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Summer 2006

The Tortoise Burrow

Newsletter of The Gopher Tortoise Council

In This Issue:

- Don Stillwaugh discusses some little known residents of gopher tortoise burrows
- Ray Ashton suggests how to make your voice heard regarding tortoise conservation in Florida
- A new position statement on gopher tortoise conservation has been created

Notes From a Co-Chair

J. Mitchell Lockhart

Greetings and let me be the first to invite all of you to Valdosta, Georgia, for the 28th Annual Meeting of the Gopher Tortoise Council. It is my pleasure to serve as your host and I am confident and excited that we will have a great time here at Valdosta State University. The meeting will be a traditional Thursday (October 26) through Sunday (October 29) affair. The course of events will be as follows: the council business meeting will occur on Thursday evening, a special session entitled "The Impacts of Invasive Species in Coastal Plain Uplands" will take place on Friday followed by an evening social, general session talks will occur on Saturday followed by the traditional Saturday evening banquet, and field trips will be on Sunday.

All talks will take place in Powell Hall on the campus of Valdosta State University. Friday parking will be free in either reserved/staff lot on Oak Street next to Powell Hall. Saturday parking is open. I urge you to reserve lunch on Friday as it will be difficult to leave campus, eat, and return to campus in time for the Friday afternoon session.

Evening socials and the silent auction will take place at the James H. Rainwater Conference Center between exits 16 and 18 off of I-75. The conference center is next to the home hotel, the Hampton Inn and Suites. Donate (or start gathering) those auction items today! I am personally offering 1, 2, and 3-day packages with my now 7-month old triplets to the highest bidder! Information concerning registration and the call for papers is available on the Gopher Tortoise Council website. If you are interested in presenting, send in your abstract as soon as possible as there is a limited number of slots available. If you are interested in presenting in the special session, there are still a couple of slots available and you should contact me at jmlockha@valdosta.edu as soon as possible.

Tortoise Conservation Statement Created

Margaret Gunzburger

The Gopher Tortoise Council is looked to as a source of information on tortoise biology and conservation. Thus, the GTC has revised and expanded its position statement on relocation into a more comprehensive Gopher Tortoise Conservation Statement. The goal of this statement is to provide simple, accurate information on the steps the GTC endorses to achieve conservation of the gopher tortoise and its habitats . This document is intended to be provided to the public to use as an explanation on the official stance of the GTC on these issues. GTC welcomes comments and suggestions on this document; please contact Margaret Gunzburger at phaeognathus@hotmail.com. The statement can be found in Supplement One of this newsletter.

CONTRIBUTED ARTICLES

Of Moths and Tortoises

Don Stillwaugh

When one thinks of tortoise burrow associates, moths aren't the first taxon to come to mind. But indeed there are at least three species of moths with close ties to the gopher tortoise, *Gopherus polyphemus*. All are apparently linked to this burrowing reptile by the unique requirements of their caterpillars. The larvae of *Ceratophaga vicinella* feed on the keratin outer layer of the shells of dead tortoises, while the larvae of both *Acrolophus pholeter* and *Idia gopheri* largely feed on tortoise dung within the burrow. These moths provide wonderful examples of how species radiate and diversify to fill available niches, creating an intricate web of life.

Many invertebrates can be found within the burrows of gopher tortoises, including the gopher moth, pictured here.

The moth family Tineidae, which includes the common clothes moth, is largely composed of detritivores. Larvae of the primarily African genus *Ceratophaga* feed on the hooves and horns of ungulates found in Africa and Asia. *C. vicinella* is the only known New World member of the genus and records exist from peninsular Florida as well as Mississippi[1]. It has a fascinating life history in which it constructs a silken tube extending from the surface of the tortoise shell to the sandy substrate. Tubes from multiple larvae act in concert to anchor the remnant tortoise shell in place. No records exist of these tubes or larvae occurring on living tortoises. For a more in-depth description of this species I refer you an article previously published in *The Tortoise Burrow*[2] and a similar article of the same title in *Wings*[3]. An even more detailed description including scanning electron images can be found in a recent issue of *American Entomologist*[4]. I especially recommend the last section of the latter article titled "On Being Endangered: An Afterthought."

In the fall of 1999, while working for the Florida Game & Freshwater Fish Commission (now Florida Fish and Wildlife Conservation Commission), I came across the gopher moth while inventorying burrow commensal vertebrates. On many mornings a host of spiders, beetles and crickets were released from the one-sided window screen funnels which I had placed into burrow entrances the night before. On a cool November morning I was astonished to find a moth in the trap and then another of the same ilk two weeks later. Although this moth is rather drab in appearance (as are the other two species for that matter) I was driven to investigate its life history. My subsequent inquires and research revealed the following story of the "gopher moth."

Eric Milstrey completed his doctoral dissertation[5] at the University of Florida in Gainesville in 1987. His studies primarily involved the tick *Ornithodoros turicata americanus* (not to be confused with the "gopher tick" *Amblyomma tuberculatum*), which often retreats to tortoise burrows. He collected specimens by inserting a long hose connected to a vacuum sampler deep into burrows. Among the many invertebrates he collected were the larvae of an undescribed moth species. Milstrey found the larvae more often in abandoned and inactive burrows and at low densities or lacking altogether in active burrows. He determined that the larvae feed on decomposing organics, including tortoise dung, as well as leaf and grass detritus. Lab experiments revealed the larvae have very narrow humidity tolerances and require high humidity levels such as those found within burrows. After successful rearing efforts, he and

Acrolophine specialist Don Davis described the adult and caterpillar as *Acrolophous pholeter*[6]. According to Davis, these are still the only known records of this species[7].

But inventories of tortoise burrow occupants began long before Milstrey's efforts. Recorded research began over 100 years ago with the work of Henry G. Hubbard of Crescent City, Florida. Upon repeatedly observing "toads" (presumably the gopher frog, *Lithobates capito*) on the aprons of burrows at night, his curiosity caused him to wonder what other creatures might inhabit these burrows. One day in January 1893 he rolled up his sleeves and set to work excavating a burrow. When he finished he was astonished at the size of the pit he had dug and remarked "a coach and span of horses might have been swallowed up in it". After collecting many arthropods at several excavation sites he published "The Insect Guests of the Florida Land Tortoise"[8] and "Additional Notes on the Insect Guests of the Florida Land Tortoise"[9]. These annotated lists included seven beetles, a wingless cricket, a pseudoscorpion, a fly and two ticks; all species new to science. Hubbard himself was the original describer/author of three of the beetles. Also among the booty was the larva of a "Deltoid (?) moth" gleaned from tortoise dung.

After several failed attempts, Hubbard succeeded in rearing two adult moths; one male and one female. These specimens he sent off to the leading Noctuid specialist of the day, John B. Smith. Smith described this new species in 1899 as *Epizeuxis gopheri*, "the gopher moth"[10]. The larva was described by S.E. Crumb in 1934[11] and in 1983 J.G. Franclemont and E.L. Todd shifted the species to the genus *Idia*, where it stands today[12].

"By focusing solely on the tortoise, we are overlooking the potential loss of a considerable number of species unique to the southeastern coastal plain."

With this information in hand, I conducted a search for specimens at all the major museums and regional collections, as well as requested information from private collectors. This yielded a total of 73 specimens of *Idia gopheri* believed to be valid. Most of these are historical and only 16 have been taken in the last 25 years. They have been collected in all months of the year but recorded collection dates seem to show a bimodal distribution with a strong spring and weaker fall flight period. All but four specimens are from Florida. Two from Georgia are relatively recent and indeed from good gopher tortoise habitat. The other Georgia specimen was labeled as taken from "Athens, Clarke Co." in 1961. Although this locale falls outside the current range of the tortoise, perhaps a population existed in that area half a century ago.

The most problematic specimen, if indeed *Idia gopheri* is a tortoise burrow obligate, is from Washington County, Mississippi. This area is primarily river floodplain and unlikely to harbor tortoises. According to Mike Pogue, a research entomologist at the Smithsonian, the specimen was collected by George Dorner and is "a very old specimen, probably over 100 years old"[13]. Unfortunately, it's all too common that specimens (of any taxon) wind up in private or institutional collections with suspect or faulty data. Specimens collected during different field outings may get shuffled together or otherwise confused. Due to the age of this particular specimen we'll probably never know if this moth was truly captured in Greenville, MS or was taken within the range of the tortoise.

Are these moths rare? Or just rarely collected? I suspect the answer to both of these questions is "yes". As additional records surface, I hope to elucidate the current range and conservation status of *Idia gopheri* as well as the other two species of moths. With shrinking habitat and declining numbers of the gopher tortoise, one can only assume that any "obligate species" that are unable to adapt rapidly will suffer a similar decline. I would ask you all to revisit Jackson & Milstrey's plea to take a "holistic or community-level" approach into consideration when restoration or translocation efforts involving the tortoise are implemented[14]. By focusing solely on the tortoise, we are overlooking the potential loss of a considerable number of species unique to the southeastern coastal plain. (Cont. on following page)

Of Moths and Tortoises (Cont. from page 3)

[1]Heppner, J.B., W.L. Adair, Jr., H.D. Baggett, T.S. Dickel, L.C. Low, T.C. Emmel, and D.H. Habeck. 2003. Arthropods of Florida and Neighboring Land Areas. 17. Lepidoptera of Florida. I. Introduction and catalog, p. 670 + x pp.

[2]Deyrup, M. and N.E. Deyrup. 2002. The Caterpillar that Recycles Tortoises. The Tortoise Burrow, 22 (1), Spring 2002.

[3]Deyrup, M. and N.E. Deyrup. 1999. The Caterpillar that Recycles Tortoises. Wings: Essays on Invertebrate Conservation, 22(2), Fall 1999.

[4]Deyrup, M., N.E. Deyrup, M. Eisner, and T. Eisner. 2005. A Caterpillar that Eats Tortoise Shells. American Entomologist, 51(4): 245-248.

[5]Milstrey, E.G. 1987. Bionomics and ecology of *Ornithodoros* (P.) *turicata americanus* (Marx) (Ixodoidea: Argasidae) and other commensal invertebrates present in the burrows of the gopher tortoise, *Gopherus polyphemus* Daudin, Ph.D. Dissertation, University of Florida, Gainesville, 278p.

[6]Davis, D.R. and E.G. Milstrey. 1988. Description and biology of *Acrolophus pholeter* (Lepidoptera: Tineidae), a new moth commensal from gopher tortoise burrows in Florida. Proceedings of the Entomological Society of Washington, 90(2): 164-178.

[7]Davis, D., personal communication, June 16, 2006.

[8]Hubbard, H.G. 1894. The Insect Guests of the Florida Land Tortoise. Insect Life,

VI (4): 302-325.

[9]Hubbard, H.G. 1896. Additional Notes on the Insect Guests of the Florida Land Tortoise. Proceedings of the Entomological Society of Washington III (5): 299-302.

[10]Smith, J.B. 1899. Description of the Gopher Moth. The Canadian Entomologist, XXXI (1): 94-95.

[11]Crumb, S.E. 1934. A Classification of some Noctuid larvae of the subfamily Hypeninae. Entomologica Americana, XIV (4): 134-197.

[12]Hodges, R.W., T. Dominick, D.R. Davis, D. C. Ferguson, J.G. Franclemont, E.G. Munroe and J.A. Powell. 1983. Check List of the Lepidoptera of America North of Mexico. The Wedge Entomological Research Foundation, London.

[13]Pogue, M., personal communication, April 14, 2006.

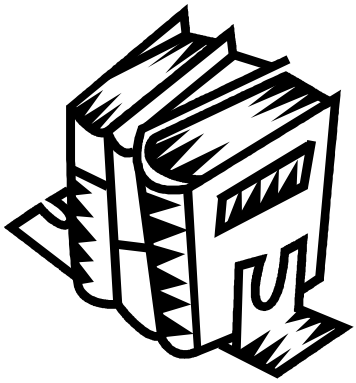
[14]Jackson D.R. and E.G. Milstrey. 1989. The Fauna of Gopher Tortoise Burrows. In J. Diemer, D. Jackson, L. Landers, J. Layne and D. Woods (Eds). Proceedings of the Gopher Tortoise Relocation Symposium. Florida Game & Freshwater Fish Commission. Non-game Wildlife Program Technical Paper No. 5, Tallahassee, FL.

Don Stillwaugh has been a field researcher, land manager and educator for over twenty years. Initially studying a wide variety of insects as well as reptiles and amphibians on the prairies and savannas of the Chicago region. He currently works as an Environmental Specialist for Pinellas County's Environmental Lands Division where he works with a wide variety of plants and animals but primarily with the Catesby's Lily, shorebirds and butterflies. A charter member of the North American Butterfly Association, he is the zone coordinator for seven "Fourth of July Butterfly Counts" in Florida and serves as Regional Co-editor for the annual NABA Butterfly Count Report.. He can be contacted at dstillwa@pinellascounty.org

GOPHER TORTOISE COUNCIL ANNOUNCEMENTS

Gopher Tortoise Bibliography

Boyd Blihovde



A gopher tortoise bibliography has been created and will soon be added to the Gopher Tortoise Council website. The PDF file will be downloadable from the website for those that would like to print a hardcopy. The bibliography currently contains hard to locate references including magazine articles, GTC newsletter citations, and natural history notes. Of course, the bibliography also contains important peer-reviewed literature on gopher tortoises and their commensals. The bibliography will be a continuously updated document. There is no doubt that a great deal of published information has not yet been added to the bibliography. If you see literature that you feel is appropriate for the bibliography, please forward the full citation to:
BoydBlihovde@msn.com. I will add all the citations that are appropriate.

Council Award Nominations Needed

Boyd Blihovde

We are soliciting nominations from the membership for the yearly Gopher Tortoise Council awards. Please consider the categories below and e-mail your nominations to: boydblihovde@msn.com Nominations due by August 20, 2006.

GTC Awards:

1. (Auffenberg and Franz Conservation Award) ALREADY SELECTED!

2. Gopher Tortoise Council's Lifetime Service Award- to be presented to individuals who have contributed significantly over the years to Council activities or activities relevant to conservation of upland species.

3. Gopher Tortoise Council's Distinguished Service Award- to be presented to individuals who have provided long-term service to GTC.

4. Gopher Tortoise Council's Special Project(s) Award- to be presented to individuals who contribute to outstanding special GTC projects- e.g., reprinting and distribution of the children's book "Gopher Tracks" to all schools within range of the Gopher Tortoise.

5. Gopher Tortoise Council's Conservation Education Award- An award to be presented to educators who have contributed significantly to environmental education relevant to conservation of upland species. Comes with cash award ($250) with no strings attached regarding its use.

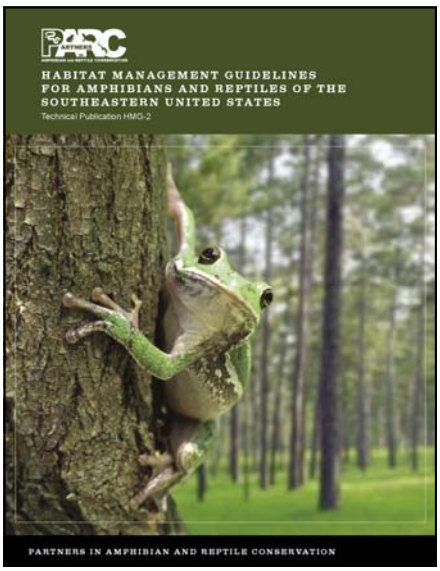
GENERAL ANNOUNCEMENTS AND PRESS RELEASES

Partners in Amphibian and Reptile Conservation's, "Habitat Management Guidelines for Amphibians and Reptiles of the Southeastern United States" Created

Priya Nanjappa Mitchell and John Jensen

Habitat alteration, fragmentation and loss are collectively considered to be the primary challenge in the conservation of amphibians and reptiles (i.e., herpetofauna). With herpetofaunal populations declining, and human populations expanding and using more land, PARC has developed a series of regionally specific best management practices, or Habitat Management Guidelines (HMGs) to provide proactive guidance for improving the compatibility of land management practices with these animals. The southeastern HMG is the second in the series to be completed and can be ordered from High Cotton at $10 per copy (contact information below).

These guidelines are not regulations, nor are they in any way an attempt to limit landowners' rights. They should simply be regarded as recommendations for landowners and managers to consider the needs of amphibians and reptiles in the course of their management activities. The HMGs are directed towards resource managers and private landowners who have a desire to help protect amphibians and reptiles. If many landowners and land managers each implement some of these guidelines, then the cumulative effect can only be a positive one.



These guidelines:

- use the best science available
- are easily understood by and practical for land managers and private landowners
- present measures to help maximize compatibility with existing management objectives, or to optimize management actions specifically for herpetofauna
- provide guidance on the management and restoration of habitats such that amphibians, reptiles, and many other wildlife species may benefit

This is not a guidebook that describes the needs of every species of amphibian and reptile. Instead, it provides regionally specific guidelines for managing habitats with the goals of keeping common species common, stemming the decline of imperiled species, and reduce the likelihood of species becoming listed as threatened or endangered.

In line with the spirit of PARC, this publication was made possible by the combined contributions of many individuals, organizations, agencies, and industries. Lead authors Mark Bailey, Jeff Holmes, Kurt Buhlmann, and Joe "Yankee" Mitchell, all Gopher Tortoise Council members, admirably organized and compiled this very user-friendly and attractive guidebook. The "meat" of the document is the habitat-specific guidelines organized as individual modules. Nearly 40 additional individuals contributed to the development of the modules and 46 others donated excellent photographs. GTC joined 34 other organizations and agencies in providing funds crucial to its development, design, and printing.

To order copies contact:

High Cotton (ATTN: Ms. Delinda Franklin)
2901 Alton Way
Birmingham, AL 35210
ph. 877-838-2345 fax 205-836-5587 dfranklin@highcottonusa.com

To view a module from this publication, contact John Jensen: John_Jensen@dnr.state.ga.us

Tortoise Conservation Changes in Florida

Boyd Blihovde

The Gopher Tortoise Council (GTC), along with 29 other interest groups, is taking part in an important "Florida Gopher Tortoise Stakeholders Group" (FGTSG) that has been organized by the Florida Fish and Wildlife Conservation Commission (FWC). The GTC is represented on the conservation group of the steering committee along with nine other stakeholder groups.

"Approximately 50 stakeholders representing development, conservation and ecological consulting interests met in Lecanto FL on September 30th, 2005. The purpose of this meeting was to examine the Gopher Tortoise management and permitting process and determine if a more effective forum for stakeholder engagement with the FL Fish and Wildlife Conservation Commission could be developed."

This quote was taken from the FGTSG share point site (**http://share.myfwc.com/GT2**) and it describes the first official meeting of the group. To read information or make comments on the site, enter the web address, then enter:

user name: gopher.public

password: Caddy74

This group provides an important forum for citizens to comment on gopher tortoise management and conservation to the FWC. FGTSG meetings can be attended by any concerned citizen; however, due to time constraints, it is recommended that comments go through a steering committee member.

The FGTSG has been exploring alternatives to the current gopher tortoise permitting process, redefining the gopher tortoise burrow for law enforcement, developing biological goals for conservation of tortoises and providing input into a new management plan. To date, there have been seven official stakeholder meetings. Future FGTSG meetings are tentatively scheduled for: **July 14th, August 11th,** and **September 15th**. If you would like to have your voice heard at one of the upcoming meetings, please email me: boydblihovde@msn.com.

REQUEST FOR COMMENTS

As part of the second phase in uplisting the gopher tortoise to "threatened" in Florida, the FWC will be preparing a gopher tortoise management plan. Comments on the management of gopher tortoises, and what should be contained in a management plan, are now being accepted. The public input period is open until 5 pm August 8th. Comments should focus on topics outlined in the draft management plan template, available at MyFWC.com/imperiledspecies/mgt_plan_template.htm.

Comments can be sent to:

Gopher Tortoise Management Plan Comments, DHSC,
Florida Fish and Wildlife Conservation Commission,
620 South Meridian St., Mail Station 10,
Tallahassee, FL 32399-1600

Florida Uplands Network Established

Boyd Blihovde

On March 9, 2006 a group of approximately 30 naturalists, conservationists and scientists representing over 20 conservation groups and agencies in Florida met to discuss issues facing Florida's upland habitats. The meeting was organized by the Gopher Tortoise Council, Defenders of Wildlife, and the University of Florida, Levin College of Law. The meeting included motivating presentations in the morning and group discussions in the afternoon. During the afternoon discussions a number of new ideas surfaced that was discussed among the group. Most of the organizations and agencies offered up their own resources to help in the formation of a new networking group. One imaginative participant came up with a name for the network: Florida Uplands Network (FUN). Although the meeting was a one-day event, it was productive and led to several action items:

1. Creation of a mission statement
2. Creation of a FUN website to help Florida scientists, naturalists, and conservationists communicate with one another
3. Creation of a coordinating committee
4. Determining the FUN organizational structure

Communications have already led to increased awareness and support for several upland protection initiatives.

A suggested mission statement has been proposed although not finalized:

"To educate Florida citizens and visitors on the importance of Florida's uplands and the their preservation and management"

The FUN has also been working on developing a website where concerned parties can post and retrieve information on Florida's uplands, issues of concern, and information about actions being taken by participating groups. Thankfully, "Save Our Big Scrub" has offered to help finance the cost of the FUN website development and two years of upkeep. Please be on the lookout for the new website and be ready to participate in this important partnership effort. If you have any questions or you would like to help partner in conserving Florida's uplands, please email me at: boydblihovde@msn.com.

Sandhill Habitat to be Acquired

Georgia Department of Natural Resources

The Board of Natural Resources has granted approval to the Georgia Department of Natural Resources (DNR) to proceed with the acquisition of approximately 884 acres in Taylor County. This property was formerly owned by AmSouth Timber Fund, LLC and will be purchased for an estimated price of $1,326,000.

The Board's action gives DNR the authority to present this acquisition to the Georgia Land Conservation Council and the State Properties Commission in June. If approved, the Nongame Wildlife and Natural Heritage Section of the DNR Wildlife Resources Division (WRD) will manage the property as a state Natural Area.

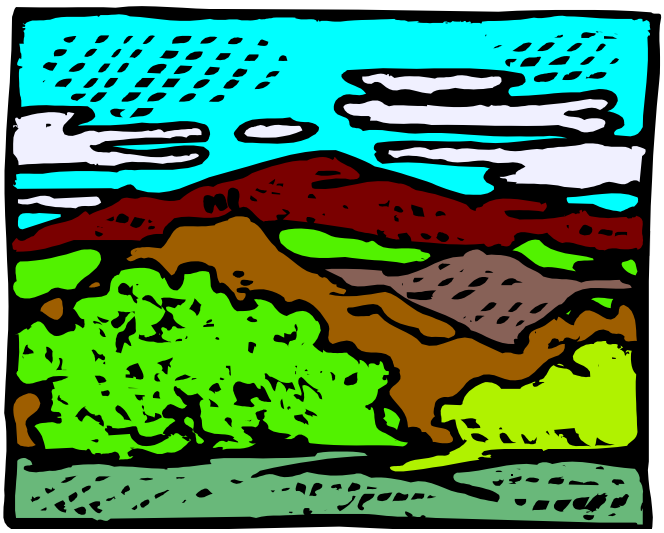
"We are fortunate that AmSouth officials understood the biological significance of this tract and worked hard to strike a deal that will benefit the state," said Dan Forster, WRD Director. "Under AmSouth's care the sandhills habitat is in good condition."

"...the tract may be used as a translocation site for gopher tortoises...."

The Taylor County tract provides critical habitat for a number of state and globally imperiled plant and animal species. Wildlife species in the area include the state-threatened gopher tortoise, the rare striped newt, Bachman's sparrow and the gopher frog. Imperiled plants include the state and federally endangered pondberry, the state threatened Sandhill golden-aster and the lax water-milfoil.

Biologists say acquisition of this site will allow WRD to restore and manage the upland and wetland habitats essential for these species, including land management practices such as prescribed burning that will protect the land from the encroachment of woody plants.

Biologists also say the tract may be used as a translocation site for gopher tortoises displaced by land conversion elsewhere. While gopher tortoises already exist on the site, their numbers are likely below the carrying capacity and could possibly support many more individuals. Additionally, gopher frog eggs collected here may be used to restore suitable wetlands for gopher frogs on other protected sites in the state, assisting in conservation efforts to increase their numbers as well.



Hunting and recreational use will also be permitted on the tract. For more information on the acquisition of this property and the species it will benefit, contact the WRD Nongame Wildlife and Natural Heritage Section at 770-761-3035.

Protecting Sand Ridges in Georgia Georgia Department of Natural Resources

The Board of Natural Resources has granted approval to Georgia Department of Natural Resources (DNR) staff to proceed with the conservation of 6,714 acres in Long and McIntosh counties through an innovative combination of fee simple acquisition and a conservation easement. Working in partnership with The Nature Conservancy, DNR will acquire 2,369 acres of riverine sandhill habitat along the Altamaha River known as the Sand Ridge Tract. In addition, DNR will acquire a 4,344-acre conservation easement that will allow for further protection of this sensitive habitat. DNR will name this property the Townsend Wildlife Management Area (WMA).

The Board's action gives DNR the authority to present this transaction to the Georgia Land Conservation Council and the State Properties Commission in July. The 2,369-acres slated for acquisition through a fee simple purchase totals $2,770,600 and is proposed for funding through a U.S. Forest Service Forest Legacy Grant, state general obligation bonds and a private foundation donation. The cost of the conservation easement totals $2,979,400 and is proposed for funding through state general obligation bonds and a private foundation donation. This transaction is part of Governor Perdue's Georgia Land Conservation Program.

"…we are safeguarding a wealth of biological diversity and ensuring continued recreational opportunities, tourism and the rural forest economy of south Georgia."

"This agreement is a win-win for the people of Georgia and its wildlife," said Department of Natural Resources Commissioner Noel Holcomb. "By leveraging state funds with other sources, the ratio of federal and private dollars to state dollars is 2.3 to 1. We will be protecting a great tract of land along the Altamaha River and adding to our recreational resources for hunters, anglers, bird watchers and others."

The property has some of the highest quality sand ridges with scattered cypress ponds remaining on the Altamaha River. DNR's Wildlife Resources Division (WRD) has named this area as a high priority conservation target because of the number of rare or imperiled species supported by these habitats including gopher frogs, striped newts, gopher tortoises and indigo snakes.

This action will permanently protect lands that were put on the market as a result of the divesture of more than five million acres of timberland nationwide by International Paper Company (IP) and its subsidiaries. In March 2006, The Nature Conservancy announced an agreement with International Paper to purchase 24,120 acres of forestland in the Altamaha River watershed - one of the largest private upland conservation agreements in Georgia's history and part of a larger 218,000 acre, 10-state agreement with International Paper.

"By working with private and public partners to make this land deal happen, we are safeguarding a wealth of biological diversity and ensuring continued recreational opportunities, tourism and the rural forest economy of south Georgia," said Tavia McCuean, vice president and state director of The Nature Conservancy in Georgia.

As part of the agreement, The Nature Conservancy will purchase the Sand Ridge Tract from IP and then sell this tract to DNR. However, before making the sale to DNR, The Nature Conservancy will sell the timber rights to approximately 1,593 acres of the upland habitat currently planted in non-native pines on this tract to Goodwood Georgia, a Timber Investment Management Organization (TIMO). This step reduces DNR's acquisition costs and aids the agency's long-term management plan to remove the non-native pines and replant them with longleaf pine. Goodwood will retain the right to harvest this timber for 11 years.

The Nature Conservancy also has a contract to purchase a 4,344-acre conservation easement tract from IP and then assign the contract to Goodwood, while retaining the right to purchase a conservation easement over this tract. The Nature Conservancy will then sell the right to acquire the conservation easement to DNR and, as part of the land sale agreement, will require Goodwood to deliver the conservation easement to DNR. The conservation easement will include recreation rights, allowing the public to drive motorized vehicles on designated roads during hunting seasons and travel by foot on the entire property year round. The conservation easement will allow Goodwood to harvest timber on approximately 2,700 acres of the uplands.

The Georgia Land Conservation Act (HB98), passed by the General Assembly in 2005, encourages long-term conservation and protection of the state's natural, cultural and historic resources. It encourages partnerships between local governments, the DNR, other state and federal agencies and the private sector, with the intent of conserving Georgia's most valued resources. The Georgia Land Conservation Council, which includes state agency heads and private citizens, is responsible for reviewing and approving all projects funded through this program.

For more information on this acquisition, contact WRD's Regional Game Management Office by calling (912) 262-3173.

Gopher frog

Southern Land Conserved

The Nature Conservancy

International Paper, The Nature Conservancy and The Conservation Fund have reached an agreement to protect 218,000 acres of forestlands across 10 states in the single largest private land conservation sale in the history of the South, and one of the largest in the nation.

The Nature Conservancy will acquire more than 173,000 acres in North Carolina, Virginia, Georgia, Florida, Alabama, Arkansas, Tennessee, Louisiana, and Mississippi. The Conservation Fund will acquire more than 5,000 acres in Florida and 500 in North Carolina. The two groups will jointly purchase an additional 39,000 acres in South Carolina.

International Paper will receive approximately $300 million for the land at closing, which is expected to occur in the next several months. The tracts included in the sale are some of International Paper's most ecologically important lands. The majority of the land will remain working forests. Under the terms of the agreement, timber will be sustainably harvested from some tracts and a set amount of timber volume will be supplied to International Paper for local production. Sensitive areas will continue to be set aside from harvesting activities.

"As much as 44 million acres of privately owned forestland will be sold over the next 25 years."

The biodiversity and ecological importance of the parcels included in the project reflect International Paper's sustainable management of its working forests. Many of the parcels which have thrived under the company's leadership are home to bald eagles, black bear and the endangered red-cockaded woodpecker. Several tracts also provide vital linkages between existing public and private conservation areas. The majority of lands being acquired by the Conservancy and The Conservation Fund are located along rivers and estuaries, such as the Perdido River on the border of Florida and Alabama, the Lower Roanoke River in North Carolina and Pee Dee and Little Pee Dee Rivers in South Carolina.

"This historic transaction demonstrates the compatibility of environmental, recreational and economic interests, and is a testimony to International Paper's legacy of sustainably managing healthy, working forestlands and protecting special forestlands for 108 years," said John Faraci, International Paper chairman and chief executive officer. "As we consider the sale of our U.S. land holdings, we saw this as an important opportunity to protect in perpetuity many of our most ecologically significant lands."

Steve McCormick, president and CEO of The Nature Conservancy, said, "This project was made possible through the leadership and vision of public officials and public agencies across the South. The South's landscape is changing before our eyes. It is only through partnerships among state and federal agencies, companies like International Paper, private landowners and nonprofit organizations that we can hope to conserve the South's natural heritage and quality of life."

"This announcement is extraordinary in every sense of the word - from its scope and scale to its tremendous conservation outcomes," said The Conservation Fund's president, Larry Selzer. "Thanks to the support and commitment of

our partners, these important lands will protect wildlife habitat, enhance air and water quality, support local economies and provide exceptional outdoor recreation opportunities for future generations."

In a number of states, the conservation organizations are working closely with state agencies and other partners to ensure these lands are conserved for future generations. Today's announcement represents the beginning of this landmark conservation project.

International Paper has protected approximately 1.5 million acres of forestlands through conservation land donations, sales and easements during its history. Recently, for example, IP and The Conservation Fund closed on the first phase of a 257,000-acre conservation easement in New York's Adirondack Park, permanently protecting those acres from development. This and many other past conservation agreements have been in partnership with The Nature Conservancy or The Conservation Fund. These partnerships laid the foundation for the three organizations to identify some of International Paper's most ecologically diverse forestlands for purchase in this historic transaction.

The agreement represents the largest financial commitment in the 55-year history of The Nature Conservancy. To secure the necessary funding to complete this project, the Conservancy engaged Conservation Forestry, LLC and its consortium partner, Forest Investment Associates. The Conservancy will transfer ownership of some lands in Virginia, Florida and Georgia to Conservation Forestry, LLC and Forest Investment Associates. The Conservancy will retain rights to acquire nearly all the properties, or interest in the properties in the form of conservation easements at later dates based on the availability of funding. In the interim period, the lands will be managed to sustainable forestry standards and key conservation areas will continue to be off-limits to wood harvesting.

"We are delighted to participate in this opportunity with The Nature Conservancy and International Paper," said John Tomlin, a founder of Conservation Forestry. "Our goal is a good outcome for conservation and a solid return for investors, and we look forward to achieving both on these and other properties."

As much as 44 million acres of privately owned forestland, a critical part of the nation's landscape, will be sold over the next 25 years. The future of these lands - especially in the South where forestry has long supported hundreds of thousands of jobs and helped to safeguard some of the nation's most biologically important wildlife habitat - will be told within that time.

The continued fragmentation of forests because of subdivision, land use change and development is one of the most pressing threats facing the American landscape today. Forests - both public and private - protect biodiversity, wildlife habitat, recreation opportunities for outdoor enthusiasts and jobs for more than 1.6 million Americans. Healthy forests protect water resources by slowing runoff, stabilizing soils, preventing erosion and floods and filtering pollutants.

Private and non-profit conservation groups continue to express interest in additional International Paper land holdings, and the company will continue to explore those opportunities.

Conservation Views

Ray Ashton

The views expressed in this column are solely those of the author and do not necessarily represent the position of the Gopher Tortoise Council. To respond to this column or submit your own view on a current conservation issue, please contact the editor.

For years now, many have been working hard to turn around the Florida Fish and Wildlife Conservation Commission's (FFWCC) conservation efforts for Gopher Tortoises and other upland species. For the first time in 25 years, there is a great chance to develop a conservation plan that will save what can be saved in a highly developed Florida.

Now is the time for you personally to have a very important say in what will be done. You have the month of July to comment during the PUBLIC COMMENT PERIOD on two extremely important issues. The first is to write a letter in support of the uplisting of the Gopher Tortoise to threatened status. Although the FWC Commissioners voted to do so, the uplisting can only be implemented after public comments have been reviewed. This is a time when special interest groups may work to stop or delay this process. Every letter and email counts. The second issue is to comment on the new Management Plan for the gopher tortoise. We have outlined the key points below.

Send your comments by 5:00 pm on August 8th to: Gopher Tortoise Management Plan Comments, Florida Fish & Wildlife Conservation Commission, 620 South Meridian Street, Mail Station 10, Tallahassee, FL 32399-1600

There have been at least three attempts in the past to establish a management plan for the gopher tortoise. The Management Plan guides the FFWCC and its partners toward achieving the conservation goals and objectives. The reasons for the failure of these plans are the points that you need to address in your comments. Specifics on each of these can be found on Ashtonbiodiversity.org, the web site for the Gopher Tortoise Conservation Initiative. The issues are:

GTCI COMMENTS ON THE MANAGEMENT PLAN

USE THE ASSURANCE COLONY PLAN AS THE FOUNDATION FOR THE MANAGEMENT PLAN

Establish this plan so FWC can afford to manage and monitor the Heritage Habitats in perpetuity while partners such as State Parks, State Division of Forestry, National Forests, Military lands, County governments, and others who manage natural areas can partner to manage local tortoise populations.

It is important to remember that the primary reason for the failure of conservation of habitats and species is the lack of funding over time. Tortoise habitat can be totally lost without fire, grazing, or mowing within 20 years.

WHAT IS THE CONSERVATION VALUE? This is the main question FWC should ask in any action taken.

Upper respiratory tract disease testing should only be used as a clinical tool and not one to determine if populations of tortoises should be destroyed. (See the petition to stop testing on the web page).

The current rules of take should be eliminated and replaced with rules that work to reduce of take of tortoises.

Current methods of mitigation are cumbersome and have little conservation value. Establish a system in each county or region where developers, local governments, and other stakeholders work to establish tortoise conservation lands in a way that essentially provide lands instead of money. Or, in those counties where there are ample lands, establish a management and monitoring fund to ensure habitats are sustained for upland species. Where wetlands are degraded or too small to function for wildlife, exchange those for upland habitat.

3. ELIMINATE THE CURRENT FWC PERMITTING PROCEDURES - There is little or no conservation value in those that have evolved from those developed years ago.

Large land developments including infrastructure must enter into contracts with FWC and local stakeholders to take into account all listed species and natural lands. This should be done BEFORE A SITE PLAN IS DEVELOPED. FWC provides staff to work with the development community to create that best plans, swap lands, large on-site natural areas that have real conservation value.

Establish cooperative agreements on small developments where local communities, State Parks, and other conservation lands can be proper relocation sites for tortoises and other species. These agreements would allow fees to be obtained for permits that in turn would offset site inspections and management of sites.

Single-family properties must have a way to handle tortoises in their yards. They must have a place to put them or get information and support to have them on their lands. People may be able to place tortoises that are in harm's way into the Assurance Colony Program.

4. CONSERVATION LANDS TAX EXEMPTION

As property taxes increase, large landowners are going to be forced to destroy natural lands and put them into agriculture or timber. This is presently one of the main reasons for habitat loss. A plan has been submitted to FWC to create a state rule that allows counties to create conservation land tax exemptions. This would allow people who wish to relocate tortoises to their properties with ample habitat to get this tax break. Without it, we will continue to lose tortoises, even if development rates slow down.

SUPPORT RESEARCH THAT HAS HIGH CONSERVATION VALUE

How do you keep cattle healthy? Make sure their graze and feed is excellent, they have clean water to drink and they are not overcrowded or stressed.

We now know that tortoises require a large diversity of foods in their diet. What we don't know is what it is in a food plant at the time the tortoise eats it that causes it to select and forage on that particular plant.

Tortoises live in the upper ground water table. That is where their burrow ends are located. This provides moisture and a high relative humidity. However, we are polluting this microhabitat all over the state and, in fact, many tortoise burrows have no invertebrates now. Why?

Most importantly, how can we replace fire as the most important management tool to keep tortoise habitat? New and different ways are needed for areas where prescribed fire is not an option and these options should be studied.

CONSULTANTS MUST HAVE PROPER TRAINING AND BE HELD ACCOUNTABLE

Under the current system, just about anyone can do protected species surveys, count tortoises, and relocate them. This results in critical errors. This situation must stop and FWC should require well-trained people to conduct the work, including backhoe operators and field technicians.

Perhaps, through the previously mentioned "contract verses permit", this issue would require direct accountability to FWC or local government.

RELOCATION IS DONE PROPERLY AND TAKE IS TRULY INCIDENTAL

It is imperative that the Management Plan define the proactive efforts that are and will be undertaken to encourage both private and public landowners and managers to participate in the Assurance Colony Program through relocation of tortoises or sustaining habitat and current resident populations.

Emphasis on enforcement and the contracting process should be the goal to ensure that relocation is done properly. A general list can be found in Ashton and Ashton, 2004. Gopher Tortoise, A Life History, Pineapple Press. Specifically each plan should include site enclosure (not penning), vegetative evaluation of carrying capacity, maintaining the relocated tortoises for 6 months on site to allow them to recalibrate their orientation and homing systems, evaluate health, establish a funded monitoring and reactive management plan all based in a conservation easement.

People can have tortoises in their local schools, parks, and proper green spaces and if approved, even their yards. People need to be viewed as a part of the solution and not made to break laws when they are trying to save tortoises. This program along with education, training programs for professionals, and on going information will be provided through a nongovernmental proactive tortoise conservation group.

The only reason for an INCIDENTAL Take Permit is when all due diligence is done on development site and a tortoise is killed by accident. When all is said and done, it is the responsibility of all stakeholders to insure that the only deaths of tortoises are purely accidental and not planned.

The agricultural community must apply for an Incidental Take Permit when converting raw land into agricultural land or pay a per tortoise and per acre fine for the loss of that land to non-agricultural purposes inside of 20 years.

ACCOUNTABILITY

The management plan will be defined in terms that are concrete enough and tied to a discernable budget and budgetary planning for at least 10 years. These plans must be measurable and tied to realistic objectives to meet the primary goal. These plans should include funds and responsibility of willing stakeholders to achieve these objectives. The management plan will provide for an outside review of stakeholders to evaluate the success of achieving the goal and objectives each year and to recommend changes in policy.

Newsletter of The Gopher Tortoise Council

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Please view the GTC website (below) for contact information

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