

# 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 were tightening 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 Krippendorff 1987 and Poon 1993) seeks a particular form of intimacy premised on the anthropomorphosis 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-

teractions 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.<sup>1</sup>

### **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<sup>2</sup> (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*).<sup>3</sup> 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-





FIGURE 4.1 • *Dolphins Kiss in Caricature at Wellness Village, Motobu*

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."<sup>4</sup>

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 critiquing 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.<sup>5</sup>

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 *intrasubjective* rather than the more conventional *intersubjective*; 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 Nago*<sup>6</sup> 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*<sup>7</sup> 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.<sup>8</sup> 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” coterminous 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.<sup>9</sup>

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 (*tōkamuri*, 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 “Fingeryes” 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 fingeryeyes 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<sup>10</sup> 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<sup>11</sup> director Tomohiro Gibu frequently used the English loanword "stakeholder" (*suteekuhorudaa*) 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*<sup>12</sup> 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 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"<sup>13</sup> 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 transplanters 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),”<sup>14</sup> 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 prolific 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,<sup>15</sup> 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 4.3a • Volunteer Coral Gardeners on Land, Ginowan**



**FIGURE 4.3b • Coral Polyp Transplants (3 months)**



**FIGURE 4.3c • Coral Polyp Transplants (6 months)**



**FIGURE 4.3d** • *Volunteer Coral Gardeners at Sea, Ginowan*

### **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 Mieagusuku 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,<sup>16</sup> 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,<sup>17</sup> sank down to about fifteen meters, and began swimming due east. I followed behind the others, mimicking their relaxed and leisurely graceful frog kicks with my black rubber 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.<sup>18</sup> 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 reasonably 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,<sup>19</sup> 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 actually 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,<sup>20</sup> 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 transplanters 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. ピトウと名護人, pronounced in Okinawan: “*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* (*Nemacystic 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](http://www.seaseed.com)) does refer to the practice as “coral farming.”
14. Dog winkles 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 yasashi*) 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).