle of ebullient ecotourists. Undaunted by the unusual setting for our interview, I attempted to make conversation with the back of his head. Taking care not to splash me with his wooden paddle, Oku turned around and explained to me that Okinawa Prefecture’s ecotourism charter was created to cultivate in visitors and locals a sense of nature as “cherishable.” Itsukushima, a verb he translated as “to cherish,” suggests a reverence for nature that comes from direct experience or contact (fureai). In fourteen years of Japanese language study I had never come across this verb, and one of my Japanese colleagues explained that it is an unusual, old-fashioned sounding word that encompasses a variety of emotions: to itsukushima is to love, have affection for, and pity something all at the same time. This, Oku suggested, was a sentiment long cultivated in mainland Japan owing to its long history of overcrowding and natural resource deficiencies. Meanwhile the vast majority of Okinawans, he claimed, had lived in predominantly rural settings until quite recently and thus did not appreciate nature in the same way mainland Japanese did. Coming from a Yamatonchu (Okinawan term for “mainland Japanese”), this assertion immediately triggered my skepticism—but I had also heard it from an Okinawan. Though he did not use the word itsukushima, Mr. Kuba (of KUTA) reiterated Oku’s notion of cherishing when he explained that the objectives of his NPO were to “cultivate hearts that value nature” in people of all ages throughout Okinawa—especially Yambaru youth who underappreciate their surrounding environment as common or mundane, to them. Both men sought to revitalize Yambaru by rendering everyday nature cherishable through carefully crafted native ecotours.
Ecotours for Locals

KUTA was created in 2000 to coordinate and promote sustainable tourism development in the Yambaru region. The organization comprises about fifteen members, including Professor Junko Ōshima, a self-described “nature-lover” (neichaa raba) originally from the Tokyo area who has lived in Okinawa since 1998. Other members of KUTA were born and raised in northern Okinawa. At least one of the energetic Chinen brothers (introduced in Chapter 3) was present at nearly every ecotourism event I attended between August 2009 and May 2011. In addition to working for the village office, both brothers also facilitate the maintenance of the Forest School, an environmental education facility in Kunigami built in the mid-2000s on land previously controlled by the U.S. military for use as a jungle warfare training area (discussed in Chapter 2).

Mr. Shimabukuro, a KUTA associate, is a professional photographer whose stunning images of endangered and endemic species, including the Yambaru kuina, the Ishikawa Frog, the Ryukyu Mountain Turtle, and the Pryor’s Woodpecker (Noguchigera), are sold as postcards and posters, and are printed on promotional materials that circulate all over Japan. In collaboration with KUTA, Shimabukuro’s son works as a nature interpreter at the Forest School, and his daughter-in-law is a forest therapy guide.

Between November 2009 and January 2010, these KUTA members organized a series of ecotourism promotional events called the Yambaru 3-Village Treasure Box. The events were scheduled to take place in Higashi, Ōgimi, and Kunigami. The organizers staged three monthly themed expeditions—“Mountain,” “River,” and “Ocean”—to teach local participants about the interrelatedness of three distinct ecosystems while introducing them to the ecotourism concept more generally. The museum-sponsored village walks and organized community chats described in Chapter 3 encouraged locals to see their everyday surroundings as a tourist would. These Treasure Box tours, offered to locals at no charge, were designed expressly to gain support and enthusiasm for the expansion of ecotourism in the area.

The advertisement in Figure 5.2, circulated by KUTA, promotes a mangrove kayak trip in Higashi, a waterfall hike in Ōgimi, and nature games in Kunigami:

Re-discover the region’s beauty! Participate for free!

Given that these tourism promotional events were limited to local residents, I felt quite fortunate when a colleague invited me to attend. I was unsure where they would place me in the lineup and was surprised when, just as
FIGURE 5.2 • Ecotourism Promotional Flier for Okinawans: “Treasure Box” Nature Games
Mr. Gibu had done during the Orion Beer event, Ms. Kakazu from the Ministry of Environment quietly slipped me a “Staff” badge. With no training whatsoever to qualify me for such a distinction, I quickly improvised a role and introduced myself to the participants as their “English language reference guide.” This proved to be a mistake once the nature interpreters began introducing plant and animal species, as I could not yet name most of them in English, let alone in Japanese or Okinawan. Fortunately, the novelty of my presence seemed to override the fact that I was neither expert nor local.

The priorities established during the KUTA planning meetings I attended were that participants would:

1) Be safe!
2) Have fun!
3) Ponder their discoveries and their sense of natural beauty.
4) Consider how to protect each place visited.

The kayaking trip up the Gesashi River proved exciting for the roughly thirty participants (ages 4–80, though the target demographic was mainly mothers and children), many of whom had lived in Okinawa their whole lives without ever being in a non-motorized boat. Unfortunately, the Ōgimi waterfall walk was interrupted by inclement weather, leaving participants little opportunity for reflection.

**Healing “Nature Games”**

On a cool Sunday in mid-January 2010, I accompanied the KUTA staff to a protected forest in Kunigami for the final stage of the Treasure Box Tour, which was advertised as a series of “Nature Games.” Participants gathered in the parking lot of a small nature center at the base of the trail and broke into five groups of roughly ten people each. Before we departed on our journey, one of the nature interpreters handed me a stethoscope. The guide laughed at my puzzled expression and said we would be using it to take the pulse of the trees.

As we trekked uphill along the beaten path, our volunteer nature interpreter Mr. Inafuku, a retired man in his late sixties, stopped to point out different trees and plants that are famous in Okinawa. The Itajii tree, he revealed, was actually not indigenous but had been imported in the late nineteenth century. He informed us in a distinctly critical tone that very few of the plants symbolically associated with Okinawa today (e.g., hibiscus, pineapple, dragon fruit) are actually endemic to the area.
Halfway up the hill, our group stopped and dispersed for a quiet moment communing with nature. We were told to plop down in a comfortable spot and listen for the sounds of the forest: the rustle of the wind in the trees, the crunching of fallen leaves by camouflaged ground critters, the trickling flow of a small stream nearby. I chose a large, smooth gray rock just off the path and sat down, feeling sleepy and flat. I wondered how long this next bit was going to take. After about ten minutes our guide roused us from our thoughts and gathered us around him for a moment of group reflection. Participants marveled politely over the various sounds and sensations they had discovered as I tried to recall where my sluggish mind had wandered.

We continued on our trek, and our interpreter stopped every few minutes to point out a rare plant such as a land orchid, or to listen for a Pryor’s woodpecker busy chiseling a new tree dwelling. One shrub had leaves that tasted like lemongrass. We approached a giant Itaji and Inafuku paused to take the stethoscopes out of his backpack. I watched a mother tenderly teaching her ten-year-old son how to listen for the tree’s pulse. After many failed attempts I finally found the tree’s muted “heartbeat,” which resembled the sound of rushing water or the inside of a conch shell. (I later learned that what we were actually hearing was the crackling, gurgling sound of sap flowing up to the branches.) This tree appeared healthy and robust, but the application of the cold metal device made me feel like we were treating it for something, reverently. At the very least, we were treating it like it like us.

About two hours passed before we descended the hill and sat clustered in circles on the asphalt parking lot of the nature center to reflect on our experience. My group consisted of the mother-son duo, three retired couples, two younger couples, and a single young woman. Participants reported back that it was nice to get outdoors; most had not known they could hike in this particular forest. They also recounted the names of some of the plants they had learned to recognize with the help of our interpreter.

The young woman stood up and volunteered to present our group’s feedback to the other tour participants. She listened attentively to their complimentary but predictable comments: “It felt so nice to be outside”; “I learned a lot”; and “I realized how much we need to protect this forest.” As the woman began to speak, she trembled and was suddenly overcome with a rush of emotion. She described having problems at work; having “many many” social and family conflicts, and alluded to suffering from a long-standing illness, which, one of the coordinators later quietly suggested to me, was most likely depression. The woman sobbed as she spoke about the sheer relief she felt from noticing the wind on her face, breathing the clean fresh air, and immersing herself in such an unfamiliar and pristine natural environment. She spoke of coming back to life, thanks to the forest.
Promoting Forest Therapy

In late March 2011, I attended a daylong conference at Kunigami’s Forest School designed to promote the longstay tourism model to Yambaru residents. Our featured speaker was an energetic executive in her fifties in charge of Mahaina Wellness Resorts Okinawa, a hotel chain leader in the longstay tourism trend since 2000. She opened by reflecting on how amazing it was to hear the call of the Yambaru kuina in the morning when she arrived, how quickly its cries had transported her out of her city life and working state of mind. She raved about the “pawaa chaaji” (power charge) she had received from the forest.

Forest therapy (also called forest bathing [森林浴]) might be described most simply as going to a forested area and wandering around. And yet the facilitation of this simple practice provides a small but crucial economic “power charge” for young residents who might otherwise be compelled to leave Yambaru to seek work in Naha or Tokyo. There are forty-two certified forest therapy centers in Japan, but only one in Okinawa Prefecture. The Kunigami Village office spent seven years planning its forest therapy program, building four distinct therapy roads; it has trained nature guides since 2007. Guides are typically recruited out of the local high school, though I met a few non-certified guides who had arrived via a different path: after studying for approximately one month, they flew to Kyushu (the nearest major island to the north), sat for a ¥7,000 ($80) test in Fukuoka Prefecture, and became certified by the national organization that runs all of Japan’s forest therapy programs.

Mr. Tamaki, a youthful looking thirty-something man who coordinates the forest therapy program in Kunigami, presented the key concepts of his program to an audience of about fifty middle-aged men and women from Yambaru: Kenkō (health), Kankyō (environment), Kankō (tourism). Tamaki promoted forest therapy as a thirty-year-old technique supported by scientific research (see Nakamura 2008; Ulrich 1993). The healing modality has been proven to boost the immune system, lower blood pressure, slow the pulse, and even reduce stress hormones (Nakamura 2008). In addition to “power charging” tourists, he described Kunigami’s program as “health-making for residents,” in part because venturing into the forest reminds older folks of their childhoods and makes them “genki” (spirited or cheerful) (see Figure 5.1).

Interpreting Forest Therapy

Nature interpreters in Okinawa define forest therapy and ecotourism more generally. Local ecotourism promoters with whom I met complained occa-
ationally that foreign tourists (primarily American, frequently U.S. military personnel) would come to their kayak shops and request a discounted rental for a guide-free experience. Mr. Miyagi, director of Higashi’s Tourism Promotion Association, explained the relative scarcity of non-Japanese visitors to the area: “Their sense is different.” The ecotour guides would never allow this kind of self-directed adventuring because they strongly believed that their natural surroundings could not be properly understood through an outside perspective. In addition to the need to protect their livelihood, these interpreters believed that the legitimacy of their enterprise hinged on their ability to provide an interpretation of Yambaru’s nature unavailable through any other medium.

Each of the interpreters introduced in the next section has negotiated his or her professional identity in relation to the guide-interpreter spectrum. Like the locals and researchers introduced in Chapter 3, the “knowing” and “noticing” ecotour guides are diverse in gender, geographic origin, level of ecological knowledge, and degree of social mobility. I include some of my personal reactions to each tour and each guide to illustrate the physical, spiritual, and intellectual discomfort that comes from healing in nature.

The Native Novice

The morning after the Kunigami community chat session, I passed a giant, colorful tourism map on display in front of the town office. I stopped to study it for a while, making sure I knew most of the highlighted destinations. The Forest Therapy Road (森林セラピーロード*) caught my attention, and I entered the office to ask how I could access what I imagined as a rugged, winding trail through the woods. A helpful city worker in a pastel green jumpsuit strongly encouraged the use of a guide. He quickly made some phone calls, and a few minutes later another young man in another green jumpsuit was escorting me to the entrance of the therapy road.

The road wound up the hillside for about two kilometers. As we ascended into the “Broccoli Forest,” the dark green Itajii trees grew dense. A wooden sign posted at the entrance to the park read “Mori to mizu to yasuragi no sato, kunigami” and was translated into English as “Kunigami offers you ‘Peace of Mind’ from Okinawa’s best Forest and Rivers.” In my impromptu quest for tranquility, I was about to get a lesson in patience.

I was escorted to Ms. Taira, a northern Okinawan woman in her mid-twenties who kindly offered to take me on an abbreviated (but free) walk on the therapy road. She had just returned from a training session at one of the larger forest therapy facilities in Nagano Prefecture and seemed eager to practice. As we walked, I asked her a few questions about the program:
“Who comes? Retirees? Mothers and children? Patients?” She replied that, while it would be ideal if “genki ga nai” (unwell, literally “no spirit”) people came, in fact most of the participants were already in good health. “People who aren’t well can’t be bothered going outside, can they?” Her deadpan response came in startling contrast to the dramatic healing potential Tamaki had touted at the longstay tourism conference.

The forest therapy road was constructed of smooth concrete with white, rubbery zebra stripes painted across it, which made it much more accessible than I had expected. Where was my rugged outdoors? I found the road aesthetically intrusive and began to wonder about its therapeutic value. As if reading my mind, Taira said: “The purpose of this route is not so much trekking as it is being. We don’t want people to slip along the way. The aim is to simply be, in the forest.”

Feeling an equal and opposite need to document the situation, I fumbled for my camera. “First, we want people to touch the trees,” Taira explained as she tenderly petted the soft green moss growing on the side of a tree. I copied her skeptically. We continued walking and she bent down to uproot a small plant. “This one’s great,” she said, holding it up to my nose. “The leaves don’t really smell but the roots are amazing.” I sniffed the white roots and guessed: “Spearmint?” “Actually it’s more like A&W,” she noted. I got the reference and concurred, “Like root beer, sarsaparilla, yes!” Before we had progressed another two hundred meters, she stopped and pointed to the ground. “Look! The Iju [needlewood] seeds look like laughing faces!” The rugged evergreen’s large brown dry seeds lay cracked open on the trail, smiling up at us indeed. I picked one up and put it in my pocket.

Ignoring her suggestion to “just be,” I attempted to continue my interview by asking about the documented effects of forest therapy, who sponsors the program, and so on. She replied that she had only been working there for a year and that there were much more experienced guides I should consult. She paused, stooped down again, and produced a handful of bitter acorns for me to sample.

Next Taira led me to a bench overlooking a large pond where a lone duck swam in circles. “Try shutting your eyes for a few minutes. We are always looking at the world, but you feel things entirely differently when you cannot see. Notice the blowing breeze, hear the rustle and the sounds of the insects chirping. This is where we work on breathing. People usually breathe with their chests, but we invite them to breathe with their bellies.” I puffed out my stomach, hoping to feel something.

We nibbled on the lemony leaves of shikwaasa, a lime-like Okinawan citrus fruit that grows on sprawling green trees and, when mixed in, makes awamori infinitely more palatable. We chewed the cinnamon-like essence out of shiny green gettō (shell ginger) leaves as she described how much she
had learned from her tourist customers. She demonstrated how one man had encouraged her to get down on all fours and sniff out the edible plants on the path “just like an animal.”

When Taira mentioned some of the psychological consequences of living “in concrete,” I immediately thought about my tiny grey shoebox of an apartment in Nago. When I had first moved to Okinawa, despite living in the centrally located city of Ginowan, I had actually been tucked away in a very earthy and alive house replete with shikwaasa (green papaya trees) and even a mori no aisu plant (“ice cream of the forest,” also called atemoya), so nicknamed for its white, creamy sweet meat. Yamori geckos and giant spiders scaled the walls of my three-bedroom house, inside and out, and a pair of lovebirds flirted the day away on my wooden deck. The walls of my house shook daily from U.S. military planes flying overhead, a source of chronic, blaring noise pollution. There was a Starbucks in walking distance from my place, and the controversial Futenma Marine Corps Air Station, surrounded by barbed-wire fences, was just a few blocks away. And yet, I had unwittingly inherited my landlord’s gorgeous green garden full of wild vines and hibiscus.

Taira asked me what had brought me to Yambaru, and I explained that for the second half of my fieldwork I was determined to get closer to the nature that ecotourists sought. So I moved an hour north to Nago, only to find myself living in a square efficiency apartment mass produced by LeoPalace21, a nationwide chain of cookie-cutter apartments. I was closer to Yambaru’s forests from Nago, but my immediate living environment felt tight and sterile. Friends’ warnings about outdoor toilets and frequent reminders that “Living in the countryside is a pain!” had convinced me to go for clean and new instead of old and charming.

As we completed the therapy loop, we passed by a row of A-frame camping bungalows designed for short-term visitors. These large birdhouse–like huts grew more attractive the more I reflected on my own housing. I wondered how it would be to live as a true nature lover, like Taira, immersed in this kind of living environment day in and day out. I asked her when I could return for a full therapy session with other customers. She explained apologetically that she was moving to the mainland the next month to become a housewife and probably would not have time to meet again.

Therapist Close to Fun

The morning after the longstay tourism symposium I reconnected with Mr. Tamaki and six forest healing participants ranging in age from 25 to 65. All were from Yambaru save for a youthful middle-aged reporter for the
Okinawa Times who had driven up from Naha. Tamaki’s first question to the group was “How are you doing today?” He was not asking in the polite, empty sort of way we all do but actually wanted us to record any specific physical and psychological (mood) complaints on a before-and-after form he distributed. We sat in a circle on the grass, and he came to interview us one by one with no real pretense of privacy. He approached me last and asked the following questions:

– How many hours did you sleep last night?
– How many hours do you usually sleep?
– How are you feeling today? Is your mood good/average/bad?

I felt quite meek next to the sporty journalist, who reported excitedly that she works every day, never takes vacations, and requires only four hours of sleep. After overhearing the rest of the group’s polite answers, I lied judiciously in answer to the first two questions. Then I remembered that this was supposed to be therapy. I told Tamaki that I was in a bad mood (a fortunate coincidence in this case), at which the energetic journalist exclaimed: “Why?!” Tamaki filled out the front and back of my intake form, circling areas of physical discomfort that I indicated on a generic human figure much like those used at a chiropractor’s office.

Then we prepared for our walk. Tamaki led us in a cheek and neck “shape-up” stretch, a simple twisting of the head up and down, left to right, which he suggested would be good for us because we were women. This comment did not help my mood, but I took it as an opportunity to ask him why no men had signed up for the tour. This forest therapy course was one of a few half-day outings, each approximately ¥3,000 ($35), coordinated for attendees at the symposium. We had chosen it over snorkeling, tea making, and a village tour exploring the connections between water and mountains. “Well, I think that women are naturally more interested in healing,” he replied.

After a few more rounds of cosmetic calisthenics, we sauntered down the hill and entered the well-marked therapy road. He encouraged us to chat as we walked slowly. He asked us to stop and smell a delicate pink flower reminiscent of a hibiscus. Tamaki described the phenomenon of phytoncide (literally “exterminated by the plant”), wherein the very same aromatic smells that attract humans to certain flowers serve to protect the plants from hungry pests. He pointed out the Itajii, the preferred home of the Yambaru kuina and the favorite tree of nearly every nature guide I met. As we continued along the striped path, he reminded us to pause for a moment to check our breathing: “Is it deep and slow?”
Next it was time for tea and (more) chatting in the forest. (Tamaki told us this was “the Yambaru way” of relaxing.) A freshly painted gazebo appeared just off the zebra-striped trail, and we sat down at a table with tree stump–shaped concrete stools. Tamaki produced two thermoses filled with steaming hibiscus tea and a boxful of homemade Chinsukoo (Okinawan salty shortbread). Perhaps inhibited by thoughts of drooping chins and stretching necks, each woman took just one cookie then gave the rest to me as an omiyage (souvenir).

After resting for a while we resumed our walk, traversing a narrow bridge that crossed over a large pond with two ducks paddling around. I passed the pond unthinking, when out of the corner of my eye, a wave of glittery wind washed over the water. For a brief and stunning moment, I was flooded with a sense of the numinous. I checked with my neighbor to make sure I was not imagining things; she had seen it, too.

The rest of the group had not seen it, so we kept on walking until we arrived at a wooden sign that explained something about music, fukisoku (irregularity), and yuragi (shaking). I had no idea what was being discussed until one of my companions explained: “Hikaru Utada’s voice does it.” Something vibrating in the world-famous pop diva’s voice was also in this forest. Apparently, if one stood in that spot long enough, there was some benefit to the parasympathetic nervous system. Tamaki said it was difficult to explain but summarized the healing effect of this station as “relaxation.” Next we engaged in a hammock experience, which was as straightforward as one might imagine. None of my companions had ever sat in a hammock before, and some of them looked quite nervous at the prospect of swinging supine. One woman lay still and stiff like a corpse in distrust of the contraption before finally exclaiming, “This is pretty good!” After approximately three minutes Tamaki asked the group, “Could you relax?”

We soon came to the end of the course, which was only about six hundred meters long, and waited for lunch by some picnic benches near the Welcome Center. Tamaki brought us handmade recycled newspaper bentō boxes chock-full of Yambaru delights. Using hand-carved reusable bamboo chopsticks, we feasted on juushi fried rice balls packaged in another waxy green shell ginger leaf (gettō in Japanese) in lieu of plastic wrap, Okinawan fatty pork, and a lightly sweetened, purplish taro yam dessert.

As we sat down one of the older women remarked: “So that’s therapy!” Two participants began discussing the meaning of the loanword for “therapy” (serapii in Japanese). Much like the coral monitoring loanword conundrum from Chapter 4, nobody seemed to know quite what it meant. They asked Tamaki, who admitted that he was not entirely sure, either. He mentioned that iryō (medical treatment or care) and ryōhō (a method of medical
treatment or a cure) were two possible translations, but quickly added that what we were doing was more like “therapy close to fun” (Fuan ni chikai serapi). Eventually he settled on describing what we had done as “enjoying the forest” (mori wo tanoshimu koto).

As we continued munching, one of the other women asked me, “So … what does therapy mean in English? Is it medical? Is it personal?” I was stumped as the many uses of the term in English flashed in my mind. I thought of colloquial examples such as “retail therapy,” but there was also physical therapy, psychotherapy, occupational therapy, even hydrotherapy. I replied that it was a very broad term with many meanings, both physical and psychological. “Yes, but what are its nuances?” They were not satisfied. “I think it connotes getting help with, or for … something,” I mustered. They nodded politely.

Using our conversation as confirmation of his earlier claim, Tamaki summarized our discussion: “Yup, women respond to healing. Men prefer trekking.” He began asking us individually about our impressions of the tour and took diligent notes on the before-and-after forms. The bouncy reporter was following him around and asking follow-up questions of the participants, so I followed her. I wanted to keep my health report card for a closer reading, but he said he needed it for their national database.

We were invited to say what was good about the tour and what could use improvement, but nobody offered any complaints or criticism. The ample positive feedback included:

My stress from work just flew away …
Naha City is so dirty [compared to this forest].
My headache is gone!
I never look at the sky [when at home in the city].
The wind!
I should visit nature more often.
I could sense the real smells and real colors.
What a great opportunity to learn about local ingredients!
… and to ask about our five, six senses!

Tamaki invited us to feel our shoulders and to notice whether any tension had been released. “But what can we do at home? What is the take-away?” someone asked. “Breath” was his answer. We were to focus on our breath. He concluded the session by encouraging us to “think about the health of the forest, not only the health of people.” By experiencing the natural world on a smaller, slower scale, this tour encouraged us to see the trees for the forest. Then we walked back to our cars and drove home.
Invasive Species Expert

My next visit to the Forest Park in Kunigami was prompted by an advertising flyer for the “Yambaru Wonderland” that read, “Live well with a relaxed stance! Become one with the pleasant winds of Yambaru.” Mr. Satō met me at the Welcome Center and informed me that I was the only participant that day. He was a handsome, muscular, weathered man in his late fifties with go-mashio (black sesame and salt) hair and a stately goatee. I studied his business card and saw that he had named his one-man company Yambaru Great Nature Experience: Let’s Play! I pointed to the flyer and admitted that I did not quite understand the description of a listed activity: Forest Pole Exhaustion (Shinrinbō Datsuryoku). “Oh, that’s just the name I made up for the form of outdoor martial arts I teach,” he smiled. Satō’s approach to guiding (and just about everything else, I quickly learned) matched the “relaxed stance” advocated in his flyer. He decided it was too difficult to run a class with only one student, so we went for a nature walk instead. He changed out of his karate garb and into jeans and hiking boots.

We sat on the gleaming wooden floor of the Welcome Center for my orientation. The receptionist brought us hot tea. Satō showed me two short films on his laptop. The name of the first, released by the Japan Broadcasting Corporation (NHK 2006), was “The Japan that Japanese Don’t Know” (Nihonjin no shiranai nihon), but was translated into English as Treasures of Japan. The films in this series showcase places and people considered to occupy Japan’s geographical and cultural periphery, such as the Ryukyu Archipelago (Okinawa), the Ainu (Hokkaido’s northern indigenous people), whales in the Ogasawara Islands south of Tokyo and Kumanokodo, and a series of ancient pilgrimage routes and World Heritage Sites in Wakayama Prefecture.17

The second film, Wrapped in the Yambaru Wind: An Okinawa Photo Poem, was a lengthy slideshow of beautiful images taken by a local photographer. Mesmerizing scenes of the ocean, beaches, and broccoli forests of Yambaru scrolled past. I felt strange sitting indoors, drinking tea out of a ceramic teacup and listening to the lilting soundtrack of nature from computer speakers while also feeling an actual breeze from a nearby open window.

After watching the orientation films, we entered the forest and began to walk along the wooded trail. Almost immediately I noticed a number of red wire mongoose traps placed at the side of the path. Satō told me he had begun tracking mongooses that had traveled north of the Shioya-Taïra line (explained in Chapter 2) and entered the Forest Park long before the government first became involved in mongoose population control and extermination in 2003. We came upon what Laura Ogden calls “state-sponsored apparatuses of capture” (Ogden 2011: 34). The traps were quite small, and I asked how they baited the animals. “Dried squid jerky,” he replied, joking...
that the trackers ate more of it than the mongooses did. I did not understand why the traps were located so close to the trail. He explained that, whereas they would normally be placed deeper in the woods, these traps were “resting”—temporarily out of use—due to a lack of volunteer trackers. Satō identified himself as part of the “world of humans,” but claimed some affinity with the mongoose: “we are both invasive species in Okinawa.” He also identified himself as a second-generation atomic bomb victim who had “invaded” Okinawa from Hiroshima twenty-five years ago and never left.

Many of the nature guides I encountered were particular about their titles, so I asked him what it meant to him to be an “annainin” (this non-loanword Japanese term for “guide” was printed on his business card). Satō distinguished himself from typical guides and from the nearby Forest School’s nature interpreters—his local competition. Instead he fancied himself a “messenger of the forest.” He elaborated further: “The trees are talking, and I’m their feces” (Ki ga katatteiru, sono daiben). I gave him a funny look, puzzled by his choice of metaphor. He smiled and reminded me that daiben has two meanings; hence, “the trees are talking, and I’m their spokesperson.”

As we walked along the trail he snapped a few photos, explaining the many different ways of capturing a plant using filmic techniques such as backlighting. He invited me to crouch down and look up at the sunlit leaves of a tree from below. Next came the quiz: “Why are the new leaves of the Itajii red instead of green?” “To keep bugs away?” (My feeble guess was based on my recent lesson in phytoncide.) He began describing what I knew must be the process of photosynthesis despite not grasping some of the more scientific language he employed. “They’re the tree’s babies. The red color means they don’t need to work yet.”

Just as Ms. Taira had done, Satō asked me to get down on the ground to see the plants from the perspective of an insect or a small animal. “See how the image changes,” he told me. I lay on my belly in the dried leaves and took a few photographs.

His next comment echoed coral activist Karen Magik’s claim that “your experience is different from my experience” (see Chapter 3), less the judgment. “The way we see the world is different. You’re standing here and I’m standing here but what we’re seeing, the reality we are experiencing, is different. My reality is different from your reality. For people who find the habu scary, that’s their reality. But I say we are all the same—the habu, mongoose, Yambaru kuina, and noguchigera [Pryor’s woodpecker].” He paused. “But I respect the earthworm the most because it is eaten by so many different animals. People are ‘ojamamushi’ [pests, in the way] in the forest.”

I asked him what he thought about “forest power,” to which he replied, “I believe it is very strong.” He shared the story of a woman healing her own cancer by spending time in the forest, and relayed how a friend had cured
healing just by walking through the forest. He told me that the year before he could barely walk because of a pinched nerve in his spine. His doctors instructed him to check into the hospital, but he went into the forest instead and was healed. “I understand people’s pain. You don’t understand when you’re healthy, do you?”

Satō told me he would do anything to avoid becoming a “sick person,” noting, “Western medicine looks at the body as a thing and doesn’t see the spirit, the heart.” He described his group tour participants standing in a circle. Without holding hands or touching, he explained, he asks them to cup their hands over one another’s to feel their collective ki (spirit). “The power of the spirit, the power of the trees—just as the characters read, it’s ‘Forest Power’ (Shinrinryoku):”

In addition to explaining the healing potential of forest power/bathing, Satō told me that we should conduct ourselves with omoi toward the forest. There are many ways to translate the Japanese word omoi: thought, feeling, wish, desire, or love. He compared human relationships with nature as that of a couple who cherish one another, adding mournfully, “Cutting trees leads to crying trees.” Suddenly he changed the subject to Doomsday and his belief in the Ascension and the dour Mayan forecast for the coming year. I was shocked when he referred to the recent earthquake and tsunami in northeastern Japan (which had struck not two weeks before) as a “message from god saying, ‘You must change your life!—Kamoshirenai [maybe].’” He also claimed to have seen UFOs in the forest.

Eventually the path led up to some gravel-covered steps. The walk had not been particularly rigorous, but we sat down to rest and he whipped out his harmonica. I was treated to “What a Wonderful World,” “When You Wish Upon a Star,” “Somewhere Over the Rainbow,” and a Hawaiian love ballad. I commented that the songs seemed rather romantic, and he told me that he usually saves the ballads for his night tours. I was tempted to applaud after each rendition but there was something startlingly tranquil about the moment. We sat in silence a while longer and soon we were back on the main road winding down toward the Welcome Center.

When we reached my car, I grabbed my wallet and handed him the ¥2,000 ($23) fee listed on the flyer. “I’m not doing this for the money,” he said, refusing to accept anything but my gratitude for the afternoon we’d spent walking in the woods. He insisted that he does not charge customers if the “official” class is canceled, so I opted to reciprocate with small souvenirs from the United States. Later another guide criticized me for accepting his generosity: “It causes problems for us when customers don’t pay,” she informed me in a scolding tone that I was unused to as a foreigner. On each
trip, independent ecotour guides like Satō had to navigate the forest trails and the slippery line between informal ecotour and friendly walk.

“This is my Yambaru.”

Satō insisted that I return the following week so he could take me on one of his favorite hikes. We met at the Welcome Center and I hopped into the passenger seat of his dirty, beat-up silver van. I immediately noticed the rumpled bed in the back, where he told me he often camped. He had decorated the dashboard with bits of bleached coral, leaves, a few acorns, and other dried seeds I did not recognize. A pair of plastic mom and baby habu swayed back and forth like hula dancers as we bumped along the road toward the trail. The first thing Satō said to me was “Mattari,” Japanese slang for “take it easy.” To this end he popped his copy of “Somewhere Over the Rainbow” into his vintage tape deck. It played on loop until we arrived at the base of Mt. Yonadake. We listened to the song quietly, as if setting the mood for our next adventure.

We parked on the side of a narrow, winding road and entered the trail, which was marked off by a sign on a long swinging gate. “You won’t learn much about ecotours from me,” he said. “I do erōtours. Eroticism.” I followed him into the forest, only slightly unnerved. The canopied air felt damp and cool against my skin. As we meandered along the trail he began to reflect on some of the differences between mainland Japanese and Okinawan approaches to hiking: “Many older Japanese are ‘peak hunters.’” I was reminded of the time I had climbed Mt. Fuji in the middle of the night, struggling alongside hundreds of others trying to reach the top in time for the sunrise in perpetuation of the famous Japanese saying: “You’d be a fool not to climb Fuji once, and a fool to climb it twice.” Satō continued: “But in Okinawa there are no high peaks so the purpose is different. Rather, people look for the nice flat stretches in the middle of the forest.” This comment reflected the yukkuri (leisurely) approach to being in the forest, common to every ecotour I joined, but also aligned with the broader life philosophy espoused by many of my informants, both urban and rural.

A bird called, and Satō pointed to an Akahige (Ryukyu robin) perched in a tree overhead. “We call it the Forest Guide (Mori no Annainin) because it doesn’t mind the presence of people and will often hop around in front of them, appearing to lead the way when in fact it’s just looking for food,” he told me. I cracked a smile, and relaxed a bit as I recalled the many “foraging” human forest guides I had met in these woods.

I noticed a conspicuous bald spot in the trail where the bank had been worn down and no plants grew. Some ten years earlier a bunch of roving
pleasure-seekers in jeeps had caused massive premature erosion on the sides of the trail, uprooting trees with their chomping tires. “We need rangers, real rangers like they have in Tanzania, not just the skinny, glasses-wearing kind they have here,” he lamented. “Those guys are really just town office workers with a patch on their arm that says ‘Ranger.’… We need rules!”

We continued on, but soon he stopped me again, pointing to a patch of bright green bamboo stalks and asking, “Where are the bamboo’s roots?” At first I thought he was going to surprise me by revealing that the roots were actually at the tips—this seemed impossible, but I had seen the sprawling Higashi mangroves that grew this way. “China?” I guessed. “That’s right!” Satō affirmed: “Even bamboo, or hōrai-chiku in Chinese, is an invasive species. Just like me. You see, the pine tree (matsu) is like Americans. It’s a ‘pioneer plant’ that grows in a place where there is nothing else. It goes there first and creates shade so that other plants can move in afterward. Whereas the Itajii tree is Japanese—it grows in shy places.”

A large puddle appeared in the middle of the trail. I tiptoed delicately around it, but Satō bent down and began fishing through the dark brown muck with his hands. Soon he pulled up a Chapstick-sized brick-red newt with black speckles and told me to smell it. Nothing. Then he began rubbing its back vigorously, and soon the creature was covered in a foamy white paste. He held it up to my nose—it smelled like rotting vegetables—and then returned it to the puddle. The newt just hovered in the water, making no attempt to escape. “That’s its poison, how it protects itself from predators. It doesn’t have to be fast.”

The most remarkable animal we encountered was dead. Just as I was about to stumble over it, Satō shouted out for me to freeze: “It’s a Ryukyu long-tailed giant rat!” This “rat” is a national protected species, one that I had heard much about but had never seen. It lay on its side in the center of the trail, its long tufts of brown back hair and lengthy black-and-white tail on full display.

Satō poked at it with his finger. “Maybe it was done in by a mongoose …” He flipped it over with a stick, but we could find no visible injuries. “Or maybe a habu bit it but couldn’t eat it because it’s too large.” He removed his cap and placed it next to the deceased. Interpreting this as a sign of funerary respect, I did the same. Then he grabbed his camera and began snapping pictures of it from all angles, using the hat as a size reference. The mood was slightly less reverent now, so I followed suit.

“It’s still soft,” he marveled. The animal could not have been dead more than a few hours. We admired the creature in silence for a few more minutes, and then he asked me: “Are you ready? Let’s send it to heaven.” He picked it up by its long striped tail, carefully swung it back and forth a few times to gain momentum, and gently lobbed it into a nearby verdant ravine. He
then placed his hands together in prayer position and bowed to the departed. When I later told Mr. Yamamoto from the Nago Museum about our discovery, he frowned at me and said, “I wanted that.” Unfortunately, the eternal life afforded by taxidermy had escaped us in the moment.

We hiked on. Misty gray clouds rolled in as we trudged uphill, and Satō had to announce that we had reached the “peak” of Yonahadake because I could not see out. We sat down, and he produced two grilled-cheese sandwiches and offered me a cup of coffee poured from his silver thermos. Once again he broke out his harmonica, this time entertaining me with “Moon River” and “La Vie en Rose.” He talked about his dream of passing on knowledge about the environment, calling the practice a “baton touch”: “If I can teach this much to someone even just ten years younger, then that person can teach it again, and on down to the children. This is why I do these kinds of activities with people of all ages, but especially children. ‘Somewhere Over the Rainbow,’ ‘When You Wish Upon a Star’ … This is my Yambaru.”

Interpreting Interpreters

My portrayal of these three guides reflects the range of biographies and personalities I encountered in Yambaru ecotourism. I focused the first part of this chapter on the role of nature interpreters because these actors filter local visitors’ and outside tourists’ experiences of nature. Foremost, interpreters impart specific kinds of ecological knowledge by facilitating multisensory experiences. Taira was native to Yambaru but was new to forest therapy—she claimed no particular authority over nature, and spoke more frequently about what she had learned from her customers than what she was able to teach them. Taira was already bound for mainland Japan, and although forest therapy provided her with a temporary job, it did not inspire in her any particular spiritual or health-related vocation. (“People who aren’t well can’t be bothered going outside, can they?”). Most of the young ecotour guides I met related to Yambaru in a more emphatic, “nature-loving” manner, expressed most keenly by Cha-chan when he declared, “I never want to be separated from this place!” Taira’s relatively detached perspective complicated my emerging expectations about who is drawn to forest therapy and why; she reminded me that interpreting nature is also a job.

Mr. Tamaki, also a native of Yambaru, was a forest therapy spokesperson who approached his tours in a rigorous but somewhat perfunctory fashion. He followed the national forest therapy program’s guidelines closely and was more interested in accumulating new data and citing convincing statistics than facilitating a particularly emotive experience of nature. For Tamaki, forest therapy offered healing but also provided a much-needed local business
opportunity. Despite his concern with completing paperwork and conducting forest exit interviews, his depiction of forest therapy as “therapy close to fun,” and his resistance to any overt medicalization of the experience, privileged the touristic aspect of the enterprise. Tamaki’s perspective on his work was consistent with Dr. Nakasone’s characterization of dolphin therapy in Chapter 4: “That was fun and my heart has grown lighter.”

Mr. Satō, on the other hand, presented forest power as a transcendent catharsis for the human spirit. He was not a certified forest therapy guide, but an independent competitor who organized trips and tours according to his own intuition and self-taught ecological knowledge. He prided himself on his ability to learn Yambaru’s forests despite being an “invasive species” from the mainland. His passion for the healing power of the forest appeared to feed him more than the frequently canceled tours and workshops he offered did. He carved out a superior position for himself by marketing his “messenger of the forest” persona as a leader even more closely connected to the forest than mere nature interpreters. Other guides I spoke with regarded him as something of a nuisance, in part for poaching their custom but mostly for his renegade approach: “I do erotours.” He naturalized his claim to an intimate relationship with the forest by downplaying the remunerative aspect of his tours—“I’m not doing this for the money”—and by trying to inspire others with his own dramatic healing narrative.

Whether guide, or interpreter, or messenger, every ecotourism professional I met constructed the forest as a therapeutic space whose healing potential could be realized only through some form of direct encounter (listening to trees, smelling flowers, or even simply increasing physical points of contact with the earth by getting close to the forest floor). The healing power of the forest, I learned, involves a spiritual and emotional awakening realized through participants’ sensorial reconnection with nature. How else is this kind of healing transformation achieved?

The next section considers the relationship between direct experience and healing events by problematizing the location and limits of Nature I encountered in Okinawa. I include details from one indoor healing modality I explored to illustrate some of the unexpected overlaps I noticed between wellness centers, forest therapy, and more conventional (i.e., non-touristic) therapeutic modalities available on the island.

Simulated Nature, Real Healing

Following my “live” nature encounters with the forest, a giant flat-screen television projecting images of generic paradisiacal beaches and swaying palm trees seemed particularly odd. A pleasant, elevator music-like Hawaiian
luau melody wafted in from the overhead speakers in the waiting room at the doctor’s office. I turned to face the other side of the room and noticed yet another, smaller television with scrolling photographs of idyllic lakeside cottages and placid forest scenery reminiscent of the slideshow Satō had shown me at the Forest Park Welcome Center.

The clinic’s head nurse, Ms. Higa, smiled through her white mask (a standard accessory in any Japanese doctor’s office) as she took my temperature and blood pressure. Higa handed me a “Profile of Mood States” intake survey, and I answered sixty-five questions about whether, on a scale of 0 (not at all), 1 (a little), 2 (moderately), 3 (quite a bit), or 4 (extremely), the way I was feeling corresponded to any of the more than seventy listed descriptors, including: (1) Friendly, (12) Peeved, (37) Muddled, (47) Rebellious, (50) Bewildered, (63) Vigorous, or—my personal favorite—(65) Bushed. The variety of English-language terms available for this survey made me wish I had known how to tell Mr. Tamaki about my “bad” mood in a more interesting way.

When I was called in to see the doctor, he told me that my mood resembled an inverted iceberg. I almost laughed out loud at this choice of metaphor. He then produced a graphical representation of my responses to the survey questions, which indeed formed a crude upside-down “V” complete with jagged edges and a spiky point. He gestured with his hands, softening the shape in the direction of a more ideal “U”-shaped mood state as he offered me some tips on how I could begin to melt away my emotional extremes.

Next I entered the “Relaxation Room” and was surprised to find that the clinic had invested in an Alpha-21DX Body-Mind Health Environment Capsule identical to a relaxation capsule I had sampled at the Motobu Wellness Village following my ethically disorienting Dolphin Adventure. I had another chance to re-enter this encapsulated “environment” when the JICA training group I had accompanied on the whale watch (see Chapter 4) spent a day exploring the many facets of health tourism in Okinawa.

The Alpha-21DX was a smooth, cream-colored vessel reminiscent of a space-age coffin or an enormous capsule of Prozac. First, I selected a scent. From orange, lemon, lavender, and ylang ylang (each of which promised a different health benefit), I chose the latter because it reminded me of a beach in Thailand (a popular place of “not work” [Graburn 1983] for international Japanese travelers) and slid eagerly into the soft capsule. Following a long morning of hiking, I relished the blissful complement of a twenty-five-minute heated, vibrating, aromatherapeutic escape.

Nurse Higa tenderly tucked a bib-like towel around my neck, placed a noise-canceling headset over my ears, and slowly pushed the curved lid
down over me. I was all sealed in and ready for takeoff. She dimmed the lights and pulled the privacy curtain around me. An eerie, New Age–meets-melancholy-Disney melody filled my ears and swirled in my mind as the bed began to vibrate. I sank gratefully into a meditative state, made safe and comfortable by a completely climate-controlled environment. I relished every second spent cocooned in the capsule, which quickly had me floating through space.

When the vibration ceased I opened my eyes to find a message on a fluorescent green digital display:

オツカレサマデンタ

At first I did not recognize one of the most commonly uttered phrases in the Japanese language, *Otsukaresamadeshita* (frequently translated as “good job” or “you look tired” and meaning something in between the two), because it is typically written using the *hiragana* syllabary. The unusual use of *katakana* to write such a quintessentially Japanese term compounded my sense of having been temporarily transported into another world with very little effort.

**Forest of Avatar**

While explaining how all life forms in the forest are connected on one of our walks, Mr. Satō referenced a 2009 blockbuster James Cameron film that had just hit movie theaters in Japan. His choice of phrasing—“The forest is the world of *Avatar*”—stuck with me because it suggests that the forest imitates the film rather than the reverse. *Avatar* tells the futuristic story of a mid-twenty-second–century world in which human beings, having depleted the earth’s natural resources, are forced to colonize another planet. The film tells a moralized tale of resource abuse and respect for life by connecting humans with nonhuman, extraterrestrial species through the use of hybrid avatars. Characters use the consciousness-transferring “Tree of Souls” to communicate with a vast biological network. The most striking aspect of the film is its ability to cause real, lasting affective shifts in viewers through the virtual simulation of an always already non-reality.

Among the highest grossing films of all time, *Avatar* struck a chord with viewers worldwide not only for its epic tale of right and wrong, but also because filmmakers utilized three-dimensional and stereoscopic technologies to make a simulated wilderness full of giant blue alien creatures feel familiar, and real. A January 2010 report on audiences’ “post-*Avatar* blues” notes:
“James Cameron’s completely immersive spectacle ‘Avatar’ may have been a little too real for some fans who say they have experienced depression and suicidal thoughts after seeing the film because they long to enjoy the beauty of the alien world Pandora” (Piazza 2010). On the online fan forum Avatar Forums, a topic thread entitled “Ways to cope with the depression of the dream of Pandora being intangible” received more than a thousand posts from affected viewers.

After seeing the film twice in 3-D glasses, I could understand why Šatō alluded to it in support of his grievance that “Cutting trees leads to crying trees.” This film was compelling enough to provoke a wave of depression among fans following the temporary escape made possible through the “immersive spectacle” (Piazza 2010) of a fantastical, Technicolor nature. *Avatar* is made real by its sophisticated simulation of an otherwise surreal experience of outer space and other forms of life.

### Natural Healing?

Our assumptions about the locus of the natural and the simulated inform our experiences and shape our responses to healing moments. N. Katherine Hayles questions the moral valence that often comes with discussions of the natural and the unnatural, and that undergirds much of ecotourism discourse: “bad simulation, good nature” (1995: 410), or what Donna Haraway calls “the authenticity-destroying powers of the artificial” (2008: 251). Hayles offers the example of Yosemite National Park; where “natural preservation” emerges through the creation of artificial borders (1995: 410). From another perspective, as I discuss in Chapter 2, the habu-mongoose fight, real as it is for the combatants, is primarily imagined and experienced by humans as an entertaining performance.

For Hayles, “when ‘nature’ becomes an object for visual consumption, to be appreciated by the connoisseur’s eye sweeping over an expanse of landscape,” it has “already left the realm of firsthand experience and entered the category of constructed experiences that we can appropriately call simulation” (1995: 411). Hayles also points out the problem of assuming that “nature is natural because it is unmediated, whereas simulation is artificial because it is constructed” (418). *Avatar* begins as a visual simulation that becomes real by creating the feeling of direct experience through sophisticated media technologies. Likewise, the carefully groomed “zebra” trails that led us safely into a space for the visual consumption of the forest; the hot tea in a thermos that kept us comfortably, “unnaturally” warm throughout the walk; and of course the reservations made and fees paid for guided paths through the forest all simulate nature.
Locating the Self

Hayles returns the intellectual and perceptual problem of natural versus simulation back to the bodies-doing-the-viewing by first problematizing the location of the self. Hayles (1995: 412) writes, “the self is contracted to some position inside the body and rendered remote from it. The body then becomes equipment that the self has to learn to manipulate. When self is constituted as a raft of awareness awash in an ocean of constructed experience, simulation is at a maximum.” This pelagic metaphor lends itself well to a comparison with the phenomenology of scuba diving (elaborated in Chapter 4), an experience that relies heavily on the manipulation of body-enhancing equipment (“virtual reality gear”) for a “maximum” simulation of sea life. Informants who who spoke of scuba diving in otherworldly terms, where one becomes hyperaware through a sensory disorientation that ultimately dissolves the self like salt in water. When awash in the non-metaphorical ocean, the self feels less like a raft and more like a porous sea sponge.

To formulate our self-gear, however, we must examine our eyes as compound, “technological eyes” (Haraway 2008: 250), in some senses an original “prosthesis”—a mediating apparatus that we learn to use just like arms and legs. Hayles locates the “marker” of the self neither internally, nor “unproblematically projected outside [the body]”; and, in “drawing the distinction between simulation and nature, where one places the marker that defines selfhood is crucial” (1995: 412). In Chapter 4, Eva Hayward’s (2010: 581) notion of beholding the world through “fingeryeyes” pokes at the very same spot to articulate “the in-between of encounter” as a space of movement and potential.

Vassos Argyrou scales up theoretical questions of self/other, real/simulated, and authentic/inauthentic by using James Carrier’s virtualism (see Chapter 1) to analyze the logic of contemporary environmentalism. Argyrou (2013: 24) writes that environmentalism, like modernity, “constructs a vision of the world, which it takes to be reality itself, and attempts to make the world conform to it.” The nature-based and simulated healing modalities developed in dolphin therapy, forest therapy, and in a more conventional clinical context each construct idealized, naturalized environments and attempt to capture and reproduce these ideals across diverse biophysical spaces.

The Ambiguous Life of Trees

The nature-based healing described in this chapter comes from trees. Laura Rival uses Carl Jung’s (1968) “philosophical tree,” an archetype of the hu-
man personality that accounts for the “natural growth and gradual transformation of the self” (1998: 11), as a jumping-off point for more grounded and historicized analyses of tree symbolism throughout the world. The act of taking a tree’s pulse by applying a cold metal stethoscope to its bark points to the intellectual difficulties humans face in conceptualizing forms of life that do not bleed red.

The anthropomorphization of trees can come in the form of character attribution. Just as Satō described certain trees as “shy Japanese” or “pioneering American” based on their natural temperament, anthropologist John Knight (Knight 1998: 197) writes that on mainland Japan’s Kii Peninsula (Wakayama Prefecture), trees become a “symbolic medium of human lives.” In Japan’s “tree culture” people and places are frequently named after trees, and wood remains a ubiquitous material in Japanese daily life (chopsticks, shrines, houses, etc.) (199). The foresters Knight met often compared tree growing to child rearing, and imbued their trees with “typically Japanese” moral qualities such as “rectitude, endurance, and sturdiness” (Rival 1998: 11). Rival and Knight build on the widespread observation that “trees are used symbolically to make concrete and material the abstract notion of life,” and are “ideal supports for such symbolic purpose[s] precisely because their status as living organisms is ambiguous” (Rival 1998: 3).

Maurice Bloch (1998: 51) interprets this ambiguity on a continuum explained anecdotally, through the observation that most Westerners are comfortable with the “unscientific” statement “plants are less alive than butterflies,” despite being taught otherwise in biology class. Put another way: Are we more incensed by plant or by animal testing? Bloch suggests that trees are “good substitutes” for human beings because they are different, yet “continuous with humans, in that they both share ‘life’” (40). Bloch’s essay, “Trees, Too, Are Good to Think With: Towards an Anthropology of the Meaning of Life,” contends that, like animals, trees provide intellectual tools that we use to think about and organize human society, a theory first proposed by Claude Lévi-Strauss (1972). Bloch is primarily concerned with the use of plants and trees in religious rituals. He generalizes the purpose of rituals as an ongoing negotiation of continuity, and discontinuity, between different forms of life (in the context of religious rituals, such as sacrifices, these life forms can be imagined as “principal” and “symbolic” entities). Rituals are thus achieved “by connecting related entities, which therefore must have an apparently ‘real’ and convincing unity between them, e.g. animals and people, and then disconnecting them, because of their ‘real’ and convincing difference” (1998: 52).

Forest therapy can be viewed as loosely ritualistic through its set of guided practices, which do not depend on strict adherence to a particular method to achieve specific outcomes. According to Bloch (1998: 53), the success of
a ritual depends on the achievement of a particular kind of nearness between entities—on ‘the complex demonstrable ‘real’ and convincing proximity, and on the ‘real’ and convincing distance of the symbols and the subjects of the ritual. They must be neither too close, nor too distant and, in fact, the more ambiguous, yet convincing, the relationship, the more it can be evoked.’ More than the attribution of human physiological characteristics (blood), or personality traits (shyness), Bloch finds that the presence or absence of attributed intentionality is what makes another organism “fully” alive or not (53). Intentionality assumes the kind of consciousness or self-awareness cited by dolphin activist Rick O’Barry as the main reason these cetaceans should not be killed. This kind of consciousness is much more difficult to ascertain in trees.

Following Victor Turner, Bloch (1998: 53) finds that symbolic objects matter most for their “transformational potential during the process of ritual” (my emphasis). With “transformation,” the symbolic object/entity becomes something else (water into wine, tree into human, etc.). The successful ritual also transforms the “principal” (human) entity, from sick to healed, sinful to cleansed, and so on. Bloch’s discussion of trees in ritual and cognitive process lands us once again at the very spot that Hayward (2010: 581) highlights in her discussion of coral interactions (“the in-between of encounter”), which Hayles (1995: 412), discussing the location of the self, describes as the “cusp between the beholder and the world.” Whether writing about trees, corals, or national parks, each of these scholars asks how humans occupy the interstitial spaces of life—how we locate our/selves on conceptual continua such as seeing/unseeing, alive/inanimate, self/non-self, inside/outside.

Trees and Cognition

In Okinawa, the metaphor of the fast-spreading mangrove tree may prove more apt than the image of the “sturdy” (Rival 1998: 11) and “stable” existence generally associated with tree metaphors (Ogden 2011: 90). Rather than “thinking with trees,” Laura Ogden argues that “thinking-as-mangroves” maps the movements of people, animals, and other mobile life forms (90). Scott Atran (1990) contends that our cognition of other life forms is innate. Atran locates this cognitive domain in the nervous system, the product of a shared human genetic heritage (cited in Bloch 1998: 44–45). For Atran, our species possesses “an inborn learning mechanism for biological things, and the details of this framework are gradually filled in and refined through experience” (Atran cited in Joye and De Block 2011: 194). The human capacity to learn things biological is of increasing interest to both social and natural scientists.
Biophilia

Renowned biologist E. O. Wilson defines “biophilia” as human beings’ “innate tendency to focus on life and lifelike processes” (Kellert 1993: 20). The biophilia hypothesis, while not a formal scientific theory, posits that human dependence on nature goes beyond essential matters of survival (food, shelter, etc.) to encompass our aesthetic, cognitive, even spiritual needs. Wilson’s hypothesis resists the dominant neoclassical philosophy that values “natural space” as profit-generating capital (Serageldin 1997) and instead advances the notion that the intrinsic value of nature, its essential importance in our lives, is not only a discussion for poets, backpackers, and natural philosophers. Rather, Wilson argues, the human tendency to “affiliate with life” (Wilson 1993: 21) is inherent, hereditary, and biologically based.

Biophilia is also “innately emotional” (Wilson 1993: 31). In Chapter 4, I identified some of the awe-inspiring, cherishable animals sought by ecotourists. With the help of scholars such as Eva Hayward and a host of Okinawan diving coral transplanters, I have tried to put a “fingeryeye” on the ontological source of this positive affiliation. Perhaps these affiliations are adaptive “because an organism had clear evolutionary benefits when it was hardwired to focus on and to respond emotionally to certain survival-relevant living elements” (Joye and De Block 2011: 190).

However, biophilia does not necessarily hold a positive (affiliative) valence, and in fact spans the spectrum of human emotions: “from attraction to aversion, from awe to indifference, from peacefulness to fear-driven anxiety” (Wilson 1993: 31). The negative (aversive) side of biophilia (perhaps more accurately described as “biophobia”; see Ulrich 1993: 76) includes common human fears of sharks, spiders, and snakes. Environmental psychologist Roger Ulrich (1993: 74) suggests that arguments for a genetic component to biophilia “gain plausibility if a genetic predisposition in humans for biophobic responsiveness to certain dangerous nature phenomena is likewise postulated.” Biophilia is not purely a matter of survival instinct; it is also a “complex of learning rules” (Wilson 1993: 31) that keeps us alive. We are not born with a fear of snakes, but children do have an “innate propensity” to learn such fear quickly and easily after the age of five (Wilson 1984: 84). As we grow and mature, the snake becomes The Serpent, cementing our awe of an animal Wilson regards as the “most bizarre” (1984: 84) example of our biophilic tendencies.

Chapter 2 asks why snakebites became such a big problem in late nineteenth-century Okinawa, or perhaps more accurately, why snakebites were suddenly prioritized by the Japanese government and later the U.S. military. For Wilson, who grew up in the back country of the Florida Panhandle, the snake problem goes hand in hand with the “colonizer’s ethic” of “push the
forest back and fill the land” (1984: 88). (As discussed earlier, in Okinawa this dangerous task was left to the colonized.) Despite 150 years of “settling” the Gulf wilderness, Wilson writes, there remains an “oddly appropriate” abundance of snakes (89). Ogden’s work on human-animal relations in the Florida Everglades features entanglements with mangroves and “fantastic snakes” (2011: 30) that possess the same human-repellant power that helped to reserve the dense forests of Yamaru for other species.

Fear of snakes is an evolutionary adaptive trait that also manifests in culturally specific ways. In Okinawa, the common sight of snakes “essing” across the landscape has become “embroidered into the lore of serpents,” and leading to some unusual local treatment methods comparable to those described in Chapter 2. (In the Florida Panhandle, “if a snake bites you, open the puncture wounds with a knife and wash them with kerosene to neutralize the poison” [Wilson 1984: 89].) Wilson (1984: 97), also concerned with the structure of the human mind influenced by space and time, writes: “For hundreds of thousands of years, time enough for the appropriate genetic changes to occur in the brain, poisonous snakes have been a significant source of injury and death to human beings.” Over time, the theory goes, the genetic material of those who respond most carefully and effectively to a snake-ridden environment will be passed on more frequently, thus perpetuating the tendency to fear snakes. These “combined biases” thus become what we commonly refer to as “human nature” (101).

For the biophilia theorist, our biophobic aversion to snakes locates deep in our bodies as a feature of our basic genetic makeup. It is easier for us to recognize the evolutionary origins of our aversion to deadly organisms than it is to feel our biophilic attraction to whales, dolphins, and (at least for some) coral reefs. However, our relationships with these charismatic life forms may be equally vital to our well-being and survival.

**Locating and Loving Nature**

The biophilia hypothesis also claims that, “when human beings remove themselves from the natural environment, the biophilic learning rules are not replaced by modern versions equally well adapted to artifacts” (Wilson 1993: 31–32). Instead, humans “persist from generation to generation, atrophied and fitfully manifested in the artificial new environments into which technology has catapulted humanity” (32). Two key assumptions are in operation here: (1) that it is, in fact, possible for us to remove ourselves from the natural environment, and (2) that our “new” environments are artificial by default.

Wilson’s biophilia hypothesis is founded on what I call the natural historian’s ethic of reason: a set of logics that embraces positivist assumptions,
allowing for “a system of universal truth that reveals the natural traits, and the relations between the elements of nature, that allow us to apprehend an actually existing world ‘out there’” (Lowe 2006: 20–21). Yannick Joye and Andreas De Block critique the biophilia hypothesis for its “anthropocentric environmental ethics” (2011: 190), and for its “vagueness” in defining the objects of human biophilic response: “There is a wide gap between a life-like process and life itself, and … something that is life-like is not necessarily natural either” (191). What does “life-like” mean? The authors are troubled by Wilson’s neglect of the commonalities and points of diversion between terms such as, “life,” “life-like,” and “natural.” Following Kay Milton (2002), they write: “life-like process’ is only a technical term in research on artificial life, and Wilson doesn’t seem to think of life-like processes in that particular technical sense” (Joye and De Block 2011: 191). Further, they remark that “the conservation ethic envisioned by biophilists would work better if biophilia should imply an affective orientation to actual life-like elements (i.e., we want to preserve real forests)” (207), and propose instead that humans might be more plausibly endowed with “biomorphilia.” In this scenario, “our biophilic tendencies [could] be equally gratified by, say, watching National Geographic documentaries that bring wildlife and picturesque views and landscapes into our homes, and are usually much more enthralling and beautiful than the real wilderness” (2011: 207).

What might simulations to feed our “biomorphilia” look like? Haraway (2008: 259–60) explores the phenomenon of the human-animal-technology triad in her discussion of National Geographic’s mid-2000s Crittercam television series, a show that attached video cameras to humpback whales to simulate the experience of swimming with whales for viewers in the comfort of their living room: “The Crittercam people offered a means to go with the animals into places humans otherwise could not go to see things that changed what we know and how we must act as a consequence, if we have learned to care about the well-being of the entangled animals and people in those ecologies.” Ultimately, Nature may not have to stoke our innate conservation ethic—perhaps a natural environment need not be “real” to heal.

Conclusion

To the extent that each person can feel like a naturalist, the old excitement of the untrammeled world will be regained. I offer this as a formula of re-enchantment to invigorate poetry and myth: mysterious and little known organisms live within walking distance of where you sit.

Splendor awaits in minute proportions.

—E. O. Wilson, Biophilia
Forest therapy offers a “formula of re-enchantment” (Wilson 1984: 139) to reinvigorate the weary body and mind. Forest therapy promises to heal patients internally, “from the heart,” through specific guided encounters with nature, but it is also a social experience. Participants are invited to have intermittent “independent” experiences of the forest (e.g., when we were sent to find a quiet space for reflection). However, these therapy tours are always conducted in groups and share many characteristics with the Aruki nostalgic village walks described in Chapter 3.

Lorimer and Lund interpret the mountain walking experience as a “socially acceptable alternative to placing an ad in the personal columns,” likening mountains to the “substrate beneath people’s longing for love, affection, friendship or a soul mate. Passage on foot presents precious time and the social space for getting to know others, for feeling accepted and for fitting in” (2008: 195). Mountain walkers walk and collect to “feel (a little more) whole again” (195).

Forest therapy provides an intensely visual encounter with nature, but participants’ reflections tended to emphasize the novelty of other heightened senses (feeling the wind, smelling “real” smells, etc.). This healing modality centers on walking, an “art” that Lorimer and Lund describe idealistically as “taking people on a journey that leads at least part-way towards greater personal security, reviving lapsed aspirations and life ambitions” (195). In forest therapy, mountain landscapes become therapeutic places where people go to “put their self more in tune with what are commonly perceived as the timeless rhythms, elements, volumes and surfaces of wild, romantic nature. In such visits, however infrequent or weekend-based, there is the promise of a higher life” (195).

The creation of a sense of place through walking, a “counter-intuitive” sense of belonging and security found in “places that are elsewhere” (Lorimer and Lund 2008: 195) is critical to the philosophies of nature loving and interpreting I encountered during fieldwork. In forest therapy, losing one’s sense of place (i.e., losing the over-determined comfort and predictability of familiar surroundings) produces a new, placeological sensibility in participants. The forest therapy walks recounted in this chapter were not destination-oriented, but do have a punctuated beginning and end. Perhaps most importantly, the emotional release that can accompany these walks “is not simply a matter of losing your sense of place, nor is there a need for ‘non-place’ to bring it about. Elsewhere can simply mean landscapes that are not workaday” (Lorimer and Lund 2008: 195).

The production of a healing elsewhere mandates a break from the everyday, and in the minds of participants it is crucial that the place visited and the activities performed are “not work” (Graburn 1989: 22). Rather, Nelson Graburn writes, “we imagine our wilderness vacation as re-creation, an ex-
experience or set of experiences that are supposed to “renew us for the workaday world” (22). Graburn applies Edmund Leach’s (1961) schematic of “sacred-profane alternations” (Graburn 1989: 25) to touristic phenomena, suggesting that work and travel, home and away can be understood as contrasting dimensions of two lives: “the sacred/nonordinary/touristic and the profane/workaday/stay-at-home” (26). Urbanization is key to understanding these categories. When city dwellers seek non-ordinary things and uplifting, elevating experiences, “nature tourism becomes, perhaps especially for the Japanese, a sacred journey” (Moeran 1983: 93). Rapid postwar urbanization and the consequent loss of “contact” with nature may partially explain the popularity of domestic nature-based tourism in Japan (Moon 1997: 226).

In fact, MacCannell (1999) and Graburn (1989) find that nature is believed to have purifying and regenerating effects for city dwellers in every industrialized society. Okpyo Moon (1997: 233) argues that village-revitalizing nature-based tourism actually serves to reify a human/nature relationship in which the two are separated and “man no longer exists as part of nature but outside and above it.” In this configuration, nature becomes a “limited good” to be sold and protected, and summons a new kind of “urbanist” environmental consciousness couched in an ethos of reverence for Nature.

When theorizing sense of place, it is also good to think with the conceptual opposite of “place”: “non-place.” Postmodern theorist Marc Augé imagines place and non-place as “opposed polarities,” arguing that “the first is never completely erased, the second never totally completed” (2000: 79). Augé defines the “non-place” as a space that is not “relational, or historical, or concerned with identity” (77–78). These non-places might include parking lots, rest stops, and highways—spaces generally overlooked (“un-placed”) for their lack of memorability. Augé’s dynamic theory of place complicates the spatial aspect of the sacred-profane binary espoused by Leach and Graburn. Augé also draws on the metaphor of the palimpsest (see Chapter 1) as an always already politicized surface “on which the scrambled game of identity and relations is ceaselessly rewritten” (79). By imposing a kinetic relationship with the landscape, walkers softly resist the proliferation of “supermodern” non-places in their communities.

Keith Egan’s essay “Walking Back to Happiness?” describes the contemporary tourist pilgrimage as a palliative for conditions of modernity such as the disorientation and despair expressed by the depressed walker in this chapter. Contemplative walking also serves as a “corrective for the maladies of modernity,” such as the privatization of public spaces, by allowing for a “more authentic pedestrianism to counteract the existential inertia of contemporary civilization” (Solnit [2002] quoted in Egan 2012: 101). Egan finds that pilgrims on Spain’s Camino de Santiago are, like Okinawan walkers, determined to “[cast] off certain aspects of their identity and obligations
in order to rediscover a sense of purpose, direction, and momentum” (Egan 2012: 100; cf. Rapport 2003). Aruki village walkers and forest therapy walkers alike reproduce local knowledge, reclaim public places, and reinscribe their history and identity with their footprints.

The biophilia hypothesis suggests that human place-making is best understood when we “look to the very roots of motivation and understand why, in what circumstances and on which occasions, we cherish and protect life” (Wilson 1984: 138–39, my emphasis). In his analysis of the roots of the “Conservation Ethic,” Wilson (1984: 138) argues that “a healthful environment, the warmth of kinship, right-sounding moral strictures, sure-bet economic gain, and a stirring of nostalgia and sentiment are the chief components of the surface ethic,” but that these factors alone do not amount to sufficient cause to compel us toward the preservation of biological diversity.

One purpose of forest therapy is to teach participants how to cherish life anew. If the technology of new and “artificial” environments leads to atrophy of our biophilic tendencies, could we reawaken them via “naturalized” methods such as guided forest tours? I engage biophilia in this chapter not to prove or disprove its validity, but rather to suggest that current trends in “natural healing” possess an import that runs much deeper than the “surface ethic” of a healthful environment and “sure-bet” economic gain (Wilson 1984: 138). Understanding the potential for economic gain is, of course, also essential to understanding Okinawans’ interest in new forms of forest development. Krishna Sivaramakrishnan’s (1998) study of collaborative forest protection efforts by villagers and the Indian state of Bengal finds that, much like mainland Japanese advocates for village revitalization (mura okoshi) in Okinawa (see Chapters 1 and 3), proponents of “joint forest management” use the language of “community resurgence” and “rural awakening” (1998: 284) to characterize their conservation projects. And like the Japanese and Okinawan forest therapy promoters described in this chapter, activists and government development specialists in Bengal regard joint forest management as an opportunity for a “recharging of energies through self-renewal” (285). Sivaramakrishnan critiques the rhetoric of reawakening an “innate conservation community” (292) in villages as a colonialist discourse that locates indigenous groups inherently closer to Nature than other populations (cf. Moore 2010; Walley 2002).

While Othering discourses are prevalent in Okinawa’s history of colonization by Japan and the United States, it is important to recognize the agency claimed by Okinawans who embrace the notion that “something is lost” in their connection with the natural environment. Along with Gerald Figal (2012), I adopt Erve Chambers’s argument that authenticity should be evaluated by “the degree of agency that a community has in deciding to change (or not change) its social settings” (Figal 2012: 89; cf. Chambers 2000). The
quest for a renewed sense of place—that is, the desire to be recharged by forest power—is made authentic by the participants’ enthusiasm.

This chapter has explored the interpreter-inspired practice of negotiating and (re)locating sense of self vis-à-vis nature by shifting the walker’s focus inward. My account for the non-economic motivations that propel the popularity of nature-based and touristic therapies in Okinawa today. Dr. Nakasone, the dolphin therapy expert introduced in Chapter 4, described this practice to me most simply as “relocating to recuperate” or, more simply: “changing place therapy.” In Yambaru, “therapy close to fun” is made possible by therapy close to tourism. In Okinawa, the simple act of walking through the forest has the potential to become therapeutic; an enchanting experience of nature worth cherishing.

Notes

1. For further discussion of the poetics and performance of interpretative guiding for international tourists, see Salazar (2010).
2. In Japanese, 憂しむ.
3. This problematic discourse pervades a body of Japanese literature known as Nihonjinron, which propagates myths of Japanese uniqueness.
5. “自然を大切にする心を育てる.”
6. やんばる3村玉手箱. This Japanese folkloric reference to a “Pandora’s Box” was included to make the trips sound mysterious and exciting (cf. Love 2013).
7. Castanopsis sieboldii or evergreen chinkapin.
8. “Longstay tourism” is hotel terminology for any visit lasting more than four nights. Most visitors to Okinawa never make it further north than the Churaumi Aquarium in Motobu, and those who do reach Kunigami stay an average of only one to two nights.
9. Akazawa Natural Recreation Forest in Nagano Prefecture is considered the 1982 birthplace of forest bathing, but forest therapy in Japan did not gain official recognition and sponsorship by the government-affiliated National Land Afforestation Promotion Organization until 2006. Forest therapy centers are certified only if researchers find scientific evidence of their relaxing effect (Nakamura 2008).
10. This conceptualization is reminiscent of the frequently cited “3-k” economic structure of Okinawa Prefecture: kichi, kankō, kōkyō jigyō (bases, tourism, and public works).
11. There are A&W restaurants all across the island, sometimes referred to as “Anata to Watashi” (You & Me) by Okinawans in reference to the U.S. military presence that led to the chain’s expansion across Okinawa (and elsewhere) during the postwar period.
12. Schima wallichii.
14. Futenma is controversial mainly for its location in the middle of a densely populated urban area; in addition to noise pollution, accidents as well as fatal plane and helicopter crashes that occur outside the boundaries of the base have stoked local protest against the
air base. Despite decades of local political resistance, including vocal opposition from Okinawa Governor Takeshi Onaga, as of early 2017 the Japanese government has resumed construction that will ultimately relocate Futenma to the northern village of Henoko (Kyodo 2017). This proposed solution to the danger Futenma currently poses does not satisfy protestors, who demand that bases on the island should be reduced, rather than relocated (see Figure 1.1).

15. Phytoncides are antimicrobial organic compounds generated by plants including pine, oak, and tea tree, as well as certain spices, onions, and garlic. They are used in Japanese holistic medicine and aromatherapy. Some forest therapy advocates believe phytoncides possess healing qualities.

16. The parasympathetic nervous system (PSNS) is responsible for the stimulation of a number of bodily functions ranging from sexual arousal and salivation to tears (lacrimation) and defecation.

17. Three Natural Heritage Sites (Sekai-san) have been designated in Japan since 2004: Shiretoko Peninsula in Hokkaido, the Ogasawara Islands, and the Ryukyu Islands (Okinawa Prefecture).

18. The direct translation of the Japanese word for baby (赤ちゃん, akachan) is “little red one.”

19. Okpyo Moon (1997) identifies this kind of essentializing rhetoric—i.e., Japanese as existing in “harmony with nature” versus Westerners as separate from/controlling/dominating nature—as central to ideologies of Nihonjinron (studies of Japaneseness) (228). Discourses of Nihonjinron have been used to create distance between Japanese and Westerners, as well as between Japanese and Okinawans (recall Mr. Oku’s explanation of nature as more “cherished” by Japanese at the beginning of this chapter).

20. The radical component of the ideogram “forest” (森林) is (木) (ki) “tree.” The first two characters, “forest” (森) and “woods” (林), commonly appear in Japanese surnames, supporting John Knight’s theory of Japan as a “forest culture” (1998) (discussed later). The third character, “power” (力), is also a radical component of the ideogram “man” (男). “Shinrinryoku” is very similar to “Shinrinyoku” (森林浴) or “forest bathing,” which involves stress management through a combination of the techniques I learned from all of my nature interpreters.

21. I use the term “base” loosely: The highest peak is 503m in elevation (Yamada and Sugimura 2004: 118).

22. In Japanese, 天然記念動物. The nocturnal, roughly possum-sized Ryukyu long-haired rat (Kenaganezumi, also known in English as the Ryukyu long-tailed rat) lives in the trees like a squirrel. Its English name does not do this magnificent animal justice.

23. As I touched on in Chapters 1 and 3, katakana is the Japanese syllabary traditionally reserved for loanwords and formal scientific nomenclature.

24. Here I use Paul Ricoeur’s (1979: 27) definition of phenomenology as “an investigation into the structures of experience which precede connected expression in language.”

25. See also Marvin Harris’s counter-argument that animals are “good to eat” (1985) and Douglas (2003). For Haraway, these animals are agents and entities also “good to live with” (Haraway 2015: 160) because their liminal characteristics can reinforce the interdependence of the human and the non-human (cf. Kirksey and Helmreich 2010).

26. Wilson is credited with popularizing biophilia, but Joye and De Block (2011: 190) claim German philosopher and psychologist Erich Fromm as its originator.
27. Yannick Joye and Andreas De Block (2011: 200) cite a vast literature linked to the biophilia hypothesis: that vegetative environments and elements such as trees, flowers, and plants are able to “elicit aesthetic responses in human beings” and can have a “stress-reducing or ‘restorative’ effect on them, as opposed to urban or [hu]man-made environments.” For empirical examples that support the biophilia hypothesis, see Kaplan (1995) and Kahn (1999).

28. Augé’s term “supermodern” refers to a modernity focused on movement, transitoriness, and impermanence. Beth Notar mobilizes Augé’s “non-place” to explain local forms of resistance to the touristic rewriting of history in Dali, China. For an insightful analysis of place-making as political resistance to hegemonic nostalgia and the tourism imperative in the postcolonial Chinese context, see Notar (2006).
Conclusion

YAMBARU FUNBARU!

Every day is a journey and the journey itself is home.
—Matsuo Bashô, *Oku no Hosomichi*, “Narrow Road to the Interior”

The *International Journal of Okinawan Studies* “Special Issue on the Environment” (Murphy 2011: 15), published around the time I concluded my fieldwork, declares that “Okinawa’s current orientation for economic development is doomed.” Okinawa’s two key economic flows—the U.S. military presence and tourism—are predicted to “slow if not screech to a halt entirely” (15) as global oil production peaks and then descends into a future of low energy consumption in which the costs of fueling aircraft and ships, both military and commercial, may prove an impossible budgetary burden that ultimately results in a much desired reduction in U.S. military bases on Okinawa.

The tourism industry, though still the most rapidly developing nongovernmental sector of Okinawa’s economy, may also be stunted by the rising cost of the energy needed to supply tourists with electricity, potable water, and fuel for the ubiquitous rental car. Murphy calls for the same kind of fundamental economic transition that Noboru Jahana anticipated and advocated during the late nineteenth century, in resistance to Japan’s political, linguistic, and environmental colonization of Okinawa. Through its enmeshment in the global sugar trade, Okinawa was vulnerabilized to “external energy and financial inputs” (Murphy 2011: 17). In the early twenty-first century, the “tourism imperative” has shifted the prefecture’s dependencies to external energy sources and the financial inputs of tourists.

University of the Ryukyus eco-critic and environmental literature expert Shin Yamashiro writes compellingly of the flux between the “particularity” of Okinawan environmental problems and the “universality” of the structures that produce nature-based tourism dependence on small islands (Yamashiro 2005: 51). The Yambaru kuina cannot be found anywhere else in the world,
but the threat of reduced habitat as a result of human expansion resonates with the predicament of the kiwi, a similar flightless bird endemic to New Zealand. Laura Ogden (2011: 119) argues that “when places become ecologically famous, belonging solely to the world of things and facts” (facts in the sense of particularized, collectable knowledge), “their social natures are polished smooth, removing discords.” Through the “polishing” of Nature for ecotourism, Yambaru today has become what a “smooth object,” a region whose ontology has lost its history of “inherent material and ideological conflicts, incongruities, and biosocial entanglements” (Ogden 2011: 101) (cf. Latour 2004). My attention to slow vulnerability (cf. Nixon 2011; Parreñas 2012) in Okinawa is intended to roughen up and reinscribe some of the major historical and political events that have brought the ecological fame of biodiversity to the north.

Looking to the future, it is important to remember that Okinawan environmental consciousness first emerged “in the reaction against the military presence” (Yamashiro 2005: 55, my emphasis). Following decades of pressure and protests by local residents, the U.S. military has announced its latest plan to transfer 5,000 of the of the 27,000 troops currently stationed on Okinawa to Guam by 2020 (Fuentes 2015). Whether U.S. military forces ultimately depart Okinawa because of long-standing popular demand by Okinawans, fossil fuel–related financial constraints, or some combination thereof, this proposed military exodus will free up close to 20 percent of Okinawan land for new (and revived) sustainable economic practices. Intensive agriculture, permaculture, and other farming techniques could rebuild the prefecture’s economic backbone to support a strategic reduction of food imports (Murphy 2011: 20). While these kinds of military agreements have been long delayed owing to triangulated conflicts between the U.S., Japan, and Okinawa, the prospect of environmental decolonization promises to strengthen diversify economic opportunities in prefecture.

A tall white lighthouse towers over Nago Wharf, encircled by a massive, elegantly carved blue and turquoise dolphin statue that faces the sea. On the lighthouse is painted the Okinawan saying, “Niraikanai.” En route to join forest treks, coral transplanting dive trips, and dolphin therapy sessions, I drove past this sculpture hundreds of times without ever really noticing the message, which translates roughly to “the other side of the sea.” Niraikanai refers to the origin of all Yuimun—the good things that come near, that come to us (yottekuru), such as protein-rich food from the sea. Mr. Satō, the eccentric (if invasive) “messenger of the forest” who led me on multiple ecotours, told me that whereas Niraikanai generally has a positive nuance, bad things that come at us (yattekuru), such as illness, can also be Niraikanai.

For those who do not live on a small island, tourism may be regarded as something that impacts life negatively “somewhere else” (Gössling and Hall
2006: 13). When I first arrived in Okinawa in the summer of 2009, a casual stroll along the beach in Motobu revealed a stunning diversity of Niraikanai litter from the other side of the sea: glass soda bottles that washed ashore from Taiwan, milk cartons floated across from China, even an empty bag of potato chips that appeared to originate in the Philippines lay shrouded in Okinawan kelp. Okinawa, still imagined by many members of the military and business communities as the “Keystone of the Pacific,” shares a host of environmental dilemmas with Guam, the Marshall Islands, Micronesia, and American Samoa—many of which also support a large U.S. military presence and depend on international tourism.

Which kind of Niraikanai do ecotourists pose for Okinawa? Celia Lowe writes that “the ‘ecotourist’ is the specific figure for whom nature will be saved. Despite claims to the universal value of biodiverse nature, this is a nature only some will be able to avail themselves of” (2006: 161, my emphasis). Whether future ecotourists come to Okinawa, as responsible travelers, or come at Okinawa, as polluting consumers, will depend upon how extensively the ideals of sustainable development are put into practice and policy, and whether and how local economic autonomy is regained for Okinawans (Uchinaanchu).

The catchy slogan “Yambaru Funbaru!” (Stand Firm Yambaru!) was printed on many of the postcards, t-shirts, posters, and brochures I collected during fieldwork. For all its doomsday predictions, Murphy’s article concludes with the promise that Okinawa “has the freedom and opportunity within the resource necessities that present themselves to pursue a path that will circle back to many of the values and practices that have long defined a vibrant, resilient, ancient island culture capable of not simply enduring the turmoil ahead but weathering it well” (2011: 20–21, my emphasis). Okinawans may not experience full freedom to reduce their fossil-fuel dependence and implement improved tourism standards as long as planes and rental cars determine the flow of tourist traffic on the island.

In this ethnography, I have assembled a pastiche of the innovative entrepreneurial and interpretive paths by which Okinawans are renegotiating the terms of their tourism imperative. The terms of the tourism industry are reclaimed through community chats that seek to revive lost language (Uchinaaguchi), and on nostalgic Aruki walks where residents search for lost places and practices (such as subsistence dolphin hunting and communal sweet potato farming). These journeys lead ecotourism guides and their visitors into the promise of newly demilitarized forests and U.S.- and Japanese-controlled farmlands. New pathways send volunteer scuba divers deep into the ocean, where they can take stakes in coral reef health, and redefine their sense of self through transformative encounters with non-human marine life. Each of these routes to economic and cultural revival present strategies for an exit.
from the maze of environmental vulnerability and tourism dependence that shapes the conditions of possibility in Okinawa today.

Anthropological studies of tourism have propelled powerful discourses of the “tourist gaze” (Urry 1990, 1992), privileging the visual realm of sensory perception. The politics of visuality, sight, and seeing in a touristic context are central to this book. I have emphasized the embodied aspect of seeing and walking, two activities fundamental to the tourist experience, to move away from the seductive but sometimes floating ideologies of the disembodied gaze (cf. Veijola and Jokinen 1994). A grounded ethnographic analysis of who is doing the participating and observing; through which technologies and interpretive media; and when, how, and for what purpose, is critical to studies of tourism concerned with human impacts on the natural environment.

Chapters 1 and 2 consider which histories are made visible—or not—for sightseeing tourists across Okinawa. In Chapter 3, I show how Okinawan placeologists, village walkers, and community chatters “notice” new and cherishable things by participating in community chats and attending to proprioception as an underutilized way of knowing the natural world. Chapter 4 scrambles anthropocentric notions of “observer” and “observed” by noticing whales who watch us (observation); dolphins who heal us (interaction); and coral polyps who transform our sense of boundedness through underwater gardening (intervention). In Chapter 5, forest therapy and other experiential nature encounters draw participants out of their comfort zones and away from overreliance on the visual apparatus as a means of apprehending the biophysical environment; at the same time, virtual simulations of Nature suggest that technological appendages can be generative and healing by providing innovative new platforms for multispecies “intra-actions.”

Many of the theoretical perspectives developed in this book center on the fundamental human problem of control: control of natural resources (sugar, water, lumber), control of knowledge and experience, climates, islands, people—and the (attempted) control of nonhuman life forms such as coral, birds, snakes, whales, dolphins, and adorable invasive mammals. This story is also about the absence of control, what Donna Haraway and Thyrza Goodeve (2000: 105) call the “rejection of simplistic dualisms derived from Modernist assumptions that nature can be controlled,” my emphasis.

My political and ethical commitments as a fading Young Optimist were clouded by a pernicious hopelessness following the 2011 earthquake, tsunami, and nuclear catastrophe that devastated northeastern Japan. I could not understand how people have the emotional capacity to continue caring about life despite the terrible ruptures, (un)natural disasters, and other human tragedies they cannot control. Instead, I asked how visiting tourists, tour guides, government bureaucrats, scuba divers, scientists, local residents,
environmental activists, and volunteer trappers come to cherish animals and ecologies not encountered in their everyday lives, and how they learn to resist slow vulnerabilities they cannot readily feel. I wanted to do this because I still believe that the key to education is experience.

Matsuo Bashō, renowned Japanese poet of the Edo Period (late seventeenth century), wrote about “home” as a daily journey undertaken by us all. Bashō’s poetic diary “Narrow Road to the Interior,” alternately translated as “Narrow Road to a Far Province,” details the journey of a pilgrim whose travels are simultaneously spiritual and geographic. While these aspects of the human journey may be timeless, it is the particularity of experience that makes our stories worth telling. Through collecting stories of history, healing, and the revaluation of local knowledge, I offer an interpretation of Okinawan journeys home, to this cherishable place.
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