

NEWSBRIEFS

Ray Ashton Receives Award

Ray E. Ashton, Jr., President of the Ashton Biodiversity Research & Preservation Institute, Inc., in Newberry, Florida, and one of the founders of the activist group, The Gopher Tortoise Conservation Initiative, was awarded the 2008 Citizen's Award at the 14th Annual Public Interest Environmental Conference held at the University of Florida Law School on 28 February 2008.

The award was presented for his outstanding contributions on behalf of Florida environmental and land use policy. Some of the contributions that Ashton has made include work with local county governments in developing policies that support local conservation of Gopher Tortoises and their habitats. Over the past two years, he has worked with 17 counties to establish programs that will help protect tortoises. Meanwhile, over the past ten years, he has been a strong voice attempting to change the old policies of the Florida Fish & Wildlife Conservation Commission from incidental take to one of long-term management and protection through uplisting the tortoise to threatened status in Florida and to encourage relocation of tortoises to well-managed and protected lands. He has proposed reasonable financing of tortoise management that would insure perpetual monitoring and management for generations to come. He and members of The Gopher Tortoise Conservation Initiative proposed a tax exemption to landowners that maintain natural lands. Today, farmers cannot maintain their agricultural exemptions on these lands and pay the highest taxes on them. Thanks to the Florida Wildlife Federation and other stakeholders, this tax bill and many changes have been brought forward to create an entirely different way of conserving a species.

Although Ashton is not totally pleased with the current rules being presented to the Florida Fish & Wildlife Conservation Commission in April 2007, he supports the direction in which they are going and hopes that the Commission will follow-up on promises to strengthen what is being presented in the near future. If they do not, we will

see a continued decline of Gopher Tortoises and the need for them to be federally listed.

Petition to End Commercial Harvest of Freshwater Turtles in Four Southern States

Conservation and health groups are seeking to end unsustainable commercial harvests of freshwater turtles in four southern states and to stop the exportation of contaminated turtles to international food markets. The Center for Biological Diversity filed emergency petitions with the states of Florida, Georgia, Oklahoma, and Texas to ban commercial turtle harvesting in public and private waters, to prevent further population declines of native southern turtle populations, and to protect public health. Turtles collected in these states and sold as food are often contaminated with mercury, PCBs, and pesticides.

Wildlife exporters and dealers are commercially harvesting massive and unsustainable numbers of wild freshwater turtles from Oklahoma, Florida, and Georgia, the few southern states that continue to allow unlimited and unregulated take of turtles. Herpetologists have reported drastic reductions in numbers and even the disappearance of many southern species of Map Turtles (genus *Graptemys*) in Georgia and Florida, especially in the panhandle. Recent surveys by Oklahoma State University show depletions and extinction of freshwater turtles in many Oklahoma streams, and commercial turtle buyers in Oklahoma reported purchasing almost 750,000 wild-caught turtles from 1994 to 1999. Over a quarter million wild-caught adult turtles captured in Texas were exported from the Dallas-Fort Worth Airport to Asia for human consumption from 2002 to 2005.

"Unregulated commercial trappers are capturing appalling numbers of freshwater turtles in southern states, including rare map turtle species that are so depleted they may need protection under the Endangered Species Act," said Jeff Miller, conservation advocate with the Center for Biological Diversity. "Collectors could legally harvest every

non-protected turtle that exists in the wild under the inadequate regulations that currently exist in Florida, Georgia, and Oklahoma. These turtles are an important part of aquatic ecosystems and should not be allowed to be wiped out."

Most wild turtles harvested in the southern United States are exported to supply food markets in Asia, primarily China, which has depleted or driven most of its native freshwater turtles to extinction in the wild. Numerous southeastern turtles are sold to Asian seafood markets in the United States as well. Many of these turtles are harvested from streams under state and federal fish advisories and bans that caution against and prohibit human consumption due to aquatic contaminants that are carcinogenic or harmful to humans such as DDT, PCBs, pesticides, mercury, and other heavy metals. Turtles live longer and bioaccumulate considerably greater amounts of aquatic contaminants than fish, particularly Common Snapping Turtles (*Chelydra serpentina*) and softshells (*Apalone* spp.) that burrow in contaminated sediments. "Hundreds of thousands of wild-caught turtles are sold locally as food or exported to international food markets from southern states each year, many contaminated with dangerous levels of mercury, PCBs, and pesticides," said Miller. "The potential health implications are staggering."

Because freshwater turtles are long-lived (some may reach 150 years of age), breed late in life, and have low reproductive and survival rates, they are highly sensitive to over-harvesting. Stable turtle populations are dependent on sufficient numbers of long-lived breeding adults to offset natural mortality and human



SUZANNE L. COLLINS, CMAA

Drastic reductions in numbers of Map Turtles (genus *Graptemys*) have been reported in Georgia and Florida. *Graptemys barbouri* is confined to the Apalachicola River system of Florida, Georgia, and Alabama.

impacts. Removal of just two adult turtles from a wild population could halve that population in as few as 50 years, since for each adult turtle removed, the reproductive potential of that animal is eliminated over a breeding life that may exceed 50 years. Commercial collecting of wild turtles intensifies the effects of water pollution, road mortality, incidental take from fishery devices, and habitat loss, which are already contributing to turtle declines. Scientists warn that freshwater turtles cannot sustain any significant level of harvest from the wild without leading to population crashes.

Adult turtles also are harvested from the wild to breed hatchlings in captivity for the international pet trade. Turtle dealers solicit huge numbers of wild turtles from American sources on the internet. A single dealer can employ a virtual army of hundreds of interstate turtle collectors to conduct unlimited turtle harvests in states where commercial harvest is still legal.

Oklahoma, Florida, and Georgia continue to allow unlimited commercial take of all sizes and ages of most species of turtles, using an unlimited quantity of hoopnets and box traps in public and private waters. In these states, many state and federally protected freshwater turtles are incidentally harvested and sold since turtle traps do not distinguish the species captured. Collectors often capture and misidentify protected species that appear similar to non-protected turtles. Hoopnets and box traps also capture, maim, kill, and drown protected turtle species, non-target fish, mammals, migratory birds, and sensitive species such as the federally threatened American Alligator (*Alligator mississippiensis*).

State wildlife agencies in Tennessee, Mississippi, North Carolina, and Alabama have prohibited commercial take of freshwater turtles from the wild. Wildlife biologists from states with bans have advised neighboring states to ban harvests, since wildlife traffickers illegally collect turtles in states where they are protected and claim they were collected in states where harvesting is still legal. Texas, Oklahoma, Florida, and Georgia do not survey to determine densities of turtle populations nor do they require commercial collectors to report the quantity and species of turtles harvested from the wild.

In 2007, the Texas Parks and Wildlife Commission voted to end commercial harvests of turtles in public waters but continued to allow unlimited harvests of some native turtle species from streams and lakes on private lands. An emergency petition was submitted today to the Texas Department of Health to ban all commercial turtle harvests in Texas, due to significant public health risk from consumption of contaminated turtles.

Because of their brilliant topographical patterns and colorations, all 12 species of map turtles from the southeastern United States are highly sought by the international pet trade, despite being protected under the Convention on International Trade in Endangered Species. Some species of map turtles fetch more than \$150 per adult on commercial internet websites. Map turtles are drainage specific; each watershed that drains into the Gulf of Mexico produces a brilliant, unique geophysical pattern and striking coloration on the shell and skin. Many map turtles in Texas, Alabama, Mississippi, Florida, and Georgia warrant federal protection under the Endangered Species Act, and two species, the Yellow-blotched Map Turtle (*Graptemys flavimaculata*) and Ringed Map Turtle (*G. oculifera*), that occur in Mississippi are already listed under the Act due to overcollection for the pet trade.

Also signing onto the petition are the St. John's Riverkeeper (Florida), Satilla Riverkeeper (Georgia), Altamaha Riverkeeper (Georgia), Oklahoma Chapter of the Sierra Club, Lone Star Chapter of the Sierra Club (Texas), Pinewoods Group of the Sierra Club (Texas), and the Center for Food Safety. The petitions and background information on the commercial harvest of freshwater turtles can be found on the Center for Biological Diversity Web site at:

http://www.biologicaldiversity.org/campaigns/southern_freshwater_turtles/index.html

The Center for Biological Diversity is a nonprofit conservation organization with more than 40,000 members dedicated to the protection of endangered species and wild places.

Jeff Miller

Center for Biological Diversity

Rudy Komarek, Rattlesnake Poacher

In early March 2008, Rudy Komarek (aka "Cobra King"), a notorious Timber Rattlesnake poacher and sometime showman, suffered a fatal heart attack at the age of 79. Apart from several well-known bounty hunters who took thousands of Timber Rattlesnakes (*Crotalus horridus*) at taxpayers' expense in three northeastern New York counties and one western Vermont county (see Jon Furman's *Timber Rattlesnakes in Vermont and New York*, University of New England Press, 2007), no single individual had a detrimental impact on northeastern populations of this species as great as that of Komarek.

During the second half of the 20th century, Komarek's extensive commercial collecting of reptiles in New York, Massachusetts, Connecticut, New Jersey, Pennsylvania, and West Virginia flourished in a career that spanned four decades. In 1994, Brown, Jones, and Stechert (*Bulletin of the Chicago Herpetological Society* 29:74-79) detailed Komarek's federal felony conviction for interstate trafficking, describing him as a "nefarious hominid" who single-handedly caused severe depletion or extirpation of many populations of Timber Rattlesnakes in the Northeast.

Using Stechert's long-term monitoring data of many of the same rattlesnake dens that Komarek is known to have exploited, Brown et al. (1994) estimated that Komarek accounted for over 2,900 Timber Rattlesnakes taken from 27 dens in eight counties in New York. We now believe that this estimate is overly conservative. Since our report was published, Stechert has continued to conduct detailed status surveys in New York, the results of which — in conjunction with the poacher's own admissions in recent



Rudy Komarek single-handedly caused severe depletion or extirpation of many populations of Timber Rattlesnakes (*Crotalus horridus*) in the northeastern United States.

BARNEY OLDFIELD

years — now allow us to provide an improved estimate of Komarek's take. Our revised estimate suggests that, over a lifetime of collecting, Komarek took or killed approximately 4,000–6,000 (best median estimate 5,000) Timber Rattlesnakes in New York, as well as hundreds in adjoining states.

Over the past 25 years, the Timber Rattlesnake has been legally protected as a threatened species in New York. Before Komarek fled the state (settling for several years in Pennsylvania and finally retreating to semi-retirement in Florida), he is believed to have had about a fourteen-year period of taking the species following its listing and protection in New York. Although an era of outright depletion of Timber Rattlesnakes may have slowed considerably due to Komarek's demise, we must take note of a variety of new and continuing threats to this snake's habitats and populations caused by greatly expanded urban sprawl in the form of housing and commercial developments.

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and

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Last Chance for the Yangtze Giant Softshell Turtle?

With only four individuals of *Rafetus swinhoei* known to exist worldwide (two in China and two in Vietnam), and only one of these a female, the stakes could not be much higher. A historic effort is now underway in China to move the lone female, currently at the Changsha Zoo, to the Suzhou Zoo for breeding with their captive male.

A collaborative effort between the Turtle Survival Alliance (TSA) and Wildlife Conservation Society (WCS), the team responsible for the move arrived in China on 1 May. Led by Dr. Gerald Kuchling (University of Western Australia), the world's leading chelonian reproductive physiologist, the team consists of Paul Calle, DVM (Bronx Zoo), Scott Davis (manager of the largest collection of Giant Softshell Turtles outside of

Asia), Nimal Fernando (Ocean Park Hong Kong veterinarian), Alex Grioni (Kadoorie Farm and Botanic Garden veterinarian), and Mitch Kalmanson, who was contracted by the TSA to insure the female during transport and to handle transportation logistics. A PBS Nature film crew will be on hand to document this incredible event for an upcoming special on efforts to breed critically endangered species in captivity. Chinese media attention promises to be intense as well.

The plan is for Dr. Kuchling and Lu Shunquing (WCS China) to inspect the recently modified breeding facilities at Suzhou Zoo; then, if approved, the female will undergo an ultrasound exam to determine her reproductive status. A 2007 exam indicated that she would likely ovulate in mid-May, so the plan is to have her with the male before then. The female will tentatively be driven to Suzhou, a 620-mile trip, on 5 May. The breeding pond at Suzhou Zoo has been subdivided to allow the pair to see and smell each other and gauge their reaction before the introduction occurs. If mating is successful, the male will be removed and the female left alone to nest.

"I hate to call this a desperation move, but it really is," Rick Hudson, Co-Chair of the TSA said. "The risks are certainly there, but doing nothing is much riskier." The TSA is growing accustomed to high-pressure situations — such is the case when working with critically endangered species — but nothing of this magnitude. The planning that has been

involved to get us to this point has been intensive and has produced a remarkable partnership based on the strengths of both the TSA global network and WCS China. This move has required major financial support (at least \$25,000 and the total could increase) and the following organizations are recognized for their contributions: Turtle Conservation Fund, Batchelor Foundation, Kadoorie Farm and Botanic Garden, Ocean Park Conservation Foundation, and Walter Sedgwick.

Should this move go through as planned look for a media storm to follow. And keep your fingers crossed that this goes well. We may not get a second chance.

Turtle Survival Alliance

5 May 2008.—History is being made today — and TSA is leading the way. The last known female Yangtze Giant Softshell Turtle (*Rafetus swinhoei*) is on her way to join the last captive male at the Suzhou Zoo in China. The team transporting the turtle left Changsha this morning about 2 AM CST, a 3-van caravan (including a PBS Nature film crew) starting an 1,100-km trip. Dr. Gerald Kuchling has inspected the modified breeding pond at Suzhou and recommended some last-minute changes before returning to Changsha, where he performed a reproductive ultrasound exam on the female. The good news is that she has not yet ovulated and has 11 pre-ovu-



With only four known individuals, the Yangtze Giant Softshell Turtle (*Rafetus swinhoei*) is likely the most endangered species on earth.

GERALD KUCHLING



TOMMY OWENS, SAN DIEGO ZOO

Hatchling Roti Island Snakeneck Turtle (*Chelodina mccordi*), one of two rare turtles successfully bred at the Fort Worth Zoo.

latory follicles and good fat deposits. The move appears to be right on time.

6 May 2008.—A call last night from “Team Rafetus” announced that, amid great fanfare, they had just put the female in the breeding pond at Suzhou Zoo. She headed down the ramp into the pool, and surfaced a few seconds later and began looking around. The pond is divided with fencing into three sections. Today, the male will be allowed into that adjacent to the female to allow and assess interaction. Phase 1 of this historic operation is complete, and the team is upbeat about the chances of a successful introduction.

Fort Worth Zoo Announces Significant Hatchings

A Forsten's Tortoise (*Indotestudo forsteni*) hatched on 2 April 2008, and four eggs from other clutches are still incubating. The Zoo's group of 4.2 was assembled in late 2005 for inclusion in the conservation-based collection at the Animal Outreach and Conservation Center (ARCC) that opened in March 2006.

The Zoo also reported the hatching of 13 Roti Island Snakeneck Turtles



RICK HUDSON

Hatchling Forsten's Tortoise (*Indotestudo forsteni*), the other rare turtle bred at the Fort Worth Zoo.

(*Chelodina mccordi*) with another 30 eggs still incubating. This species also is included in the ARCC collection.

Turtle Survival Alliance

Death-Dealing Frogs

Are Bullfrogs a four-legged version of Typhoid Mary, spreading a lethal plague among their fellows but remaining unaffected themselves? That's one of the newer hypotheses for a global die-off of frogs and other amphibians, which may already have led to the extinction of more than 100 species since the 1980s. Other hypotheses include increased ultraviolet-B radiation, pesticides, habitat loss, and a mystery parasite.



S. PRICE, BEROGWATCH/VECTRIA GOV/ECOA

Introduced Bullfrogs (*Rana catesbeiana*) have displaced native amphibians from large areas of southeastern Vancouver Island in Canada — and may be carriers of a deadly fungus.

“It's never going to be one single cause,” cautions Purnima Govindarajulu, a biologist who has been tracking the exploding Bullfrog (*Rana catesbeiana*) population on Vancouver Island for the past decade. A fungus known as Bd may be a major reason that Bullfrogs are supplanting common island denizens such as the Western Toad (*Bufo boreas*) and the Red-legged Frog (*Rana aurora*). Bd is short for *Batrachochytrium dendrobatidis*, a fresh-water mold identified in 1998 as responsible for a disease that's deadly to many amphibians, but not to Bullfrogs, which all carry Bd. Govindarajulu began investigating the island's Bullfrog explosion in 1997 for her Ph.D. at the University of Victoria, supervised by evolutionary ecologist Brad Anholt. Now a herpetofaunal specialist with the B.C. environmental ministry, she is coordinating amphibian collections across the province, but keeping an eye on Bd and Bullfrogs as an adjunct professor at UVic.

“We've found Bd in places here where there are no Bullfrogs. For instance, Rough-skinned Newts (*Taricha granulosa*) also carry it, and they are native to Vancouver Island,” she says. The province is now appealing to all biologists to report dead frogs to get a better handle on the extent of the problem. Meanwhile Anholt's lab is preparing molecular family histories of both Bullfrogs and the Bd fungus. “If the two family histories are congruent then there's a good chance that Bullfrogs are the carriers,” says Anholt.

Peter Calamai
Toronto Star

2008 Gopher Tortoise Council Meeting

The annual meeting of the Gopher Tortoise Council will be held at the Oceanside Inn and Suites, Jekyll Island, Georgia on 3–4 October 2008. The meeting will feature a special session on Friday of presentations on Wildlife and Ecosystem Health, with confirmed presentations by Elliot Jacobson, Sonya Hernandez Divers, Charles Innis, Steven H. Divers, Terry Norton, John Maerz, Scott Connelly, Nancy Stedman, Lori Wendland, Matt Aresco, Kimberly Andrews, and Greg Lewbart. On Saturday, the scientific program continues with contributed presentations and posters on any topic relating to the Gopher Tortoise and the Longleaf Pine ecosystem. A tour of the Georgia Sea Turtle Center will be offered Friday evening. For more information and registration information, please visit the Gopher Tortoise Council's website at www.gophertortoisecouncil.org/events.php.



SUZANNE L. COLLINS, CMH

The scientific program of the Gopher Tortoise Council will focus on the Gopher Tortoise (*Gopherus polyphemus*) and the Longleaf Pine (*Pinus palustris*) ecosystem.