

TO CATCH A PIRATE HOW HI-TECH RULES THE SEAS

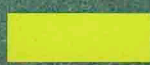


Discovery

CHANNEL MAGAZINE™

WHALES WATCHING US

CLOSE ENCOUNTERS
WITH GENTLE GIANTS



ECO-MILITARY
WAR GOES GREEN

FLOCK ATTACK
HOW BIRDS
CRASH PLANES

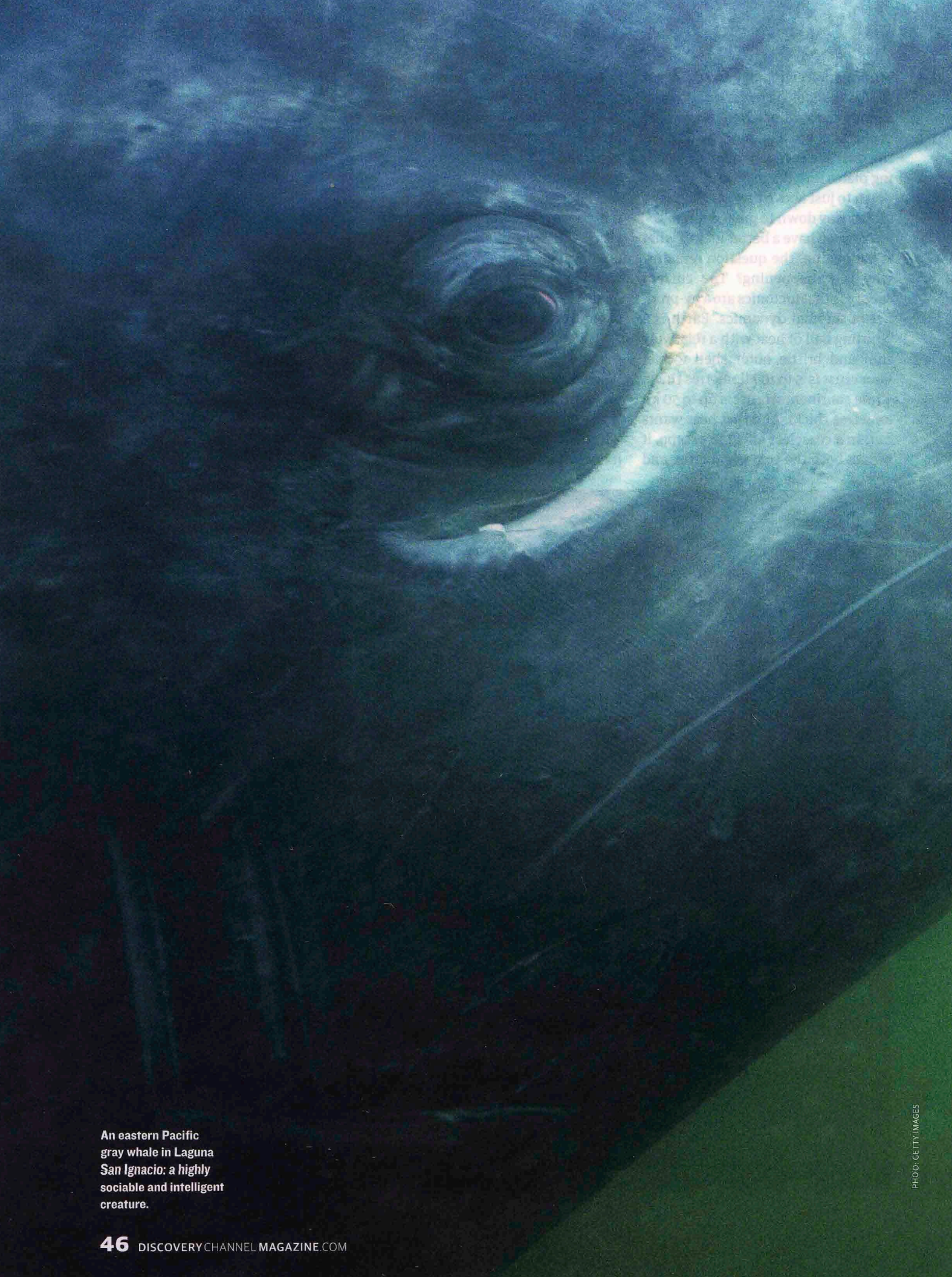
ROCK N ROLL
WHEN THE
EARTH MOVES

**SHEER
FEAR**
MEN WHO
DIVE OFF
CLIFFS

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An eastern Pacific gray whale in Laguna San Ignacio: a highly sociable and intelligent creature.

PHOTO: GETTY IMAGES



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WATCHING
WHALES
WATCHING

MOST WHALE SPECIES STAY
WELL AWAY FROM HUMANS.
SO WHY CAN'T THE GRAY
WHALES OF BAJA CALIFORNIA
GET ENOUGH OF US?
BY CHARLES SIEBERT

US

"Whale! Two o'clock!" our boatman and guide, Ranulfo Mayoral, shouted one morning in March, steering towards a distant spout of vapour above the clear blue waters of Laguna San Ignacio in Baja California Sur, Mexico. We had been out in Mayoral's 18-foot (5.5-metre) fishing skiff, or panga, the *Dolphin II*, for less than 20 minutes - myself, marine mammal behaviouralist Toni Frohoff and three other whale watchers - and already we had a number of gray whales (*Eschrichtius robustus*) in our sights, yet another exhalation appearing now along the horizon, followed by the balletic, sun-glistened flourish of a suddenly upraised tail, or fluke.

They largely elude us, whales, thus their deep allure. The Earth's most massive creatures, they nevertheless spend the bulk of their lives off in their own element, beyond our ken, about as close as fellow mammals can get to being extraterrestrials. Other than the occasional disoriented stray or the victims of strandings, whales typically visit us only fleetingly, to grab a passing breath of air or, rarer still, when they're breaching: spectacular, body-long heaves, the impetus for which still baffles scientists, who have attributed them to everything from sheer exuberance to attempts to shake off body lice.

And yet the gray whales of Baja baffle scientists for the opposite reason: They can't seem to get enough of us humans. Each winter and early spring, gray whales arrive by the thousands to the warm, placid lagoons off Baja's western coast, where the mothers give birth and nurse their calves for two to four months before beginning the migration to feeding grounds in the Bering and Chukchi Seas. Typically child-rearing is a time of intense seclusion and protectiveness among mammals, but many of the Baja grays treat their days of birthing and nursing as a kind of protracted coming-out party.

"It's extraordinary," Frohoff said. "At precisely the time when you'd expect them to be the most defensive, they're incredibly social. They'll

come right up to boats, let people touch their faces, give them massages, rub their mouths and tongues."

The very notion of sociable, extroverted whales seemed to me an oxymoron. Yet even as Mayoral was speeding towards the blow we just sighted that morning, we were being treated to a spectacular breaching display: four consecutive, time-delayed flights of a mother gray's 12-metre-long, 30-tonne bulk; a performance

so exhilarating I couldn't believe that Mayoral was suddenly slowing his panga to a sputtering idle. Until, that is, he happened to mention that the very whale we were pursuing was now in fast pursuit of us.

Among the most ancient of all the whales, grays are also by far the homeliest, their gunmetal bulks encrusted with barnacles and lice and the crisscrossed scars of everything from orca attacks to the blades of



Despite a history of terrible suffering at the hands of mankind, the "Friendlies of Baja" seek out close encounters with humans.

PHOTO: NORBERT WU/SCIENCE PICTURE CO/REXUS

boat propellers. Indeed, the mother gray fast approaching us looked like a sunken US Civil War-era submarine and appeared to be just as inert, until she suddenly surfaced alongside us with a huge, explosive whoosh of air from her blowhole before submerging once more.

A small boat on open seas is, in almost any circumstance, a tenuous alignment. But to suddenly find yourself in that same small vessel

above a fleet, 12-metre-long mid-sea mastodon is to know the pure, wonderfully edgeless fear of complete acquiescence. I watched, wide-eyed, the soundless slide of that “moving land”, as Milton once described whales, everywhere beneath our boat, and suddenly felt the whole of myself wanting to go away with her; to hop on for a long ride downward towards some dimly remembered, primordial home.

Within moments, the mother was surfacing again off to our stern and doubling back in our direction, but this time with her newborn in tow, the calf’s skin still shiny and smooth. The baby gray glided up to the boat’s edge, and then the whole of his long, hornbill-shaped head was rising up out of the water directly beside me, a huge, ovoid eye slowly opening to take me in. I’d never felt so beheld in my life.



**“THEY’LL COME RIGHT UP TO THE BOATS,
LET PEOPLE TOUCH THEIR FACES”**



Gray whales get their distinctive markings from scrapes with boats, barnacles and other marine species.

REMARKABLE REBOUND

Eastern Pacific grays were nearly hunted out of existence as recently as 75 years ago. The waters of Laguna San Ignacio once ran red with whale blood each winter and spring, orphaned calves circling whalers' vessels for days after the murders before dying themselves of starvation.

A gray-whale hunting ban agreed upon by most of the world's whaling nations in 1937, along with the inherent resilience and adaptability of the eastern Pacific gray, has since allowed the species a rather remarkable rebound. Still, the question of why gray-whale mothers, some of whom still bear harpoon scars, would take to seeking us out and gently shepherding their young into our arms is a mystery that captivates whale researchers and watchers alike.

Some marine biologists have suggested the whales are attracted to the sound of the boats' motors or that they are looking to scratch their lice-ridden and barnacled backs against the boats' hulls. A combination of anecdotal evidence and recent research into whale biology and behaviour suggests that there may be something far more compelling going on in the lagoons of Baja.

Frohoff is something of a pioneer in the field of human-cetacean interactions, having begun her career in the early 1980s studying the to and fro between dolphins and people. She currently serves as the research director of TerraMar Research, dedicated to the protection of marine mammals and their ecosystems, and is a founder of its educational offshoot, the Trans-Species Institute. She began observing the extraordinary goings-on with the so-called Friendlies of Baja in the late 1990s.

"These encounters are highly unique and rare," Frohoff told me as we sat up talking one night in base camp. "And there's another word for it: it's an enigma. Intellectually, it is an enigma as to why gray whales do this, because there's a continuity and predictability to these interactions. What we have here are highly

sophisticated minds in very unique bodies, living in such a different environment, and yet these whales are approaching us with some frequency for what appears to be sociable tactile contact. And with no food involved."

THRILL RIDE

On my fourth and final day in Baja, I set out once more with Frohoff in

Mayoral's panga. We were well into our watch when a mother gray suddenly emerged a short distance off our bow. I knew straight off that this was the same mother from my first day's encounter because of the tell-tale markings of her barnacles and orange sea lice.

She let out a great exhale and for the next 30 minutes or so, mother



Some whale species, including these humpbacks, have highly complex social structures.

JUST LIKE YOU AND ME?

To date, no neurological studies of the gray whale have been done. In 2006, however, researchers at Mount Sinai School of Medicine in New York analysed the brains of a number of other whale species. The study revealed structures surprisingly similar to our own. Some contained large concentrations of spindle cells – often referred to as the cells that make us human because of their link to higher cognitive functions like self-awareness, a sense of compassion and linguistic expression – with the added kick that whales evolved these same highly specialised neurons as many as 15 million years before we did, a stunning instance of parallel evolution.

"In spite of the relative scarcity of information on many cetacean species," the scientists concluded in a report in the journal *The Anatomical Record*, "it is important to note in this context that sperm whales, killer whales and certainly humpback whales exhibit com-

plex social patterns that include intricate communication skills, coalition formation, cooperation, cultural transmission and tool usage." It is therefore "likely that some of these abilities" are related to the comparable complexity in the brain structures of whales and hominids.

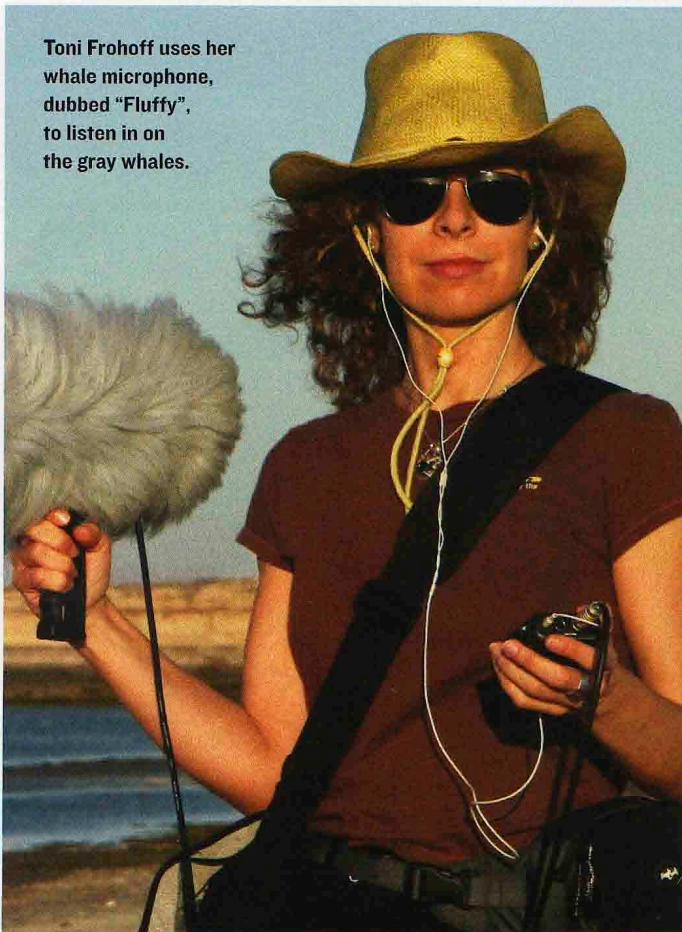
The sperm whale, for example, has been found to live in large, elaborately structured clans that typically number in the tens of thousands and wander over many thousands of kilometres of ocean. The whales of a clan are not all related, but within each clan there are smaller, close-knit, matriarchal family units. "It's like they're living in these massive, multicultural, undersea societies," says Hal Whitehead, a marine biologist at Dalhousie University in Nova Scotia, Canada, and the world's foremost expert on the sperm whale. "Really the closest analogy we have for it would be ourselves."

Charles Siebert

Scientists don't know for sure why whales, such as this gray in Baja, perform the spectacular breach.



Toni Frohoff uses her whale microphone, dubbed "Fluffy", to listen in on the gray whales.



BACK FROM THE BRINK

The very coastal existence that has long afforded gray whales the protective lagoons and coastline kelp beds for feeding has also exposed them to human-made perils: ship traffic, various chemical contaminants and noise pollution.

Hunted to near extinction in the 1850s and early 1900s, the gray-whale population was reduced, according to some estimates, to fewer than 1,000 animals, a small fraction of their current estimated population of 18,000.

But grays have exhibited a degree of resiliency that suggests that their sociability in Baja is far more than a reflexive behaviour. Research by Elizabeth Alter, a marine biologist at the Natural Resources Defense Council, indicates that grays have what she describes "a great degree of behavioural flexibility", avoiding the Baja lagoons during the peak hunting years and finding other areas to calve and nurse.

"Some naysayers," marine mammal behaviouralist Toni Frohoff told me, "might claim that these whales don't have the intelligence to know the difference between the present peaceful climate in the lagoon and what transpired in the past, that they're not smart enough to remember that humans can inflict pain and cause death. However, historical evidence, as well as the limited data we do have on these whales, compels us to think otherwise." **Charles Siebert**

PHOTOS: FRANÇOIS GOHIER/AUSCAPE, TERI JENITZ



WE WERE SUDDENLY UP ON A WHALE BACK, GIDDILY AIRBORNE AND HELPLESS

and son repeatedly wove us and our boat into their designs, and then all at once Little Nut, as we had dubbed the playful calf, popped up directly alongside the boat again and held there. I reached over and touched him on the head, the smooth, shiny, melon-cask of him, dimpled everywhere with stubbles of hair.

Then it was deemed, by the mother at least, time to move on to other things. Not, however, before she decided to admit us into that exclusive club of unwitting whale riders.

"She's coming under the boat," Mayoral shouted, cutting the engine, and there we suddenly were, borne up on a swelling promontory of whale back, giddily airborne and helpless.

When Little Nut next emerged, the mother let us gently back down. She then thrust the whole of herself between her calf and our boat, and began to shepherd him away.

For another ten minutes or so, the two swam along about 50 metres off and parallel to us, the mother at one point going into a spectacular series of breaches.

Back at our base camp that last night, still worked up from the day's turn with Little Nut and his mother, I sat up late talking with Mayoral and a number of the other boat guides. A 25-year-old named Alberto Haro Romero, known as Beto, told me of something he saw a month earlier while kayaking off Cabo San Lucas. A group of gray whales were surrounded and attacked by a pod of pilot whales. Out of nowhere, a group of humpback whales - who, like grays, are baleen whales - appeared and began going at the pilot whales, a highly coordinated counterattack. "It was unbelievable," Beto said. "One baleen whale coming in on the behalf of another. It was, like, tribal."

As Beto spoke, I thought of another bit of interspecies cooperation that I recently read about. A female humpback was spotted in December 2005 off San Francisco's coast. She was entangled in a web of crab-trap lines, hundreds of metres of nylon that had become wrapped around her mouth, torso and tail, the weight of the traps causing her to struggle to stay afloat. A rescue team arrived and decided the only way to save her was to dive in and cut her loose.

For an hour they cut at the lines and rope. When the whale was freed, the divers said, she visited each one of them, nudging them all gently, as if in thanks. They said it was the most beautiful experience they have ever had. As for the man who cut the rope that was entangled in the whale's mouth, her huge eye was following him the entire time, and he said that he will never be the same again. ■