

Turtles & the law

In spite of existing laws, certain restaurants in Hawaii still actively advertise and sell turtle steak and soup.

There are really only three explanations that can account for the meat products being offered by these establishments:

- The meat was illegally imported into the U.S., or illegally transported to Hawaii from another state, after Sept. 6, 1979, when the shipment ban went into effect.

- The meat was obtained from our Hawaiian sea turtles that were illegally killed.

- The meat was shipped to Hawaii before the ban, and therefore has been sitting in a freezer for at least 12 months before being thawed and served.

None of the above sounds very palatable to me. If turtle meat 12 months and older is indeed being offered for sale, certainly there must be some health or marketing regulation to prevent such a practice. If there isn't, there should be.

If the restaurants in question are illegally importing meat, or somehow are involved in the killing of Hawaiian turtles, then federal and state wildlife protection officers need to vigorously pursue the offenders.

Regardless of which is the case, ethics make it advisable for the public to avoid restaurants still selling turtles.

GEORGE H. BALAZS

Turtle in 'Wet Dock'

George H. Balazs, a marine biologist with the U.S. Marine Fisheries, made a "house call" yesterday on an ailing Hawaiian green sea turtle but his patient was not in.

That's a good sign, said Balazs, who has been keeping tabs on the 250-pound turtle that had surfaced in the Ala Wai Boat Harbor recently.

"If she were dead, there would be no doubt about it, because she would float belly up to the top and there would be a mighty big stink," Balazs said. "She must be recuperating on the bottom."

The turtle was reported by Balazs to be in a weakened condition in mid-August, caused, he believes, by large tumors on the back part of her shell and hind flippers.

Although the cause of the tumors is not known, he said they seem to be on the increase in the green turtles, which have enough problems, being an endangered species.

The turtle came to Hawaii, perhaps to recuperate, from her nest in French Frigate Shoals, indicated by a tag that, coincidentally, Balazs had placed on her in 1978 when he was there at the Hawaiian Islands National Wildlife Refuge. The shoals are some 500 miles northwest of Honolulu, but it is not unusual for the turtles to travel to various sites in the Islands, including areas around Oahu, although, they don't frequent the boat harbor.

The friendly turtle

The value of green sea turtles as ecological, educational and aesthetic components of our Hawaiian marine environment is well-known to many residents and tourists who have seen these great reptiles swimming in island waters. These reasons alone are sufficient to justify current protective laws aimed at preventing further population declines following many years of heavy and uncontrolled exploitation. However, an additional benefit of special interest to the fishing community has now come to light. The following short but true "fish story" was recently related to me by my colleague, John Naughton, of the National Marine Fisheries Service:

"While trolling between Kauai and Niihau during calm weather, a turtle about two feet long was seen floating at the surface with several seabirds circling overhead. A closer inspection revealed the presence of small fish aggregated under the turtle, along with two mahimahi. As the boat passed by, the turtle quickly dove out of sight and both fish were hooked-up and landed. The total catch amounted to a respectable 40 pounds."

Maybe there is something to the Japanese "Urashima Taro" folk-tale where the sea turtle becomes the fisherman's good friend!

GEORGE H. BALAZS

letters

8-27-1982
MAUI NEWS

Turtle nestings

During the early morning hours of August 24th, a giant leatherback sea turtle (*Dermochelys Coriacea*) crawled ashore to nest on a West Maui beach. Although this species regularly occurs in the deep waters surrounding our islands, the nesting on Maui is the first such record ever recorded in Hawaii. The closest known nesting area for leatherbacks is several thousand miles away on the Pacific coast of Mexico.

Leatherbacks are easily distinguished from other sea turtles by their large size, smooth dark skin and prominent ridges that extend along the back. The leatherback seen on Maui was estimated to weigh at least 500 lbs. It is entirely possible that more nestings will take place on Maui, either by the same turtle, or others. If someone does see a turtle on the beach, or finds evidence of a nest, I would greatly appreciate hearing about it. Please send me a note addressed to the National Marine Fisheries Service, P.O. Box 3830, Honolulu, HI 96812.

Sea turtles are especially sensitive to humans when nesting, so care should be taken not to disturb them. All sea turtles, and their egg nests, are protected in Hawaii by State and Federal wildlife laws.

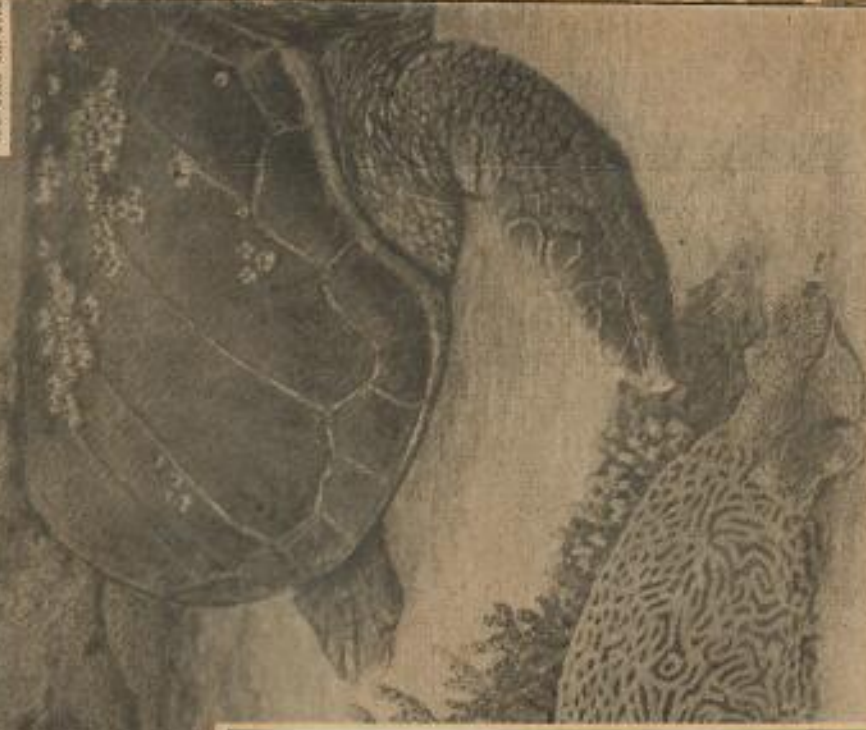
George H. Balazs
Fishery Biologist

Mexico and North Atlantic. Eats crabs and mollusks.
FLATBACK TURTLE. Length about 90 cm (35 in). Weight about 80 kg (160 lbs).
Northern Australia. Eats sea cucumbers and other invertebrates.
LEATHERBACK. Length 152-178 cm (60-70 in). Weight 320-590 kg (710-1300 lbs).
Nests in tropics but wanders to temperate, even sub-arctic waters. Eats jellyfish.



HAWKSBILL
Eretmochelys imbricata

LOGGERHEAD
Caretta caretta



1983

Mr. Chuck Johnston, Editor
Hawaii Fishing News
Honolulu, Hawaii

Dear Chuck,

The response to my article about sea turtles that appeared in the December issue of HAWAII FISHING NEWS has really been encouraging. As I emphasized in the story, the great majority of Hawaii's fishermen are sincerely concerned about the intelligent conservation of marine resources. There is clearly a desire to help out in some meaningful fashion. Hawaiian sea turtles serve as an excellent example of where lots of people are now making fine contributions. From the telephone calls received in recent weeks, I'm convinced that this community effort will continue to grow.

A few months ago the National Marine Fisheries Service and the Center for Environmental Education (of Washington, D.C.) jointly issued a wall-sized poster showing the eight species of sea turtles occurring throughout the world. A limited supply of these attractive and educational posters is available for distribution at no cost to fishing clubs and other ocean-related organizations in Hawaii. To obtain one of these posters, requests should be sent to:

National Marine Fisheries Service
Marine Mammals and Endangered Species Program
P.O. Box 3830
Honolulu, HI 96812

Once again, many thanks for the beneficial role that HAWAII FISHING NEWS serves to our fishing community.

Sincerely,
George H. Balazs
Fishery Biologist

MAY 4 1989

Oil spills

With so many recent oil spills happening in Hawaiian waters it is important to know what damage this pollution can have on our marine life. Information is especially relevant for vulnerable creatures listed under the U.S. Endangered Species Act, such as our Hawaiian sea turtles. How does oil impact a sea turtle? Here are some answers. As air breathers, sea turtles must frequently swim to the surface. When a layer of oil is present, a turtle will invariably come into contact with it. If the slick is viscous and wide-spread, a turtle can become so coated that its mouth, nostrils and eyes are completely clogged. Similar devastation to sea birds, otters and other wildlife has been shown almost daily in TV coverage of the Valdez, Alaska spill. Fortunately, acute death of this sort has thus far not been a common feature of oil spills here in Hawaii. Does this mean little or no damage has occurred? Not necessarily. According to Dr. Peter Lutz, sea turtle physiologist and researcher at the University of Miami, the chronic or lingering sublethal effects of petroleum on sea turtles can be considerable. These impacts are usually much less apparent to the casual observer. They can include: a massive immune response by the body when oil passes across the intestinal wall; shut-down of the turtle's salt excreting gland; severe dermatitis leading to increased skin infection; and interference with digestion when oil is swallowed. In addition, "tar balls" floating at the surface often have a strange appeal to turtles to the point that they eat them. When this happens the throat can become blocked and the jaws stick together.

The bottom line in all of this can be summed up in one simple sentence: oil and sea turtles don't mix, no matter what quantities are involved.

George H. Balazs
Honolulu

Turtles and oil spills

With so many recent oil spills in Hawaiian waters it is important to know what damage this pollution can have on our marine life. Information is especially relevant for vulnerable creatures listed under the U.S. Endangered Species Act, such as our Hawaiian sea turtles.

How does oil impact a sea turtle? Here are some answers. As air breathers, sea turtles must frequently swim to the surface. When a layer of oil is present, a turtle will invariably come into contact with it. If the slick is viscous and wide-spread, a turtle can become so coated that its mouth, nostrils and eyes are completely clogged.

Similar devastation to sea birds, otters and other wildlife has been shown almost daily in TV coverage of the Valdez-Alaska spill. Fortunately, acute death of this sort has thus far not been a common feature of oil spills here in Hawaii.

Does this mean little or no damage has occurred? Not necessarily. According to Dr. Peter Lutz, sea turtle physiologist and researcher at the University of Miami, the chronic or lingering sublethal effects of petroleum on sea turtles can be considerable. These impacts are usually much less apparent to the casual observer. They can include: a massive immune response by the body when oil passes across the intestinal wall; shut-down of the turtle's salt-excreting gland; severe dermatitis leading to increased skin infection; and interference with digestion when oil is swallowed. In addition, "tar balls" floating at the surface often have a strange appeal to turtles to the point that they eat them. When this happens the throat can become blocked and the jaws stick together.

The bottom line in all of this can be summed up in one simple sentence: Oil and sea turtles don't mix, no matter what quantities are involved.

GEORGE H. BALAZS

Letters

The Honolulu Advertiser

Wednesday, May 3, 1969 A-10



Even minor oil spills threaten Hawaii sea turtles

With so many recent oil spills in Hawaiian waters, it is important to know what damage the pollution can have on our marine life. This is especially relevant for vulnerable creatures listed under the U.S. Endangered Species Act, such as our Hawaiian sea turtles.

How does oil impact a sea turtle? Here are some answers. As air breathers, sea turtles must frequently swim to the surface. When a layer of oil is present, a turtle will invariably come into contact with it. If the slick is viscous and wide-spread, a turtle can become so coated that its mouth, nostrils and eyes are completely clogged.

Similar devastation to sea birds, otters and other wildlife has been shown almost daily in TV coverage of the Alaska spill. Fortunately, death of this sort has thus far not been a common feature of oil spills in Hawaii.

Does that mean little or no damage has occurred? Not necessarily. According to Dr. Peter Lutz, sea turtle physiologist and researcher at the University of Florida, the chronic or lingering sub-lethal effects of petroleum on sea turtles can be considerable. These impacts are usually much less apparent to the casual observer.

They can include: a massive immune response to the body when oil passes through the intestinal wall; shut-down

of the turtle's salt excreting gland; severe dermatitis leading to increased skin infection; and interference with digestion when oil is swallowed.

In addition, "tar balls" floating at the surface often strangely appeal to turtles to the point that they eat them. When this happens the throat can become blocked and the jaws stick together.

The bottom line in all of this can be summed up in one simple sentence: Oil and sea turtles don't mix, no matter what quantities are involved!

George H. Balazs

Biologist will speak

Northwest Hawaiian Isles lecture topic

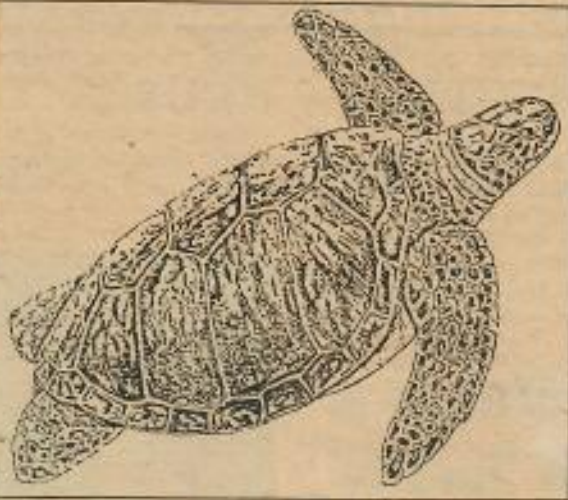
George Balazs, a biologist with the Hawaii Institute of Marine Biology, will give a free lecture and slide show entitled "A Journey Through The Northwestern Hawaiian Islands", Wednesday, March 4, at 7:30 pm in the Kona Surf Hotel's Kamehameha Ballroom.

Balazs has spent many hours studying the marine life in the remote Hawaiian Islands. His photographs have been featured in both the 1979 and the 1981 Dillingham Tide Calendars.

The Northwestern Hawaiian Islands have extensive shoals and reefs, and are abundant in marine life and birds that

are rarely seen in other parts of the world.

This lecture is one in the Big Island Marine Lecture Series, sponsored by the University of Hawaii Sea Grant Marine Advisory Program. At 7 pm, preceding the lecture, the public is invited to a no-host cocktail social given by the Kona Surf Hotel. For further information, please call 329-6767.



THE GREEN turtle shown in this drawing by biologist Balazs will be one of the sea creatures featured in his lecture-slide show Wednesday at the Kona Surf Hotel.

Baby sea turtles imported to boost local population

By PEGGY HODGE
WINDWARD

Something new has been added to the turquoise waters surrounding Oahu: Baby year-old green sea turtles released last month to help boost the population and breeding.

George H. Balazs, fishery biologist, and William Gilmartin, wildlife biologist with the National Marine Fisheries Service, set the 165 squirming yearlings into Waimanalo and Hanalei bays along the North Shore and in Makaha waters.

The baby turtles weigh an average of 8 pounds and measure 8-10 inches in shell diameter. They were hatched in their native breeding grounds at French Frigate Shoals, 900 miles from here, a unit of the Hawaiian Islands National Wildlife Refuge.

Balazs spent the last 10 years immersed in the study of these gentle creatures, spending months at the lonely islands of Hawaii's Leeward Islands.

Already one has probably been sighted — at Lanikai recently, by Mr. and Mrs. William Nolan — near shore and resting in shallow waters. It's unusual to see green sea turtles there today, especially young ones, and this one was settling in nicely for several days.

About 20 years ago green sea turtles were common in Lanikai bay and we'd see folks bring in boatloads at a time, turn them over on their backs and let them die.

Today they are protected by strict laws.

In the 1930s green sea turtles would be silhouetted in the breaking waves as surfers rode along with them, a thrilling sight. During the last few years, only one adult was seen close to shore in Lanikai, lifting its head curiously as swimmers watched.

Turtles have to breathe air and surface often when active, but can stay under for hours when resting or sleeping. They tuck their flippers back over their shells in neat fashion.

Those released baby turtles were brought as day old hatchlings to Sea Life Park, where small pieces of white tissue were surgically grafted on their dark black shells, a project in identification. After a year's tending, they were released at sea.

Balazs and Gilmartin tagged the turtles with metal markers on their front flippers. If anyone sees one, Balazs would like to be notified at his office, National Marine Fisheries Service (under U.S. Dept. of Commerce), phone 946-2181.

Look, folks, and gently handle, but no touching — or taking! Today the sale of any product from any species of sea turtle is prohibited in the U.S., including farm-raised products. Civil violation is six months in jail and a \$10,000 fine; criminal penalty, a year imprisonment and \$20,000 fine.

Turtle info is fascinating. These



A green sea turtle is tagged while nesting at French Frigate Shoals.

little turtles will take from 10 to 60 years to grow to adulthood. They mature when their shells are about a yard long and body weight is 200 pounds.

Balazs hopes these released young turtles will eventually become part of the breeding colony as mature adults. In Florida, where a "headstart" project such as Hawaii's was conducted, the results were good, he said.

Sadly enough, though, in this century no major population of any species of sea turtle has increased, either in the wild or as a result of conservation.

The green sea turtle is actually a mottled light to dark brown streaked with olive and is called green because of the color of its fat.

Because the green sea turtle has the best meat and its oil is used in cosmetics, it was almost fished out of existence. The young hatchlings may be wiped out by ants, crabs, lizards, birds and dogs on the beach. And fish and birds may devour them later at sea.

Unlike other turtles, sea turtles cannot retract their heads into their shells, making them even more vulnerable.

Green sea turtles are great migrants and famous navigators. Some of their nesting journeys, made every 2-4 years, are more than 1,000 miles.

The stalwart males are often indiscriminate in their efforts to mate, scientists relate. During breeding season they will attempt to mount crude wooden decoys, other males, skin divers and even small rowboats.

When a lady green wants to say "no," she will bite pursuing males, assume a vertical "refusal" position or leave the water.

Watkins note — there is also a "female reserve," an underwater refuge where females can go to escape the advances of sexually aroused males they do not desire. No one knows how this female reserve is established or why, but the stalwart males honor it.

Shells on beach no surprise, but this one's rare

9/1982

By TOM STEVENS
Staff Writer

MAALAEA — Like a lot of coastal residents, KMVI radio manager Russ Doran enjoys starting his day with a brisk early morning stroll down the beach.

He usually sees the same things: sand, driftwood, occasional clumps of debris. So he wasn't surprised one recent morning to spot a large clump of something on the beach up ahead.

He was surprised, however, to see the clump move.

"I was walking down the beach one morning just after daylight and I came upon this big hulk of a thing," Doran recalled. "At first it looked like some debris had washed up on the beach, but then I saw it moving, and I thought it might be a beached whale."

When he got closer, Doran discovered an enormous live sea turtle flippering itself slowly along the sand.

"The shell was probably four feet long and three feet wide," he said. "And my guess at the weight would be between 500 and 600 pounds. It was a huge son-of-a-gun."

Or daughter-of-a-gun, as things turned out. After watching the creature lumber into the ocean and disappear, Doran returned to his Maalaea apartment and called the National Marine Fisheries Service on Oahu to describe the sighting to turtle researcher George Balazs.

Within hours, Balazs had flown to Maui and was inspecting the site with Doran. The flipper marks in the sand and Doran's description of a "ridge-backed, leathery-looking" turtle convinced the researcher that what Doran had seen was a female "leatherback" turtle and that what she was doing was looking for a likely place to lay her eggs.

"It's the very first record we have of a leatherback nesting in the Hawaiian Islands," said Balazs, who added that such turtles usually spend most of their lives five to 15 miles from shore, where they feed happily on jellyfish and can reach a weight of 1,500 pounds.

"Fishermen who see them out on the ocean say they look like a Volkswagen bug in the water," Balazs said. He added that the leatherbacks have several distinctive ridges running lengthwise along their shells.

Balazs and Doran carefully excavated the dry sand area where the turtle tracks led but were unable to find evidence that the turtle had "nested" at the site.

"There was no way she could have laid any eggs around there," said Doran, but Balazs said the site could be one of several visited by the prospective mother leatherback.

"Turtles are fussy creatures," he said. "If she didn't lay her eggs there, she may go back to another spot and try again in a couple of weeks." Balazs asked Maui residents spotting a turtle like that described by Doran to contact him at the National Marine Fisheries Service office on Oahu, 946-2181.

There are only about 50,000 leatherbacks in the world, Balazs said, and "for one to come ashore on Maui is an interesting and potentially important event."

Added Doran: "It was an awesome looking thing."

9/13/82
9/14
MAUI NEWS