

The World's Top 25 Most Endangered Turtles

2003



This list of the world's top 25 most endangered tortoises and freshwater turtles was compiled by the Turtle Conservation Fund (TCF)—a partnership of the Center for Applied Biodiversity Science (CABS) at Conservation International (CI), The World Conservation Union Species Survival Commission's (IUCN/SSC) Tortoise and Freshwater Turtle Specialist Group (TFTSG), and IUCN/SSC Turtle Survival Alliance (TSA).



1. River Terrapin

Batagur baska

S.E. Asia (Indo-Burma & Sundaland Hotspots)

IUCN Rank: Critically Endangered

Eliminated over much of its former range from chronic egg collection or harvesting of adult turtles and considered extinct through most of Indochina, a small population was discovered in Cambodia in 2001. Protected for centuries by Malaysian and Cambodian royalty, guards were posted at the communal nesting sites to protect the freshly laid eggs from local harvesting. These “royal turtle guards” are once again at work, funded by conservation organizations, to protect the nesting beaches. Thirty hatchlings were hatched and released in 2002 from this program.

2. Striped Narrow-headed Softshell Turtle

Chitra chitra

S.E. Asia (Indo-Burma Hotspot)

IUCN Rank: Critically Endangered

A potentially gigantic softshell turtle, specimens in the four-foot, 500 lb. range have been reported. Once considered on the verge of extinction, recent captive breeding events in both Malaysia and Thailand have provided new hope for the future of this magnificent fish eating species.

3. Roti Snake-necked Turtle

Chelodina mccordi

Southern Indonesia (Wallacea Hotspot)

IUCN Rank: Critically Endangered

Described in 1994 this turtles is restricted to an area of occupancy of less than 100 sq km on the single small island of Roti, Indonesia, where in less than 10 years it has rapidly reached commercial extinction due to over-collection for the international pet trade. Despite the existence of good habitat, this snake-necked turtle has nearly disappeared from areas of former occurrence and a species recovery plan is urgently needed.

4. Chinese Three-striped Box Turtle

Cuora trifasciata

Northern Vietnam & China (Indo-Burma Hotspot)

IUCN Rank: Critically Endangered

Considered the “poster child” for the Asian turtle crisis, this highly attractive and very personable turtle has suffered tremendously due to its value in traditional Chinese medicine. The belief that soup and jelly from this turtle has cancer-curing properties has placed an enormous burden on wild populations. Dogs trained to hunt these turtles have effectively eliminated them from most areas. Almost extinct but for a few remnant colonies, biologists routinely remove poachers’ traps to save the very few left in the wild.

5. Arakan Forest Turtle

Heosemys depressa

Myanmar (Indo-Burma Hotspot)

IUCN Rank: Critically Endangered

Once believed extinct, no specimens had been reported since 1908. However in 1994 a few specimens were spotted in a Chinese food market. Now encouraged, an expedition to the Arakan Forest in Myanmar has located a remaining population but more fieldwork is necessary to safeguard this elusive species. Good numbers exist now in captivity and attempts to understand their biology are underway.

6. Burmese Star Tortoise

Geochelone platynota

Myanmar (Indo-Burma Hotspot)

IUCN Rank: Critically Endangered

This striking tortoise had been a favorite Burmese food item, but its enhanced value in China has led to unsustainable collecting for export. A program underway with local Buddhist Monks may yield some protection for the remaining few in western Myanmar. The huge number already harvested may prove to have been too great for this tortoise to survive in the wild.

7. Sulawesi Forest Turtle

Leucocephalon yuwonoi

Indonesia (Wallacea Hotspot)

IUCN Rank: Critically Endangered

This enigmatic and curious turtle was first described in 1995 after being discovered by an Indonesian tropical fish exporter. Its range, hidden in a remote corner in one of the world's most populated countries, has not spared this turtle from over-exploitation by the Chinese food markets. It is critically endangered after only being known to science for less than 10 years. This turtle inhabits cool mountain streams and feeds primarily on fruit.

8. Painted Terrapin

Callagur borneoensis

S.E. Asia (Indo-Burma & Sundaland Hotspots)

IUCN Rank: Critically Endangered

Males of this species undergo a dramatic head color change during the breeding season giving this species the nickname "clown turtle". Inhabiting tidal flats and coastal estuaries, efforts to collect both adults and eggs are made easy by their stereotypic and predictable feeding and nesting patterns. Ranked as critically endangered due to years of overharvesting of eggs and now adults, government-sponsored headstarting programs in Malaysia may help boost wild population numbers.

9. Burmese Roofed Turtle

Kachuga trivittata

Myanmar (Indo-Burma Hotspot)

IUCN Rank: Endangered

Found only in Myanmar and regarded as one of the most threatened turtles in Asia, a live specimen has not been reliably recorded in the wild since 1935. However, four living specimens have turned up recently in temple ponds and in a Chinese food market, providing a glimmer of hope for this species' survival, ultimately which may depend on captive breeding.

10. Vietnam Leaf Turtle

Mauremys annamensis

Vietnam (Indo-Burma Hotspot)

IUCN Rank: Critically Endangered

Vietnam's proximity to the southern China food markets has spelled doom for much of its wildlife. This turtle's very small natural range in Central Vietnam made it particularly vulnerable and recent field expeditions have not been able to locate any remaining populations. Fortunately this species thrives and breeds well in captivity, which could provide a source for specimens for reintroduction in Vietnam.

11. Southern Speckled Padloper Tortoise

Homopus signatus cafer

South Africa (Succulent Karoo Hotspot)

IUCN Rank: Species Near Threatened, subspecies not yet ranked

The Southern Speckled Padloper tortoise is considered the world's smallest tortoise with adults not exceeding 4 inches in length. It lives in the warm dry succulent Karoo of southwestern South Africa. The padloper is found in areas of rocky outcroppings (granite koppies) where it likes to take refuge between the large rocks during the hot mid-day sun. It has an extremely restricted range and is therefore of special concern.

12. Yangtze Giant Softshell Turtle

Rafetus swinhoei

China and Vietnam (Indo-Burma Hotspot)

IUCN Rank: Critically Endangered

Perilously close to extinction, this giant softshell is currently probably the most endangered freshwater turtle in the world. Five captive specimens are known to exist in China and Vietnam in addition to one in Hoan Kiem Lake in Hanoi. Sightings of this old specimen are so rare that they become news in the local papers. Recent surveys throughout the species' range have turned up no evidence of wild turtles.

13. Madagascar Big-headed Turtle

Erymnochelys madagascariensis

Madagascar (Madagascar and Indian Ocean Islands Hotspot)

IUCN Rank: Endangered

Madagascar's only endemic freshwater turtle, this species has disappeared over much of its former range due to over-fishing by a protein-starved and impoverished nation. Recent extinctions of large lake populations have been documented, and unfortunately no populations exist within protected areas. A captive breeding and headstart program is underway to prevent this species' extinction.

14. Ploughshare Tortoise

Geochelone yniphora

Madagascar (Madagascar and Indian Ocean Islands Hotspot)

IUCN Rank: Endangered

The ploughshare tortoise, or *angonoka* as it is locally called, gets its English name from an unusually long projection (gular scute) extending under its head from the bottom of its shell. This gular scute is often used in combat to flip over opponent males when competing for females. This species is considered among the rarest tortoises in the world with less than 400 individuals believed to exist in the wild. The ploughshare is only found in the bamboo scrub near Baly Bay in northeastern Madagascar.

15. Flat-tailed Tortoise

Pyxis planicauda

Madagascar (Madagascar and Indian Ocean Islands Hotspot)

IUCN Rank: Endangered

The entire natural range of the flat-tailed tortoise in central western Madagascar is only about 50 square miles. Like many forest dwelling tortoises they eat fruit and spend a lot of time hiding in the leaf litter. The population of flat-tailed tortoises has been decimated by deforestation and very recently made even worse by over-collection for the pet trade in defiance of international conservation treaties. This is a resilient and determined little tortoise, which should respond very well to conservation strategies.

16. Geometric Tortoise

Psammodromus geometricus

South Africa (Cape Floristic Region Hotspot)

IUCN Rank: Endangered

This species is found only within a very limited area around Cape Town, South Africa, its previous range having been altered for agricultural purposes. South Africa is unique in that it has the highest tortoise diversity in the world: 14 out of 43 worldwide tortoise species occur here with 11 of these being found only in South Africa.

17. Philippine Forest Turtle

Heosemys leytenensis

Philippine Islands (Philippines Hotspot)

IUCN Rank: Critically Endangered

Known from only four specimens and considered one of the world's rarest and least known turtles, the original specimens were reported from the island of Leyte. Despite numerous attempts to "rediscover" this species, no wild populations are known to exist. The last specimen to reach a museum was collected on the island of Palawan in 1987, and further research is needed to correctly determine the taxonomic position of this enigmatic turtle.

18. Egyptian Tortoise

Testudo kleinmanni

S.E. Mediterranean (Mediterranean Basin Hotspot)

IUCN Rank: Endangered

The Egyptian tortoise is the smallest (5 inches) of the five Mediterranean species belonging to the genus *Testudo*, which makes it a popular tortoise in the pet trade. Despite its popularity it is a difficult tortoise to keep in captivity and therefore has a high incidence of mortality. The tortoise is found in dry woodlands and desert thorn shrub of Northern Libya, Northern Egypt, and Southern Israel, but has been extirpated from most regions. Efforts at its conservation are being undertaken by Bedouin herdsmen in the

Sinai, and populations in the Negev desert have recently been described as a closely-related even more critically endangered species, *Testudo weneri*.

19. Western Swamp Turtle

Pseudemydura umbrina

Australia (Southwestern Australia Hotspot)

IUCN Rank: Critically Endangered

This critically endangered turtle might be the world's rarest freshwater turtle. The species inhabits shallow swamps in a very limited area of southwestern Australia. Two small nature reserves were set aside for the species in the early 1960s but by that time there were only about 200 turtles remaining. Despite this "protection", the habitat deteriorated, and the population had dwindled to less than 30 individuals by the late 1980s. A successful captive breeding program was established and has succeeded in producing 423 hatchlings. As of October 2002, 263 captive bred *P. umbrina* juveniles have been re-introduced into the nature reserves where they are being monitored.

20. Mary River Turtle

Elusor macrurus

Australia

IUCN Rank: Endangered

Although hatchlings of this turtle flooded the pet shops of eastern Australian cities from the early 1960s to about 1974, its habitat remained a mystery for over 25 years. Intensive searches finally traced this species to the Mary River in southeast Queensland, where it is now known to be restricted. The turtle was formally described in 1994. Ongoing habitat degradation, along with predation from pigs and foxes, continues to threaten this turtle's survival and, indeed, it is now being viewed as an icon species for endangered riparian forests in the area. Community interest in the project is steadily being encouraged and Australian zoos are cooperatively managing captive stocks.

21. Dahl's Toad-headed Turtle

Batrachemys dahli

Colombia (Choco-Darien-Western Ecuador Hotspot)

IUCN Rank: Critically Endangered

Restricted to an isolated region near the north coast of Colombia, the majority of the toad-headed turtle's habitat has been fouled by domestic and industrial waste. Surviving in a highly degraded environment, individuals are rarely sighted and the species is believed to be in imminent danger of extinction. What remains of its natural habitat urgently needs reclamation, and a captive management program should be implemented immediately.

22. Abingdon Island Tortoise (Galapagos Tortoise)

Geochelone nigra abingdoni

Galapagos Islands

IUCN Rank: Extinct in the Wild

The last surviving representative of a lineage millions of years old, the single remaining Abingdon Island Tortoise, “Lonesome George”, was moved to the Charles Darwin Research Center in the 1970s. With 100 or more years of solitude ahead, George is an ominous reminder of the plight of turtles and tortoises worldwide. Of the roughly 15 distinct island forms of Galapagos tortoises, some have already become extinct, the victims of whalers in the mid-nineteenth century. Others remain critically endangered due primarily to the negative impact of introduced feral mammals. Urgent conservation measures undertaken in the past thirty years have rescued others from extinction.

23. Central American River Turtle

Dermatemys mawii

Central America (Mesoamerica Hotspot)

IUCN Rank: Endangered

Known locally as the “white turtle”, this large riverine turtle is heavily exploited for food throughout its range in Mexico, Belize, and Guatemala. The only living member of its lineage, this species is able to grow rapidly on a readily obtainable variety of plant material. *Dermatemys* may be an ideal candidate for farming operations to supply meat and eggs to urban areas while safeguarding wild populations.

24. Bog Turtle

Clemmys muhlenbergii

United States

IUCN Rank: Endangered

The smallest of North American turtles is restricted to spring-fed meadows and other acidic wetlands of the Piedmont and Appalachian Mountains. Habitat fragmentation and destruction, as well as over-collection for the black-market pet trade have decimated this naturally rare species. Conservation measures aimed at land acquisition and habitat protection have stabilized some populations, but much more is needed to ensure the future of this rare species.

25. Yellow-Blotched Map Turtle

Graptemys flavimaculata

United States

IUCN Rank: Endangered

Confined to the Pascagoula River of Mississippi, the little habitat remaining to this striking species suffers from rampant pollution and agricultural alteration of water levels that have destroyed its nesting beaches and the shallow microhabitats of the river margins used by juveniles. While providing camouflage against many predators, the map turtle’s intricate color pattern and subtle beauty are useless against the “turtle plinking” target practice of thoughtless recreational sportsmen that kill a significant portion of the remaining population each year.