

On The Wild Side

WILDLIFE PROGRAM NEWSLETTER



USDA
FOREST SERVICE

JANUARY- FEBRUARY 2005



NEWS

NEW DEPUTY CHIEF FOR THE NATIONAL FOREST SYSTEM

24 February 2005

Joel Holtrop has been selected as the next Deputy Chief for the National Forest System. Joel is leaving his current job (held since 2002), as Deputy Chief for State and Private where his leadership of the fire and aviation program, during some of the most severe fire years we have experienced, along with all of

the other state and private forestry programs has been outstanding. Prior to his position as Deputy Chief of State and Private, Joel was the Director of Watershed, Fish, Wildlife, Air and Rare Plants. Joel has held a number of other significant positions in the Forest Service; he is well known and respected among natural resource professionals both inside and outside of our agency.

Joel's effective date is March 6, 2005. Please join us in welcoming Joel to his post!

ERNESTO GARCIA NAMED AS NEW FEDERAL PARC COORDINATOR



Photo by Bruce Drapeau
BIG TURTLE. John Jensen, Wildlife Biologist and Herpetologist with the Georgia Department of Natural Resources, holds an alligator snapping turtle as Ernesto Garcia, wildlife program leader for the U.S. Forest Service Southern region, looks on.

Ernesto (Ernie) Garcia, previously the Forest Service Wildlife Program Leader for the Forest Service's Southern Region, has accepted the position as Federal Partners in Amphibian and Reptile Conservation (PARC) Coordinator. Ernie has relocated to Weaverville in California where he is on loan to the U.S. Fish and Wildlife Service. As the new PARC coordinator, Ernie will work with the PARC Federal Agencies Steering Committee to promote amphibian and reptile conservation at national and regional scales. He will continue to glean support from the federal family of PARC partners for the ongoing development of conservation tool such as the amphibian and reptile habitat management guides, inventory and monitoring handbooks, training workshops, and other PARC products. Ernie will also conduct education and outreach efforts within and outside of the Federal Government to advance the objectives of PARC, with special emphasis on reaching land managers, the general public, the pet trade and the American Zoological Association.



Ernie has been involved with PARC since 2000, and with the help of FS regional amphibian and reptile conservation coordinators, has been successful in promoting the FS Herp Initiative. This initiative, supported by all FS regions, continues to contribute significantly to amphibian and reptile conservation efforts, and has firmly seated the Forest Service among the leaders in amphibian and reptile conservation.

Although we will greatly miss Ernie's leadership in the FS wildlife program, we are excited about the prospects of working with him in his new role. We are confident that Ernie's commitment and tenacity to promote amphibian and reptile conservation will continue to keep this unique and important group of species and their habitats in the national spotlight.

FOREST SERVICE RELEASES NEW PLANNING RULE

News Release No: FS- 0518
Contact: Dan Jiron, 202-205-0896
USDA Forest Service
Washington, D.C.

Environmental Management System will be adopted; new rule will allow forest managers to adapt more quickly to changing forest conditions.



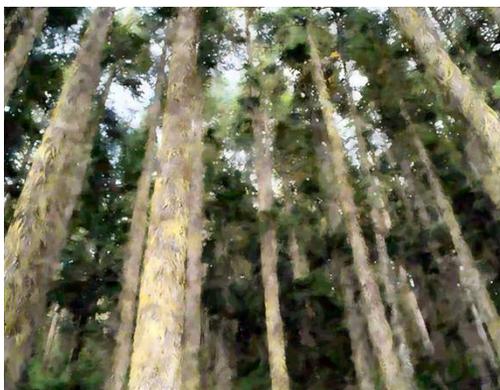
WASHINGTON, Dec. 22, 2004 — The U.S. Department of Agriculture Forest Service released its final rule that provides the framework for individual forest management plans

governing the 155 national forests and 20 grasslands. For the first time, an Environmental Management System (EMS) will be used during the planning process to improve performance and accountability. The rule establishes a dynamic process to account for changing forest conditions, emphasizes science and public involvement, and ultimately will help local forest managers provide future generations with healthier forests, cleaner air and water, and more abundant wildlife while sustaining a variety of forest uses.

“The new rule will improve the way we work with the public by making forest planning more open, understandable and timely,” said Forest Service Associate Chief Sally Collins. “It will enable Forest Service experts to respond more rapidly to changing conditions, such as wildfires, and emerging threats, such as invasive species.” The agency will adopt an EMS for each forest and grassland—a management tool used widely by the public and private sector both nationally and internationally that includes internationally-accepted standards. EMS connects planning with implementation so that plans can be dynamic, and outcomes of project-level decisions can be assessed for continuous improvement. A key feature of the EMS is the requirement for independent audits of the Forest Service’s work. This new review and oversight of agency performance will help the Forest Service more fully account for its management of more than 192 million acres of public land.

The new rule will make forest planning more timely and cost effective. Currently, the forest planning process generally takes 5-7 years to revise a 15-year management plan. For example, the management plan for the Arapaho and Roosevelt National Forest in Colorado took seven years and \$5.5 million to revise. Under the new rule, forest plan revisions will take approximately 2-3 years, with a comprehensive evaluation of the plan to be completed every five years to ensure it is meeting goals and objectives. Desired land conditions will be outlined in each management plan, and local managers will be held accountable for their efforts to achieve them. This will make planning more relevant to on-the-ground practices and outcomes.

“This rule applies the most current thinking in natural resources management,” said Collins. “It takes a 21st Century approach to delivering the full range of values that Americans want for their quality of life: clean air and water; habitat for wildlife; and sustainable uses that will be available for future generations to enjoy.” The new rule directs forest managers to take into account the best available science to protect air, water, wildlife, and other important natural resources at a landscape-level. Plant and wildlife protections will be provided first by conserving ecosystems as a whole, with more targeted protections for listed species and other species of concern. Management decisions will consider ecological, social, and economic sustainability, consistent with broadly accepted international standards.



Under the new rule, local experts will be able to more effectively comply with environmental laws, like the National Environmental Policy Act (NEPA) and the Endangered Species Act. Because information gathered and analyzed at the local level will be current and constantly updated, the Forest Service will have a better basis for evaluating the environmental effects of projects. Land management plans under the new rule will be strategic in nature. Generally, these plans will not include specific project management decisions. If a plan does include decisions with on-the-ground effects, it will require an Environmental Assessment or an Environmental Impact Statement as appropriate, consistent with NEPA. This provision is in a separate proposal identifying how plan development,

amendment and revision will comply with NEPA requirements.

The final rule moves many detailed procedural requirements to the Forest Service’s directive system, which is the agency’s “how to” internal manual. For example, broad species protection goals remain in

the new rule, but the analytical procedures on how to achieve those goals will be spelled out in the directive system. The proposed directives will be released soon for public review and comment. The new rule neither promotes nor discourages any particular forest use, such as recreation, grazing, timber harvest, or mineral development. Decisions regarding such uses will be made on a forest-by-forest basis and will be informed by local conditions, science and public input. Guidelines on activities, such as timber harvesting, will be placed in the directives.

The National Forest Management Act of 1976 requires the Forest Service to develop, periodically revise and amend all forest and grassland plans. The first generation of forest plans was developed under a regulation adopted in 1982. There are currently 49 revisions underway using the 22-year-old regulation. Those forests and grasslands may now choose to change to the new rule or wait to use the new rule for their next revision or amendment. An additional 42 are awaiting revision and must use the new rule. The list of forest plans completed, undergoing revision, and awaiting revision can be found at: The new rule and the proposal identifying how plan development, amendment and revision will comply with NEPA are available at www.fs.fed.us/emc/nfma.

The public will have 60 days to comment on the NEPA proposal. Written comments may be sent to: Forest Service Content Analysis Team, P.O. Box 22777, Salt Lake City, Utah 84122. Comments also will be accepted by electronic mail to planningce@fs.fed.us or by facsimile to 801-517-1015.

THE 2005 FOREST SERVICE CENTENNIAL CONGRESS CONCLUDED JANUARY 6, 2005

Materials including proceedings, breakout outcomes, photos, and awards will be forthcoming and available on this website: <http://www.natlforests.org/centennial/proceedings.htm>



The Forest Service Centennial Congress commemorated 100 years of conservation, assessed current challenges and opportunities, and initiated a dialogue for the 21st Century to meet the needs of present and future generations. The 2005 Centennial Congress convened Congressional leaders, representatives from agency partners and interests, leading academicians, select state and local government representatives, key governors, media leaders and Forest Service leaders to honor the creation of the U.S. Forest Service and to provide a contemporary focus for the future.

The Proceedings for the Forest Service Centennial Congress is being prepared by the Forest History Society in Durham, NC. Both printed copies of the proceedings as well as CD-ROMs will be available, and the final proceedings will be posted on the Internet. For questions related to the proceedings, please contact Dr. Steven Anderson, 919-682-9319; stevena@duke.edu.

The Forest History Society will also be distributing the 3-DVD set of the film "The Greatest Good" that was unveiled at the Congress, as well as a companion book to the film entitled "The Forest Service and the Greatest Good: A Centennial History." For more information visit this website <http://www.fs.fed.us/greatestgood/film/screens.shtml?sub2>. Gallery of Photos of the Greatest Good are found at: <http://www.backfromthebrink.org/inthespotlight.cfm>



2005 TEAMING WITH WILDLIFE FLY-IN DAYS

(From: http://www.iafwa.org/Inside%20IAFWA/Feb%2005/February_Inside_IAFWA.html)



PhotoRobert@shanzt.com

On March 1-2, representatives from the state wildlife agencies and other conservation organizations will come to Washington for the 2005 Teaming with Wildlife Fly-In Days. More than 100 people, representing nearly every state, will attend this year's events--meeting with their lawmakers to inform them about the State Wildlife Grants program.

The Teaming with Wildlife Fly-In Days are hosted and organized by the Teaming with Wildlife National Steering Committee. In addition to the International Association, the Steering Committee

includes the American Fisheries Society, the American Zoo and Aquarium Association, the Congressional Sportsmen's Foundation, the Izaak Walton League of America, the National Audubon Society, the National Wild Turkey Federation, the National Wildlife Federation, The Nature Conservancy, the Theodore Roosevelt Conservation Partnership, the Wildlife Society, the Wildlife Conservation Society, and the Wildlife Management Institute.

The first day of the Fly-In (March 1) will include a training session for participants, with background briefings on the State Wildlife Grants program and the current budget climate on Capitol Hill. The second day (March 2) is set aside for individual meetings between Fly-In Days delegates and their Members of Congress.



APPLICATIONS INVITED FOR FIVE-STAR RESTORATION MATCHING GRANTS PROGRAM: DEADLINE IS MARCH 1, 2005



The National Association of Counties, the National Fish and Wildlife Foundation, and the Wildlife Habitat Council, in cooperation with other sponsors, seek applications for the Five-Star Restoration Matching Grants Program. Award amounts range between \$5,000 and \$20,000, with the average grant amount roughly \$10,000.

The program, which is open to any public or private entity, provides modest financial assistance on a competitive basis to support community-based wetland, riparian and coastal habitat restoration projects that build diverse partnerships and foster local natural resource stewardship through education, outreach, and training activities.

See the NFWF Web site for program guidelines, application procedures, and an FAQ.

<http://nfwf.org/programs/5star-rfp.htm>



LANDBIRD REPORTS BY STATE

Partners in Flight and the International Association of Fish and Wildlife Agencies (IAFWA) developed landbird reports by state. The reports were sent to the state fish and wildlife agencies in spring and summer 2004. They include priority species lists, and population estimates, population targets, and population objectives for those priority species. The information is sorted by habitat suite within each state and BCR. The reports and the user's guide can be downloaded from the IAFWA's website at:

http://www.iafwa.org/bird_conservation/landbird_reports.htm.

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International Association of Fish and Wildlife Agencies
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COMPREHENSIVE WILDLIFE CONSERVATION STRATEGIES



The IAFWA website on Comprehensive Wildlife Conservation Strategies has lots of great information regarding the status of the various state efforts, resources, reference materials, contacts, and more. If you haven't visited the site lately, we would suggest you take a look. You can see information for the states within your regions and how they are progressing and where they may need your help! Visit for information http://teaming.com/state_wildlife_strategies.htm - The editors – OTWS

COORDINATED BIRD MONITORING

(Excerpt from Partners in Flight Newsletter, January 2005, By Terry Rich, USFWS Partners on Flight Coordinator)

As requested, Partners in Flight (PIF) provided comments to NABCI on the International Association of Fish and Wildlife Agencies (IAFWA) report, Monitoring Avian Conservation: Rationale, Design, and Coordination (September 2004). An ad hoc NABCI committee was formed to receive comments from all sources, to consolidate them, and to seek ideas for the next steps. Forty-nine sets of comments were received from a variety of organizations including U.S. Federal Agencies (3), State Fish and Wildlife Agencies (21), Universities (2), Non Governmental Organizations (5), Joint Ventures (3), Bird Conservation Initiatives (5), and international partners (1). That committee issued their report, Report to the U.S. NABCI Committee: A summary of comments to the IAFWA report on coordinated bird monitoring, on 14 December. Further comments were then solicited from all partners as to what our next steps should be. PIF has submitted those comments as well.



If this all seems very process heavy, it is. But this is a complicated task with many partners, many existing programs, different ideas, people with various agendas, and newly identified monitoring needs in the mix. Somehow, we must work our way through this puzzle to optimize our collective bird monitoring investment. This will take continued discussions over time, but we are moving ahead. Anyone who would like to see a) the original IAFWA report, b) the PIF comments on the report, c) the NABCI analysis of the comments, or d) the subsequent PIF recommendations on the next steps, should contact me - Terry Rich, USFWS

NEW PLJV IMPLEMENTATION PLAN GATHERS NO DUST

(From Playa Post, Vol. 3 Issue 1, January 2005, Contact: Debbie Slobe, 303-926-0777)

www.pljv.org

The Playa Lakes Joint Venture (PLJV) staff is putting the final touches on an innovative, new implementation plan created not on paper but with tech-



nology to help guide all-bird conservation. Over the past year, PLJV staff and partners have been crunching numbers on birds and acres, and have devised a database that stores the latest information on bird densities and habitat acres and conditions in a format that can compare any number of factors and provide up-to-date planning information for PLJV partners.

The database, called the Hierarchical All-Bird Strategy or HABS, can be used to calculate current and optimal habitat carrying capacities for birds, and can assess the effects of conservation programs on bird numbers within the PLJV region. HABS users can look at individual species, groups of birds or all birds at once to obtain specific and broad views of how conservation actions affect species within a single landscape. The ultimate products of HABS are simple, brief Area Implementation Plans that give specific guidance to land managers on local habitat needs to reach national bird population goals.

"We are extremely excited about the potential of HABS as a tool for all bird conservation," said PLJV Coordinator Mike Carter. The system will be continuously updated as new information emerges, making HABS a 'living' plan based on the best scientific data available. The PLJV staff and partners are also authoring several companion documents which explain the planning process, products and philosophy. The last PLJV implementation plan was authored in 1994 and has not been updated since. This new plan exemplifies the Joint Venture's commitment to science-based planning for all birds within the entire PLJV landscape. The plan culminates two years of hard work by PLJV staff, planning teams and other partners.

The PLJV staff will formally present the new implementation plan during the JV's winter management board meeting in Amarillo, Texas, February 22 – 24, 2005.

THE NATURE CONSERVANCY PARTNERS WITH RARE TO BUILD LOCAL SUPPORT FOR CONSERVATION

(Excerpt from http://www.ems.org/nws/2005/01/03/the_nature_conse, January 3, 2005; also see <http://rareconservation.org/pressrelease01032005.htm>)

Rare - Inspiring Conservation

Laurel Braitman, Communications Manager, 1840 Wilson Blvd.,
Suite 204, Arlington, VA 22201, 703-522-5070 ext. 111
Or lbraitman@rareconservation.org
www.rareconservation.org



Thirty Campaigns to Target Public Apathy and Catalyze Change

Arlington, VA – The Nature Conservancy and Rare, two international conservation organizations, have teamed up in an unprecedented partnership to bring social marketing campaigns to 30 key international Conservancy sites in order to build support for and help advance conservation over the next three years. These campaigns are called Rare Pride campaigns. Pride is a methodology developed by Rare that borrows proven marketing techniques traditionally used by consumer product marketers to galvanize public support for conservation – often the missing link to conservation success.

"The Nature Conservancy is thrilled by this partnership. It allows us to combine our organizations' expertise and enhance our overall impact in the communities that are the highest priority for conservation efforts around the world," said Steve McCormick, President and CEO of The Nature Conservancy. "The Conservancy knows that the support and involvement of local communities is the key to lasting conservation success. These Pride campaigns are a fantastic way to get people aware of and involved in protecting their natural resources."

The \$3-million alliance will provide Conservancy's international country managers the opportunity to integrate the Pride methodology to galvanize support for conservation and thus advance protection and sustainable development activities. Pride has the strongest impact in locations where public apathy and a lack of awareness prevent local people from protecting their environment. For instance, two Pride campaigns run in Mexico's Sierra de Manantlan Biosphere Reserve inspired community support for the protected area and demonstrated measurable results. Pride efforts there led to a 45% decrease in agriculturally-related forest fires, establishment of the largest community-based recycling program in Mexico, and the censuring of a major watershed polluter. "At the Conservancy, community-based education isn't one of our core strengths, yet it needs to be part of our strategy," said Ed Norton, senior advisor for The Nature Conservancy's China program. "We have recognized that these are essential conservation objectives, and we need to partner in order to achieve our goals.

"If we know where the world's most important places are, and we know that the principal threats to these sites are social, political, and economic, we are left with two questions: What methods best address these challenges and how can we take what works and make it available throughout the world?," explains Brett Jenks, President and CEO of Rare. "Rare works to develop methodologies that address the human factor. The partnership with The Nature Conservancy is exceptional, because it enables the proliferation of the methods that have been proven and are ready to be replicated." Part of an industry awakening, environmental organizations are banding together in partnership to turn the conservation tide. "Collaborations that are effectively run are the future of conservation. In order to achieve the critical mass needed to turn the tide, we must propagate approaches that can catalyze change around the world. Partnerships like this one between Rare and The Conservancy do just that," explains Wendy Paulson, Co-Vice Chair of the Rare Board and Trustee of The Nature Conservancy of New York.

Implemented in 35 countries, 60 Pride campaigns have turned charismatic flagship species—like the St. Lucia parrot or the manatee in Belize—into symbols of local pride. Through a combination of grassroots and mass-marketing techniques, ranging from catchy songs about the flagship species to church sermons, music videos, and puppet shows, these campaigns generate broad based support for ecosystem protection on a regional or national level.



The Nature Conservancy is a leading international, nonprofit organization that preserves plants, animals and natural communities representing the diversity of life on Earth by protecting the lands and waters they need to survive. To date, the Conservancy and its more than one million members have been responsible for the protection of more than 15 million acres in the United States and have helped preserve more than 102 million

acres in Latin America, the Caribbean, Asia and the Pacific. Visit us on the Web at nature.org.

Rare, a pioneering environmental conservation organization, works globally to equip people in the world's most threatened natural areas with the tools and motivation they need to care for their natural resources. Rare believes conservation is a social issue, as much as it is a scientific one. A lack of alternatives and awareness leads people to live in ways that are harmful to the environment. For thirty years, Rare has used proven social marketing campaigns, "edutainment" radio programs, and economic development solutions to inspire communities to protect their natural environment. Visit Rare on the web at rareconservation.org.

Contacts: Rare – Amy Appleby, appleby@rareconservation.org or 703-265-2463
The Nature Conservancy – Emily Whitted, ewhitted@tnc.org or 703-841-8745

A TEXAS MICHELANGELO

(Entire excerpt from

<http://www.backfromthebrink.org/inthespotlight.cfm?subnav=landowner&ContentID=3710>)



As a doctor in Dallas, Texas, Rickey Fain used to work helping members of the human species. Today, he lives in the Texas Hill Country where he is aiding a bird of a different feather, the endangered black-capped vireo, which perches on his land. Over the years Dr. Fain had become disenchanted by the medical profession. "I wanted to get outside. I was tired of the fluorescent lights," recalls Fain. So he traded in his little black bag for a pair of saddlebags and headed for the hills.

It was 1992 when he gave up the city life for a home on the ranch and found he had a slight problem on his hands. Schooled in medicine, not ranching, the born-and-bred Texan had a moment of doubt.

"Basically I woke up the next morning wondering what I had done. I didn't know anything about ranching. I started wondering if I had one too many glasses of wine the night before". But, his misgivings were fleeting and in short order, he had a plan. He began educating himself about how he could effectively turn back the clock on the land--to return it to the state it was in during the heyday of the Wild West, before heavy cattle grazing had denuded the lush country.

He bulldozed large swaths of the range to clear out the invasive cedar that shaded out important grassland. He reestablished native grasses and built a 40-acre wetland area that now attracts ducks, turkeys and deer--just the type of wildlife needed to attract clientele to what is now an exclusive bed-and-breakfast catering to some unlikely pairs: nature enthusiasts and hunters. Folks who prefer the wildlife to the wild life now flock to his high-end Quail Ridge Ranching droves.

Exclusive guests like General Norman Schwarzkopf may pay top dollar for a weekend getaway, but some manage to enjoy the land for free. "I did not set out to restore the vireo population of the world," admits Dr. Fain. "I was doing things right by accident. I set out to restore the land to what it was like in the 1800s. It turns out that was good for the vireo--which makes sense. They were doing fine in the 1800s." Accident or not, his passion for the land has paid off in spades for the endangered black-capped vireo, whose numbers have climbed up to about 17 in just a decade. His guiding philosophy has a lot to do with the land's improvement and the vireo's success: if you treat the land right, it will treat you right.

Work in Progress

The now full-fledged rancher continues to work to foster natural ecosystems in sync with the soil and the climate. In fact, when it comes to land management, you might say Fain is developing something of an art form. "The best comparison to this work was made by a landowner friend of mine [who] looked at all I had done and said, 'You know, land management is not unlike Michelangelo and the Sistine Chapel,'" said Fain. "'You start in one corner. You don't necessarily know what you're going to finish up with. You just start and it comes to you.'" But unlike art, the land is not immutable. It is a living entity that changes over time, and so Dr. Fain also sees Quail Ridge as a kind of experiment. He is trying to create a system that's sustainable environmentally and economically.

One of the first hurdles for landowners is the expense of doing the type of brush manipulation work needed to bring back acceptable natural habitat, explains Environmental Defense wildlife scientist David Wolfe. Clearing cedar, for example, can run as much as \$200 per acre, which is expensive when you have to clear 1,000 acres. This is where techniques like prescribed fire and managed grazing can help reduce costs that could otherwise skyrocket into hundreds of thousands of dollars. Another way of

curbing expenses is to take advantage of the dizzying array of government monies available to landowners.

"We've been able to help him speed up the work he had already started by taking advantage of a several different programs designed to make this easier," said Wolfe. Dr. Fain's work is an example of a shifting tide. Previously landowners, federal agencies and conservation groups had been at odds. Now, they are allies. "Environmental Defense was kind enough to come out, we sat down, we agreed to do things right," he said. "The quail, the deer, the turkey, the vireo--everything benefited. And that's the bottom line. When you do things right, you do them right."

Dr. Fain continues to restore the land's natural systems rather than overtax it. It's a delicate balancing act with telltale results: if you can get things back in balance, then all of the species native to that land will benefit. And the black-capped vireo is living proof. "The best thing we can do to our land is put our footprints on the land," explains Fain. "In other words, we walk the land, we observe. And with the observations we make, we continue to refine our land management. One day we look up and the ceiling of our Sistine Chapel is finished."

Environmental Defense program manager Melinda Taylor and Texas landowner Rickey Fain explain how we are working together to help recover the endangered black-capped vireo on this video: <http://www.backfromthebrink.org/inthespotlight.cfm>.

RESEARCHERS FIND POND SCUM TOXIN THAT MAY KILL BALD EAGLES

(This article appeared at http://bobwhitson.typepad.com/howlings/2005/01/researchers_fin.html)
January 12, 2005

By Bo Petersen

The Post and Courier, Knight Ridder/Tribune Business News

Two researchers at the Hollings Marine Laboratory on James Island have made what could be a groundbreaking discovery in the search for a mysterious killer of bald eagles. Four years into their work at the Fort Johnson facility, researchers Susan Wilde and Sarah Habrun said they think a previously unknown form of pond scum carries a toxin that's killed some 100 of the majestic national symbols in the Southeast, including half the nesting population in the Thurmond Reservoir on the South Carolina-Georgia border. If the duo are correct, their "eureka moment" could help thwart a strange new avian disease. Wilde, a University of South Carolina assistant professor, observed an unidentified blue-green alga that grows on hydrilla, an invasive plant species that clogs state waterways. Habrun, a research technician and College of Charleston graduate student, grew a culture of the pond scum in late 2004 after three years of being daunted by blooms of other blue-green algae that crowded it out of lab samples.

Field tests showed mallards that eat the algae develop avian vacuolar myelinopathy, a brain-eating disease. The eagles apparently get it from eating coots. Ducks and geese also have died from the disease. "If we're right," Wilde said, "we're talking about a totally new species and a new neurotoxin traveling through the food chain." Blue-green algae, the ubiquitous slime that blooms in still water, often is harmless enough that some organic advocates tout it as a food supplement, although researchers have found a number of toxins can grow in it. The hunt for AVM has been "one of those studies where you have no idea what's going on initially," said Tom Murphy, the state Department of Natural Resources biologist who asked for help from Wilde, an algae specialist.

One by one, pesticides, mercury, infectious disease and known toxins were ruled out as causes of AVM. Wilde got involved because of "the really long shot" that an unknown algae toxin might be the culprit. The 16-year algae research veteran, fondly referred to as "the pond scum expert" by her in-laws, grew up in a

family in which her veterinarian dad took the children on walks and taught them the scientific names of trees. Even today she is fascinated with knowing names.



Habrun applied for a job at the lab when she enrolled in the college to work on her master's degree in environmental science. As a kid, she'd always loved cutting things apart in biology lab. The researchers are cautious about overstating the impact of their work, but they are excited. "I don't know if I can ever expect to do something like this again," Wilde said. Other toxins have been found in pond scum, suspended in the water or growing on the bottom. Wilde found this alga growing on the underside of hydrilla leaves underwater. The "eureka moment" came for the two researchers when they peered at the culture through a microscope. Wilde said she knew they had something "as soon as I turned on the fluorescent light and saw the glowing red balls in filaments." Gene sequencing determined it was, indeed, a new species.

AVM is considered the most significant unknown cause of eagle deaths in United States history, according to the National Wildlife Health Center Web site, which describes it as a mysterious disease whose cause has eluded scientists. It first was discovered in 1994 when 29 bald eagles died in Arkansas. On the South Carolina-Georgia border, 17 eagles were killed by AVM at Lake Thurmond and the Savannah River Site in 2000-01. The disease has been found at Lake Murray but not Lakes Marion or Moultrie. The algae apparently don't grow on hydrilla close to the coast.

The researchers now must figure out what water, weather, light and nutrient conditions make the algae grow, then do field studies. If the blue-green alga is the culprit, the cure is simple. "You can get rid of hydrilla," Wilde said.

The threat to the national symbol is a powerful argument for stepping up control or removal of hydrilla in areas where the algae can grow. Aquatic plant professionals are watching the work closely, Murphy said. AVM hasn't stopped the bald eagle's remarkable recovery in South Carolina and the Southeast, at least not yet, Murphy said. The number of eagle pairs nesting in the Palmetto State has risen from 13 in 1977 to 190 this year. But because the disease is emerging, nobody knows about its long-term effects. It can take decades for the eagles to re-establish a nesting population in any one location.

PREHISTORIC BADGER HAD DINOSAURS FOR BREAKFAST

news@nature.com

The best in science journalism

(Excerpt from Nature News Online: 12 January 2005; doi: 10.1038/news050110-11)

By Michael Hopkin

Fossil of a surprisingly large, carnivorous mammal is discovered in China



This artist's impression shows how the meter-long mammals might have looked. © Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences

Archaeologists have dug up a new species of mammal that roamed China during the reign of the dinosaurs. The creature was large enough to feast on young dinosaurs, exploding the myth that all of the mammals living back then were relatively tiny. *Repenomamus giganticus*, as the creature has been christened, was more than a meter long, about the size of a large dog. However, it would have more closely resembled a badger, says Yaoming Hu of the American Museum of Natural History in New York, who led the examination of the fossil. The fossil, which dates back 130 million years and was found in Liaoning in northern China, has a skull that is double the size of that of its closest relative, *R. robustus*, Hu and his colleagues report in this week's *Nature*¹. This makes it a startling addition to the ranks of Mesozoic mammals that lived with the dinosaurs more than 65 million years ago. "We were totally surprised," Hu told news@nature.com. "The idea about Mesozoic mammals is that they were small. These ones are totally different."

So big, in fact, was *R. giganticus* that it may well have had some dinosaurs for breakfast, literally. At the same site, the researchers uncovered a *R. robustus* skeleton with the bones of a baby *Psittacosaurus* in just the spot where its stomach would have been. If *R. robustus* could manage to eat a dinosaur, then its big brother almost certainly could, Hu and his colleagues suggest. They add, however, that it may well have fed on plants and insects too. "If this is not the largest Mesozoic mammal, it must be approaching it," comments Jerry Hooker, who studies prehistoric mammals at the Natural History Museum in London. "Its jaw length is about that of a fox." The idea that *Repenomamus* ate young dinosaurs is very plausible, he adds.

The dinosaur bones found with *R. robustus* are from a single individual and some are still articulated, making it unlikely that they were washed there from elsewhere after death. The bones' articulation also suggests that *Repenomamus* tore its prey limb from limb before gulping it down in large chunks, Hooker argues. This theory is bolstered by the fact that the mammals' teeth are sharp, with no molars. One way to confirm that the *Psittacosaurus* was eaten would be to look for corrosion on its bones from digestive acids, Hooker suggests. "Mammalian carnivores today have very strong digestive juices," he says. Hyenas' stomach acid, for example, can make holes in bones and teeth. Hooker rejects the suggestion, however, that *Repenomamus* supplemented its diet with vegetarian options. "I would have thought it unlikely that they were eating plants," he says. "With these teeth you wouldn't expect them to do a lot of grinding or crushing, and that's what you would need, like a pestle and mortar."

References

Hu, Y., Meng, J., Wang, Y. & Li, C. *Nature* 433, 149–152 (2005)

Coming Events

2005 DUCKS UNLIMITED NATIONAL CONVENTION, MAY 18-22, 2005--ORLANDO, FL

Imagine a land where the historic, old-world charm of St. Augustine beckons you to a majestic Spanish fort. And the festive island spirit of Key West extends a colorful welcome to magnificent nightly sunsets in Mallory Square. Where the gentle fog of the Everglades reaches up to escort you along rustic wooden walkways, and the opulent Emerald Bay, stunning with Spanish Renaissance architecture, greets you with a fabulous array of amenities. Now imagine that it's all in one extraordinary place. You have now entered the breathtaking Gaylord Palms Resort and Convention Center. The resort features 1,406 guest rooms and suites specifically designed



to reflect the individual style of each locale. Add to this, the magnificent gardens under the 4.5 acre glass atrium that connects these themed accommodations; a state-of-the art fitness center and full-service salon; outstanding restaurants; an abundance of meeting space; a location just five minutes from the main gate of Walt Disney World Resort; and you have the ideal facility for DU's 68th Annual Convention.

Falcon's Fire Golf Club is minutes away from Gaylord Palms, and for those bringing children to the convention, La Petite Academy Kids Station is located inside the resort and offers on-site, supervised, and accredited children's programs and day-care center. Add to this a marine activity pool with a waterslide and sand beach play area, and the sparkling South Beach pool area with art deco design and private cabanas. You can have it all in one destination – the Gaylord Palms Resort and Convention Center, headquarters for the 68th Annual Ducks Unlimited Convention. Don't delay, reserve your accommodations NOW and prepare for the spirit, excitement and adventure that await you in Orlando.



Informative Business Sessions

The business agenda for the 2005 Convention is designed to provide you with plenty of information, while accomplishing a lot of work. As usual, the General Business Sessions, convening on Friday and Saturday mornings, will feature informative and comprehensive audio/visual productions outlining the programs and goals of our vital habitat work in the United States, Canada, and Mexico. You will learn how the funds you helped raise for DU are being utilized to benefit this continent's waterfowl and wildlife, as well as learning about the future that is being charted for this great organization. Come and See – Learn and Enjoy!

Exciting Social Events

Convention '05 kicks off on Wednesday evening with the "House of Blues Blow-Out" Party that will combine great blues music, original Mississippi Delta folk art and Southern cuisine into an energetic mix of culture and entertainment. On Friday evening, the "Everglades Adventure" Party will transform the ballroom at the Gaylord Palms Resort into the unique wetlands typical of the Everglades, with cypress trees, moss and indigenous wildlife, including the ever-present alligators. The gala 68th Annual Convention Reception and Banquet on Saturday evening at the Gaylord Palms Resort will provide a fitting and memorable close to our festivities. Don't miss the excitement – join us in Orlando for Ducks Unlimited's 2005 Convention.

For more information and registration visit: <http://www.ducks.org/NationalConvention/index.asp>



FS CONTINUING EDUCATION WORKSHOP: ENDANGERED SPECIES ACT FOR LINE (ESAL) WORKSHOP, MAY 2-5, 2005

We have 6 openings for the "Endangered Species Act for Line" workshop. This class will be held in Teton Village, Wyoming, with the Grand Tetons as the backdrop and field trip destination. Tuition is \$960 (sliding scale tuition; price drops if class is full), which does not include lodging and meals (Lodging is a screaming deal at \$74/night!).]

For more information visit <http://www.fs.fed.us/biology/education/workshops/ESAL/index.html> or http://www.lclark.edu/dept/elaw/esal_0505.html

The ESAL workshop builds on your field knowledge and the Lewis & Clark College program faculty knowledge gained from academic and practical experience. The workshop provides bridges between abstract knowledge and field application, internal agency practice and external expectations, and past

and future practices. One reason for coming to a workshop taught by institutions of liberal education such as Lewis & Clark College is to evaluate and discuss what is "best practice."

Some of the TES and recovering species found in the Greater Yellowstone Ecosystem include bald eagles, trumpeter swans, whooping cranes, peregrine falcons, cutthroat trout, black-footed ferrets, Rocky Mountain bighorn sheep, gray wolves, grizzly bears. The Tetons and Greater Yellowstone Ecosystem are notable for their spectacular beauty as well as for their threatened and endangered species recovery plans. Wednesday spent in the field making connections between ESA, "best practices" and implementation.



To register for this class please contact Shelly Witt at switt01@fs.fed.us, or call 435-753-4838.

Shelly Witt
USDA Forest Service - Continuing Education Program Leader
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Postal Address: 860 North 1200 East, Logan, UT 84321
Phone: 435-753-4838; Fax: 435-755-3563
Email: switt@cc.usu.edu (read daily); switt01@fs.fed.us (read weekly)



FS CONTINUING EDUCATION WORKSHOP: NATURAL RESOURCE POLICY, VALUES & ECONOMICS (NRPVE) WORKSHOP, MAY 2-6, 2005

We have 5 openings for the "Natural Resource Policy, Values and Economics" workshop, being held at University of Georgia, Athens, GA. For more information visit <http://www.fs.fed.us/biology/education/workshops/RPVE/index.html>

A workshop for leaders and thinkers seeing the whole landscape. Why do we go down the certain paths in natural resources? How are decisions made?

This class is one week, (it previously was 2 weeks), and tuition is \$1200 (includes breaks and "full sit down lunch"); this price does not include lodging and other meals.

Class Objectives & Description

This class delves into the complex factors involved in policy making, the basic role of economics in management of natural resources demonstrate comprehension, and appreciation of human value systems that underlie policy making and economics. Discussion is strongly related to activities on National Forests via case study and interactive exercises. Obviously one week won't make you an economist or policy analyst - but it will help you in understanding and dealing with economic and political influences in natural resource management. Don't be afraid of the "economics" - it is taught in an engaging and interesting way.



To register for this class please contact Shelly Witt at switt01@fs.fed.us, or call 435-753-4838.

Shelly Witt

USDA Forest Service - Continuing Education Program Leader

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Postal Address: 860 North 1200 East, Logan, UT 84321

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Email: switt@cc.usu.edu (read daily); switt01@fs.fed.us (read weekly)

CALL FOR PAPERS FOR WESTERN STATES AND PROVINCES DEER AND ELK WORKSHOP



mcox@ndow.org

Mike Cox, Big Game Staff Biologist

Nevada Department of Wildlife

Big Game Staff Biologist and Workshop Chairman

775-688-1556

Everyone:

We are seeking papers for the 6th Western States and Provinces Deer and Elk Workshop to be held in Reno, Nevada, May 16 - 18, 2005. Please consider presenting a paper or poster. There is also a call for nominations for the Wallmo Award. Please visit <http://www.ndow.org/hunt/events/index.shtml> for online registration to the workshop, and additional related to information. Please forward this Call for Papers to your colleagues.

Biologists are Encouraged to Submit their Papers.

Authors will have a choice to either publish an entire paper (peer reviewed) in the workshop proceedings or an abstract of their oral or poster presentations. Abstracts will be accepted until March 25, 2005 and should be submitted electronically via e-mail attachment or on CD. Papers should include: title, author(s) name, postal address, phone number (voice and fax), and E-mail address. Please be certain the format you submit adheres to Journal of Wildlife Management guidelines and is compatible with WORD2000.

Hope you are able to attend! Mike Cox

THINKING BIG: NEW PLANS, NEW PRODUCTS, NEW PARTNERS FOR PARC

Southeastern PARC Meeting, February 25-27, 2005, Hot Springs, AR (venue, lodging TBA)

For more information visit <http://www.parcplace.org/SERegional.htm>

Do you live near Hot Springs, Arkansas? If so, why not attend the Southeast PARC Annual Meeting to be held Feb. 25-27, 2005. Even if you don't live near Hot Springs, you may attend and learn about herp conservation and get a first glimpse at the new Southeast Regional Habitat Management Guide for Amphibians and Reptiles. MW/MW PARC members are also welcome to attend. Due to the proximity of Hot Springs to TX, OK, MO, KS, etc., members from adjacent regions are encouraged to attend.



PARC
PARTNERS IN
AMPHIBIAN
& REPTILE
CONSERVATION

Topics of Interest

Herp Conservation Issues in the West Gulf Coastal Plain

Lower Mississippi River Alluvial Plain and Central Highlands (well-known listserv contributor Malcolm McCallum and others)
Landscape-Scale Herptofauna Research in the Ouachita Mountains (Paul Shipman)

New Partners

SE PARC Quail Plantation Initiative, a pilot project to build stronger partnerships with the hunting and fishing communities (Jeff Holmes); reaching out to NGOs, including land trusts, <http://lta.org/>, local/state/regional forestry associations, and others (group discussion).

New Products

Habitat Management Guidelines at Last! Bring a trailer, because we're going to load you down. We'll also revisit the distribution lists we developed last year and fine tune an efficient, effective distribution strategy (Mark Bailey and Kurt Buhlmann).

Other Topics

Inventory and Monitoring and Habitat Management Workshops (Bailey, Buhlmann, and Garcia), Turtle Conservation Workshop and New Plans

Aligning our Working Groups

TNC Ecoregional/Conservation Area Plans (TBA), USFS Forest Plan Revisions (Betty Crump), and Comprehensive State Wildlife Plans (Steve Bennett).

We'll break out into working groups to select new leaders and identify plan-compatible action steps for Research, Inventory/Monitoring, Habitat Management, Policy/Trade, and Education/Outreach.

Keynote Speaker

It's a surprise (Which means I don't know yet. But trust me, it will be riveting)

Field Trips

To see endemic salamanders, easternmost populations of western diamondbacks and collared lizards!

See you there, Jeff Holmes, Co-Chair, SE PARC

A TECHNICAL SYMPOSIUM AND WORKSHOP ON THREATENED, ENDANGERED, AND AT-RISK SPECIES, JUNE 7-9, 2005

Call for Abstracts

Abstracts are now being accepted for technical session presentations from individuals of federal and non-federal organizations for a Technical Symposium & Workshop on Threatened, Endangered, and At-Risk Species (TER-S). Ongoing or recently completed research on TER-S relevant to Department of Defense (DoD) lands and waters will be accepted. Abstracts should address one or more TER-S threats such as land use and management, invasive species, urban encroachment, etc. Birds, bats, tortoises, amphibians, freshwater fish, mammals, and higher-level plants will be the species of focus. While DoD also uses extensive off-shore ocean and coastal ranges, ocean species will not be addressed at this workshop. Topics may include, but are not limited to:

- Species inventory and monitoring technologies;
- Species and habitat management;
- Population recovery and viability;
- TER-S stressors with special emphasis on stresses caused by military activities;
- Quantification of DoD training restrictions due to TER-S;

- Mitigation measures identified through research; and
- Methods to achieve transfer of research results to the user community.

Abstracts should address technical accomplishments, as well as scientific and/or engineering aspects of the research or project. Please do not include programmatic or marketing aspects in your abstract. Abstracts with a strong commercial or sales slant are not acceptable.

All abstracts must be received by 28 February 2005

Late submissions will not be considered. The selection of candidate abstracts for presentations will occur in March. Everyone submitting an abstract will be notified of its acceptance status by April 15. Selected abstracts will be included in technical proceedings that will be provided to all Workshop attendees.

Abstract submission instructions, registration information, and a link to the hotel website will be available at <http://www.serdp.org/tesworkshop/> by January 5, 2005. If you have any questions, please contact John Thigpen at 703-326-7822 or e-mail TESWorkshop@hgl.com.

2005 FOREST LEADERSHIP CONFERENCE: PARTNERSHIPS TOWARDS SUSTAINABILITY

March 1 - 3, 2005, Toronto, ON, Canada

For additional information call: 514-274-4344 or 888-274-4344 or visit online at conference@forestleadership.com

Entitled "Partnerships Towards Sustainability," the 2005 Forest Leadership Conference will provide exceptional opportunities for discussing exciting trends in sustainable forestry and responsible procurement, with a special emphasis on the development of multi-stakeholder partnerships toward forest sustainability. Building on the success of five conferences held under the auspices of Forest Certification Watch, the event will feature some 40 prominent speakers. It will take place between March 1 and 3, 2005 at the Wyndham Bristol Place Hotel just next to Toronto's international airport in Ontario, Canada. The conference is geared towards a diverse audience of forestry sector decision-makers; corporate social responsibility officers; sustainable forestry experts; government officials; professional foresters; industry representatives; procurement specialists; First Nations; and conservation and other organizations.

Conference Key Topics

- Corporate sustainable forestry and social responsibility strategies and the increasing role of multi-stakeholder forest partnerships in North America, with perspectives from corporations such as Weyerhaeuser, Boise, Proctor & Gamble and Lowe's
- Practical lessons drawn by corporations such as MeadWestvaco, StoraEnso and HTRG from partnership experiences
- Practical partnership work carried out by conservation organizations such as The Conservation Fund and World Wildlife Fund
- In-depth updates on partnerships such as the Forest & Biodiversity Conservation Alliance, the Ontario Forest Accord, the BC Central Coast Land & Resource Management Plan and the Boreal Leadership Framework
- The role of partnerships in governmental and intergovernmental processes, including the United Nations Forum on Forests
- The role of partnerships in forest certification with practical examples associated with the FSC, SFI, CSA and Tree Farm
- Strategic dialogue involving the leading North American forest certification programs

Why Should I Attend

- Leading North American and international speakers, including at the ministerial and CEO level
- Focus on sustainable forestry & responsible procurement with emphasis on multi-stakeholder partnerships
- Innovative program with a combination of plenary sessions, breakouts, parallel and other meetings
- Strategic and field-oriented sessions examining the practical implementation of partnerships on the ground
- Special features such as a Forest Leadership Awards Gala Dinner with Guest Speaker Patrick Moore
- Networking opportunities with many of the most influential North American sustainable forestry leaders

Training, Tools and Information

All three of the following websites are excellent and we encourage you to check them out -The Editors, OTWS

CONSERVATION CENTRAL (SMITHSONIAN'S NATIONAL ZOO) NAMED BEST MUSEUM WEB SITE

<http://nationalzoo.si.edu/Education/ConservationCentral>



Recognizing achievement in heritage web site design

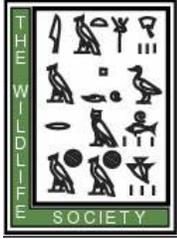
Conservation central, the online conservation education program, won a third and major award on November 18, 2004 when it took first place in the multimedia category from the National Association for Interpretation. Earlier in 2004, it won the "Best of the Web Award" as the Best Overall Museum Web Site from Museums and the Web, and a Silver MUSE Award from the American Association of Museums. This is a remarkable achievement for the team of FONZ and Zoo staff, who developed Conservation Central.

Here's what the judges had to say about Conservation Central: Conservation Central is a middle school science teacher's dream. This is an extremely thorough resource for standards-based learning about conservation and habitats. The activities are well-balanced with both high-tech, extensive Flash interactives, and low-tech, simple printout family learning activities. This site is great for educators and for children. Thoughtful execution, great lessons and good use of multi-media and good balance between high and low tech.

GROUSE PARTNERS WEBSITE

The North American Grouse Partnership website is located at <http://www.grousepartners>.

WILDLIFE POLICIES IN GOVERNMENT



“When government leaders are informed by the best available biological information, wildlife benefits; and when managers are aware of proposed policies that affect wildlife and habitat, they CAN make a difference”. - **The Wildlife Society**

For good information about wildlife policies in government visit **The Wildlife Society** website <http://www.wildlife.org/policy/index.cfm?tname=moupressrelease>.

FROM THE RMRS, SOUTHWESTERN UNITED STATES

Bird Migration

There is a paper that will be published in **Condor's May 2005** issue using bird migration data sets from a variety of researchers in the southwestern U.S, including Debbie Finch's (USFS RMS) Albuquerque data set from the Middle Rio Grande. Please circulate this announcement to those who are interested in bird migration. It is a fascinating geographical perspective on bird migration that contributes in an original way to the literature on migration ecology.

Use of Pinyon-juniper Woodlots by Bats in New Mexico

Author: Alice L. Chung-MacCoubrey

United States Department of Agriculture, Forest Service, Rocky Mountain Research Station, 333 Broadway Boulevard SE, Suite 115, Albuquerque, NM 87102, USA, achungmaccoubrey@fs.fed.us

Forest Ecology and Management 204 (2005) 209-220; available online at: www.sciencedirect.com.

Abstract

In recent years, the demand has grown for information on how to conserve bat populations in forested ecosystems. Many researchers have responded with studies of bats in forests, but few have studied bat communities in arid-adapted forest types, such as pinyon-juniper woodlands, which are widespread and abundant throughout the west. In this study, I evaluated the relative use and importance of pinyon-juniper woodlands to bats in west-central New Mexico by comparing bats captured in pinyon juniper woodlands with those captured in ponderosa pine forest. I compared species richness and relative abundance of bats captured in these vegetation types and evaluated the relative importance of each based on its use as reproductive habitat by females. Bats were mist netted over stock tanks in pinyon-juniper woodlands for 55 nights during 1995–1997 and in ponderosa pine forest for 22 nights in 1998–1999. Although overall capture rates (bats per net hour) were not different between study sites, more species were captured in pinyon-juniper woodlands. The bat community of this pinyon-juniper woodland was dominated by species typically found in upper elevation forests, but also included species from lower elevation shrublands and grasslands.

A greater proportion of females was reproductively active in pinyon-juniper woodlands than ponderosa pine, suggesting that females prefer woodlands for rearing their young or that fecundity rates of females are higher in this vegetation type. Results of this study demonstrate that pinyon-juniper woodlands support abundant and diverse bat communities and provide important summer habitat to reproductive females. Thus, biologists and land managers should plan activities in pinyon-juniper woodlands with greater attention and consideration to bats and their habitat requirements.

2004 Elsevier B.V. All rights reserved. Keywords: Bats; Pinyon; Juniper; Wildlife; Habitat



A radio transmitter is attached to a long-legged Myotis

CONSERVATION BIOLOGY ON SUSTAINABILITY

The new issue of Conservation biology, February 1, 2005 (Vol. 19, No 1), has four articles that present differing views about the concept "sustainability" in the natural resource arena. They are all very good articles and forest service biologists may access these articles through Digitop.

CONSERVATION BIOLOGY OF CAECILIAN AMPHIBIANS

(Excerpt from Conservation Biology, Volume 19 Issue 1 Page 45 - February 2005
doi:10.1111/j.1523-1739.2005.00589)

Authors: David J. Gower and Mark Wilkinson

Abstract: Most of the available data on declining populations of amphibians pertain to frogs and, to a lesser extent, salamanders. In keeping with their generally less understood biology, the population trends and conservation status of caecilian amphibians (*Gymnophiona*) are also much less known. We reviewed reports of threats to and declines of populations of caecilians. Despite a lack of field-study details (e.g., localities, dates, and sampling methods) and quantitative data, there are several recent reports of threats to and declines and extinctions of caecilians. A range of causal explanations (habitat loss, pollution, chytridiomycosis, and scientific collecting) for these perceived declines have been proposed but little or no associated evidence has been given. Although caecilians are often considered rare and thought to require pristine habitat, published, quantitative data demonstrate that at least some species can occur in high abundance in disturbed, synanthropic environments. Few estimates of caecilian population parameters have been made and very few field methods have been tested, so the assumed rarity of any taxa remains inadequately demonstrated. Distribution and taxonomic data are also inadequate. Because they are generally poorly known and often cryptic, caecilians can be overlooked in standard faunal surveys, meaning that lack of opportunistic collection over several years might not represent evidence of decline. The conservation status of most species must be considered data deficient. More precise assessments will require a substantial increase in all areas of caecilian research, especially those involving new fieldwork. Future reports of caecilian conservation biology need to be explicit and more quantitative.

STEMMING THE TIDE OF TURTLE EXTINCTION

(A book review by Graeme C. Hays, excerpt from Nature 433, 109, 13 January 2005;
doi:10.1038/433109a)

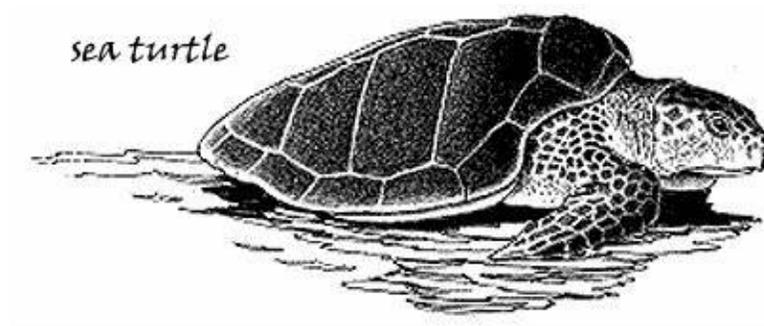
Graeme C. Hays is in the Department of Biological Sciences, Institute of Environmental Sustainability, University of Wales Swansea, Swansea SA2 8PP United Kingdom

Sea Turtles: A Complete Guide to their Biology, Behavior, and Conservation
by James R. Spotila, Johns Hopkins University Press: 2004, 240 pp.

Humans have a history of driving once abundant species to extinction. The passenger pigeon is thought to have once been the most abundant bird on the planet, with several billion in North America when Europeans arrived. But by the end of the nineteenth century the species had been exterminated through hunting and habitat loss. Extinctions approaching this magnitude may be under way with some sea-turtle populations. It is estimated, for example, that there were tens of millions of green turtles in the Caribbean when Columbus arrived in the fifteenth century, but human harvesting has since reduced this number by around 95%. Some populations have already been driven to extinction: the last green turtles nested in Bermuda in the 1930s.

The survival of sea-turtle populations is now dependent on conservation efforts. In the late 1990s I was part of a group that traveled to Ascension Island to assess the status of the nesting green-turtle

population. To our pleasant surprise we recorded thousands of nests each year and found that this population had grown since the previous census 20 years before, a success story reflecting conservation efforts both at Ascension Island to protect breeding turtles and in Brazil where these turtles forage. This same positive outlook has been reported elsewhere. For example, monitoring of green-turtle populations in Hawaii and Costa Rica for the past 30 years has revealed upward trends at both sites



We can rejoice in these demonstrations of just how effective conservation measures can be: they provide living testimony that the tide of sea-turtle decline can be stemmed. But we cannot be complacent, warns Jim Spotila in his book *Sea Turtles*. Many sea-turtle populations continue to suffer high mortality at the hands of humans, and the specter of population extinction still looms large.

This lavishly produced book is filled with numerous excellent photographs of sea turtles in their various habitats, as well as beautiful schematics of anatomy and distribution maps. But this is much more than just a coffee-table book: it also deserves space on the academic's bookshelf. Spotila has been a front-line turtle researcher for many years and his extensive knowledge is evident throughout, with clear descriptions of sea-turtle physiology, ecology and threats to conservation. Along the way we read a fascinating account of how "perhaps the greatest zoological puzzle of the last century" was solved. I won't spoil your enjoyment by telling you more. Detailed information on the biology of each species is accompanied by case studies illustrating how beach development, collection of eggs, directed killing of turtles for their meat and shell, and incidental capture have contributed to the demise of various populations.

Often topics are covered with particular reference to Spotila's own work, giving parts of the book an autobiographical feel. The text is infused with human-interest stories and stand-alone biographies of prominent conservation workers. These personal accounts help bring the material to life, broadening the target audience compared with more specialist volumes such as the *The Biology of Sea Turtles* (CRC Press, 1997, 2002). Spotila describes, for example, his team's perilous first attempts to radio-track turtles from an old inflatable boat held together with duct tape. And his account of Anne Meylan's work on the diet of hawksbill turtles ends with the sad postscript of how sponge spicules embedded in her fingers led to her losing her right hand.

In general the book gives far more space to conservation concerns than to conservation successes, but it is success stories that inspire the legions of conservation workers around the world by showing that their efforts can reap dividends. These are small criticisms, however. This beautifully produced book deserves to be widely read to achieve its main aim of alerting people to the many threats facing sea turtles.

BANK AND NORTHERN ROUGH-WINGED SWALLOW NESTING HABITAT IMPROVEMENT

Here's a clever bank stabilization idea that also increases the nesting habitat available for bank swallows and northern rough-winged swallows. These swallows nest in long tunnels

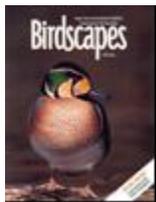


carved out of steep sandy banks, typically near water. The type of substrate suitable for nesting is naturally rather limited, but it has been reduced by development, bridge building, and erosive forces.

In the Netherlands, Dutch biologists and engineers have teamed up to create artificial nesting banks. Stable shotcrete walls with a backfill of sandy soil are peppered with numerous holes swallows can use as 'starter holes' for their nesting tunnels. Shotcrete is a mixture of sand and cement, often used around swimming pools. The swallows make their own nest tunnels, starting at a hole in the wall.

You can see examples of these swallow walls at <http://www.oelemars.com/oeverzwaluw.htm>. The site is in Dutch (except for the swallow vocalizations!) but the image titles are mostly self-explanatory.

If anyone has seen swallow walls in North America, please let me know. Sandra Jacobson, sjacobson@fs.fed.us.



BIRDSCAPES: NEWS FROM INTERNATIONAL HABITAT CONSERVATION PARTNERSHIPS

This is a full-color magazine published in cooperation with the Canadian Wildlife Service three times each year: Spring/Summer, Fall, and Winter. To receive Birdscapes send an email to DBHCcommunications@fws.gov, with your name and physical mailing address. We DO NOT have an electronic mailing list. There is no subscription fee.

INCREASING THE ACCURACY OF PRODUCTIVITY AND SURVIVAL ESTIMATES IN ASSESSING LANDBIRD POPULATION STATUS

(From Conservation Biology, Volume 19 Issue 1 Page 66 - February 2005 doi:10.1111/j.1523-1739.2005.00543)

Authors Angela D. Andres and Matthew R. Marshall

Abstract: The conservation of species with declining populations requires information on population demography and identification of factors that limit population growth. For landbird species, an understanding of large-scale population declines often requires assessment of local population processes, including the production of offspring, the survival of those offspring, and adult survival. Population growth has been modeled for several species of landbirds to date, and these studies have provided important information on relationships between population status and population-limiting factors. Several recent studies have illuminated field methods and analytical techniques that can aid in increasing the accuracy of productivity and survival estimates for population models. We reviewed these methods and recommend their implementation, including quantification of the season-long productivity of individuals, collection of empirical data on juvenile survival during the post fledging and over wintering periods, and incorporation of adult breeding dispersal into annual adult survival estimates. Such methods will allow for more accurate assessment of population status and provide a better understanding of the factors on which to focus our conservation efforts.

WFRP-MS FIND A PHOTO DATABASE: SIX HUNDRED PHOTOS AND COUNTING

There are now over 600 photos in the Find-a-Photo database that Forest Service employees have added since its debut this past year. These photos can be used as images in reports, brochures, displays or any other not for profit project you may be developing. The pictures vary in content and include images of

habitat restoration projects, wildlife species and Naturewatch activities. So far this is an internal database only, but may go on the Internet in the near future (check to see if is true).

SCIENTISTS GET THEIR OWN GOOGLE

(Excerpt from Nature News Online: 18 November 2004; doi: 10.1038/news041115-13)

By Declan Butler

New search engine ranks papers by importance, and finds the free versions.

Imagine searching the Internet and being able to restrict your results to academic texts. Today Google launched a free search engine that aims to do just that. Google Scholar searches only journal articles, theses, books, preprints, and technical reports across any area of research. A test version of the search engine is available at <http://scholar.google.com>, so you can try it out. In a search for the phrase "human genome", for example, a normal Google web search throws back 450,000 or so hits, with genome centers and databases and other websites ranked top.

In contrast, Google Scholar returns just 113,000 hits, and all the top-ranked items are not websites but seminal papers on the subject. In fact, the number one hit is the landmark article "Initial sequencing and analysis of the human genome", published in Nature in 2001.

On the links

The tool is based on principles similar to those of Google's web search. The original search manages to make the most useful references appear at the top of the page using algorithms that exploit the structure of the links between web pages. Pages with many links pointing to them are considered 'authorities', and ranked highest in search returns. The ranking is refined by taking into account the importance of the origins of links to a paper. "We don't just look at the number of links," says Sergey Brin, a cofounder of Google. "A link from the Nature home page will be given more weight than a link from my home page," he explains.

Google Scholar works in much the same way, using the citations at the end of each paper, rather than web links. It automatically identifies the format and content of scientific texts from around the web, extracts the references and builds automatic citation analyses for all the papers indexed. This approach has been pioneered in computer science by ResearchIndex, software produced by the information technology company NEC.

Search for success

Much of the peer-reviewed material has been made available to Google by publishers, including Nature Publishing Group, the Association for Computing Machinery and the Institute of Electrical and Electronics Engineers, through a pilot cross-publisher search engine called CrossRef Search. Publishers have arranged for Google robots to scan the full texts of their articles. Users clicking on a hit returned by Google Scholar are directed to the article on the publisher's site, where subscribers can access full text and non-subscribers get an abstract or information on how to buy an article.

Google Scholar has a subversive feature, however. Each hit also links to all the free versions of the article it has found saved on other sites, for example on personal home pages, elsewhere on the Internet.

Vacancies

Federal job announcements can be found at:

http://jobsearch.usajobs.opm.gov/agency_search.asp

Hotlinks!

Wildlife, Fish and Rare Plants: <http://www.fs.fed.us/biology/wildlife/>

Working with Partners for Bird Conservation: <http://www.fs.fed.us/biology/>

2004 News Releases: <http://www.fs.fed.us/news/2004/releases.shtml>

FS Today Newsletter: http://fsweb.wo.fs.fed.us/pao/fs_today/

National Fire Plan: <http://www.fireplan.gov>

Roadless Area Conservation: <http://roadless.fs.fed.us/>

Large-Scale Watershed Restoration Projects: <http://www.fs.fed.us/largewatershedprojects/>

Land and Resource Management Plans: <http://www.fs.fed.us/forum/nepa/nfmalrmp.html>

Watershed and Air Management: <http://www.fs.fed.us/clean/>

Lands and Realty Management: <http://www.fs.fed.us/land/staff/>

Road Management: <http://www.fs.fed.us/news/roads/>

Recreation, Wilderness and Heritage Resources: <http://www.fs.fed.us/recreation/>

Forest Management: <http://www.fs.fed.us/land/fm/>

International Programs: <http://www.fs.fed.us/global/>

Research: <http://www.fs.fed.us/research/scientific.html>

Healthy Forests Initiative: <http://www.fs.fed.us/projects/HFI.shtml>

Partners in Planning: <http://www.fs.fed.us/biology/planning/guide/index.html>

Landowner Assistance Programs

<http://www.fs.fed.us/cooperativeforestry/programs/loa/index.shtml>

Forest Service's Annual Fall Foliage Hotline: <http://www.fs.fed.us/news/fall-colors.shtml>, or call:

IMPORTANT NOTE: Once you select a link, please be sure to hit the "Refresh" button to ensure that you are loading the most current version of the web page!

On The Wild Side is a monthly update provided by the National Forest System Wildlife Program of the USDA Forest Service. Contributions are welcome and should be submitted to Debbie Pressman at dpressman@fs.fed.us or Jina Mariani at jmariani@fs.fed.us no later than the 25th of each month. We reserve the right to edit contributions for clarity and brevity.

Positions listed are for outreach purposes only and are not full announcements. Interested individuals should contact the forests referenced or consult the USAJOBS website.

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