Dedicated to Turtle & Tortoise Conservation, Preservation, and Education Since 1964

California Turtle & Tortoise Club

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Glyptemys muhlenbergii, the bog turtle, photographed during a long-term study tracking bog turtle populations. This image was captured in habitat in a southern Appalachian bog in western North Carolina by US Fish and Wildlife staff. Public domain.

featured species

Bog Turtle, *Glyptemys muhlenbergii* (Schoepff, 1801)

A Critically Endangered Flagship Species

by M. A. Cohen

What is a flagship species ?

A phrase used in the field of conservation biology, the term "flagship species" is characterized by the **World Wildlife Fund for Nature** as "a species selected to act as an ambassador, icon or symbol for a defined habitat, issue, campaign or environmental cause."

The concept of the flagship species, whether a plant or an animal, was conceived to raise awareness of biodiversity conservation within an ecosystem. By prompting recognition and conservation of the flagship species itself, this concept promotes the protection of the species' entire biological community.

The smallest species of turtle endemic to North America, the semi-aquatic bog turtle inhabits wetlands and bogs in the eastern United States. For those who may be unfamiliar with the term, "a bog is a freshwater wetland of soft, spongy ground consisting mainly of partially decayed plant matter called peat," according to the National Geographic Society. "Bogs are generally found in cool, northern climates. They often develop in poorly draining lake basins created by glaciers during the most recent ice age" (Bog, no date).

The bog turtle (*C. muhlenbergii*) prior to 2001 was one of four species belonging to the genus *Clemmys* in the family Emydidae. The spotted turtle (*C. gutatta*), the wood turtle (*C. insculpta*), and the western pond turtle (*C. marmorata*) were the three other members of the genus at that time.

Following DNA analyses of the four *Clemmys* species, researchers determined that the bog turtle and the wood turtle were closely related. These two species were subsequently assigned to a new genus termed *Glyptemys*, a name

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derived from the Latin root words *glypt-*, meaning carved, and *emys*, meaning turtle (Virginia Herpetological Society). Following publication of the DNA analyses in 2001, the bog turtle became known as *Glyptemys muhlenbergii* and the wood turtle, *G. insculpta*.

As for the other two species in the genus *Clemmys*, the spotted turtle remained in that genus as the sole species. Taxonomists assigned the western pond turtle to a new genus, and it became *Actinemys marmorata*.

Also known as Muhlenberg's turtle, this species was named in honor of Gotthilf Heinrich Ernst Muhlenberg (1753–1815), an American clergyman who was a self-taught botanist. While studying the native flora on his property in Lancaster County, Pennsylvania, Muhlenberg discovered this diminutive turtle in his millpond (Virginia Herpetological Society, no date). In 1801 Johann David Schoepff, a German botanist and physician, formally described the species, naming it *Testudo muhlenbergii*.

Description

Rarely exceeding a carapace length of 4 inches (10 centimeters), the bog turtle averages 3 to 3.5 inches (7.6 to 8.9 centimeters) long (Oguni). Varying in coloration from light brown to mahogany to black, the carapace of the species is somewhat domed with a low medial keel, and its scutes have a roughened, "carved" texture. The scutes may be solid in coloration or may have a lighter center.

Lacking any hinges, the species' plastron is brown to black with lighter asymmetrical markings at the midline (Ernst and Lovich 2009).

The head of the bog turtle is typically dark brown with prominent blotches of bright yellow, orange, or red above and behind the tympanum (ear drum) on both sides of its head. Its limbs and tail are dark in color and may have mottled markings of orange or red.

The male bog turtle is typically larger than the female. The tail of the male is noticeably longer and thicker than that of the female, and his plastron is concave. The female has a comparatively higher and wider carapace than that of the male, and her plastron is flat.

Although there are minor variations in the appearances of bog turtles from different geographical regions, there are no recognized subspecies of *G. muhlenbergii*.

Range and Habitat

Occurring in disconnected populations in the eastern United States, the bog turtle primarily inhabits western Massachusetts, Connecticut, eastern New York, eastern Pennsylvania, New Jersey, northern Delaware, and northern Maryland. Populations also occur in northwestern New York and Pennsylvania, southern Virginia, western North Carolina, northwestern South Carolina, northern Georgia, and eastern Tennessee (Ernst and Lovich 2009).

The preferred habitats of the bog turtle include spring-fed sphagnum (peat moss) bogs, swamps, and marshy meadows with clear, slow-moving rivulets and brooks having soft bottoms, according to Ernst and Lovich.

Diurnal Activities

A word meaning 'active in the daytime,' the term diurnal typically implies two periods of activity with an interval of inactivity in between.

In many chelonian species, including the bog turtle, activity begins in early morning as the animal emerges from nighttime cover to bask. Being ectothermic, i.e., dependent on the external temperature, many turtles bask until they gain sufficient warmth to begin actively seeking food or mates.

As the air temperature rises during the warmest part of the day, many ectotherms seek protective cover for purposes of thermoregulation. They rest to lower their body temperature until the air temperature cools in the evening, at which time bog turtles emerge from their midday cover for an evening feeding.

Of course, there are variations in these activity patterns depending on geography, weather, and other factors. Basking occurs predominantly on land, and occasionally in shallow water. Researchers observe that *G. muhlenbergii* is

Bog turtle, *Glyptemys muhlenbergii*, basking. Photo by R. G. Tucker, Jr./USFWS. Public domain.

usually more active on cloudy days than on days with bright sunshine (Oguni).

While the bog turtle is generally diurnal, researchers have documented nocturnal activities in some northern populations. Similarly, there is a prevailing belief that the species is most active in spring, yet researchers have found some individuals to be active as late in the year as December.

Dormancy

Brumation (reptile hibernation) for the bog turtle begins from late September to November, and ending in March or April. Likely spots for brumation include the bases of tree stumps, meadow vole and muskrat burrows, and the soft, silted bottoms of waterways. Bog turtles may brumate singly or in small or large groups.

This species may estivate in summer when the air temperature rises. Bog turtles often seek subterranean places such as wetland tunnels, either partly or completely flooded, in which to estivate.

Foods and Feeding

An omnivore that will eat in water or on land, *G. muhlenbergii* consumes both live prey and carrion. Feeding on a wide array of prey items, the bog turtle ingests earthworms, crayfish, insects, spiders, butterflies, moths, wood ticks, frogs, salamanders, snakes, and nestling birds, among others (Ernst and Lovich 2009).

Plant materials, primarily seeds, consumed by bog turtles include sedge grasses, winter cress, wild strawberries, duckweed, pondweed, arrow arum, skunk cabbage, dryland blueberry, and cattail, among others (Ernst and Lovich 2009).

Reproduction

Because the bog turtle is so small and so secretive, its reproductive cycles and behavior are not well-studied. Biologists surmise that the onset of reproductive maturity will vary by geographic location; typically the bog turtle matures in 5 to 8 years (Oguni).

Researchers have observed mating in the afternoon not long after bog turtles emerge from brumation. *G. muhlenbergii* will frequently mate with more than one partner during each mating season.

Having a low rate of reproduction, the female bog turtle lays only 1 to 6 eggs per clutch in June and July, the average clutch size being 3. Females may then "become unreceptive" after one or two mating episodes, typically nesting just once per season, and may not produce a clutch every season.

In contrast, males will continue attempting to mate with as many females as they can throughout the species' April-to-July mating season (Ernst and Lovich 2009; Oguni).

Threats

Because it is so small, the bog turtle is prey for an array of larger animals, including raccoons, skunks, snakes, snapping turtles, muskrats, birds such as egrets and herons, and canids such as dogs, coyotes, and foxes (Ernst and Lovich 2009).

G. muhlenbergii is not an aggressive species, and will dive into the silted bottoms of waterways to hide from predators if at all possible.

Besides its many predators from the animal kingdom, the bog turtle is impacted by several human activities. Collection for the pet trade has taken a substantial toll on wild populations because the species is comparatively small, attractively colored and does well in captivity.

Furthermore, biologists have identified various external parasites and disease-causing bacteria that pose serious health threats to *G. muhlenbergii*.

Additionally, habitat destruction of wetlands for development, pollution of watershed lands, and vehicle traffic all threaten remaining bog turtle populations (Ernst and Lovich 2009)

Conservation

Listed as CITES I (international commercial trade is prohibited) and 'Endangered' under the federal Endangered Species Act, the bog turtle is classified as 'Critically Endangered' by the IUCN Red List of Threatened Species as of 2010. ❖

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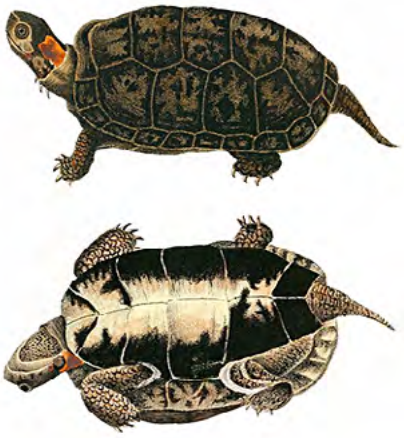

Bog turtle, *Glyptemys muhlenbergii*. Rendering by John Edwards Holbrook, 1794–1871, from *North American herpetology; or, A description of the reptiles inhabiting the United States*, published in 1842. Public domain.

Galápagos Conservancy News: November and December 2019 press releases

Park Repatriates 109 Young Tortoises to Pinzón and Santiago

6 November 2019 — Rangers from the Galapagos National Park Directorate (GNPD) recently repatriated two groups of tortoises from the *Chelonoidis duncanensis* and *Chelonoidis darwini* species to their islands of origin: Pinzón and Santiago, respectively.

The Park rangers, with the help of a helicopter, transferred 93 tortoises to Pinzón Island and 16 to the southeast of Santiago Island. The tortoises, which were hatched and raised at the Tortoise Breeding Center on Santa Cruz Island, are between the ages of five and six years — which ensures a higher survival rate in the wild.

§ § §

Twenty Baby Tortoises Hatch at the Santa Cruz Breeding Center

20 November 2019 — Twenty baby tortoises of the Española Island (*Chelonoidis hoodensis*) and Floreana Island (*Chelonoidis niger*) species recently hatched from the incubators at the Galapagos National Park Directorate's (GNPD) Fausto Llerena Breeding Center on Santa Cruz Island. The nesting period began in July when the first eggs were collected, and they began to hatch after 120 days in the incubators in which Park rangers control the temperature to obtain females (85.1° F | 29.5° C) and males (82.4° F | 28° C).

This marks the beginning of the hatching period within the giant tortoise captive breeding program at this Tortoise Center, which has seven pens housing tortoises from Española and Floreana Islands. Park rangers have collected 125 eggs from 35 nests there in the 2019 season.

The breeding program is part of the Giant Tortoise Restoration Initiative (GTRI), which is jointly developed by the GNPD and Galapagos Conservancy.

§ § §

Giant Tortoise Census on Darwin Volcano Indicates Ecosystem Recovery

25 November 2019 — A healthy population of growing giant tortoises, large numbers of *Opuntia insularis* cacti, and abundant presence of bird species are several indicators that the ecosystem on Darwin volcano, Isabela Island is recovering after the eradication of wild goats there in 2006, according to Wacho Tapia, Director of the Giant Tortoise Restoration Initiative (GTRI).

As part of the activities of the GTRI, thirty scientists and park rangers covered approximately 200 square kilometers of the volcano during a recent ten-day expedition and managed to locate, take data from, and mark 1,150 tortoises with microchips. The population of the Darwin Volcano tortoise species (*Chelonoidis microphyes*) was previously estimated at 400 individuals and categorized as "Endangered" by the International Union for the Conservation of Nature (IUCN).

"We consider the population of this species of tortoise to be healthy, with an estimated size of 2,000 individuals — of which 40% are females and 60% is made up of undetermined males and juveniles. The figure confirms a good state in reproductive terms, because according to preliminary results there are 1.1 females for each male," said Tapia.

Stool samples of the tortoises were also collected for the subsequent study of their diet; for decades, the tortoises here had to compete for food with introduced goats but the habitat has now improved immensely.

"The final results of this census will provide information that will allow us to make management decisions to guarantee the conservation of the native and endemic species of this area," said Jorge Carrión, Director of the Galapagos National Park.

§ § §

Breaking News: Intensive Search on Fernandina Island Confirms the Presence of Tortoises

9 December 2019 — The discovery of a giant tortoise on Fernandina Island earlier this year — an island where tortoises were believed to be extinct — increased the need for an intensive, thorough expedition to search the entire island's possible tortoise habitat for more tortoises. Since 1967, there have been reports of trails that suggest the presence of more than one animal on the island.

Last month, the Giant Tortoise Restoration Initiative (GTRI) team from the Galapagos National Park Directorate (GNPD) and Galapagos Conservancy executed an expedition in which 10 groups of scientists and Park rangers were deployed to thoroughly search the island for tortoises. However, in spite of their efforts, poor weather conditions that persisted throughout the six-day expedition made it difficult to fulfill the entire search plan, and only trails and feces of tortoises (possibly female) were found.

"The trails suggest that there is still at least one tortoise on the island, but the dense vegetation, especially ferns, made it impossible to locate," said Washington Tapia, Director of the GTRI and leader of the expedition. The team is planning a new and final search when weather conditions should be improved; most likely in January 2020. ❖

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Our Galápagos Adventure

text by Vicki Jaramillo and photographs from Alex Jaramillo

As a lifelong lover and owner of tortoises and turtles, I often had dreamed of traveling to the Galapagos Islands to visit the giant tortoises there. My husband Alex and I figured it was just a dream until the opportunity came that convinced us to act on that idea. My older sister Louise is an avid bird-watcher and a Master Naturalist, and learned through her membership in the Cornell Lab of Ornithology that trips were available.

Offered and operated by Galápagos Best, the Spring and Fall voyages promised an 8–day expedition to several of the Galápagos Islands highlighting the many rare and unique species of birds as well as reptiles. Soon to observe a milestone birthday, Louise said we all should go while we have the time, energy and money, so with our two adult daughters who also love wildlife we made our reservations. It was about a year and a half before we left our own pet cats, turtles and tortoises with a sitter in our Southern California home and embarked on our Fall journey.

A Galápagos tortoise photographed in a forested area.

We flew from Guayaquil, Ecuador to Baltra airport and boarded our new home, a handsome catamaran named the Tip Top II. Our tour group consisted of 14 fellow passengers who were photographers, bird watchers, librarians and snorkelers and all very compatible and fun. The leaders were PhDs from Cornell, and the Naturalist Guide was Fausto Rodriguez, a delightful energetic man very familiar with the animals, geology, and history of the Galápagos Islands.

The Jaramillo family — Alex, Vicki, Sonja, and Kathy — on Santa Cruz Island with a large native tortoise.

Each day followed a schedule of early rising, an expedition, breakfast, an expedition, a snack, lunch, another expedition, delicious healthy dinner and a review of the day's sightings, a lesson about island adaptation or animal behavior, and a description of the next day's plans.

Thanks to Dramamine we did not suffer too much from sea sickness. Assured that the motion of the boat traveling between islands during the night would "rock us to sleep in our cradles", we were alarmed on the second night by the rough rising and dropping action of the boat lasting several hours, and not much sleep happened that night! Morning brought smooth turquoise seas again and a broken anchor winch which was eventually replaced.

We had been prepared for hot sunny weather since we are located along the equator, but often the weather was cool and misty and very pleasant and the air, sweet and clean. We got used to clambering in and out of the "pangas," with the help of our excellent crew, in order to reach the various islands. A wet landing meant you'd be wading in the shore of a white sandy beach and a dry landing may mean balancing along a narrow strip of concrete or lava. We began seeing exciting animals as soon as we arrived on the islands: the iconic blue-footed boobies, land iguanas, Darwin's various finches and frigate birds. Later we saw

flamingos, penguins, mockingbirds, hawks, and albatrosses and other sea birds.

If you were able to navigate the very steep Cliffside Prince Phillip Steps on the remote island of Genovesa, you were rewarded with the sight of many nesting boobies, tropic birds, iguanas, and an owl. Snorkeling provided views of beautiful tropical fish, green sea turtles, sharks, rays and playful sea lions who swam right up to your face and invited you to roll and somersault in the sea. The animals and birds really were not afraid of people and did not run away from us at all. The marine iguanas and sea lions owned the beaches, and the boobies made weird whistling sounds and danced for each other.

Alex Jaramillo hiking near a pond and meeting three local tortoises.

Visiting the island of Santa Cruz was special: that is where thousands of wild Galápagos tortoises live in harmony with the farmers. We rode up into the highlands by bus and enjoyed hiking across the grassy areas where many enormous tortoises soaked in mud puddles and grazed in the grass along with cattle and birds. These tortoises with dome-shaped carapaces, *Geochelone nigrita*, are strictly protected as are all inhabitants of the Galápagos National Park. Invasive species such as goats and pigs have been controlled.

Some early human arrivals to the "Enchanted Islands" believed that the giant tortoises could see into your soul, and cursed the settlers. To us they appeared fat, happy and benevolent. On the bus ride back down from the highlands we counted 65 giant tortoises visible just from one side of the road and some casually traveling along the reddish dirt road, so the driver had to wait for them. One clever member of our group liked to make up funny poems each day about what we saw, and I wrote a haiku describing the scene:

Red Cloud Forest road.
Giant tortoise slowly strolls.
Disregards the bus.

The subject of Vicki Jaramillo's haiku as photographed from the tour bus window.

On the island of Floreana, the native tortoises have gone extinct but other tortoises brought there are thriving. This island has a beautiful cloud forest environment and many lush tropical plants. The immigrant human history is fascinating and scandalous. The founder of the eco-tourism company that operated our boats was Rolf Wittmer, who was born in a cave on this island in 1932.

We loved seeing the Post Office Bay, where whalers centuries ago would leave mail in a barrel awaiting the next ship to take and deliver it. Now it is a fun tradition for tourists to leave in a barrel an un-stamped post card addressed to self or friend, and other tourists look for cards addressed to locations near their homes. They are supposed to take those cards and hand-deliver them to the recipients. Two cards we "sent" this way did arrive amazingly at their destinations within a couple weeks!

Ecuadorian Naturalist Guide Fausto Rodriguez at the Post Office Bay on Floreana Island.

One clear night several of us gathered on the top deck of the Tip Top and gazed at the myriad stars, Milky Way, and constellations we never see from home.

It was a trip of a lifetime, and we have many memories of this wonderful place! Our contact person with Cornell was Myrah Bridwell whose email address is **mb252@cornell.edu**. ❖

Special thanks to Vicki and Alex Jaramillo, members of the CTTC Inland Empire chapter since 1976, for sharing their Galápagos travel adventure with the CTTC membership.

Care Society's 2019 "OkTurtleFest"

Photography by Anita De Leon and text by John Wong

▲John Wong

The Turtle and Tortoise Care Society held its annual "OkTurtleFest" event during its October 19th meeting. The festivities featured bratwurst and (root)beer along with side dishes provided by members and guests, costumed members, and a "show and tell" of members' turtles closing the event. It was an evening of good food, good friends, and insights into the members and their turtles.

▲Liz Underwood and Anita De Leon

▲Rusty Rustuen

▼Ginny Doepping

▲Show and Tell time!

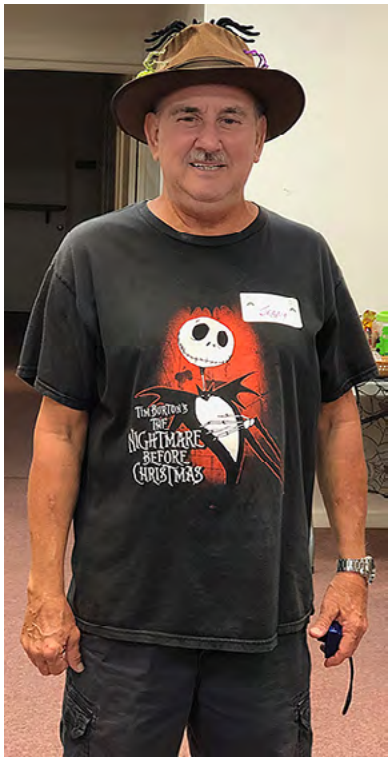
◀ Robbi Rustuen, Scott Ringwelski and Becky Rustuen

▲ A pirate and his matey!

▲ Nicole Perlman

▲ George Alcatraz

▲ It's the cat's meow!



▲ Jerry Weir

▲ Alex Guererro and Katy Chumly

▲ Scott Ringwelski

▶ Vicki Salcido-Smith and James Hong

▲ This turtle will scare the "SHELL" out of you!

New Meeting Location and Day for TTCS

Beginning on **18 January 2020**, the Turtle & Tortoise Care Society (Long Beach) will meet on the **third Saturday of every month** at 7:30 PM at a new location.

The address of the new meeting place is as follows:

St. Gregory's Episcopal Church
6201 East Willow Street
Long Beach, CA 90815.

▲ Henry Craig and Molly McLaren Craig

Largest Turtle Release on Record For Guatemala

Estación Biológica el Banco, Guatemala—9 December 2019—This week saw the largest release of sea turtles ever recorded in Guatemala. From 1st to 8th of December, 16,643 baby olive ridley sea turtles (*Lepidochelys olivacea*) were released on the Pacific Coast of Guatemala. This is the largest release of the species in Central America, outside of neighbouring countries, Mexico and Costa Rica. The endangered turtles were released as part of ongoing long term conservation efforts by the local community project, Tortugario el Banco.

Olive ridley sea turtles are the smallest of the seven species of sea turtles. Like all species of sea turtles, olive ridleys are considered threatened with extinction having suffered drastic population declines in recent years due to the over harvesting of eggs for human consumption. El Banco community member, and Director of Tortugario el Banco, Juan Hildago says "It was these declines that led members of the el Banco community to start collecting turtle eggs and incubating them in hatcheries, known locally as tortugarios."

Over the last 20 years Tortugario el Banco has worked with Guatemalan NGO Fundaselva to save sea turtles, and their efforts have seen baby turtle releases increase from 45,000 per year in 2014 to over 233,000 during 2018. Fundaselva's Scientific Director Rowland Griffin, said: "These increases show us just how important long-term efforts are for the conservation of sea turtles. With the commitment of the community of el Banco, these once scarce animals are coming back from the brink of extinction. It is so inspiring to see what can be achieved when a community comes together and works tirelessly to solve a conservation issue."

Biologists from Universidad del Valle de Guatemala and University of South East Norway are currently using dataloggers to monitor the temperatures on the beach at el Banco and in the nests of eggs at Tortugario el Banco. Daniel Ariano-Sanchez from the Department of Biology at Universidad del Valle says: "In the face of climate change, and rising temperatures, it is critical for us to understand what is happening to the temperatures in sea turtle nests. The sex of sea turtles is determined by the temperature at which the eggs are incubated. This means that if temperatures rise too high then only females will be produced. Or even worse, the embryos will die."

The next step in understanding the conservation status of olive ridley sea turtles at el Banco, is for Fundaselva to start a planned monitoring project of the adult population, which it will run from Estación Biológica el Banco in collaboration with Tortugario el Banco. The project which is part funded by volunteer participation, monitors the number of adult turtles coming to the beach to lay their eggs. ❖

—Fundaselva press release

Galápagos Lizard Photographs by the Jaramillo Family

Captions are based on information from the **Galápagos Conservancy website**.

◀ The only marine iguana (*Amblyrhynchus cristatus*) in the world is found in the Galápagos Islands. Although it is not especially agile on land, the marine iguana is an excellent swimmer, foraging for green algae at sea. At maturity it averages 28 inches (0.7 meter) in length.

▶ The Galápagos land iguana (*Conolophus subcristatus*) is one of three species of land iguana endemic to the Galápagos Islands. A large lizard, *C. subcristatus* can grow up to 3 feet (0.9 meter) at maturity, and males can weigh up to 30 pounds (14 kilograms). They feed primarily on shrubs and prickly-pear pads and fruit.

Mike's Turtle Net Picks by Michael J. Connor, Ph.D.

A varied selection of recent articles, stories and sites on the Web that some of you may find as interesting as I did. This list is also posted at tortoise.org/turtlenetpicks/turtlenetpicks.html

Tortoises Learn New Tricks and Remember Them
Aldabra tortoises taught to recognize colored balls remembered nine years later.

Feds May Allow New Highway through Red Cliffs Reserve
The Administration is moving forward with plans to build a highway through the most important desert tortoise habitat at Red Cliffs Reserve, St. George, Utah. This is land that was set aside to protect Utah's few remaining desert tortoises.

Giant Asian Forest Tortoise Head-Starting
Efforts to conserve and recover Bangladesh's remaining Asian Forest Turtles are paying off.

Gopher Tortoise Nesting and False Nesting Behavior
Biologists describe nesting behaviors of wild Gopher Tortoises, *Gopherus polyphemus*, at Archbold Biological Station in south-central Florida.

Pancake Tortoise Range Extension
A small population of the critically endangered Pancake tortoise discovered at Lewa Wildlife Conservancy in Kenya.

Yellow-Spotted River Turtle Release
Video of a release of head-started taricaya or yellow-spotted river turtle hatchlings in Peru.

Emmott's Short-neck Turtle
One of Australia's largest river turtles, the Cooper Creek or Emmott's short-neck turtle, *Emydura macquarii emmotti*, appears to be doing well despite drought.

Western Pond Turtle Head-Starting
Video overview of Woodland Park Zoo's western pond turtle program.

US Hawksbill Turtles Show Little Evidence of Recovery
New study shows that nest counts are a poor proxy for estimating adult female population status and highlights the need for multiple approaches to estimating turtle population trends.

The Administration Scales Back Moves to Protect Kemp's Ridley
Final rule exempts most shrimpers from new requirements to include escape hatches ("TEDS") in their nets to reduce risks of turtles drowning.

New Fossil Sheds Light on the Evolution of Modern Sea Turtles
Newly described 75 million year old fossil turtle, *Asmodochelys parhami*, may have been one of the most recent ancestors of modern sea turtles.

Global Turtle Mapping
Tennessee Aquarium is leading an effort to develop interactive maps of the world's turtle communities.

New Therapy For Sea Turtles With Red Tide Poisoning
A detox therapy used to treat overdoses in humans may help save endangered sea turtles from red tide poisoning!

Radiolab - There and Back Again
Podcast on long-distance migrations in birds, turtles, and mammals. (Most of the turtle discussion is in the second half)

CTTC's Turtle And Tortoise Listserve
CTTC's Turtle and Tortoise list has now moved to io.groups. If you want to talk with other turtle and tortoise fans in a friendly atmosphere just send an email to: **CTTC-TurtleAndTortoise-list+-subscribe@groups.io**

CTTC on Facebook
For breaking news updates visit and "like" us on Facebook!

2020 Meetings and Programs

Chino Valley
17 January: Laura Brewer from Prehistoric Pets;
21 February: David Brunette–Exotic Tortoises

Foothill
24 January; 28 February

High Desert
13 January; 10 February

Inland Empire
3 January; 7 February

Kern County
13 January; 10 February

Low Desert
3 February

Orange County
10 January; 14 February

Ridgecrest
13 January; 10 February

Santa Barbara-Ventura
Contact the chapter for meeting information.

Santa Clarita
18 January

TOOSLO (San Luis Obispo)
21 January; 18 February

TTCS (Long Beach)
18 January; 15 February

Valley
17 January; 21 February

Executive Board
TBA January 2020. Meetings take place at the Los Angeles County Arboretum in Arcadia, CA.

Click on your Chapter's website link for the latest program information. Programs may be scheduled after newsletter publication.

2020 California Turtle & Tortoise Club Directory

Executive Board
General Information:
CTTCEBOfficers@tortoise.org
Chair: **Don Williams**
Vice-chair: **Robyn Kohr**
Treasurer: **Javier Gonzalez**
Meeting: quarterly (January, April, July and October) at 10 AM at the Los Angeles County Arboretum, 301 No. Baldwin Avenue, Arcadia, CA 91007

Chino Valley Chapter
President: **Lynda Misiak**
Vice president: **David Bowman**
Secretary: **Rachelle Buck**
Adoptions: **Jim Misiak**
Meeting: Third Friday, 7:30 PM at Chino Girl Scout House, 5007 Center Street, Chino, CA 91710

Foothill Chapter
President: **Robin Robb**
Vice president: **Joanna Bolt**
Secretary: **Mardy Graves**
Treasurer/membership:
Jeanette Lea
Meeting: Fourth Friday, 7:30 PM at Los Angeles County Arboretum, 301 No. Baldwin Avenue, Arcadia, CA 91007

High Desert Chapter
President: **Regene Fonville**
Vice president: **Dave Zantiny**
Secretary: **Mary Dutro**
Treasurer: **Jose Zumudio**
Meeting: Second Monday, 7:00 PM at Sterling Inn Regency Room, 17738 Francesca Road, Victorville, CA 92395

Inland Empire Chapter
President: **Monica Dirac**
Vice president: **Richard Roosman**
Corresponding Secretary:
Amy Taylor
Treasurer: **Robyn Kohr**
Meeting: First Friday, 7:30 PM at "The Ark" Church of the Nazarenes in the Fellowship Hall in Young Hall, 1307 East Citrus Avenue, Redlands, CA 92374

Kern County Chapter
General Information:
TurtleTortoiseClubKern@gmail.com
President/membership:
Heather Ponek
Vice president: **Tim Brennan**
Secretary: **Lisa Marriott-Smith**
Treasurer: **Kathy Studer**
Adoptions:
Richard Marriott-Smith
Meeting: Second Monday, 6:30 PM at St. Philip of the Apostle Church, St. Ann's Room (east side of church), 7100 Stockdale Hwy (on the north side, between Ashe and Gosford), Bakersfield, CA 93309

Low Desert Chapter
General Information:
Tony Vaninetti
Secretary: **Marlies Dietrich**
Adoptions: **Bill Powers**
Meeting: First Monday of every even-numbered month 7:00 PM at The Living Desert Reserve, 47-900 Portola, Palm Desert, CA 92260-6156

Orange County Chapter
General Information:
orangecounty@tortoise.org
President: **Sharon Paquette**
Vice president: **John Kim**
Secretary: **Joyce Keyak**
Treasurer: **Traci Fields**
Adoptions
Meeting: Second Friday, 7:30 PM at Grand Street Center (First Presbyterian Church), 146 N. Grand Street, Orange, CA 92866

Ridgecrest Chapter
President: **Robert Parker**
Vice president: **Sue Parker**
Adoptions: **Montynne Yates**
Meeting: Second Monday, 7:30 PM at Maturango Museum, 100 East Las Flores Ave., Ridgecrest, CA 93555

Santa Barbara-Ventura Chapter
President: **Don Williams**
Meeting: Contact the Chapter for meeting information.

Santa Clarita Chapter
President: **George Ordway**
Secretary: **Jennifer Fields**
Treasurer/membership/adoptions:
Abigail DeSesa
Meeting: Third Saturday of odd-numbered months at 6:30 PM at Valencia United Methodist Church, 25718 McBean Pkwy, Valencia, California 91355

TOOSLO (San Luis Obispo) Chapter
President: **Brandon Froelicher**
Vice president: **Brian Kusko**
Treasurer/membership/adoptions:
Lola McAulay
Meeting: Second Wednesday, 7:00 PM at Ludwick Community Center Meeting Room. 864 Santa Rosa St., San Luis Obispo, CA 93401

Turtle & Tortoise Care Society (Long Beach) Chapter
President: **Richard Roosman**
Vice president: **John Kim**
Secretary/Membership:
Anita De Leon
Treasurer: **John Wong**
Meeting: Third Saturday, 7:30 PM at St. Gregory's Episcopal Church, 6201 East Willow Street, Long Beach, Ca. 90815

Valley Chapter
President: **Bob Hazard**
Treasurer: **Karen Berry**
Adoptions: **Valley Adoption Team**
Meeting: Third Friday, 7:30 PM at Woodland Hills Christian Church, 5920 Shoup Ave., Woodland Hills, CA 91367-3327

NOTE: The postal mailing addresses for each Chapter are listed on the last page of this newsletter.

California Turtle & Tortoise Club

CALIFORNIA TURTLE AND TORTOISE CLUB
WWW.TORTOISE.ORG

ADOPTION EVENT

Saturday, May, 16, 2020
10:00 am to 3:00 pm

5007 Center Street, Chino 91710

The *CALIFORNIA TURTLE AND TORTOISE CLUB* is holding an adoption event to help place turtles and tortoises in approved homes.

Come and talk to our adoption chairs and find out what is required for you to adopt a turtle or tortoise.

No fee required for adoptions. Come and obtain information and required forms to adopt:

DESERT TORTOISE
BOX TURTLE
WATER TURTLE
RUSSIAN TORTOISE
SULCATA TORTOISE

For more information, please contact:

THE CHINO CHAPTER @ jlcalif2@aol.com

Classified Advertisements

Classified advertisements run for one issue at 5^{00} for up to four lines. Ads are accepted at the discretion of the Editor. Classified ads are available to members and subscribers only and are run as a service to our members. California Turtle & Tortoise Club is **not** responsible for merchandise placed for sale in the *Tortuga Gazette*.

Please make your check payable to the California Turtle & Tortoise Club.

Please send ad fee to: CTTC *Tortuga Gazette*, attn Treasurer, P. O. Box 7300, Van Nuys, CA 91409-7300.

Mail fee with ad copy to the *Tortuga Gazette* mailing address; OR, mail fee to the postal address above, and email the ad copy to the **Gazette Editor**.

California Turtle & Tortoise Club: a Society Dedicated to Turtle & Tortoise Preservation, Conservation and Education since 1964. Promoting and Facilitating the Care, Rehoming, and Adoption of Native and Nonnative Turtles and Tortoises.

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The California Turtle & Tortoise Club (CTTC) is a non-profit 501(c)(3) corporation. Contributions are tax deductible to the full extent of the law. Please pay by USA funds only (US bank check, money order, or International Postal Order).

Membership in the CTTC and subscriptions to the *Tortuga Gazette* are handled through the CTTC Chapters. The Chapters also manage membership renewals (see postal addresses below).

Many members choose to join a nearby Chapter to participate in Chapter meetings and other activities. Print membership forms from the **CTTC website.**

Your Chapter and your renewal date (month/year) are displayed on your newsletter notification. Mail your new or renewal membership/subscription to the Chapter of your choice.

Membership fees

- **Student membership $15^{00}**
- **Individual membership $25^{00}**
- **Family membership $35^{00}**
- **Life membership $500^{00}**

CTTC Mailing Addresses

Chino Valley Chapter: P. O. Box 1753, Chino, CA 91708-1753

Foothill Chapter: P. O. Box 51002, Pasadena, CA 91115-1002

High Desert Chapter: P. O. Box 163, Victorville, CA 92393

Inland Empire Chapter: P.O. Box 2371, San Bernardino, CA 92406-2371

Kern County Chapter: P.O. Box 81772, Bakersfield, CA 93380-1772

Low Desert Chapter: P.O. Box 4156, Palm Desert, CA 92261

Orange County Chapter: P.O. Box 11124, Santa Ana, CA 92711

Ridgecrest Chapter: P. O. Box 1272, Ridgecrest, CA 93555

Santa Barbara-Ventura Chapter: P.O. Box 3086, Camarillo, CA 93011-3086

Santa Clarita Chapter: P.O. Box 4012, Castaic, CA 91310

TOOSLO Chapter: P.O. Box 763, Grover Beach, CA 93483

Turtle & Tortoise Care Society Chapter: P O Box 15952, Long Beach, CA 90815

Valley Chapter: P.O. Box 7364, Van Nuys, CA 91409-7364

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California Turtle & Tortoise Club
Post Office Box 7300
Van Nuys, California 91409-7300

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