

The Home Forum

Tale of a sea turtle has a happy ending

Back from near-extinction – and getting closer to people

KAI worked hard to escape her sandy nest on East Island, near Hawaii. The baby green sea turtle waved her tiny flippers until she was free.

Around her, dozens of her little brothers and sisters were scrambling out, too. Kai (Hawaiian for “sea”) flopped and flapped across the sand, sometimes running over another hatchling, and sometimes being run over. The turtles knew, instinctively, they must get to the water.

Soon Kai was lifted by a wave and tossed upon the sea. She began to swim. On the beach, she’d looked like a flopping stone. Now she was as graceful as a bird. Kai’s brothers and sisters swam, too. But of all the hatchlings in her nest, only Kai would return to East Island.

In the early ’70s, when Kai was born, times were hard for Hawaii’s green sea turtles. Hundreds were killed every year and eaten as soup, fritters, and steaks.

Hunting made turtles frightened of humans. “Turtles used to flee at the very sight of people or at a scuba diver’s bubbles,” says biologist George Balazs, an expert on sea turtles. “All you saw was the turtle’s rear end as it swam away.”

Dr. Balazs didn’t plan to become a sea turtle scientist. But he saw Hawaiian fishing boats unloading dozens of turtles they’d caught. If so many were being killed, how many were left to breed? Were turtles in danger? He decided to find out.

Balazs knew turtles nested on a group

of tiny islands (including East Island) 400 miles from Hawaii called the French Frigate Shoals. They are part of the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. Balazs traveled to the islands in the summer of 1973 and began counting and tagging nesting sea turtles. He discovered that only about 150 nesting females were left. Most of them nested on East Island, where Kai was born.

While Balazs was learning about turtles, Kai was learning to survive. Young turtles swim in the open ocean, eating jellyfish and fish eggs. The open ocean can be dangerous. Large fish and sharks love to eat small turtles, and there is nowhere to hide. Still, the Pacific is big, and baby turtles are small and easy to overlook.

Kai grew bigger and stronger. One day, when she was about six years old, she swam toward Kauai, one of the main Hawaiian Islands. She had avoided becoming a shark snack. Could she avoid becoming turtle soup?

When Balazs realized how few sea turtles were left, he began an effort to protect them. In 1974, thanks to Balazs’s work, Hawaii protected green sea turtles. In 1978, the United States government listed sea turtles as an endangered species. Today, all seven species of sea turtles (green, hawksbill, olive ridley, Kemp’s ridley, leatherback, loggerhead, and flat-back) are protected. Most of Hawaii’s sea turtles are green turtles like Kai.

Although sea turtles could no longer be hunted, Balazs’s work was not over. He has returned to the French Frigate Shoals every year to count and tag turtles. He has also studied turtles living near the main Hawaiian Islands. Children often help.

“We herd the turtles into a net on a shallow reef,” Balazs says. “The kids catch the turtles gently, by hand, and bring them to our boat. The kids help weigh, measure, examine, and tag the turtles. Then we let them go free.”

Kai grows up and goes home

Meanwhile, Kai had found a home. Juvenile and adult turtles prefer the seaweed and sea grasses found in coastal areas. Off Kauai there was plenty to eat, and underwater nooks for resting. Kai had never been hunted, so she was not afraid of people. She swam close to shore at high tide to feed. When she wasn’t eating, Kai rested in the nooks and crannies of offshore reefs. She grew a bit each year. When she reached

adulthood at 25, her shell was three feet long and she weighed 200 pounds or so. One day, Kai left Kauai behind. She was heading home. Scientists still aren’t sure how sea turtles find their way across hundreds, sometimes thousands, of miles of ocean to their nesting beaches. Perhaps turtles can sense the Earth’s magnetic field



URSULA KEUPER-BENNETT

GEORGE BALAZS AND FRIEND: The biologist inspects a flippered (but unflapped) green turtle for tags off the coast of Maui. He led a campaign to save the turtles in the 1970s.

– like being born with a compass. However she did it, Kai swam back to East Island.

Kai mated with a male green turtle offshore. A few weeks later, she crawled onto the sandy beach. Like all nesting turtles, Kai came at night, just after high tide. It was June 1996.

Kai carefully dug a hole in the sand and laid about 100 eggs, each about the size and shape of a Ping-Pong ball. Instead of being hard like chicken eggs, Kai’s eggs were leathery and soft.

Balazs and his team found Kai. They saw her lay her eggs. Afterward, she was given four metal tags. (Using more than one tag helps scientists tell how well tags stay on.) Kai was carefully examined and measured. Then Kai disappeared again, back into the Pacific.

In 1996, Kai was one of about 700 female green sea turtles nesting in the French Frigate Shoals. That was very different from 1973, when Balazs found fewer than 150 nesting turtles. “The population started to increase within a few

years after state and federal protection,” Balazs says. “The turtles that would have been killed were able to grow up, then migrate and reproduce.”

With hunting over, turtles get closer

Protecting sea turtles changed the way turtles act around people, too. “Along with the greater number of turtles has come an amazing increase in tameness, or at least toleration of people,” Balazs says. “The turtles now go about their business as long as you give them a comfortable distance.”

That distance can be very small. At some places in Hawaii, green sea turtles graze on seaweed inches from the toes of people wading in the ocean. Today, turtles sometimes rest on shore, something they never did when they were hunted. “The turtles haul out right next to people on beach blankets,” Balazs says. “You don’t even have to snorkel to see them.”

But even though sea turtles are no longer hunted, they still face dangers. Over the past 12 years, Balazs and volunteers all over the islands have rescued 152 sea turtles and returned them to the wild.

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For more information

You can watch sea turtles in Hawaii on Oahu (Laniakea, on the North Shore), the Big Island (Kahaluu Beach Park, south of Kailua-Kona), and Kauai (the cove next to Kuhio Shores on Lawai Road, Poipu). The best time is at high tide, when the turtles emerge to eat seaweed on the rocks.

Remember, never grab, catch, or ride on turtles. Don’t feed them human food. Move away from a turtle if it seems disturbed. Don’t go close to a nesting turtle that has not yet laid her eggs. For more guidelines, go to: www.coral.org. See also www.turtles.org and look under ‘Things you can do to help.’

Sea Turtles of Hawai’i, by Patrick Ching (University of Hawaii Press, 2001, all ages). A wildlife ranger native to Hawaii explores the life history, breeding, biology, and conservation of the *honu*, the green sea turtle.

Interrupted Journey: Saving Endangered Sea Turtles, by Kathryn Lasky (Candlewick Press, 2001, Grades 3-6). A 10-year-old boy helps to rescue a sea turtle stranded on Cape Cod.





MICHELLE CHRISTENSON/CORPUS CHRISTI CALLER-TIMES/AP - FILE

SKITTER TO THE SEA: A baby Kemp's ridley turtle charges toward the Gulf of Mexico during a turtle release at the Padre Island National Seashore near Corpus Christi, Texas.

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Some were entangled in fishing lines, or had fish hooks stuck in them. One small turtle was rescued from a dog's mouth - it had been "retrieved" right off the beach!

Some of the rescued juvenile turtles also have tumors, which scientists think may be linked to ocean pollution. Balazs is working to find out more.

Some turtle dangers are as old as turtles themselves. Kai may have been at the surface, taking a breath of air. The big tiger shark grabbed Kai's right rear flipper in its jaws. The shark shook its head, biting off part of the flipper. Kai escaped.

Perhaps Kai's injury kept her away from East Island. Adult female green turtles usually nest every two to three years. After her first nesting in 1996, though, Kai didn't return for six years. On June 13,

nesting season. Scientists say green sea turtles may live to be around 50 years old in the wild. Kai may return many more times to East Island.

Face-to-tail with Kai

I met Kai while scuba diving off Kauai in September, at a spot known for its many turtles. I watched a large male turtle wiggling and twisting on a coral head. (A male turtle's tail is twice as long as a female's.) Clearly, turtles enjoy a good belly scratch! Nearby, another turtle floated to a "cleaning station." A school of small surgeonfish swarmed over his shell, pecking at algae like pigeons pecking at breadcrumbs. After a few minutes of this, the turtle glided off. Another turtle customer, waiting patiently, took his place.

A young male turtle slept soundly on a ledge. He looked as contented as a puppy on a rug. A large female was a few feet away. She rested with her head inside a crevice and her rear end sticking out. Her right rear flipper was mostly bitten off. There was something written in white paint on her shell: 293C.

In the three months since she had nested on East Island, Kai had swum 400 miles to her feeding grounds off Kauai. Several years ago, Balazs used satellite tags to track 16 green turtles after they left the French Frigate Shoals. Most made a beeline to the main Hawaiian Islands. But one turtle made a huge loop through the open ocean before finding her way to coastal waters. I hope Kai took the direct route!

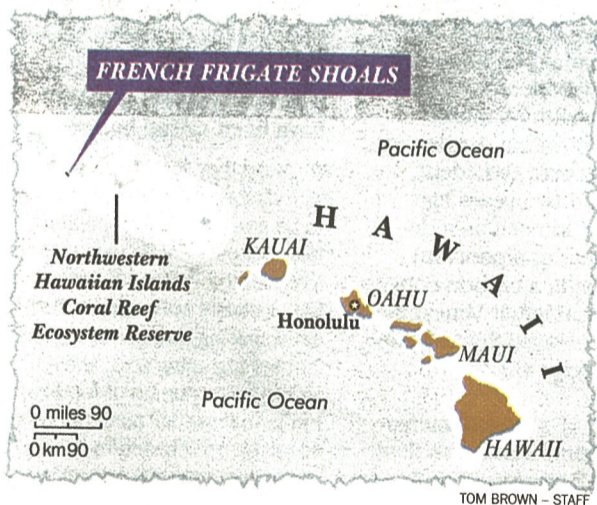
I saw Kai once more. We were climbing on board the dive boat when Kai surfaced nearby. She eyed us, then swam right over to the ladder at the back of the boat.

"This one is really friendly," said Debbie, our dive guide. She reached down and pushed Kai away, so the flopping ladder wouldn't hit her.

"Nice turtle," Debbie said.

Kai took one last look and vanished under the swells.

Pamela S. Turner



2002, Kai was back on East Island.

Balazs and his team found Kai. She had grown slightly - 2/3rds of an inch. Of the four tags Kai was given in 1996, only one was left. Balazs's team put a tiny microchip in her left rear flipper. This new high-tech tag can be "read" at close range using a special scanner. They also painted a number on her shell: 293C. They saw that most of her right rear flipper was gone, but that the wound was healed.

Kai returned several times over the next two weeks, each time laying a clutch of eggs. This year was a good one for Hawaii's green turtles. From fewer than 150 in 1973 to about 700 in 1996, the number grew to about 900 by the end of the 2002

TODAY'S ARTICLE ON CHRISTIAN SCIENCE

Bringing a spiritual perspective to daily life

You're not alone

MY TIRE BLEW OUT as I was returning from a late night meeting. We lived in the country. This was a double highway, but there were no cars visible in either direction. No houses. No stores for several miles. I didn't have a cellular phone.

My headlights pierced the cold as I walked toward the darkness to inspect a very flat tire. A woman alone, stranded. Was it fear or the falling temperature that caused the sudden shudder?

But I've been in worse situations and proved over and over that "God is... a very present help in trouble" (Ps. 46:1). I am never a woman alone. God is always present with me, with every-

one. I didn't want to slide into a pit of fear. I'd only have to claw my way back to quietude in order to pray properly. So I stopped the Hitchcock-style speculations and started to think about God in order to regain mental control.

There were no words to this prayer. I didn't start pleading with the Almighty to help me. If God is all-knowing and all-seeing, I didn't need

to inform Him or ask for help. I trusted that God was there and knew my need.

My prayer was more a reaching out for reassurance, like a child reaching for a parent's hand. I trusted that God would protect me - that He knew my need and would supply a tangible answer. I thought of a favorite Bible promise: "Trust in the Lord with all thine heart; and lean not unto thine own understanding. In all thy ways acknowledge him, and he shall direct thy paths" (Prov. 3:5-6). Well, my path didn't need directing. At that moment I wasn't going anywhere. But I affirmed that God directs everyone's path.

God, divine Love, would send someone who was honest and honorable. I was trusting my safety to God, not to chance or random acts of kindness.

At that moment, an old sedan pulled into the light of my headlights. I glanced in the open passenger window. Fast-food wrappers, soda cans, papers, and parts cluttered the seat, the dash, the floor. But the eyes looking at me were clear and showed concern. He invited me to get into the car. Instead, I gave him my home phone number and asked him to tell my husband to come for me. All that paper, but not a pen be-

tween us. I repeated the number and hoped he'd remember by the time he found a phone.

Back in my car, I settled in for a long wait. This was the time for prayer. All sorts of doubts danced into my thoughts. Each doubt I met with affirmations of God's presence, power, and care.

Would the fellow remember the number? I knew that God is divine Mind and doesn't forget. Each of us reflects this Mind and the accurate memory that goes with it. This stranger was moved by Mind to stop and help me. He certainly reflected all the intelligence he needed to complete the task. In fact, I saw how silly it was to doubt his sincerity or ability.

What if someone with bad intentions saw me during the long wait? The phrase "hid with Christ in God" popped into thought. It's from the Bible (see Col. 3:3) and is a refrain in a hymn ("Christian Science Hymnal," No. 370).

The hymn begins, "We are hid with Christ forever/ In the Father's holy plan." The second verse continues:

**There were
no words
to my prayer.**

Hid with Christ in God, O gladness:
O the meekness and the might,
When the risen Christ has lifted
All our thoughts into the light.

This was a comforting thought. I was hidden from those with evil intentions. I was visible only to those whose thoughts were illumined by Christ.

No one else stopped during the 40 minutes it took for my husband to reach me. God had spoken to one person. That person kindly brought the help I needed. I was hidden from harm and safe in God's loving care.

When I remember to embrace others in the world in prayer, I think of this incident and the inspiration that came with it. Each child and adult can feel the supporting care of the Holy Spirit. We are all hid with Christ in God, as He meets our need.

*Love inspires, illumines,
designates, and leads the way.*

Mary Baker Eddy
(founder of the Monitor)

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e-cards and more everyday, go to:

 **spirituality.com**
A site inspired by Science and Health