

Extreme Motherhood

The cartoon gracing the cover of the May 2006 issue of *The New Yorker* depicts an exhausted mother pushing an immense stroller overflowing with kid paraphernalia. The load is reminiscent of the one Max, the Grinch's dog, had to drag away from Whoville. My friend Heidi's jogging stroller makes such images look spartan. The back pouch strains under the weight of juice boxes, water bottles, and snacks of the fruit, cheese, cracker, carrot, snap pea, and cookie variety. An umbrella, flip-flops, wet wipes, and sunscreen struggle free of pockets on the sides. The lower net contains a noisy clatter of pails, shovels, and toys. Packages to be mailed, library books, and school projects perch on top. Most mornings, the whole contraption comes complete with a ninety-pound Portuguese water dog tied to the handle, and two kids. It's a double.

Heidi's stroller is a symbol of twenty-first-century mothers on the go, mothers who take their kids with them everywhere, and thus, come well prepared. I cannot imagine a single eventuality for which Heidi would not be ready, given the supplies at hand. Perhaps that is why I am so struck by the contrast. While Heidi moves her enormous load of necessities along the recreation trail overlooking the coastline of Monterey Bay, mother gray whales (*Eschrichtus robustus*) are leading their calves so close to the shore that Heidi's little ones can see their blows. These other mothers are embarked on a round-trip journey from Mexico to the Arctic and back again—roughly the equivalent of 640,000 lengths of an Olympic swimming pool. They follow one of the longest migration routes of any mammal on earth, traveling nearly thirteen thousand

miles round-trip. They travel day and night, covering an average of ninety miles every twenty-four hours. And they take nothing with them.

Once she's sexually mature, a gray whale gives birth to a calf every other year. Which means that in every twenty-four-month cycle, she's pregnant or lactating 80 percent of the time. Despite the impressive caloric demand, she virtually fasts (or eats very little) from the time she begins her migration south until she returns to the northern feeding grounds six months later.¹ So a pregnant female arriving in the Baja Mexico lagoons in the first part of January won't get back to food until May. She will fast that whole time and deliver a one-ton baby and feed it with milk that is 50 percent fat. The energy demands are staggering.

Mercedes Eugenia Guerrero Ruiz is a whale researcher at the Autonomous University of Baja California Sur (UABCS), one of Latin America's leading marine biology institutes. She's also the mother of a toddler. When we meet on a clear March morning in a café along the Malecón, a wide welcoming seashore promenade rimming the turquoise waters of La Paz Bay, I am running late and thankful that the woman sitting across from me understands the challenges of trying to marry professional schedules with a three-year-old's concept of time. It's hard not to think about children when you're in La Paz. The streets of the beautiful capital city of Baja California Sur are lined with dozens of language schools and kindergartens, each aflutter with neatly dressed children in brightly colored uniforms. A quarter of a million people live in this thriving commercial, cultural, and political center, and thanks to one of the highest standards of living in the country, the population is growing fast.

Mercedes and I spend a few moments getting acquainted and laughing over the impossibility of making the tiny feet in those tiny shoes *please go faster* when we're late, when the talk shifts to whale mothers. "Just imagine," she says, reflecting on how vulnerable she sometimes feels when her daughter falls too far behind. "It must be the same for the whales. They have to be aware of predators, but if they are being harassed and they have a calf, they can't move fast."

The ocean is not an easy place to be a baby—or a single mother. Cetaceans are the only group of mammals to evolve in a habitat where there are so few places to hide. Individuals of some dolphin or whale species try to escape particular predators by swimming close to shore or diving deep, but for most cetaceans, the only refuge from predators is found in group living. Gray whale mothers gather in the thousands along the Baja Peninsula's four major calving lagoons—Laguna Guerrero Negro, Laguna Ojo de Liebre (formerly known as Scammon's Lagoon), Laguna San Ignacio, and Bahía de Magdalena—to give birth, presumably because these bays offer protection from bad weather and from sharks and other large predators.

Few people have witnessed the birth of any whale species in the wild. Sandy Lanham is one of the fortunate souls who has. Sandy is the pilot for and the founder of Environmental Flying Services, a nonprofit organization that supports research flights for biologists in Mexico. In 2001 the MacArthur Foundation granted her one of its coveted genius grants—\$500,000 with no strings attached—in recognition of her extraordinary originality and dedication to science and conservation. She frequently flies researchers doing aerial surveys over Baja's gray whale calving lagoons, sometimes seeing as many as 700 gray whales in a day. The day she saw the whale birth, she was flying scientific transects over Laguna Ojo de Liebre, a UNESCO World Heritage Site and home to more than half the gray whale births in Baja. "It took a minute to figure out that this was a whale giving birth," she says, describing the sight of a little fluke poking beneath a mother's belly in the very shallow water at the eastern end of the lagoon. But rather than grab for her camera, she instinctively turned the airplane away as violently as she could. "I wondered how the researchers, two men, would react to that. But we all agreed we had no business being there."

All Sandy's actions demonstrate her sensitivity to animals and her appreciation for the tenderness of whale mothers. "I've seen instances with gray whales, when the airplane would scare them," she tells me. "The calf would hurry back to her mother, and the mother would stretch her pectoral flipper to just gently brush the calf." Every case moves her. "We're always cautioned

against reading emotion into wildlife; there's a reluctance to ascribe feelings to whales," she says. "But the thing is, what other binding factor is there except for emotions? What else is going to ensure that a mother takes care of her young?"

Gray whale mothers and their calves stay in the lagoons for two months so that the babies can grow strong enough to migrate back. By March or April, small groups of four or five mother-calf pairs leave the safety of the lagoons and begin the treacherous trip northward. There's a good chance the whales you can see from the California coastline each spring are mothers and calves. They hug the coastline and take advantage of places like Point Conception, the biggest point that sticks out in Southern California, to seek temporary shelter from rough weather and to find a protected place for the calf to suckle.

A gray whale calf depends entirely on its mother. She is the one who will nurse it, show it how to navigate one of the world's busiest coastlines to the northern feeding grounds, and eventually, how to feed on its own. The trouble is, from a gray whale's perspective, there are other whale mothers in the ocean teaching their calves too—killer whale (*Orcinus orca*) mothers.

The bucolic shore of Monterey Bay where Heidi and her little ones stroll has a more sinister nickname in the whale research community. It's called "ambush alley." Monterey Bay is a prime location for mother killer whales to teach their calves how to feed on gray whale calves. Every April and May, young transient, or mammal-eating, killer whales arrive here to take advantage of this excellent food source. Researchers sometimes compare the activity to a mother cat teaching her kittens how to hunt mice. If you examine any of the pictures of killer whales attacking gray whales in Monterey Bay, you'll see that it's mainly the young animals who try to separate the calf from the mother. The adult female killer whales aim toward the periphery, acting as backup.

The playful cat comparison belies the full horror of the experience. According to Nancy Black, a killer whale biologist at Monterey Bay Whale Watch who has witnessed this astonishing predation event several times, six hours may pass from the time a group of killer whale juveniles and calves give chase

to the moment when a gray whale calf is killed. They ram and bite the gray whale calf in their efforts to drag it from its mother. During this period the mother and calf will try to dash for the safety of shallow water. In her desperate attempts to shield the calf from the intense onslaught, the mother repeatedly tries to roll the calf onto her belly. Eventually the calf, too exhausted to continue, is driven from the mother and swiftly drowns. Sometimes the force exerted by the killer whales is enough to decapitate the calf.²

It has become a common practice in recent years to try to impress young teens with the demands of motherhood by asking them to strap on a baby carrier and look after a ten-pound bag of flour for a week or to provide round-the-clock care to an egg. What activity, I wonder, could possibly give one a sense of the extreme demands facing a gray whale mother?