

Ask the Naturalist...



Dr. Jeffrey A. Seminoff
answers:

What kinds of sea turtles can we see in Baja?

Mexico is truly a remarkable area for sea turtles. Considered by many the capital of the world for these amazing marine reptiles, the country hosts six of the world's seven sea turtle species. Five species occur around the Baja California Peninsula: the green turtle (also known locally as the black turtle, *la tortuga prieta*), the hawksbill (*la carey*), the loggerhead (*la amarilla or perica*), the olive ridley (*la golfina*), and the largest of all turtles, the leatherback (*la laud*).

The region is primarily important as a foraging area for sea turtles. They come from nesting beaches as far away as Japan (loggerheads) or southern Mexico in the state of Michoacán and beyond, to forage on everything from seagrass (green turtles) to crabs (loggerheads), sponges (hawksbills) to sea jellies (leatherbacks). At least two species, the olive ridley and the leatherback, nest along the sandy beaches of the southern portion of the Peninsula.

All five species are listed as either endangered or critically endangered by the World Conservation Union (IUCN): all have declined in the Pacific due to overexploitation of eggs and turtles as a food resource and, to a lesser extent, incidental mortality relating to marine fisheries and degradation of marine and nesting habitats. The leatherback, loggerhead, and hawksbill populations are in particularly bad shape, with the former two being heavily impacted through accidental capture in commercial driftnet and longline fisheries. The hawksbill has been decimated due to the illegal trade of its beautiful shell (called tortoiseshell) used to make jewelry and other ornamental items.

The hunting and use of sea turtle products was declared illegal by the Mexican government in 1990, but many impacts continue. Fortunately, a considerable amount of research and protection efforts have focused on sea turtles in Baja over the past 10 years.

(Top) Green sea turtles travel long distances to forage on seagrass off the coast of Baja.

(Left) Olive ridley sea turtles nest along the sandy beaches of the southern portion of Mexico's Baja California Peninsula.



Photo by J. Nichols



Photo by Jeffrey Seminoff



Lurch's Cheesecake

from Chef Randy Fickes

2004 passengers will remember Randy's cheesecakes, often served with fresh berries on top.

Crust:

- 4 oz. crushed chocolate cookie crumbs
- 2 T melted butter

Filling:

- 2-1/2 lb. cream cheese room temperature
- 1-3/4 cups sugar
- 3 T flour
- 1/4 teaspoon salt
- 2 egg yolks
- 5 whole eggs
- 1 tsp vanilla
- 3/4 cups sour cream

Preheat oven to 450°F. Grease a 10-in. springform pan.

Blend the cookie crumbs with the melted butter. Press it into the bottom of the pan, and chill.

Whip the softened cream cheese in a mixer with a whisk attachment. Add sugar and continue to mix until blended. Add flour and salt and blend. Add yolks and eggs gradually, scraping in between. Then add the vanilla and sour cream and mix in.

Pour mixture over chilled crust. Bake for 1 hour and 15 minutes.

Field notes from a cruise

Excerpted with kind permission from an essay by John Janovy, Jr., author, Varner Professor of Biological Sciences at the University of Nebraska/Lincoln, and Searcher passenger.

Real courage, and real idealism, is what happens when someone says, “I want to show you a whale;

I want to show you where the frigate birds nest; I want you to see a particular kind of sunrise light splashing over red basalt.” And then that someone accepts the responsibility, liability, and logistical burden of making “want to” become “did.”

I can't speak for the other passengers, for what they expected to happen and what actually occurred for them personally in the days after we cleared Ensenada, but in my own case I was determined to accomplish two goals: to get out of Lincoln, Nebraska, and to touch a whale. My check and airline ticket are the easy part—they're made out of paper and electrons. Captain Art and his crew's performance is made from something that cannot be manufactured, but must arise from a primeval sense that human beings are somehow incomplete without a first-hand encounter with a mystic land.

I did indeed see humpback acrobatics and spun a whole lot of film on them. I did indeed touch both a mother and a baby gray. I did indeed collect some blue whale poop. (Accept it, folks; poop is here to stay. There are a number of things a person needs to know about blue whale poop, the first one being that it smells like, well, poop. It really stinks. I won't say that this discovery was a pleasant surprise, just a surprise, and surprises are by definition at least

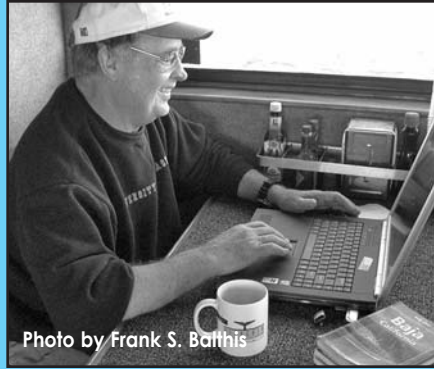


Photo by Frank S. Balthis

interesting if not pleasant. Go figure. The second thing you need to know about blue whale poop is that it is orange, the color of well-fed crustaceans whose carotenoid pigments are probably the source of the color. The third thing you need to know is that it floats, so that if the phrase “lower than whale *%#@ on the bottom of the ocean” has any relevance to reality, then it refers to a different species of whale, and its relevance shows you can't generalize about nature, even when that nature is orange poop floating on the blue Sea of Cortez.)

Invertebrate zoologists are at home on beaches. Invertebrate zoologists with hand lenses are in heaven on beaches, and those with both a hand lens and a camera are in ecstasy. When all is said and done, my own memories of Baja California are mainly of shells. By Monday morning at 8:30, I had a PowerPoint show/quiz for my Biodiversity class. I warned my students by e-mail: when I get back, expect a lesson.

Monday, I talked shells, addressing the question: what does a collection of beach shells tell you? What I have done is take material that captivated my attention a week earlier, many miles away from Lincoln, Nebraska, in a mystic land called Baja California, captured it with my camera, stuck it into my computer, and used it in an



Photo by John Janovy, Jr.

auditorium. On the screen are pictures: Baja California beach scenes, desert and mountains in the background, then close-ups of shells, many shells, diverse shells.

I can see the looks on their faces as they deal with this material: “He's giving us an exercise intended to develop our habits of mind,” they're thinking, “but he's really wishing he could take us all to where those pictures were taken.”

[Editor's note: I think those students are probably right.]



Photo by Frank S. Balthis

John Janovy, Jr. accomplished both his goals: he got away from Lincoln, Nebraska, and he touched a gray whale during a Searcher trip in 2004.

**ANIMAL
PROFILE****sperm whale**
Physeter macrocephalus

The blow is unmistakable. With its single blowhole positioned to the left and far forward on its immense squarish head, only a sperm whale blows to the left. We see groups of sperm whales surfacing over deep-water canyons in the Sea of Cortez, where they seem to be year-round inhabitants. The deep canyons are home to squid, prey for sperm whales.

Sperm whales can dive for more than an hour, so it takes patience on the part of the whalewatcher to get a good look at sperm whales and their behaviors. The reward comes after a deep dive, when the whales often stay close to the surface for an hour or more to re-oxygenate before diving again. They get close enough for us to observe their dark brownish-gray wrinkled skin, their underslung mouth, and that distinctive blowhole.

The “melon” area in the head of toothed whales reaches huge proportion in the sperm whale. A sperm whale’s head can be 25% to 33% of its body size. (*The fatty substance in a sperm whale’s melon is a high-quality oil called spermaceti, prized by whalers.*)

A waxy substance called ambergris forms around squid beaks as they pass through the whale’s lower intestine. Lumps of ambergris—from just a few ounces to 100 kg (220 lb.)—are found floating at sea and cast up on beaches.

When sperm whales are in the vicinity of the boat, we lower our hydrophone and hear their vocalization “clicks.” The clicks may be communication, or maybe echolocation for finding prey.



Photo by Frank S. Balthis

**Letter from Searcher**
Owner/Operator
Art Taylor

Photo by Frank S. Balthis

Celia and I attended the *Gulf of California Conference 2004* in Tucson, Arizona with hopes of learning more about wildlife conservation and habitat preservation in the Gulf of California (Sea of Cortez). It was sponsored by U.S. and Mexican government agencies, conservation organizations, and museums and aquariums. We attended presentations by students and researchers about the status of fisheries, impacts of illegal fishing on sea turtles, and future of the vaquita (an endangered porpoise from the upper gulf).

We heard several talks about large whales in the southern gulf—where we take passengers. One was about the summer distribution of sperm whales. Researchers identified an aggregation of sperm whales in the deep canyons between Islas Carmen and San Jose. This is no doubt the group that we often see on our natural history tours. They also documented males with groups of females and immature whales, challenging the long-standing theory that males travel in “bachelor herds,” at least during the summer.

Encountering sperm whales on our tours is an amazing event. Their physical size and large herd numbers create an overwhelming presence around the boat. At the conference, we were reminiscing about an especially amazing encounter a few years ago. We watched a herd of about 20 sperm whales blow over and over again at the surface (re-supplying their oxygen stores), then they all fluked and dove underwater, one after another. That was incredible enough, but then we realized a small calf was still at the surface, perhaps too young to make a deep dive. The curious youngster swam directly to our boat, nudged the side with its head, and lifted its head out of the water to peer at us as it swam up and down the length of the boat. We were in awe and honored to be the little guy’s babysitter while mom made her feeding dive!

Searcher Natural History Tours 2004–2005 Schedule



Photo by Frank S. Balthis

beaches of the Sea of Cortez and snorkel among brilliant reef fishes and California sea lions. We'll search for blue, fin and sperm whales as well as bottlenose and common dolphins and sea lions. Explore and photograph Baja's beaches, tide pools, islands plants, and bird life. Passengers board the *Searcher* in San Diego and fly home from Cabo San Lucas. \$2,975

12 days in Baja: San Diego to Cabo San Lucas

February 10–21, 2005

(three days in Laguna San Ignacio)

March 10–21, 2005

(two days in Laguna San Ignacio)

March 24–April 4, 2005

(two days in Laguna San Ignacio)

Magnificent gray whales, frolicking dolphins, and vast numbers of seabirds welcome you to Baja.

Explore the offshore islands of Islas Todos Santos and Islas San Benito looking for harbor seals, sea lions, elephant seals, and nesting birds.

Hikes reward you with breathtaking vistas and glimpses of rare plant life.

In Laguna San Ignacio, *pangas* bring us eye-to-eye with gray whales. You'll have time to explore pristine beaches and mangroves before we move south to spend more time at sea with gray whales and watch blue whales, common dolphins, and frigatebirds. Offshore Cabo San Lucas, we'll look for the acrobatic humpback whales of Gorda Banks. We'll explore some of the most beautiful islands and



Photo by Frank S. Balthis

Offshore Birding Adventure

September 8-12, 2004

April 13–17, 2005

This pelagic birding adventure is the only way to see some of our most elusive seabirds! We take you to the Cortez Bank and the 1,000-fathom curve near the offshore U.S./Mexico border in search of Cook's petrel, red-billed and red-tailed tropicbirds, Laysan and black-footed albatross, and other seabirds such as gulls, terns, and shearwaters. Trips depart Wednesdays and return Sundays. \$750

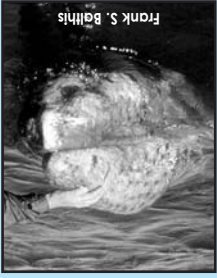


Photo by Frank S. Balthis

Email searcher@bajawhale.com or call us at (619) 226-2403.

www.bajawhale.com

- ◆ You'll see the best of Baja aboard the *Searcher!*
- ◆ Snorkel among brilliant reef fish, rays, and sea turtles.
- ◆ Hike islands of the Pacific and the Sea of Cortez and explore pristine beaches, tide pools, and mangroves.
- ◆ Cruise with the whales, dolphins, seals, and birds of Baja California's Pacific coast and Sea of Cortez.



- ◆ Go eye-to-eye with "friendly" gray whales in breeding lagoons of Baja California, Mexico.

Close enough?



Baja Whales & Wildlife

Searcher Natural History Tours

2004-2005
Tour Schedule
inside...

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Baja Whales & Wildlife

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AUGUST 2004



Photo by Frank S. Balthis

To the delight of passengers, gray whales in Laguna San Ignacio approach our pangas.

Log from Laguna San Ignacio

by Michelle Berman

Our third morning aboard the *Searcher*, we awoke as Captain Art delicately skirted the sandbar at the entrance to Laguna San Ignacio. Spouting gray whales, the rising sun and the aroma of coffee greeted us. By 9 a.m., after a breakfast of pancakes, bacon, oatmeal, scones, cereal and fruit, we found ourselves aboard pangas, surrounded by gray whales.

Several mother/calf pairs approached us for back scratches, belly rubs and whale-lice picking. One calf—mouth open and tongue hanging out like a puppy—appeared to particularly enjoy the attention. Our days in the lagoon included many more whale encounters along with beach walks and panga rides through the mangroves.

Our last afternoon in the lagoon, a calf we called “Luisa” played with us and made it hard to say goodbye. As we departed for our next destination under a light sprinkle, the sun emerged from the north and radiated a complete rainbow over the lagoon. Bottlenose dolphins escorted us out (“Dolphins on the bow!”) and it became clear that a piece of San Ignacio would be with us forever, and we had each left a piece of ourselves behind.

My memories will last as long as I’m alive. Maybe my photos will last longer. But the whales, wildflowers, beaches and birds of San Ignacio will be there for others to experience, each in his or her own way.

A TRADITION OF
QUALITY ECOTOURISM
TO BAJA CALIFORNIA

For nearly 20 years, the *Searcher* has conducted natural history expeditions to Baja California’s coastal waters and islands. We are one of only a few U.S. businesses with special permission from the Mexican government to operate natural history cruises into Mexican ecological preserves and national parks.

OUR MISSION:

“To observe marine animals in their natural environment, and to share that experience with our passengers.”

2838 Garrison Street
San Diego, CA 92106

Tel: 619-226-2403

Fax: 619-226-1332

Email: searcher@bajawhale.com

Web site: www.bajawhale.com

