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Top 25 Turtles On Death Row

New List Spotlights Most Endangered Turtles And Action Plan to Save Them

Washington, DC, May 15, 2003—The Turtle Conservation Fund (TCF) today released its first-ever list of the *World's Top 25 Most Endangered Turtles* to highlight the survival crisis facing the world's tortoises and freshwater turtles and to unveil a **Global Action Plan** to prevent further extinctions. Fully 200 of the 300 living species of tortoises and freshwater turtles are threatened and require conservation action.

The TCF list focuses on 25 species at highest risk and includes endangered and critically endangered tortoises and freshwater turtles, based on the World Conservation Union's (IUCN) Red List of Threatened Species, as well as general consensus between TCF's three partner organizations—the Center For Applied Biodiversity Science at Conservation International (CABS), The World Conservation Union Species Survival Commission's (IUCN/SSC) Tortoise and Freshwater Turtle Specialist Group (TFTSG), and IUCN/SSC Turtle Survival Alliance (TSA).

“Many of the critically endangered species are at great risk of going extinct within the next 20 years—unless we take immediate action,” said Kurt Buhlmann, Conservation International's director for the Center for Applied Biodiversity Science Turtle Program, and executive director for the Turtle Conservation Fund. “The Turtle Conservation Fund is a strategic partnership that combines the strengths of our organizations and will enable us to act quickly to avoid further extinctions and ensure sustainable populations of wild species.”

In Indonesia, for example, the Sulawesi forest turtle is already critically endangered after only being known to science for less than 10 years. The belief that soup and jelly made from the attractive Chinese three-striped box turtle has cancer-curing properties has reduced populations of this species to a few remnant colonies in Northern Vietnam and China.

“With nine of the world's turtle species and subspecies having already become extinct at the hands of modern man, and fully two-thirds of the remaining species under great threat, we have a crisis that needs to be addressed immediately,” said Anders Rhodin, director of the Chelonian Research Foundation, chair of the TCF and co-chair of the TFTSG. “The collaborative efforts of the Turtle Conservation Fund and its alliance partner organizations and quick implementation of an effective conservation action plan can help ensure their long-term survival.”

Turtles are increasingly threatened by human exploitation and development-related pressures. Of particular concern is the unrelenting demand from the Asian food and traditional medicine market with more than half of the continent's 90 species endangered or critically endangered. Tons of live turtles are imported each day to southern China from the Southeast Asia region, with more than 10 million individuals traded per year.

The non-sustainable harvest has decimated natural populations near the consumer source in China and has reached deep into the surrounding Southeast Asian regions and is now even beginning to impact turtles in North America, Africa, Europe and elsewhere.

In many areas, threats include development, habitat destruction and fragmentation, as well as unregulated pet trade collection. Turtles are also affected by other human-caused threats, including invasive alien species, chemical and hormonal pollution, gradual global warming, and various illnesses due to introduced pathogens, such as the upper respiratory tract disease affecting North American desert tortoises.

Species on the Top 25 list cling to survival in small numbers in Asia (12), South Africa (2), Madagascar (3), the Mediterranean (1), Australia (2), South America (2), Mesoamerica (1) and the United States (2).

Twenty-one of the species occur in 11 of the world's 25 biodiversity hotspots, areas which house the greatest number of species yet face the most severe threats. Critical to the turtles' survival will be protection of these hotspots where small populations still remain: Indo-Burma, Sundaland, the Philippines, Wallacea, Succulent Karoo, Cape Floristic Region, Madagascar & Indian Ocean Islands, Mediterranean Basin, Southwestern Australia, Choco-Darien-Western Ecuador, and Mesoamerica.

"Turtles have been around since before many dinosaurs walked the planet and have survived relatively unchanged for about 250 million years," said CI President Russell Mittermeier. "But mankind's actions have brought them to the brink of extinction. It's our responsibility to bring them back." CI believes that effective protection of these 11 hotspots will go a long way towards increasing the survival of 21 of the most endangered turtles.

In order to implement their five-year Global Action Plan, the TCF intends to raise an estimated \$5.6 million. Plans include captive breeding (using trade-confiscated turtles), additional field research, development of country support for trade monitoring, illegal trade confiscations, establishment of rescue centers, sustainable harvest programs, ecologically sound turtle farming (for commercial purposes to lessen pressures on wild populations), relocation and return to countries of origin, public outreach and educational programs, trade regulation enforcement, and identification and establishment of protected areas that take tortoises and freshwater turtles into consideration.

"While the Turtle Conservation Fund plan offers a glimmer of hope to some of the world's most endangered turtles; for some, it is already too late," said Rick Hudson, co-chair of the IUCN Turtle Survival Alliance, and a member of the Steering Committee of the TFTSG. "Unless urgent conservation action is taken, many more species may go the way of 'Lonesome George'," he said, referring to the famous sole surviving Galapagos Abingdon Island tortoise. As the last of his species, George's fate is sealed. He is destined to remain a bachelor for the rest of his days—about another 100 years.

For descriptions and photos of the top 25 endangered turtles, or to request an interview, contact Pamela Moyer at (202) 912-1294.

About the TCF and partner organizations:

The **Turtle Conservation Fund** (TCF) is a partnership initiative of Conservation International-The Center For Applied Biodiversity Science (CI-CABS), IUCN/SSC Tortoise and Freshwater Turtle Specialist Group, and IUCN/SSC Turtle Survival Alliance. Its mission is to ensure that no species of tortoise or freshwater turtle becomes extinct and that sustainable populations of all species persist in the wild, and will be achieved through facilitation and funding of coordinated global turtle conservation initiatives, including strategic partnership alliances and directed conservation action.

Conservation International (CI) is an environmental organization working in more than 30 countries around the globe to protect biodiversity and to demonstrate that human societies can live harmoniously with nature. CI develops scientific, policy and economic solutions to protect threatened natural ecosystems that are rich in biodiversity. Read more about CI at www.conservation.org.

The **Center For Applied Biodiversity Science** (CABS) based at Conservation International, strengthens the ability of CI and other institutions to accurately identify and quickly respond to emerging threats to Earth's biological diversity. CABS brings together leading experts in science and technology to collect and interpret data about biodiversity, to develop strategic plans for conservation and to forge key partnerships in all sectors toward conservation goals. Read more about cabs at <http://www.biodiversityscience.org/>.

The **Species Survival Commission** (SSC) is one of six volunteer commissions of the **World Conservation Union** (IUCN), a union of sovereign states, government agencies and non-governmental organizations. The SSC's mission is to conserve biological diversity by developing and executing programs to save, restore and wisely manage species and their habitats.

The **Turtle Survival Alliance** (TSA), under the auspices of IUCN-SSC, exists to develop and maintain a global network of living tortoises and freshwater turtles with the primary goal of maintaining these chelonian species over the long term to provide maximum future options for the recovery of wild populations. The TSA is comprised of individuals and organizations from 11 countries in North America, Europe, Asia and Australia representing conservation NGOs, private breeders, zoo community, commercial breeders, regional turtle survival centers, university researchers, veterinarians, corporations, government and regulatory agencies and range country biologists. It is a task force initiative of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Read more about TSA at www.turtlesurvival.org.

IUCN/SSC Tortoise and Freshwater Turtle Specialist Group (TFTSG), under the auspices of IUCN-SSC, is responsible for producing and revising threatened status determinations for all tortoise and freshwater turtle species according to the IUCN Red List criteria. TFTSG has been proactively engaged in population status determinations for CITES (Convention on International Trade in Endangered Species of Fauna and Flora) recommendations for regulations for species threatened by international trade.

Top 25 Turtles on Death Row

SNAPSHOTS OF THE WORLD'S TOP 25 MOST ENDANGERED TURTLES—2003



River terrapin
Batagur baska
S.E. Asia (Indo-Burma & Sundaland Hotspots)
Hugh Quinn, Cleveland Metroparks Zoo



Vietnam leaf turtle
Mauremys annamensis
Vietnam (Indo-Burma Hotspot)
Rick Reed, Fort Worth Zoo



Western swamp turtle
Pseudemydura umbrina
Australia (Southwestern Australia Hotspot)
Gerald Kuchling



Striped narrow-headed softshell turtle
Chitra chitra
S.E. Asia (Indo-Burma Hotspot)
Chris Tabaka, DVM



Southern speckled padloper tortoise
Homopus signatus cafer
South Africa (Succulent Karoo Hotspot)
Thomas F. J. Leuteritz



Mary river turtle
Elusor macrurus
Australia
John Cann



Roti snake-necked turtle
Chelodina mccordi
Southern Indonesia (Wallacea Hotspot)
R. Andrew Odum, Toledo Zoological Society



Yangtze giant softshell turtle
Rafetus swinhoei
China and Vietnam
Ha Dinh Duc



Dahl's toad-headed turtle
Batrachemys dabli
Colombia
Russell A. Mittermeier, Conservation International



Chinese three-striped box turtle
Cuora trifasciata
Northern Vietnam & China (Indo-Burma Hotspot)
Kurt Buhlmann, Conservation International



Madagascar big-headed turtle
Erymnochelys madagascariensis
Madagascar (Madagascar and Indian Ocean Islands Hotspot)
Gerald Kuchling



Abingdon Island tortoise (Galapagos Tortoise)
Geochelone nigra abingdoni
Galapagos Islands (Choco-Darien-Western Ecuador Hotspot)
Anders G. J. Rhodin, Chelonian Research Foundation



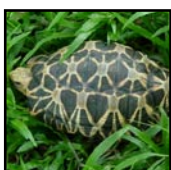
Arakan forest turtle
Heosemys depressa
Myanmar (Indo-Burma Hotspot)
James E. Barzyk



Ploughshare tortoise
Geochelone yniphora
Madagascar (Madagascar and Indian Ocean Islands Hotspot)
Thomas F. J. Leuteritz



Central American river turtle
Dermatemys mawii
Central America (Mesoamerica Hotspot)
John Polisar



Burmese star tortoise
Geochelone platynota
Myanmar (Indo-Burma Hotspot)
Chris Tabaka, DVM



Flat-tailed tortoise
Pyxis planicauda
Madagascar (Madagascar and Indian Ocean Islands Hotspot)
John L. Behler, Wildlife Conservation Society



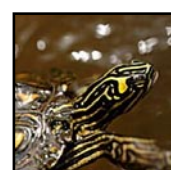
Bog turtle
Clemmys mühlenbergii
United States
Roger Barbour



Sulawesi forest turtle
Leucocephalon yuwonoi
Indonesia (Wallacea Hotspot)
Chris Tabaka, DVM



Geometric tortoise
Psammodromus geometricus
South Africa (Cape Floristic Region Hotspot)
Thomas F. J. Leuteritz



Yellow-blotched map turtle
Graptemys flavimaculata
United States
David E. Collins



Painted terrapin
Callagur borneoensis
S.E. Asia (Indo-Burma & Sundaland Hotspots)
Rick Reed, Fort Worth Zoo



Philippine forest turtle
Heosemys leytensis
Philippine Islands
Walter W. Timmermann, ETI World Biodiversity Database



Burmese roofed turtle
Kachuga trivittata
Myanmar (Indo-Burma Hotspot)
Gerald Kuchling



Egyptian tortoise
Testudo kleinmanni
S.E. Mediterranean (Mediterranean Basin Hotspot)
Omar Attum

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 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).

IMAGES AVAILABLE UPON REQUEST.

TOP 25 TURTLES ON DEATH ROW

THE WORLD'S TOP 25 MOST ENDANGERED TURTLES—2003



BIODIVERSITY HOTSPOTS

- | | | | | | | | |
|---|-----------------------------------|----|------------------------------|----|--------------------------------|----|---|
| 1 | TROPICAL ANDES | 8 | PHILIPPINES | 15 | NEW CALEDONIA | 22 | CENTRAL CHILE |
| 2 | SUNDALAND | 9 | CAPE FLORISTIC PROVINCE | 16 | CHOCÓ-DARIÉN-WESTERN ECUADOR | 23 | CAUCASUS |
| 3 | MEDITERRANEAN BASIN | 10 | MESOAMERICA | 17 | GUINEAN FORESTS OF WEST AFRICA | 24 | WALLACEA |
| 4 | MADAGASCAR & INDIAN OCEAN ISLANDS | 11 | BRAZILIAN CERRADO | 18 | WESTERN GHATS & SRI LANKA | 25 | EASTERN ARC MOUNTAINS & COASTAL FORESTS OF TANZANIA & KENYA |
| 5 | INDO-BURMA | 12 | SOUTHWEST AUSTRALIA | 19 | CALIFORNIA FLORISTIC PROVINCE | | |
| 6 | CARIBBEAN | 13 | MOUNTAINS OF SOUTHWEST CHINA | 20 | SUCCULENT KAROO | | |
| 7 | ATLANTIC FOREST REGION | 14 | POLYNESIA/MICRONESIA | 21 | NEW ZEALAND | | |

TOP 25 TURTLES ON DEATH ROW

THE WORLD'S TOP 25 MOST ENDANGERED TURTLES—2003

The top 25 most endangered tortoise and freshwater turtles cling to survival in small numbers in: Asia (12), South Africa (2), Madagascar (3), the Mediterranean (1), Australia (2), South America (2), Mesoamerica (1) and the United States (2).

Twenty-one of the world's top 25 most endangered tortoise and freshwater turtle species occur in 11 of the world's 25 biodiversity hotspots, areas which house the greatest number of species yet face the most severe threats. Critical to the turtles' survival will be protection of these hotspots where small populations still remain: Indo-Burma (9), Sundaland (2), Philippines (1), Wallacea (2), Madagascar & Indian Ocean Islands (3), Succulent Karoo (1), Cape Floristic Region (1), Mediterranean Basin (1), Southwestern Australia (1), Choco-Darien-Western Ecuador (1) and Mesoamerica (1).

INDO-BURMA HOTSPOT

Striped Narrow-headed Softshell Turtle (*Chitra chitra*), S.E. Asia

Chinese Three-striped Box Turtle (*Cuora trifasciata*), Northern Vietnam & China

Arakan Forest Turtle (*Heosemys depressa*), Myanmar
Burmese Star Tortoise (*Geochelone platynota*), Myanmar
Burmese Roofed Turtle (*Kachuga trivittata*), Myanmar

Vietnam Leaf Turtle (*Mauremys annamensis*), Vietnam
Yangtze Giant Softshell Turtle (*Rafetus swinhoei*), China & Vietnam

INDO-BURMA AND SUNDALAND HOTSPOTS (COMBINED)

River Terrapin (*Batagur baska*), S.E. Asia

Painted Terrapin (*Callagur borneoensis*), S.E. Asia

PHILIPPINES HOTSPOT

Philippine Forest Turtle (*Heosemys leytenis*)

WALLACEA HOTSPOT

Roti Snake-necked Turtle (*Chelodina mccordii*), Southern Indonesia

Sulawesi Forest Turtle (*Leucocephalon yuwonoi*), Indonesia

SUCCULENT KAROO HOTSPOT

Southern Speckled Padloper Tortoise (*Homopus signatus cafer*), South Africa

CAPE FLORISTIC REGION HOTSPOT

Geometric Tortoise (*Psammobates geometricus*), South Africa

MADAGASCAR AND INDIAN OCEAN ISLANDS HOTSPOT

Madagascar Big-headed Turtle (*Erymnochelys madagascariensis*), Madagascar

Ploughshare Tortoise (*Geochelone yniphora*), Madagascar

Flat-tailed Tortoise (*Pixys planicauda*), Madagascar

MEDITERRANEAN BASIN HOTSPOT

Egyptian Tortoise (*Testudo kleinmanni*), S.E. Mediterranean

SOUTHWESTERN AUSTRALIA HOTSPOT

Western Swamp Turtle (*Pseudemydura umbrina*), Australia

CHOCO-DARIEN-WESTERN ECUADOR HOTSPOT

Abingdon Island Tortoise (*Geochelone nigra abingdoni*), Galapagos Islands

MESOAMERICA HOTSPOT

Central American River Turtle (*Dermatemys mawii*), Central America

Top 25 species not occurring in hotspots:

AUSTRALIA

Mary River Turtle (*Elusor macrurus*)

COLOMBIA

Dahl's Toad-headed Turtle (*Batrachemys dahli*)

UNITED STATES

Bog Turtle (*Clemmys muhlenbergii*)

Yellow-Blotched Map Turtle (*Graptemys flavimaculata*)



Photo: Anders G. J. Rhodin, Chelonian Research Foundation



Photo: R. Andrew Quinn, Toledo Zoological Society

This list 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).

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.