

NEWSBRIEFS

Suspect Sliders Stopped

The Florida Fish and Wildlife Conservation Commission approved new regulations concerning many species that are not native to Florida. The new rules add the Red-eared Slider (*Trachemys scripta elegans*) to a list of “conditional species” that are covered under this rule. The rule will prohibit the possession of any Red-eared Slider less than four inches (10 cm) carapace length after 1 July 2008, except by special permit. Red-eared Sliders possessed prior to 1 July 2007 (when the rules are proposed to become effective) will be exempt, as will those with distinctive aberrant color patterns (e.g., albino, amelanistic); the latter sell for high prices, are unlikely to be released, and probably have low survival value in the wild. The rule does not prohibit breeders from exporting sliders out of state. The Florida reptile pet industry



KEVIN ENGLE

Red-eared Sliders (*Trachemys scripta elegans*) have become a plague in Florida, where they have been introduced, presumably via the pet trade. Many have been released into the wild, where they are breeding and competing or even hybridizing with native turtles. The female (top) was collected in Miami, the adult (middle) was photographed in Oak Grove Park (Miami), and the 28 turtles in the tubs (bottom) were trapped in one night using 12 traps at Crandon Park on Key Biscayne.

**The Carolina Herp Atlas**

E. PERSON HILL

Redbelly Water Snakes (*Nerodia erythrogaster*) are essentially ubiquitous in the Carolinas. This image graces the Carolina Herp Atlas homepage (www.carolinaherpatlas.org).

expressed its support for the new rules. Thanks go to everyone who wrote to the Commission last year in support of establishing rules that would help to prohibit the mass sales of Red-ear Slider hatchlings in Florida (at least some of which are released into the wild to compete or hybridize with native turtles).

Carolina Herp Atlas on the Web

The Carolina Herp Atlas, a new online database developed by Davidson College and partly funded by the N.C. Wildlife Resources Commission (WRC), will harness the power of “backyard biologists” with an interactive website that could shed new light on countless animals across North and South Carolina. “Many species of amphibians and reptiles are very difficult to sample because they’re either rare, difficult to find, or active at times that make it tough,” said Mike Dorcas, an associate professor with Davidson’s biology department. “The Carolina Herp Atlas provides a method where we can rapidly collect information on the distribution of amphibians and reptiles, and that information is desperately needed for us to make management decisions.”

“In the past, we’ve relied on a small number of herpetologists to provide the critical information that is used by the Wildlife Resources Commission to prioritize conservation activities for reptiles and amphibians,” said Chris McGrath, a biologist with the N.C. WRC. “The Carolina Herp Atlas is a powerful new tool that gives all citizens an opportunity to contribute scientific information that will help the Commission achieve our wildlife conservation goals.”

For more information or to become a member, visit the Carolina Herp Atlas at www.carolinaherpatlas.org.

Raleigh, North Carolina

Funding Cut for the Savannah River Ecology Laboratory

The Savannah River Ecology Laboratory (SREL) is a research unit of The University of Georgia, located on a U.S. Department of Energy (DOE) facility and primarily funded by DOE. Founded in 1951, SREL provides independent evaluations of the ecological effects of the nuclear reactor located on the site. Activities include extensive research, including many valuable herpetological studies, as well as education and outreach. A major benefit of the Savannah River Ecology Lab has been its long-term research and steady accumulation of detailed field records that can provide insights into, among other things, the possible consequences of climate change on the complex ecology of the region. Unfortunately, we may lose this valuable resource. Funding was exhausted at the end of May 2007, and the lab will be forced to close unless additional funds can be obtained.

During the past year, SREL has worked with Savannah River Site (SRS) representatives to implement a new 5-year cooperative agreement with task-based funding, similar to what has been used for the past 20+ years. According to written and verbal communications from DOE, the funds have been budgeted for SREL tasks that have been underway since September 2006, and the funds are actually at the SRS to complete these

tasks. However, the funds have not been released to SREL, a decision made by officials at DOE Headquarters in Washington, D.C. The nature of the tasks proposed and approved by SRS managers appears not to have played a role in this decision.

The SREL has been home to herpetologists Drs. J. Whitfield Gibbons and Justin D. Congdon and their colleagues, collaborators, and students for 30+ years. Gibbons, who received the esteemed Henry S. Fitch Award for Excellence in Herpetology in 2006, and his colleagues have conducted ecological research on reptiles and amphibians since 1967, producing over 700 research papers and 15 books. The SRS has been a host to several long-term ecological studies, resulting in the marking of over 20,000 turtles, and the capture and re-release of 1.4 million amphibians and 20,000 snakes. Closure of SREL would also bring to an end an ongoing, long-term study of an amphibian community at Rainbow Bay that was initiated in 1978 and continues today with the help of researcher David Scott. The loss of this long-term amphibian study comes at a critical time, when amphibian population declines are being reported globally and as many as 32% of amphibian species are threatened. SREL was one of the founding constituents of Partners in Amphibian and Reptile Conservation

(PARC; www.parcplace.org), and members of SREL were present at the first stakeholder meeting to establish PARC in Atlanta in 1998.

“Closure of SREL would be a tragic loss to the global science of reptile and amphibian ecology,” stated Brian Todd, SREL graduate student and doctoral candidate at the University of Georgia. “The attempted closure of SREL is yet another warning of the increased hostility against independent environmental oversight and ecological research that we have seen in recent years. Today it may be SREL, but tomorrow it could undoubtedly be any other ecological research lab. It saddens me deeply that the closure of SREL may come so soon after the losses of SREL founder Dr. Eugene Odum and vocal SREL advocate and alumnus Dr. Frank Golley. It does no honor to their memory to dismantle the lab that they put on the map. We must come together and take a stand to declare that ‘enough is enough’ or we will see no end to the loss of important institutions like SREL and others.”

In late May, the Investigations and Oversight (I&O) Subcommittee and the Energy and Environment (E&E) Subcommittee of the House Committee on Science and Technology called on Energy Secretary Samuel Bodman to continue funding for the Savannah River Ecology Lab. “We are currently unsure

why and how the decision was made to terminate the Department’s support for the facility,” wrote I&O Subcommittee Chairman Brad Miller (D-NC). “We ask that you continue to provide support to the lab until the Committee can thoroughly review the Department’s actions in this case.” “The Subcommittees deserve a chance to review the logic that led DOE to terminate support for a lab that has been doing world-class research since 1951,” added E&E Subcommittee Chairman Nick Lampson (D-TX). “On the face of it, this is a difficult action to understand.”

Miller and Lampson called the lab indispensable in tracking the environmental conditions around the Savannah River site and providing unbiased information to the public and the government about those conditions. The Chairmen have asked for continued support for the lab from DOE pending further review by the Subcommittee. They have also asked that the Department provide all records since 1 August 2006 regarding the lab and the decision to terminate support.

All citizens, including researchers, parents, teachers, and children, who want to urge DOE to release the funding for SREL to continue tasks approved by SRS managers should contact individuals who could make this happen. The more people who express their concern, the more likely it is that action will be taken. You should write letters to your congressional representatives, newspapers, or anyone else you think should know.

Kansas River Flood Triggers Snake Movements

Alfred Cramer and Lisa Bryson had been sitting on large, jagged rocks watching the rapid flow of the Kansas River when they suddenly realized they had close company. “There was a snake and a muskrat, or something like a rat,” Cramer said of a couple of critters they saw crawling among the rocks near the river’s edge just east of the Bowersock Dam. Cramer and Bryson decided it was time to move off the rocks to the dirt path behind them. They were among a steady stream of people who continued to gather Tuesday on the banks of the Kaw (= Kansas) to watch the slowly receding river and the tremendous amount of debris it carried.



SIZANNE L. COLLINS, CMAH

Ornate Chorus Frogs (*Pseudacris ornata*) are among the 1.4 million amphibians that have been examined in long-term studies conducted at the Savannah River Ecology Laboratory since 1967. The lab will be forced to close unless additional funds can be obtained after threatened cuts in federal support.



Flooding causes snakes along rivers to move to higher ground. The Northern Water Snake (*Nerodia sipedon*) is a common species in the Kaw River system, and probably accounts for most sightings of snakes during springtime floods.

Lawrence residents Jonathan Doerr and Steve Dahlberg also saw snakes on the bank. "We thought there was a Copperhead over there, but someone said it was something else," Dahlberg said, pointing to a now-vacant slab of rock. The flood may cause more snake sightings near the river, but that doesn't mean there are more of them, said John Simmons, collections manager in the division of herpetology at Kansas University's Natural History Museum. Simmons indicated that the rising water has flooded the snakes' usual places to sit and hide, causing them to move around, looking for places to go. Water snakes in the Lawrence area are not venomous, and Water Moccasins, which are venomous, do not occur in the area.

Mike Belt

Lawrence Journal-World, 9 May 2007

Adding Insult to Injury

A Chesterton man faces possible charges of illegal possession of venomous snakes after one of his "pets" bit him. Robert Urbanski, 66, was airlifted to Methodist Hospital in Indianapolis after suffering the snake bite. Urbanski told rescue personnel he was handling a Western Diamondback Rattlesnake (*Crotalus atrox*) when it bit him.

An Indiana Department of Natural Resources (DNR) conservation officer arrived at the home and learned that two rattlesnakes were still inside the house. Urbanski told investigators that he had purchased the snakes five days earlier at a swap meet in Hamburg, Pennsylvania. One was a Western Diamondback and the other a Dusky Pygmy Rattlesnake (*Sistrurus miliarius*). Owing venomous

snakes without a permit is illegal in Indiana. The DNR said Urbanski did not have a permit. The case was referred to the Porter County Prosecutor's Office for possible charges for illegal possession of venomous snakes.



A "pet" Western Diamondback Rattlesnake (*Crotalus atrox*) bit its owner, who may face charges for illegal possession of a venomous snake.

The snakes are being held at the DNR's Michigan City office and will be destroyed. They cannot be returned to the wild. Western Diamondbacks are commonly found in the southwest, whereas Pigmy Rattlesnakes are found in Florida. Neither is indigenous to northwestern Indiana.

Tom Wyatt

Northwest Indiana Post-Tribune
7 & 8 May 2007

A License to Kill Gopher Tortoises

Workers buried the 30-pound Gopher Tortoise (*Gopherus polyphemus*) on a Lee County construction site, its shell crushed by a backhoe. Two weeks later,



Florida's "pay-to-pave" program had issued permits to bury more than 94,000 Gopher Tortoises (*Gopherus polyphemus*).

despite a spinal injury, the determined tortoise dug its way out. The remarkable resurrection led a wildlife expert to nickname the 16-inch-long tortoise "Phoenix." It was the largest Gopher Tortoise ever found in the wild. It died last week.

For 16 years, Florida officials have allowed developers to bury Gopher Tortoises alive and pave over their burrows, in exchange for paying money into a fund to buy land for tortoises elsewhere. Because of their low metabolic rate, tortoises can take months to suffocate under convenience store parking lots, shopping centers, and new subdivisions.

By this year, the state's pay-to-pave program had issued permits to bury more than 94,000 Gopher Tortoises. Now the species is in sharp decline, and tortoise experts blame the permitting program. "It's a massive loss of tortoises," said George Heinrich of Heinrich Ecological Services in St. Petersburg and a former co-chairman of the Gopher Tortoise Council, a group of biologists concerned about the animal's future.

State wildlife officials have decided to end the program by 31 July 2007, prompting a rush by developers to beat the deadline. Up to a dozen applications a week have been sent in for the last permits to kill Gopher Tortoises, according to Rick McCann, who runs the permit program for the Florida Fish and Wildlife Conservation Commission.

Four months ago, for instance, the Orlando-Orange County Expressway Authority got a permit to kill more than 400 Gopher Tortoises whose burrows were in the path of a new highway. Before the bulldozers could crank up, the Humane Society of the United States

lodged a protest. Last month the expressway authority agreed to drop its plans to kill the tortoises and agreed to move them to a Gopher Tortoise preserve area in the 48,000-acre Nokuse Plantation in the Panhandle.

The Humane Society is eager to see the pay-to-pave program end, said Jennifer Hobgood, program coordinator in the society's Tallahassee regional office. But Hobgood is concerned about the rush to beat the deadline. The permits the state wildlife commission are issuing now have no expiration date, so developers who get them can use them any time in the future. "They would be permitted to kill limitless numbers of tortoises indefinitely," Hobgood said.

No one knows for sure how many Gopher Tortoises remain, but more live in Florida than anywhere else. However, the habitat Gopher Tortoises favor also is popular with developers. By 2003, more than 1.7 million acres of Florida land that was once tortoise habitat had been turned into home sites, roads, shopping centers, and the like, according to the wildlife commission. In 1979, state wildlife officials included them on a list of imperiled animals as a "species of special concern." That meant no one could harm or harass one without the state's permission.

Since 1991, developers who wanted to build in Gopher Tortoise habitat could choose between two state-authorized solutions: Write a check to the state and pave over the burrows, suffocating the occupants, or pay someone to find all the Gopher Tortoises and move them. Moving tortoises was the feel-good choice, McCann said, but it didn't always work. The tortoises often tried to find their way home, only to be run over; or they carried a respiratory disease that then spread to other tortoises already on their new home turf. For a while, the state required developers who wanted to relocate Gopher Tortoises to pay to test them for the disease first, making that option much more expensive than paying to kill the tortoises.

McCann contended that the pay-to-pave program was, in a way, better for Gopher Tortoises, because the money collected from developers was used to buy and preserve 25,000 acres of tortoise habitat. Unfortunately, that makes up for only one-fifth of the habitat that's been

wiped out, Hobgood said. Meanwhile, the government has sanctioned suffocating tens of thousands of the animals.

In a report last summer, a panel of state wildlife experts estimated that the population of Gopher Tortoises in Florida has declined by more than half in the past 60 to 90 years. That persuaded state officials to take the first step toward bumping the tortoise up to "threatened," one rung below "endangered." The change is long overdue, said Matt Aresco, conservation director of Nokuse Plantation.

Craig Pittman
St. Petersburg Times
7 May 2007

Monitor Lizard Shot in Orlando

A 4½-foot monitor lizard that made waves in the Lost Lake subdivision earlier this month is believed to be dead, Casselberry police said. A police officer caught the lizard sunning on the bank of a pond and shot it twice. The creature crawled back into the water after being struck, and authorities have not been able to locate the body.

Officers had been given the go-ahead to take out the vicious lizard after several attempts to trap it, including one in which it dragged a trapper into the water. Police think the creature once was a house pet that either escaped or was released when it grew too large to be confined. Residents in the area feared for their pets' and children's safety after close encounters with the lizard.

Sarah Langbein
Orlando Sentinel
27 May 2007

Cairo Snake Smuggler Snared

Customs officers were stunned when a passenger was caught trying to smuggle 700 live snakes onto a plane. The man was stopped at Cairo's international airport with the serpents stashed in small cloth sacks in a carry-on bag. Among the snakes were two poisonous cobras. The would-be smuggler said he had hoped to take them into Saudi Arabia and sell them.

Police confiscated the snakes and turned the passenger over to the prosecutor's office, accusing him of violating export laws and endangering the lives of other passengers. According to customs officials, the would-be smuggler claimed that the snakes are wanted by Saudis who display them in glass jars in their shops, sell them to research centers, and keep them as pets.

news.sky.com
25 May 2007



WOLFGANG WÜSTER

Customs officers in Cairo arrested a passenger trying to smuggle 700 live snakes, including two Egyptian Cobras (*Naja haje*), onto a plane. The snakes were destined for Saudi Arabia.



TODD CAMPBELL

An Orlando police officer shot a Monitor Lizard (*Varanus niloticus*) sunning on the bank of a pond. Residents in the area feared for their pets' and children's safety.

Los Angeles Gator Captured

One of America's most-wanted has finally been caught — after spending the past two years lounging in a Los Angeles lake. For months, the 2-m American Alligator (*Alligator mississippiensis*) called Reggie evaded authorities and made more headline news than the average A-list celebrity. The late “Crocodile Hunter” Steve Irwin had even offered to help nab Reggie at one point, when the local newspaper kept a “Reggie Watch” on its masthead.



DESIRÉE WONG

“Reggie,” a 2-m long American Alligator (*Alligator mississippiensis*) became quite a celebrity before his capture in a Los Angeles (California) lake.

Reggie even inspired a song, two children's books, and innumerable T-shirts. Every day, crowds of people converged on Harbor City's Lake Machado, hoping to catch a glimpse of the elusive creature that was dumped in the park by its owner back in 2005.

However, when Reggie's time was up — as he sunbathed in a secluded area of the park — he refused to surrender without a fight. In true Hollywood style, as TV helicopters hovered above, and fans and paparazzi gazed on, Reggie thrashed around as six men attempted to restrain him while reptile expert Ian Recchio hooked his neck so the alligator's jaws could be taped shut. Reggie was then loaded onto a truck by firefighters bound for the Los Angeles Zoo, where he will be kept in quarantine for up to two months. Clearly fame doesn't come without a price.

www.itv.com
25 May 2007

New Texas Regulations Protect Nongame Wildlife

On 24 May, the Texas Parks and Wildlife Commission approved a measure that will prohibit commercial collection of all

wild turtles from public waters and public land in the state, but will still allow collection of three varieties of turtles on private property, including ranch stock tanks and farm ponds. The turtle provisions are part of new Texas nongame regulations that create a “white list” of 84 species that can be collected and sold and prohibit the commercial collection of all other nongame animals not on the list.

The new regulations are designed to help monitor and regulate the escalating commercial collection and sale of wild

turtles, snakes, and other nongame animals (species not covered under hunting and fishing regulations) in Texas. The change would protect at least 15 species of turtles and more than 200 other nongame wildlife species that are not on the white list.

The Texas Parks and Wildlife Department (TPWD) staff had proposed new nongame regulations in April that would have prohibited the commercial collection of turtles everywhere in the state. However, public comments during the past few months showed that while about 90 percent of those who commented support turtle protection, some landowners expressed concerns about not being able to effectively manage turtles within their property.

“We currently have a huge and growing demand for turtle meat, coupled with unrestricted commercial collection, and we need to move toward sustainability,” said Matt Wagner, Ph.D., TPWD wildlife diversity program leader, in a briefing to commissioners on 23 May. “It is a fact that unrestricted take of any species from the wild, including turtles, over the long term leads to population declines. If we need to further restrict activity in the future, based on ongoing monitoring, we can.”

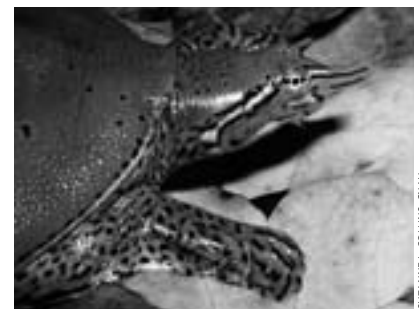
The new regulations will allow commercial collection of three varieties of turtles from private property in Texas, including the Red-eared Slider (*Trachemys scripta elegans*), the Common Snapping Turtle (*Chelydra serpentina*), and the five varieties of softshell turtles (*Apalone* spp.). Commercial collection of all wild turtles will be prohibited on public land and in public waters of the state, such as rivers and public lakes.

Wildlife biologists say the new nongame regulations are needed in part because of increased pressure from out-of-state collectors and dealers, fueled in part by a growing demand for turtle meat sold to China and other Asian markets. In recent years, an average of 94,442 turtles per year were collected or purchased by at least 50 Texas dealers, mostly for export from the state.

Wildlife experts are expressing particular concern about the turtle trade. Abundant scientific research indicates that unregulated commercial turtle harvest from the wild is not sustainable. At least four southeastern states have prohibited commercial collection of turtles from the wild, and most others are more restrictive than Texas.

A total of 84 species are on the new white list, with annual permitting and rigorous reporting required for anyone possessing more than 25 specimens in the aggregate of listed animals for commercial purposes.

“For any nongame species not on the white list, there will be a possession limit of up to six nongame animals at one time for personal use,” said Matt Wagner, TPWD wildlife diversity program director. “We want kids, for example, to be able to keep a pet turtle or two.”



SUZANNE L. COLLINS, CVAH

Spiny Softshell Turtles (*Apalone spinifera*) may still be collected for commercial use on private land after implementation of new Texas regulations addressing the unrestricted take of turtles from the wild.

Box Turtle Conservation Workshop

A Box Turtle Conservation Workshop will be held 9–10 November 2007 at Patuxent Research Refuge's National Wildlife Visitor Center in Laurel, Maryland. This is the third in a series of workshops aimed at bringing together individuals actively engaged in box turtle research and conservation to assess the status of these species, the challenges they face, and to devise strategies to help secure their future. The workshop is sponsored by the Jug Bay Wetlands Sanctuary, The Humane Society of the United States, and the North Carolina Zoological Park.

This workshop will focus exclusively on research studies of box turtle population status, ecology, and life history strategies. Box turtle populations are declining throughout their range, yet few efforts have been made to assess current population status in the interest of developing long-term conservation strategies. The principal goals of this workshop will be to provide current information, where it exists, on population size assessment throughout the species' ranges, and to initiate population studies in as many states as possible where these turtles occur.



SUZANNE COLLINS, GWHT

Box turtle populations are declining throughout their range, a November workshop will focus exclusively on research studies of box turtle population status, ecology, and life history strategies.

Nature Museums are Threatened

The great American natural history museum could be headed for the vulnerable species list, alongside the polar bear and the redwood tree. A national survey last year showed nature museums' annual bottom lines sinking chronically into the red, and some of the leading institutions

have winnowed their staffs since the decade began.

Science leaders worry that financial pressures and demands to boost attendance could prompt natural history museums to self-lobotomize, cutting away brain matter — the pure scientific research that's largely hidden from the public — to save the exhibits and educational programs that are the institutions' visible cash generators. Research is what makes natural history museums special: The mandate to venture into nature and bring back new finds and fresh questions, while maintaining millions of specimens. Some scientists say that amid global warming and a rapid die-off of species, these collections encompassing the world's life forms, living and extinct, have become especially valuable for the clues they might hold. How have creatures through the eons adapted or failed as their environments have changed? What's happening now? Biologists say those questions are vital in coping with today's challenges, and they can't be answered fully without museum collections. "With some major exceptions, there's been a 20-year retraction" in museum-based natural history research, said Leonard Krishtalka, who directs the museum at the University of Kansas. "We're slowly witnessing, by the whittling of curatorial positions, the extinction of incredible knowledge. For many organisms there are only one or two world experts, and they retire with no one to replace them."

Officials with the American Association of Museums, which conducted the 2006 survey that tags natural history as an underperforming sector, cautioned against drawing strong statistical conclusions, but there's no shortage of anecdotal woe. The Milwaukee Public Museum lies fiscally prostrate. The Academy of Natural Sciences in Philadelphia, the deficit-ridden, 195-year-old granddaddy of American natural history museums, sold some of the family jewels to prop up its finances last year, earning \$1 million for a chunk of its mineral collection. The Smithsonian Institution's natural history museum in Washington, D.C., which draws more than 5 million visitors a year and has the nation's largest collection, with more than 126 million specimens, is seen as deeply troubled; the staff has shrunk almost a third since 2000. Even the American Museum of Natural History in

New York, which stands with the Smithsonian and the Field Museum in Chicago as the Big Three of natural history exhibits and research, has had to economize. The museum has reduced its staff about 11% this decade, although curators were untouched. The L.A. museum, which vies with San Francisco's California Academy of Sciences for fourth place in national rankings, turned to shock therapy in 2003, laying off 7% of its staff to save \$2 million and reverse a long string of deficits. Most remaining employees endured a wage freeze that ended this year.

Universities aren't a strong alternative, scientists say, because many have given up their expensive-to-maintain natural history collections and focused their efforts elsewhere, including biomedical research, genetics, and technology.

Experts even worry that the very name "natural history museum" has a Victorian tinge that makes it harder to compete for audiences and funding. "It harks back 300 years and doesn't resonate anymore," said Krishtalka, the University of Kansas museum director who reclassified his venue as a "biodiversity institute." The challenge and potential salvation, he believes, lie in making visitors and donors understand the connection between the fate of the Earth and all those seemingly inert specimens tucked into drawers or arrayed on back-room shelves in jars of alcohol. "Our collections and knowledge help inform solutions to the problems the planet's facing," Krishtalka said. "Our time is now, and museums that reach out and grab that mission strongly will be the ones who survive."

Mike Boehm (mike.boehm@latimes.com)

Los Angeles Times

3 June 2007



JOHN BINNS

Natural History museums are essential for addressing many different kinds of questions. For example, the study elevating the Grand Cayman Blue Iguana (*Cyclura lewisi*) to full-species status involved the examination of museum specimens.

2007 Gopher Tortoise Council Meeting

The 29th annual meeting of the Gopher Tortoise Council (GTC) is scheduled for 11–14 October 2007 at Adventures Unlimited, a private retreat facility north of Milton, Florida, in the western Florida Panhandle. GTC is a group of scientists, agency personnel, educators, and laypersons who are interested in the ecology and conservation of the Gopher Tortoise (*Gopherus polyphemus*) and the upland ecosystems in which it lives, especially longleaf pine-wiregrass habitats. The annual meeting is an informal venue to share ideas and research results. Students are especially encouraged to attend and present their research. Friday's special session, "Real World Solutions for Conservation," will highlight the application of scientific research, unique approaches, and new partnerships to solving conservation challenges.



SUZANNE L. COLLINS, OIAH

The Gopher Tortoise Council is a group of scientists, agency personnel, educators, and laypersons who are interested in the ecology and conservation of the Gopher Tortoise (*Gopherus polyphemus*) and the upland ecosystems in which it lives.

EPA Sued Over Pesticide Poisoning of San Francisco Bay Area Endangered Species

The Center for Biological Diversity filed a lawsuit against the U.S. Environmental Protection Agency (EPA) for violating the Endangered Species Act (ESA) by registering and allowing the use of 60 toxic pesticides in habitats for nearly a dozen San Francisco Bay Area endangered species without determining whether the chemicals jeopardize their existence. May 27th would have been the centennial birthday of Rachel Carson, whose pioneering 1962 book *Silent Spring* raised awareness about the deadly impacts of pesticides on the environment and human health, and led to a federal review of pesticide policy and an

eventual ban on DDT in the United States.

"Ending the use of known poisons in habitat for our most endangered wildlife is an appropriate 100th birthday tribute to Rachel Carson, who alerted us to the hazards of exposure to toxic chemicals almost half a century ago," said Jeff Miller, conservation advocate with the Center. "Unfortunately, the EPA has not learned from her legacy and still has no plan to adequately assess impacts while registering and approving pesticide uses that pose a clear and present danger both to imperiled species and human health."

At least 61 million pounds of pesticide active ingredients were applied in Bay Area counties from 1999 through 2005 — over 8.5 million pounds annually. Actual pesticide use may have been several times this amount since most home and commercial pesticide use is not reported to the state. Under the Bush administration, the EPA has consistently failed to consult with the U.S. Fish and Wildlife Service (USFWS) on endangered species impacts when registering and authorizing use of toxic pesticides.

Studies by the USFWS, EPA, U.S. Geological Survey (USGS), and California Department of Pesticide Regulation show that at least 60 pesticides of concern are used or accumulate in or adjacent to (upstream or upwind) habitat for 11 Bay Area endangered species, including freshwater and wetlands habitat for the California Tiger Salamander (*Ambystoma californiense*) and San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*) and terrestrial habitat for the Alameda Striped Racer (*Masticophis lateralis euryxanthus*). According to the Service, pesticide use may threaten an additional 19 of the 51 Bay Area animal species listed under the ESA.

The EPA is required under the ESA to consult with the USFWS over registration, re-registration, and approved uses of pesticides that may endanger listed species or adversely affect their designated critical habitat. The consultation is designed to ensure that the EPA avoids authorizing pesticide uses that jeopardize the existence of endangered species. The Center is seeking pesticide-use restrictions in habitat for the 11 Bay Area species until EPA and USFWS assessments of pesticide impacts have been completed. The consultations should

result in some permanent use restrictions for harmful pesticides.

Similar protections were obtained by the Center for the California Red-legged Frog (*Rana aurora draytonii*) under a settlement signed by the EPA and the pesticide industry last October. The use of 66 pesticides is now prohibited in and adjacent to core frog habitats statewide for three years, until the EPA completes consultations.

"The registrations of contaminants known to be deadly to endangered species and harmful to human health, such as atrazine, should be cancelled," said Miller. "Given the proximity of agricultural pesticide spraying to some Bay Area residential areas, surveys that have detected accumulation of pesticides in local creeks and San Francisco Bay, and what we know about movement of pesticides through drift and runoff, we should be wondering if we are next when we see endangered species poisoned by these chemicals."

In 2006, the Center published "Poisoning Our Imperiled Wildlife: San Francisco Bay Area Endangered Species at Risk from Pesticides" (www.biologicaldiversity.org/swcbd/Programs/science/pesticides/BayAreaPesticidesReport.pdf), a report analyzing the EPA's dismal record in protecting endangered species and the agency's ongoing refusal to reform pesticide registration and use in accordance with scientific findings. Despite mounting evidence of harm to endangered species and human health, the Bush administration keeps dodging use restrictions for dangerous pesticides and has tried to exclude wildlife agency oversight of the pesticide-registration process. In 2004, the Center published "Silent Spring Revisited: Pesticide Use and Endangered Species" (www.biologicaldiversity.org/swcbd/programs/science/pesticides/REPORT.pdf), detailing the decades-long failure of the EPA to regulate pesticides harmful to endangered species despite numerous lawsuits, three of which have been filed by the Center. The EPA still has no meaningful plan to protect endangered species from pesticides.

Numerous studies have definitively linked pesticides with significant developmental, neurological, and reproductive damage to amphibians. Pesticide contamination can cause deformities, abnor-

mal immune system functions, diseases, injury, and death of frogs and salamanders. Studies by Dr. Tyrone Hayes at the University of California have strengthened the case for banning atrazine, a potent chemical that is the most common contaminant of ground, surface, and drinking water nationwide. Dr. Hayes demonstrated that atrazine is an endocrine disruptor that “assaults male sexual development,” interfering with reproduction by chemically castrating and feminizing male frogs. Atrazine has also been linked to increased prostate cancer, decreased sperm count, and high risk of breast cancer in humans. Thousands of pounds of atrazine are used each year in the Bay Area in close

proximity to habitat for the Red-legged Frog and Tiger Salamander.

The Bush administration has attempted to undercut Endangered Species Act protections by changing how pesticide impacts on wildlife are evaluated and making it easier for pesticide manufacturers to ignore the effects of their products on endangered plants and animals. The EPA proposed new regulations in 2004 that would have removed input from expert wildlife agencies in determining whether pesticides threaten endangered species, but a federal court overturned these new rules in 2006.

The lawsuit, report on pesticide impacts to Bay Area species, maps of pesticide use, and information about the

listed species are available at: www.biologicaldiversity.org/swcbd/programs/science/pesticides/bay-area.html



Freshwater and wetlands habitat used by the endangered San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*) has been contaminated by pesticides. A lawsuit seeks to prevent further applications until a thorough review of the effects of potentially harmful agents has been properly assessed.

O B I T U A R Y

George Thomas McDuffie (1927–2007)

George McDuffie, a well-known Ohio herpetologist, passed away on 15 April 2007. Born in Cincinnati, Ohio, on 25 August 1927, George received his Bachelors (1952), Masters (1956), and Doctoral degrees (1960) from the University of Cincinnati, the latter doing research on the natural history of Copperheads in the Buckeye State. His research on these snakes was published in 1963 [Studies on the size, pattern, and coloration of the Northern Copperhead (*Agkistrodon contortrix mokasen* Daudin) in Ohio. *Journal of the Ohio Herpetological Society* 4: 15–22]. He was one of the founding members of the Ohio Herpetological Society, which evolved into the Society for the Study of Amphibians and Reptiles.

During the 1950s and 1960s, George mentored many young herpetologists in southwestern Ohio, and most of them experienced their first real snake hunt under his watchful eye. He is remembered for his sense of humor, and on field trips to Shawnee State Forest in southern Ohio, many students and colleagues on their first field trip listened in stunned silence to the plethora of risqué limericks that he sang with gusto (and which they eventually memorized and sang also). More importantly, he took the time and made the effort to teach them how to find amphibians and reptiles, and much of what they know today about field herpetology can be traced directly back to George.

At the first Shawnee Herpetological Weekend held at Shawnee State Forest in May 2006, keynote speaker Joseph T. Collins (who grew up in Cincinnati and was mentored by George during his teenage years) dedicated the event to George McDuffie, and spoke fondly of his influence. Memorial contributions should be sent to the Torch Lake Protection Alliance, P.O. Box 706, Bellaire, MI 49615.



George McDuffie with a Western Diamondback Rattlesnake (*Crotalus atrox*) ca. 1960. Photograph courtesy CNAH files.