



U.S. Fish & Wildlife Service

Fish & Wildlife News

March/April 1999

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Director Announces New Leadership Slate for Key Programs

Service Director Jamie Rappaport Clark recently named new chiefs to lead four key programs. The new division chiefs are Nancy Gloman, chief of the Division of Endangered Species; Everett Wilson, chief of the Division of Environmental Contaminants; Jon Andrew, chief of the Office of Migratory Bird Management; and Jim Kurth, chief of the Division of Refuges.

“All four of these individuals bring extensive biological expertise and field experience with them to Washington,” Clark said. “They have been leaders in implementing landscape level conservation measures in ecosystems as diverse as the arctic tundra, the desert southwest and the Chesapeake Bay.”

New Chief of the Division of Endangered Species **Nancy Gloman** has worked for the Service since 1978, starting in the Bloomington, Indiana, Field Office and then moving to the Washington Office where she was the national hydropower coordinator and Special Assistant to the Assistant Director.

She went to the Western Washington Field Office in Olympia in 1989 and has been acting supervisor of that office since February 1998.

“Nancy’s supervisory skills along with her vast experience in Pacific Northwest endangered species issues makes her the perfect candidate for this position,” Clark said.

Gloman’s predecessor, LaVerne Smith, will join the regional office in Alaska as the Assistant Regional Director for Ecological Services and Fisheries.

Everett Wilson, the new chief of Environmental Contaminants, has been with the Service since 1977, first as a research biologist at the Columbia National Fisheries Research Laboratory. Later he became an environmental contaminants biologist at the Juneau, Alaska, Field Office. In 1988, he became the environmental contaminants coordinator for the Alaska region.

In 1996, Wilson became the Special Assistant to the Northern Geographic Assistant Regional Director, and in 1998, he was named Acting Southern Geographic and Ecological Services Assistant Regional Director.

“Everett’s background in ecosystem conservation and his vast expertise in contaminants provide him with a strong foundation for confronting the challenges of his new position as chief of the Division of Environmental Contaminants,” Clark said.

Former Chief of the Division of Environmental Contaminants Frank DeLuise has joined the Interior Department’s Office of Environmental Policy and Compliance.

Jon Andrew, the new chief of the Office of Migratory Bird Management, was previously chief of the Branch of Policy and Planning in the Division of Refuges and Wildlife. Prior to that, he worked in the Southeast regional office in Atlanta implementing the ecosystem approach to conservation.

Andrew has extensive field experience, serving as refuge manager at Key Deer NWR in Florida and Balcones Canyonlands NWR in Texas. He also worked in the Alaska regional office in the Division of Realty and at the Northern Prairie Wildlife Research Center in Jamestown, North Dakota.

“Jon has served with distinction in a variety of field, research, and management positions. He’s the ideal person to lead our migratory bird office at a time when the Service has made bird conservation a major priority,” Clark said.

His predecessor, Paul Schmidt, has been named the Deputy Assistant Director for Refuges and Wildlife.

New Chief of the Division of National Wildlife Refuges **Jim Kurth**, a 20-year veteran of the Service, currently manages the nation’s largest refuge—Arctic NWR in Alaska. He has served at refuges in Mississippi, Florida, Louisiana, Michigan, Rhode Island and Connecticut, and also in the Alaska regional office as Deputy Assistant Director for Subsistence.

“We have asked our refuge system employees to step up into leadership positions, and Jim’s selection is a signal of the passion and dedication our refuge managers share for the system,” Clark said. “I look forward to working alongside Jim in advancing the system into the next century.”

Kurth’s predecessor, Rick Coleman, will be joining the Service’s Pacific Northwest regional staff in Portland, Oregon, as the Assistant Regional Director for External Affairs.

On the Cover:

Catch the Migration Sensation! *The Service has trust responsibility for conserving more than 700 nongame migratory birds—including the least Bell’s vireo. Read all about the Migratory Bird Management program and International Migratory Bird Day in a special section beginning on page 15. Photo by S. Maslowski.*

Awards Recognize "Unsung Heroes"



To recognize employees who have made valuable behind-the-scenes contributions to the Interior Department, in June 1998 Secretary Babbitt established the Unsung Hero Award. Each bureau in the Department then developed procedures to solicit, evaluate and select its own nominees.

The Department recognized the contributions of Unsung Heroes at a March 4 awards ceremony in the Main Interior Building auditorium. President Bill Clinton joined Secretary Babbitt in kicking off the Department's year-long 150th anniversary celebration with the bi-annual DOI awards convocation, a video tribute to Interior employees, and a spirited performance by the Great American Indian Dancers.

Harry Sears, a maintenance worker at Great Meadows NWR in eastern Massachusetts, was presented with the Departmental Unsung Hero award at the ceremony. The Service has nominated a number of other employees to receive the award.

The Department will hold a celebration each quarter recognizing Unsung Heroes awarded during the previous quarter—an event was held in April in Denver.

Award-winning. *The Department of the Interior awards convocation held March 4 recognized employee excellence over the past two years. Among the Service employees honored were Thomas Pabian (far left), for valor, Burkett S. Neely, Jr., (second from left) for distinguished service, and Harry Sears (second from right), who was the Service's first Unsung Hero award winner. They are pictured with Service Director Jamie Rappaport Clark (center) and Assistant Director for Refuges and Wildlife Dan Ashe. Photo by LaVonda Walton.*

Fish & Wildlife Service Unsung Hero Nominees

Vernon Byrd, Alaska Maritime NWR,
Homer, Alaska

Mary Conser, Information Resources
Management, Hadley, Massachusetts

Bonnie Gaukler, Division of Habitat
Conservation, Arlington, Virginia

Gary Hagedorn, Mid-Columbia River
NWR Complex, Umatilla, Oregon

Elizabeth L'Huillier, Marquette Biological
Station, Marquette, Michigan

Kenneth Stansell, International Affairs,
Arlington, Virginia

At the March 4 awards ceremony Secretary Babbitt also handed out a number of other departmental awards. Service award recipients were:

Secretary's Diversity Award-Management Achievement

Richard W. Voss

Conservation Service Award

Gary N. Brown
Benedict Cerven (posthumously)
Tom Bedell
Randall L. Hoffman
Terry and Mary Kohler
Helen Sevier
Avian Power Line Interaction Committee
Mexican Spotted Owl Recovery Team
Native American Fish and Wildlife Society
Western Canal Water District

Distinguished Service Award

Gail C. Kobetich
Burkett S. Neely, Jr.
James Ambler Young

Valor Award

Dean F. Knauer
Thomas M. Pabian
John Marshall Rayfield

*Rachel F. Levin, Public Affairs,
Washington, DC*

82 and Going Strong

On March 4, Harry Sears became the first Service employee to receive the Interior Department's Unsung Hero Award.

A maintenance mechanic at Great Meadows NWR, Sears has for the past three decades operated heavy equipment and done automotive repair, plumbing, construction, woodworking and hard labor, all the while providing visitors with information about the eastern Massachusetts refuge. Until recently, Sears was the only maintenance worker for this complex of nine refuges.

That might pose a challenge for some but consider this: Harry Sears is 82 years old.

Sears says he has stayed with the Service since 1952 simply for the satisfaction he gets from his work. When asked how he felt about receiving such an honor as the Unsung Hero award, he said he had no time to think about it.

"There's just too much to do. Fields need mowing, vehicles need fixing and trails need work," he said.

But when he describes his visit to Washington, D.C., to receive his award, a wide smile spreads across his face and he can't conceal his pride.

*Pamela Hess, Great Meadows NWR,
Sudbury, Massachusetts*

MOU Solidifies Cooperation between Service, Schools



Spirit of cooperation. *The Service recently signed a Memorandum of Understanding with Historically Black Colleges and Universities. Dr. David Henson (standing at podium) was one of five HBCU representatives who spoke at the signing ceremony. Looking on are (left to right) Dr. Joe Boyer of Alabama A&M University, Dr. Calvin Burnett of Coppin State College, Sherman L. Lewis of Langston University and Service Director Jamie Rappaport Clark. Not pictured is Dr. Robert Johnson of the University of Maryland at Eastern Shore. Photo by LaVonda Walton.*

Director Jamie Rappaport Clark proclaimed the Service's "renewed commitment to work toward diversity" as she signed a Memorandum of Understanding in April with five Historically Black Colleges and Universities.

The agreement allows the Service to give grants and provide technical assistance to the five schools and allows staff exchanges and resource sharing between Service facilities and the schools, all of which are located near a national fish hatchery or national wildlife refuge.

The MOU will allow the agency to continue to train minority students in the natural resources field as the Service works "to address the under representation of African-Americans in the Fish & Wildlife Service," Director Clark said in her opening remarks.

Clark said that all of the participating schools—Alabama A&M, Coppin State University in Baltimore, Langston University in Oklahoma, Lincoln University in Missouri and the University of Maryland-Eastern Shore—have strong programs in natural resources and the environment. She said she hopes that cooperative work through the MOU will encourage even more students to pursue these fields of study.

"I want more African-Americans to follow in the footsteps of notable scientists" such as George Washington Carver, Clark said.

Clark pointed out that the Service and black colleges and universities nationwide have worked cooperatively for years and that Historically Black Colleges and Universities have traditionally been "great recruitment sources for the Service."

"Ninety percent of our top senior African-American employees are graduates of Historically Black Colleges and Universities," she said.

The Memorandum of Understanding supports such activities as:

- HBCU faculty participation in projects focused on public policy and natural resources;
- Implementation of an Undergraduate/Natural Science Initiative to provide student and staff exchange to enhance development of academic programs;
- Adjunct faculty appointments at the participating HBCUs for approved Service employees through Intergovernmental Personnel Act assignments or other government details, and visiting scientist status at Service facilities for approved HBCU faculty members; and
- HBCU student participation in education and training programs at Service field stations and the National Conservation Training Center.

Representatives from the five signatory colleges and universities agreed that both their facilities and the Service have much to gain by formalizing their cooperative efforts.

"I can't think of a better legacy to leave with Lincoln than to use my...interest in science to build on a relationship with the Fish & Wildlife Service," said Dr. David Henson, president of Lincoln University in Jefferson City, Missouri.

Dr. Joe Boyer of Alabama A&M said he was "very, very proud" to be a part of the MOU signing and the HBCU consortium. Biologists at Alabama A&M are "excited about this opportunity," he said, and looking forward to working with staff at nearby Wheeler NWR.

At the University of Maryland-Eastern Shore, which has several agricultural and natural resources degree programs, the MOU will allow students and faculty to become even more involved in natural resources. Already this fastest growing school in the University of Maryland system is home to the first cooperative research unit opened at a Historically Black college or university.

*Rachel F. Levin, Public Affairs,
Washington, DC*

We're Going to the Movies!

Movie-goers in many cities will soon be seeing the Service while they eat their popcorn, thanks to a new partnership with Century Media Network.

Six color slides celebrating the National Wildlife Refuge System have been produced and are being distributed to 1,250 theatres around the country. The slides feature wildlife and habitat with brief messages such as "For a Spectacular Show... Try a National Wildlife Refuge." The slides direct viewers wishing more information to the Service's 1-800 number and Web site.

Public Affairs chief Megan Durham began work on the project while serving last year as National Outreach Coordinator.

"I wrote down Century Media's phone number one night after I saw it at a local movie theatre," she said. "It took a while, but I finally got to the right person—Tere Perez, program manager for Century Media. Tere was eager to do something for wildlife conservation and she's been great to work with."

Century Media network produces and distributes promotional slides which run before feature movies. Theatres in the Century Media chain include Century, Mann, Loews Cineplex Entertainment (Sony, Magic Johnson Enterprises), Krikorian and Studio Theatres. Major markets for these theatres include Los Angeles, San Francisco, San Jose, Albuquerque, Tucson, Denver, Salt Lake City, Portland, Las Vegas, Chicago, Dallas, Baltimore, Bethesda and Washington, D.C.

Thanks to Perez, Century Media donated advertising time worth nearly \$500,000 to run the Service's slides. NCTC photo librarian Beth Jackson, designer Jeff Miller, graphics team leader Troy Bunch and production division chief Steve Hillebrand selected the slides and design appropriate for the big-screen format.



The big screen. Movie-goers in a number of cities now see these slides promoting the National Wildlife Refuge System before the start of the "main attraction." USFWS photos.

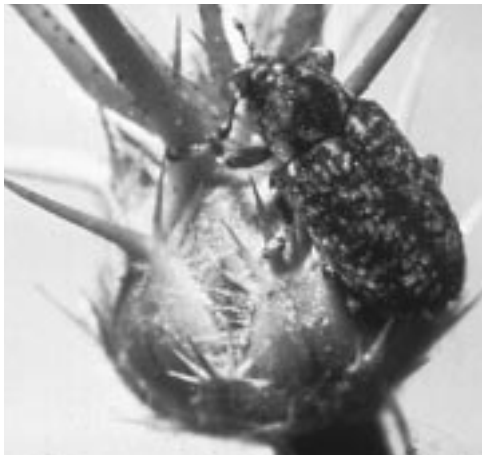
World Wide Web guru Charlie Grymes of the Public Affairs office is working with the Division of Refuges to modify the Service home page to make it easier for movie-goers who decide to follow up and look for refuge information. The Service will be monitoring calls to the 1-800 number and Web site visits to see if the slides result in a greater number of information requests.

"We hope to continue this partnership with Century Media and perhaps highlight some of the Service's other activities with future slides," Durham says.

*Rachel F. Levin, Public Affairs,
Washington, DC*



President Proposes Record \$1.58 Billion FY 2000 Budget



Fighting the invasion. *The President's proposed budget includes additional funding to fight both aquatic nuisance species and invasive species occurring on national wildlife refuges, such as the yellow starthistle. Photo by Tom Melanson.*

President Clinton is proposing a record \$1.58 billion budget for the Service in Fiscal Year 2000, including \$950 million in appropriated funding to support the National Wildlife Refuge System and migratory bird, fisheries, land acquisition, endangered species, and other conservation programs.

"The increased funding in the President's budget will allow the Service to more effectively perform its mission to conserve our nation's fish, wildlife, and plants and their habitat for the benefit of the American people," said Director Jamie Rappaport Clark.

Highlights of the proposed FY 2000 budget:

- The Administration proposes to increase overall funding for the National Wildlife Refuge System by \$27.1 million, or 11.4 percent, to \$265 million.

- The President's budget also includes a \$25.6 million, or 53.3 percent, increase in the Service's land acquisition budget, to \$73.6 million. This would allow for the acquisition of 118,425 acres for the refuge system.

- The budget requests \$114.9 million for the endangered species program, a net increase of \$4.1 million over 1999.

- To help states, local governments, and tribes develop habitat conservation plans and take steps to recover listed species, the Administration is proposing \$80 million for the Cooperative Endangered Species Fund, an increase of \$66 million over FY 1999. This provides \$26 million for state and local land acquisition in support of HCPs and \$52.5 million to help states plan and implement HCPs, conservation agreements, and "Safe Harbor" agreements for listed and candidate species.

- The Administration proposes to increase funding of additional habitat conservation programs to \$73.6 million, up \$9.9 million. These programs help prevent the degradation of key fish and wildlife habitats before listing species that depend on them is necessary.

- The President proposes a \$79.8 million budget, a \$6.2 million increase, for the fisheries program. The funding will support efforts to control the spread of non-indigenous invasive species and the Secretary's initiative to rebuild native fish populations and ensure fish passage to historic spawning grounds through voluntary partnership efforts.

- The budget also proposes \$21.9 million to support the Service's migratory bird program, a 14 percent increase. The bulk of the increase will be used to expand monitoring and conservation efforts for declining species, and the Service will continue to develop science-based strategies to help control overabundant populations of mid-continent geese, which are wreaking havoc on their pristine Arctic breeding grounds.

- The President's budget includes an additional \$3.5 million to support the Service's international conservation programs.

*Hugh Vickery, Public Affairs,
Washington, DC*

Initiative Seeks Record Funding for Open Space



Legacy for the future. *The Lands Legacy Initiative proposes funding to award grants to state, local and tribal governments to acquire lands for urban parks, greenways and outdoor recreation. USFWS photo.*

The Interior Department—and the Service—will play a major role in carrying out the \$1 billion Lands Legacy Initiative proposed by President Clinton in January.

From acquiring lands for national wildlife refuges to developing habitat conservation plans to protecting coral reefs, the Service and the Department will be at the forefront in carrying out the landmark initiative designed to expand federal protection of natural resources, help states and communities preserve local green spaces, and strengthen protection of oceans and coastal areas.

"We will honor the core principle Theodore Roosevelt set out for us a hundred years ago," President Clinton said as he announced his plan. "We will leave this magnificent country 'even a better land for our descendants than it is for us'."

"As we go into the twenty-first century the need to preserve our open spaces and wild places is more urgent than ever," said Service Director Jamie Rappaport Clark. "I'm excited that the Service will play such a role in these groundbreaking initiatives."

Gearing Up for Alligator Gar

The Lands Legacy Initiative includes \$900 million from the Land and Water Conservation Fund; this marks the first time any administration has requested full funding from this account, which draws revenues from offshore oil sales.

Lands Legacy will be administered by the departments of Interior and Agriculture, and the Commerce Department's National Oceanic and Atmospheric Administration. The Interior Department will manage the majority of the funds—\$579 million.

When coordinated with the \$1 billion "Livability Agenda" announced by Vice President Gore on January 11, the Lands Legacy Initiative would, among other things:

- increase federal land acquisition funding by 26 percent; priorities for fiscal year 2000 include acquiring 100,000 acres for national wildlife refuges in Maine, New Hampshire, Vermont and New York.

- call on Congress to grant permanent wilderness protection to more than 5 million acres within a variety of national parks, forests and wildlife refuges, including Chincoteague NWR on the Eastern Shore of Virginia.

- award matching grants through the Land and Water Conservation Fund to state, local and tribal governments to acquire lands for urban parks, greenways, outdoor recreation, wildlife habitat and coastal wetlands.

- provide \$80 million for state and local land acquisition to protect threatened and endangered species, promoting the use of habitat conservation plans and other flexible tools available to the Service under the Endangered Species Act.

Rachel F. Levin, Public Affairs,
Washington, DC



"Bumper" crop. This alligator gar was one of 107 caught in a single day from a Mississippi River oxbow in 1931. The huge fish are beginning to make a comeback thanks to efforts in the Southwest region. Photo courtesy of Arkansas Wildlife magazine.

Besides the fact that it reached 10 feet long and 300 pounds, little is known about alligator gar. This mammoth big river fish has been the subject of rumor and legend, but unfortunately few facts.

"It's just ironic," says Bob Pitman, of the Service's Oklahoma Fishery Resources Office, "that here we have the second largest freshwater fish in the United States, yet we know so little about it."

Aside from being rare in U.S. rivers, the alligator gar is difficult to study because of its foreboding size.

"A 100-pound alligator gar tangled in a trammel net won't stay tangled for long," says Pitman. "Live fish are hard to capture, which partly explains the huge gap in our knowledge about this fish."

Now, however, through a partnership with Tishomingo NFH and local anglers, Pitman hopes to close that gap using radio transmitters to track the movements of alligator gar in Oklahoma rivers.

Piecemeal data from biologists, commercial fishermen and recreational anglers suggests alligator gar are in a downward spiral. Service biologists hope to reverse that trend for this pre-historic species.

The body of knowledge on alligator gar is limited. Life history studies are lacking; to date, studies of alligator gar have been confined to the species' diet and a few cursory inquiries on the fish's distribution in a few states. Those reports show their distribution is shrinking. Alligator gar once ranged along the length of the Mississippi and Ohio rivers, but now they rarely occur north of St. Louis, Missouri.

In Oklahoma, alligator gar live in the Red and Arkansas rivers but the brutish-tempered fish are hard to come by except in a few locations known to certain anglers.

Pitman's office, assisted by the Oklahoma Department of Wildlife Conservation, had searched high and low for alligator gar using a variety of methods. Their search turned up very little. Their luck turned with help from a local angler who, in one afternoon, hauled in five adult alligator gar.

A partnership was born.

Thanks to this partnership alligator gar will begin arriving at Tishomingo NFH this spring. Staff from the Service's Pinetop Fish Health Center in Arizona will do a disease assessment on the new arrivals and then biologists will set about to learn more about the fish.

Tishomingo Hatchery Manager Kerry Graves plans to try a variety of hormonal injections at various times of the year to induce spawning, building upon the experience with alligator gar at Private John Allen NFH in Mississippi.

While the fish are in captivity, biologists from the Oklahoma Fishery Resources Office will attach transmitters to them. Following radio-tagged fish in the wild could yield a wealth of information on habits and habitat, not to mention seasonal migration patterns.

Anglers are now tagging alligator gar, as well, according to Pitman.

Craig L. Springer, Division of Fisheries,
Albuquerque, New Mexico

Lake Huron Fish Get Help from an Unusual Source

Captain Tod Williams was fond of lake sturgeon before he ever saw one.

“As a kid growing up in northern Michigan, I remember hearing stories about ‘Germfask the Sturgeon,’” he said. “My dad told me it was a big fish that rescued children who fell in the water; put ‘em right up on the riverbank!”

These days, Williams rescues sturgeon, not the other way around. When he checks his live trap nets in Michigan’s Saginaw Bay, it’s not just catfish and perch his crew hefts aboard his vessel, the *Osprey*. About 25 times a year, the net yields a 50-pound lake sturgeon.

The lake sturgeon is one of Michigan’s oldest fish; scientists have fossil records of 150-year-old specimens measuring 9 feet and weighing more than 300 pounds. Overfishing and loss of critical spawning habitat to dam construction on lake tributaries brought lake sturgeon to the brink of extinction in the late 1800s.

Service biologists need basic information such as where lake sturgeon are located and this is the reason behind a successful volunteer program between the Service and 11 commercial and tribal fishers from Saginaw Bay to Michigan’s Upper Peninsula. Twenty-two boat captains and their crews take sturgeon as by-catch in their nets during the April to November season. Fishers have caught more than 200 sturgeon and tagged 140 since 1994.

“Before we started helping the U.S. Fish & Wildlife Service with their study, there was a five-foot sturgeon that was there every time we lifted the net for about two months,” Williams said. “We cut a tiny notch out of the dorsal fin so we could identify it and we realized it sure liked that part of the bay.”

“We don’t have the staff, or the budget, to get this data ourselves,” said project leader Jerry McClain at the Service’s fishery resources office in Alpena, Michigan and coordinator of the multi-lake, international and inter-agency study. “We wouldn’t be able to determine the status of the lake sturgeon in Lake Huron without commercial fishers.”

Biologists from the Great Lakes region traveled to Canada in January to learn about the latest techniques in sturgeon management, including how to determine the age of a lake sturgeon (*see sidebar*).



A helping hand. Commercial anglers in the Great Lakes have been helping the Service to gather data on lake sturgeon. Pictured, left to right, Tod Williams, captain of the *Osprey*, Service biologist Tracy Hill, *Osprey* crewhand Richard Bacca and Service biologist Scott Kopraski. Photo by Joan Guilfoyle.

Pollution, over-fishing, habitat loss and poaching continue to threaten lake sturgeon today and biologists still know little about the species’ life cycle.

This is where Williamson and his fellow fishermen come in.

“The information collected by the volunteer commercial fishers, along with a monitoring study of sturgeon outfitted with sonar tags will help with a recovery plan for this unique creature,” McClain said. “The lake sturgeon represents both the past, and, as a barometer of the health of the ecosystem, our future.”

And for the near future, at least, Captain Tod Williams will continue to “rescue” the lake sturgeon of his youthful fairy tales.

Joan Guilfoyle, External Affairs, Minneapolis, Minnesota

Guessing the Age of an Ancient Survivor

This January, it was back to school for Service biologists from the Great Lakes region who trooped across the border for an in-depth look at new techniques for managing a rather unusual fish.

The lake sturgeon, an ancient species and a contemporary of the dinosaurs, is a top conservation priority for the Great Lakes Basin Ecosystem Team. The workshop, taught by Dr. John Casselman with assistance from biologists from the Ontario Ministry of Natural Resources, focused on assessing the age of populations of lake sturgeon.

“Lake sturgeon are a challenge to manage—they live a long time, mature slowly, and grow very large,” said Jerry McClain from the Alpena Fishery Resources Office in Michigan, who organized the workshop. “To be successful, we need a lot more information than we have about the size of the population, the age distribution, and the life history of the fish.

Since lake sturgeon migrate long distances, it has to be a cooperative effort among our partners.”

Biologists from federal, state and Canadian resource agencies involved in sturgeon conservation were in attendance. The workshop was sponsored by the Service’s Alpena Fisheries Resource Office, the Ontario Ministry of Natural Resources, and the American Fisheries Society and funded by the Federal Aid Program from the Sport Fish Restoration Fund.

Casselman demonstrated a new interpretive system and companion software to determine the age of sturgeon from the seasonal growth of fin rays.

“One of the age old problems in managing a fish stock is assessing the age of the population, and this new method offers a level of precision and accuracy that we’ve never had before,” Casselman said.

Tracy Hill, Alpena Fishery Resources Office, Alpena, Michigan

Eric Eckl, Public Affairs, Washington, DC

Museum Display Highlights Biodiversity

Where in a city of nearly 7.5 million people can you stand in an African rainforest, view nine of the earth's ecosystems, and count yourself as one with more than 1,500 displayed specimens and models of living creatures?

You can do all of this at the American Museum of Natural History in New York City, where thousands of visitors each day may learn about the Service's work with habitat conservation and restoration, the presence and needs of resident and migratory species, and locally occurring endangered species, at an enormous new interactive display, part of the museum's new Hall of Biodiversity exhibit.

If you visit this extensive display, keep an eye out for "Biobulletins," a computer database which includes information on the work of the Service's Hudson River-New York Bight Ecosystem Team such as maps, descriptions of listed species and discussions of important habitat.

At the request of this Region 5 ecosystem team, the Southern New England-New York Bight Coastal Ecosystems Program Office in Charlestown, Rhode Island, worked with the museum's Center for Biodiversity and Conservation to complete the database.

If you visit, however, you probably will not make a beeline for the Service's portion. Much more awaits you in the 11,000-square-foot exhibit.

An introductory video provides an illuminating overview of biodiversity and the role it plays in the continuation of life on earth.

In the middle of the room, a 90-foot-long glass diorama re-creates a portion of an African rainforest with sounds, light, animal movement, and more than 160 species of flora and fauna.

Cross to the "Spectrum of Life" and you will see the astonishing range of life on earth, illustrated by a 100-foot wall of mounted specimens and models. Video screens show footage of live animals and interactive computer stations describe the specimens.



Life on earth. *The Hall of Biodiversity exhibit in New York's American Museum of Natural History features diversity of life on earth—with over 1,500 specimens. The 100-foot-long display is one part of the museum's new exhibit, to which the Service contributed through the Southern New England-New York Bight Ecosystem Team. Photo ©Enrico Ferorelli.*

Turn around, and you're facing "Lives in the Balance," a free-standing display case containing specimens of endangered species. Collected in the past when these species were abundant, the specimens have been in the museum's collection for decades.

Through text, graphics and video the "Transformation Wall" shows the changes on the planet caused by agriculture and urbanization, exploitation of resources, introduced species, and global environmental change. The "Solutions Wall" discusses solutions to the loss of biodiversity such as protection and restoration, research and outreach, management of natural resources, and reducing the demand for resources.

These two walls flank the "Resource Center," banks of interactive computer stations containing a searchable archive, a bibliography, and the Biobulletins database, which includes topics such as "Management for Biodiversity" and "Reducing Resource Demand," as well as the "Laws and Regulations" section, where you will find the Service's contributions.

Marcianna Caplis, Southern New England-New York Bight Coastal Ecosystems Program, Charlestown, Rhode Island

Helping with the Hall

In building exhibits for the Hall of Biodiversity, the American Museum of Natural History not only relied on its vast collections, but also sought information from organizations around the world. The Service contributed maps, photographs and text to the interactive computer in the hall's Resource Center.

One Service map in the exhibit shows the Hudson River-New York Bight watershed from the Troy Dam, at Albany, south, citing 23 federally listed species in the watershed. An icon links viewers to a photo and brief description of each species.

Another map shows habitats within a 25-mile radius around the museum and is linked to close-up views and brief descriptions of 11 individual significant habitat complexes identified in the New York Bight ecosystem.

Service staff from around the nation provided, and continue to provide, endangered species slides to the Southern New England-New York Bight Coastal Ecosystems Program office for inclusion in this regularly updated portion of the exhibit.

Marcianna Caplis

Report Reflects the Spirit of Cooperation

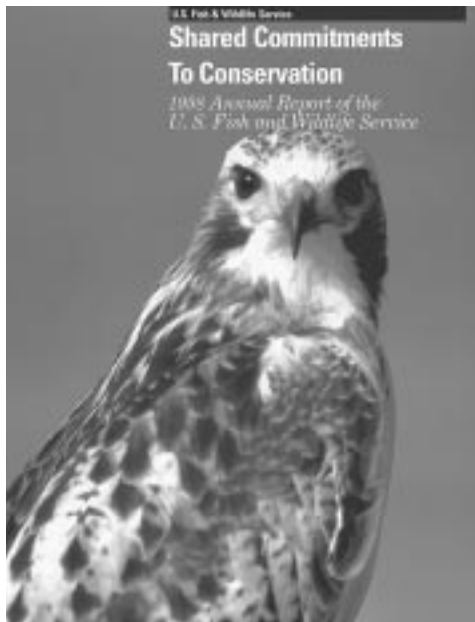
The Service's annual report for fiscal year 1998 is more than merely an account of the agency's accomplishments over 365 days. It shows the Service as a dynamic organization committed to conserving natural resources through sound management of its fish, wildlife and their habitats.

Moreover, the report represents a cooperative effort by diverse contributors from all program areas, from administrative assistants to wildlife biologists, from Engineering to Realty.

Service Director Jamie Rappaport Clark recently presented certificates of appreciation to a number of employees who made outstanding contributions to the 1998 annual report.

"Your willingness to contribute program accomplishments that represent all levels of the Service has been essential to the success and accuracy of this report," she said as she presented the awards. "Service employees have a proud tradition of pulling together to get the job done and I thank you for your dedication to excellence in presenting the Service's yearly accomplishments so that our public can understand our work and its importance to conserving fish and wildlife resources." (See sidebar for list of personnel honored.)

Annual reports allow the Service to report to the American people, its constituents, on how the agency has fared in achieving its mission to conserve fish and wildlife resources, providing stewardship of its trust resources and accounting for the costs associated with performing its work. The Office of the Inspector General audits the report's contents and the audit results are scrutinized by the Office of Management and Budget and the Congress.



Teamwork pays off. Director Jamie Rappaport Clark lauded the cross-program effort involved in producing Service's 1998 Annual Report. USFWS photo.

The FY 1998 report marks the fourth consecutive year in which the Service has received unqualified or "clean" audit opinions from the Inspector General. This report is becoming more complex to prepare under the Federal Accounting Standards Advisory Board standards requiring the integration of financial and operational information, combined with management's discussion of the future impact on Service operations based on its currently displayed financial and operational status.

The Service's report also provides program and financial information used to prepare the Department of the Interior's annual report.

*Pam Matthes, Division of Finance,
Arlington, Virginia*

Clark Commends 31

Director Clark presented certificates to the following personnel for their work on the 1998 annual report:

Sue Arroz, *Refuges*
Tom Barnes, *North American Waterfowl and Wetlands Office*
Terry Clayton, *Engineering*
Frank Cockrell, *Engineering*
Krista Doebbler, *Engineering*
Karen Drews, *Refuges*
Ken Grannemann, *Refuges*
Becky Halbe, *Realty*
Thomas Hawkins, *Realty*
Beth Jackson, *NCTC*
Tom Jeffrey, *Federal Aid*
Kevin Kilcullen, *Refuges*
David Klinger, *NCTC*
Cathy Lockwood, *Engineering*
Chris MacArthur, *Contracting and General Services*
Don MacLean, *Habitat Conservation*
Mary Maruca, *International Affairs*
Debora McClain, *Endangered Species*
Judy Pharris, *Law Enforcement*
Nancy Roeper, *Refuges*
Gail Sloss, *Engineering*
Claude Stephens, *Federal Aid*
Jon Streufert, *Fish Hatcheries*
Anne Tracy, *External Affairs*
Jay Troxel, *Management Assistance*
Kathy Walker, *Ecological Services*
David Weaver, *North American Waterfowl and Wetlands Office*
Joe Williams, *Refuges*
Barbara Wyman, *Realty*
David Yeargin, *Endangered Species*
Mary Anne Young, *Refuges*

Outdoor Traditions Leap Onscreen at Trade Show

The Service and its conservation partners took center stage at the 1999 Shooting, Hunting and Outdoor Trade Show February 1 to 4 in Atlanta, Georgia.

Highlighting the Service's participation at the show was the debut of the new Federal Aid in Sport Fish and Wildlife Restoration home page www.restorewildlife.org—during a luncheon for media representatives at the show. The event was coordinated by the Service and the Outdoor Writers Association of America with sponsorship assistance from the Archery Manufacturers and Merchants Organization, National Fish and Wildlife Foundation, National Shooting Sports Foundation and the National Wild Turkey Federation. The presentation was well received by the approximately 250 people in attendance.

Service staff and others attending the show also promoted the Federal Duck Stamp program and the Sport Fish and Wildlife Restoration program at two exhibits manned throughout the show's duration.

And in a special presentation, congressional staffer Jeff Fleming received an award for his efforts on behalf of the Sport Fish Restoration Program (*see "Conservation Groups Laud Congressional Aide"*).

Its creators hope the new Web site will increase awareness of the value and successes of the Sport Fish and Wildlife Restoration Program and the role hunters, anglers, shooters and boaters play in protecting the nation's valuable fish and wildlife resources. The site also serves as an access point to state fish and wildlife agency home pages.

In addition, restorewildlife.org features background information about the program, a list of items taxed under the program, a unique "shopping cart" feature that allows visitors to tally how much their angling and shooting purchases contribute to conservation, and a section that allows visitors to send "virtual" wildlife postcards.

The Web site is just one component of a three-year cooperative agreement with the International Association of Fish and Wildlife Agencies to increase outreach and communication efforts about Sport Fish and Wildlife Restoration. One of the objectives of the project is to coordinate outreach efforts among Sport Fish and Wildlife Restoration Program stakeholders, including the Service, state fish and wildlife agencies, industry, nongovernmental organizations and the media.

Mary Jane Williamson, International Association of Fish and Wildlife Agencies



Job well done. *The Service's Tom Melius presents Congressional staffer Jeff Fleming with a framed Duck Stamp print. Photo by Laury Parramore.*

Conservation Groups Laud Congressional Aide

For his effective behind-the-scenes efforts to ensure the financial integrity of the Sport Fish and Wildlife Restoration Program, Jeffrey M. Fleming, press secretary to U.S. Representative John Tanner of Tennessee, received a special framed Federal Duck Stamp print from the Service and several conservation partners.

Assistant Director for External Affairs Tom Melius presented the award, a reproduction of the 1994 duck stamp featuring a pair of mallards, during a media briefing at the 1999 Shooting, Hunting, and Outdoor Trade Show.

"Jeff Fleming is a real conservation hero," Melius said. "Through his willingness to go the extra mile in working with Service Federal Aid Division staff, the Internal Revenue Service, industry, and the U.S. Customs Service, Jeff was instrumental during the past 2 years in setting up improved procedures that secured release of nearly \$50 million in tax receipts on hunting and fishing equipment.

"These monies are used for conservation projects underwritten by the Sport Fish and Wildlife Restoration Program. Boaters, hunters, shooters and anglers who fund this program through their purchase of sporting equipment and motorboat fuels owe Jeff a debt of gratitude for making sure these funds are available to be allocated in a timely manner."

Fleming, 34, has been press secretary to Congressman Tanner since 1991, staffing natural resource and conservation issues for the last 3 years. He works closely with federal agencies, industry groups, conservation and boating organizations, and the Congressional Sportsmen's Caucus, which Congressman Tanner recently chaired. He is extremely active in working to strengthen the Sport Fish and Wildlife Restoration Program and the National Wildlife Refuge System.

Phil Million, External Affairs, Arlington, Virginia

Critical Wildlife Habitat Added to Long Island Refuge

With acquisition of 128 acres of woodlands and freshwater wetlands at Wertheim NWR, a decade-long grassroots effort led to the protection of one of the last remaining undeveloped areas in the Carmans River watershed on Long Island's south shore.

"This is a dream come true for the refuge and the surrounding communities," said Pat Martinkovic, manager of Wertheim refuge. "The property will buffer the Carmans River and the remaining 2,400 acres of the refuge from the impacts of development."

The land falls within the refuge's approved boundary and provides habitat for migratory birds and threatened and endangered species in one of New York's most densely populated areas.

A 71-unit residential subdivision nearly devoured this important habitat in 1987, but was stopped by coalition of local environmental and civic groups who mounted a campaign to prevent the development. Their tireless efforts paid off in 1998 when the landowners agreed to work through the Trust for Public Land to protect the parcels.

The Trust negotiated the details of the transaction and, along with the Audubon Society and the Open Space Council, helped lobby for a congressional appropriation to purchase the property. Most of the money for acquisition came from the Land and Water Conservation Fund, but the Town of Brookhaven, Brookhaven Village Association, Ducks Unlimited and the local Post-Morrow Foundation also contributed funds.

Late Tribal Leader Recognized for Conservation Support

Mescalero Apache tribal leader Wendell Chino, who died last November, was a renowned defender of Indian sovereignty who won respect in the halls of Congress as well as on the reservation. He also supported proper management of fish and wildlife resources on Mescalero tribal lands, which encompass many lakes and a trophy elk population, and in that capacity was instrumental in helping the Service to establish Mescalero NFH in southern New Mexico.



Expressing appreciation. Tony Leger (center), assistant regional director for Refuges in Region 5, presents a commemorative poster and a book to Congressman Michael Forbes, a key player in bringing sensitive wildlife habitat to a Long Island refuge. USFWS photo.

To commemorate the acquisition, the refuge hosted a ceremony last October. Nearly 200 elected officials and agency representatives joined the landowner and members of neighboring communities to celebrate the land transfer and the power of partnerships. At the ceremony, U.S. Representative Michael Forbes of New York declared the acquisition "a victory for all who care about preserving Long Island's vulnerable open spaces."

Located along the Atlantic flyway, Wertheim refuge was established in 1947 to protect habitat in the Carmans River watershed for black ducks, mallards, wood ducks, gadwalls and other migratory waterfowl and waterbirds. Several thousand ducks winter on the refuge, which also supports the largest breeding population of wood ducks on Long Island.

The headwaters of Yaphank Creek, a tributary of the Carmans River, is located on the newly acquired land. The creek is one of only six on Long Island that still supports naturally reproducing populations of brown trout.

Several federal and state protected threatened and endangered species occur on the refuge, including bald eagles, peregrine falcons, loggerhead sea turtles, and roseate, common and least terns.

Terri Edwards, External Affairs, Hadley, Massachusetts

The Albuquerque branch of the National Association for the Advancement of Colored People posthumously awarded Chino its 1999 Martin Luther King, Jr. Freedom Award at a celebration of Dr. King's legacy in January. Chino's son accepted the award on his late father's behalf. He is pictured above (right) with Region 2 Native American liaison John Antonio.

Ben Ikenson, Student Conservation Associate, Albuquerque, New Mexico



Partnership Provides a Template for Success

Think of some of the most destructive natural events in recent history, and a variety of images come to mind: hundreds of thousands of acres burned during the Yellowstone fires; the denuded landscape of southern Florida after Hurricane Andrew; the devastated farm fields and roads, the houses standing window-deep in water after the great Mississippi River flood of 1993.

These events are not often remembered in a positive way, yet Yellowstone's forests are growing; South Florida is rebuilding; and life continues along the Mississippi. In fact, one Wisconsin community, and a group of partners that includes the Service, sees the flood of 1993 as the beginning of an answer to problems of erosion and flooding that have long plagued residents.

The partnership has used an ecosystem approach, incorporating the assistance of partner agencies, groups, programs and offices to help address water quality and land use issues and successfully develop and manage this watershed-based initiative.

As with many communities, the Town of Onalaska, in the southwestern Wisconsin county of La Crosse, felt the effects of the 1993 flood with washed out roads, sodden homes and railroad tracks, and farm fields under water. Although exacerbated by the flood, these problems were not solely the result of flood conditions.

Two local watersheds feeding the Mississippi River, Halfway and Sand Lake Coulee creeks, have long been affected by sedimentation and erosion. Their outlets into the river have been choked by sedimentation from building sites, agricultural lands and other human activities. The process of sedimentation backs up water into basements and inundates wetlands and farm fields with sand and silt.

On nearby Upper Mississippi River National Wildlife and Fish Refuge, sedimentation has damaged valuable fish and wildlife habitat and rendered recreation areas unusable.



Joint effort. Kevin Kenow (left) and Chris Kochanny (center) of the National Biological Survey, and Jim Nissen of the Service sample nutgrass tubers in moist soil areas on the Pedretti Tract, part of a partnership project to restore flooded habitat along the Mississippi River. Photo by Mary Stefanski.

The 1993 flood proved to be the straw that broke the camel's back. In 1994, with assistance from the Mississippi River Regional Planning Commission, the Town of Onalaska received a grant from the Commerce Department for a hydraulic study of the Halfway and Sand Lake Coulee creek watersheds to find ways to control sedimentation and ultimately protect homes, businesses, infrastructure, wildlife habitat and recreation areas.

The study was completed in 1995 and now an alliance of private citizens, conservation groups, and local, state, and federal representatives is undertaking projects aimed at solving the area's flooding and erosion problems.

Because of sedimentation's effects on refuge lands, the Service got involved in the partnership early on, assisting with the development of management strategies, land use plans, project designs and funding options. Jim Nissen, manager of the La Crosse District of the Upper Mississippi River refuge, says that the refuge and other Region 3 offices have been looking for ways to solve the problem of sedimentation.

Traditional work with the Agriculture Department's Natural Resource Conservation Service and local landowners has expanded and the Service takes an active role in the partnership, Nissen says.

The first part of the multi-phase project is the Upper Halfway Creek Marsh Project on the refuge. Project goals include trapping sediment and enhancing wetland habitat.

A portion of the project, including a water control structure and part of a diversion channel, will be developed on private lands. Service staff obtained the required perpetual easements to construct and maintain these structures.

All partners focus on obtaining the money to complete the project. Currently, about half of the funding has been committed from a variety of sources, including the Upper Mississippi River Joint Venture Program of the North American Waterfowl Management Plan, the Service's Challenge Cost-Share Program, the Town of Onalaska and Wisconsin DNR.

The refuge is using the Service's ecosystem approach by being recognized as a "value-added" partner throughout the watershed to help positively influence land use decisions. One of the significant benefits of this partnership is the improved daily working relationship between the Service and its partners on many issues, says Nissen.

"This watershed approach, with an emphasis on local partners, and including state and federal partners, is an example of what Region 3 envisions for the Mississippi River Basin Partnership," says Regional Director William Hartwig. "This project provides a clear message that ecosystem management and collaborative efforts will help conserve and enhance fish and wildlife resources."

*Georgia Parham, External Affairs,
Bloomington, Indiana*

Region 2 Veterinarian Honored

Friends and neighbors have variously dubbed Service biologist Dr. Leslie Dierauf “Mother Theresa of the Seas,” “the Sea Turtle Lady” and “Patron Saint of Marine Mammals.”

And for good reason. Dierauf’s work on behalf of marine mammals—and a variety of other species in peril—has earned her a reputation among her peers as a hardworking and compassionate veterinarian and conservationist.

In the late 1970s, for example, Dierauf helped lead the Marine Mammal Center in northern California through its early development phases. Through her efforts, the center has become the premier center of marine mammal rehabilitation in the world.

In recognition of her dedication to animal care and advancing animal well-being, Dierauf, who works in the Southwest regional office in Albuquerque, received the American Veterinary Medical Association’s 1998 Animal Welfare Award.

Accepting the award last fall, Dierauf confirmed her belief in the strong connection between veterinary science and conservation.

“If I have learned one thing from this rewarding experience,” she said, “it’s that animal health is inseparable from the health of the natural world.”

As the first female president of the International Association for Aquatic Animal Medicine, Dierauf strove to increase awareness of marine mammal conservation and rehabilitation issues. She developed a 700-page textbook—*Handbook of Marine Mammal Medicine: Health, Disease, and Rehabilitation*—considered to be the most complete work of its kind and a primary source of information for veterinarians.



Dr. Leslie Dierauf. Photo by Ben Ikenson.

Dierauf’s work has not been limited to scientific study. In Washington, D.C., as an American Association for the Advancement of Science Congressional Fellow and then a staff member of the U.S. House of Representatives Merchant Marine and Fisheries Committee, she proved instrumental in the formulation of the Marine Mammal Health and Stranding Act. She also worked on endangered species and other important conservation issues during her time in the nation’s capital.

A short time after coming to the Service’s Albuquerque office in early 1994, Dierauf began juggling diverse duties. She acted as the head veterinarian for the Mexican Wolf Recovery Project and served as the Acting National Sea Turtle Recovery Coordinator and the regional Endangered Species Outreach Coordinator. She now serves as the Regional Habitat Conservation Plan Coordinator for the Southwest.

As if all of that hasn’t been enough, Dierauf also selects and mentors volunteer and community program participants who perform tours of duty in the Albuquerque office focusing on ecological restoration.

“It is truly an honor to have someone as talented and multi-faceted as Leslie on board,” said Nancy Kaufman, regional director for the Southwest. “She’s a mover and a shaker. Not only is she a great scientist, she knows how to... really make visible forward strides in conservation.”

As for Dierauf’s next project...who knows?

Ben Ikenson, Student Conservation Associate, Albuquerque, New Mexico

Making Transitions

These days it can be difficult to keep up with the latest news about your colleagues around the Service...who’s on the move to a new region, who retired.

Beginning with the May issue *Fish & Wildlife News* will feature a “Transitions” column about Service folks on the go—where they’ve gone and what they’re doing. If you’ve got information about someone who has:

- become a project leader,
- changed regions, programs, field stations or agencies, or
- retired

Send it to the *News* at:
“Transitions”

Fish & Wildlife News
U.S. Fish & Wildlife Service
1849 C Street, NW, Room 3024
Washington, DC 20240
fax: 202/219 9463
e-mail: rachel_levin@fws.gov

Due to space limitations we can only accept items that fall into the above categories.

Thank you.

Catch The Migration Sensation: Celebrate International Migratory Bird Day, May 8

In celebration of International Migratory Bird Day, May 8, 1999, Fish & Wildlife News presents a special section on migratory birds—the problems facing them today and the Service's work to conserve them for the enjoyment of generations to come.

Held each year on the second Saturday in May, International Migratory Bird Day is the world's largest single-day event celebrating wild birds. As an IMBD organizer, the Service is encouraging people across the nation—young and old, urban and rural—to “Catch the Migration Sensation” on May 8.

Now in its seventh year, International Migratory Bird Day is the hallmark event of Partners In Flight, an international coalition of conservation organizations dedicated to reversing the decline of migratory bird populations. In 1995, the Service's Office of Migratory Bird Management and the National Fish and Wildlife Foundation assumed principal responsibility for coordinating IMBD nationally.

Each year, several hundred thousand people gather in town squares, university auditoriums and nature centers, at schools and national wildlife refuge visitor centers, and of course in the great outdoors, to learn more about wild birds, take action to conserve birds and their habitats, and simply have fun. Since the first International Migratory Bird Day, the number of events has grown from a few dozen to more than 500 events in 1998.



Colorful reminder. *The 1999 International Migratory Bird Day art features riparian habitats and some examples of the birds that thrive in them. The artwork, which is featured on posters, t-shirts and other items, was created by wildlife artist, naturalist and educator Carol Decker.*

This year's celebration emphasizes the importance of wetland habitats in sustaining biological diversity and providing nesting, wintering and stopover areas for neotropical migratory birds. The IMBD '99 poster, designed by wildlife artist Carol Decker, features riparian habitats—lands and plant life immediately bordering wetlands and streams—and some of the bird species found in and around them.

The 1999 IMBD Educator's and Organizer's supplements are aimed at teachers, parents and community leaders who want to teach about the importance of migratory birds. The packets include color overhead transparencies depicting issues critical to migratory bird populations with accompanying activities for use in the classroom as well as by bird clubs, nature centers and other groups.

Additionally, the Endangered Species Teacher's Packet is included free with every order of educator's and organizer's materials. Filled with endangered species information, activities and puzzles, the endangered species packet serves as additional outreach tool for the Service.

For additional information, contact the Office of Migratory Bird Management, 401 North Fairfax Drive, Suite 634, Arlington, Virginia 22203, call 703/358 2318, or e-mail to imbd@mail.fws.gov.

*Julie Anne St. Louis,
Office of Migratory Bird Management,
Arlington, Virginia*

Service Leads Effort to Restore Colonial Waterbirds

To ornithologists and wildlife biologists, colonial waterbirds are not waterbirds from America's colonial period, but rather waterbirds that form closely packed aggregations, called *colonies*, when they nest. Colonial-nesting waterbirds represent a diverse group of species, including tree-nesting waders (such as herons, egrets and ibises), ground-nesting gulls and terns, and cliff- and burrow-nesting seabirds (such as storm-petrels, murres and puffins).

The Service has long been associated with the protection of colonial-nesting waterbirds. The first national wildlife refuge, Pelican Island in Florida, was established in 1903 to protect nesting habitats of the brown pelican.

Biologists have become increasingly concerned about colonial waterbird conservation as loss and degradation of wetland habitats have caused populations of many species to decline. The Everglade snail kite, Newell's Townsend's shearwater, brown pelican, least tern and roseate tern all have been listed as threatened or endangered in recent years.

Other species face the opposite problem as their populations have increased to the point that they are beginning to create conflicts with human activities. Double-crested cormorants eat catfish, for example, hindering aquaculture operations. Herring gulls congregated at airports near coastal wetlands sometimes fly into airplane engines.

In July 1998, the Service helped initiate development of the North American Colonial Waterbird Conservation Plan to promote the long-term conservation of colonial-nesting waterbirds and their habitats.

The plan aims to maintain healthy and well-distributed colonial-nesting waterbird populations and habitat throughout their breeding, migratory and wintering ranges. A partnership of non-government agencies, researchers, private individuals, academics, and federal and state agencies will help develop the plan over the next two years.

Representatives of Partners in Flight, the North American Waterfowl Management Plan and the U.S. Shorebird Conservation Plan have endorsed the colonial waterbird conservation plan, which has also received strong support from such diverse partners as Ducks Unlimited, the National Audubon Society, and the International Association of Fish and Wildlife Agencies, which represents the interests of State and Provincial wildlife agencies in North America.

The plan's steering committee has sponsored several workshops to identify research and information needs. Most recently, the group met in February to identify and discuss ideal colonial waterbird monitoring methods, including the eventual development of on-line regional and national databases.

For additional information about the North American Colonial Waterbird Conservation Plan, check out the Web site at <http://www.nacwcp.org> or contact Melanie Steinkamp (melanie_steinkamp@usgs.gov).

John L. Trapp, Office of Migratory Bird Management, Arlington, Virginia

Migratory Bird Conservation Milestones

1900

Lacey Act—Prohibits the sale or possession of any fish, wildlife or plant taken in violation of any federal, state or Tribal law.

1903

President Theodore Roosevelt established the first national wildlife refuge at Pelican Island, Florida.

1918

Migratory Bird Treaty Act—Established a federal prohibition, unless permitted by regulations, on the possession, killing, sale, purchase or transport of any migratory bird or any part, nest or egg. The Act is the domestic law that implements the United States' commitment to four international conventions—with Great Britain on behalf of Canada and later with Japan, Mexico and Russia—for the protection of a shared migratory bird resource.

1920

Bird banding laboratory established within the Bureau of Biological Survey.

1934

Migratory Bird Hunting and

Conservation Act—Also called the Duck Stamp Act, this law requires all waterfowl hunters age 16 or older to purchase and carry with them a valid federal hunting stamp. Proceeds from the sales of these stamps are deposited into the Migratory Bird Conservation Fund and are used to purchase wetlands for national wildlife refuges.

The first Duck Stamp cost \$1. It was designed by refuge manager and cartoonist J.N. "Ding" Darling.

1937

Federal Aid in Wildlife Restoration (Pittman-Robertson) Act—Authorizes an 11 percent excise tax on sporting arms and ammunition, proceeds of which are apportioned to the states to fund up to 75 percent of approved wildlife habitat projects and 50 percent of the cost of hunter safety programs.

1938

First mid-winter waterfowl survey conducted.

1948

Migratory bird flyways—Recognizing the great differences in hunting conditions across the country, the Fish & Wildlife Service created four migratory bird flyways for the purpose of setting hunting regulations: Atlantic, Mississippi, Central and Pacific.

Flyways are administered by four flyway councils, established in 1952.

Partners in Bird Conservation

by Peter Stangel

The Fish & Wildlife Service and the National Fish and Wildlife Foundation have a long and successful record of working cooperatively to conserve birds and their habitats domestically and abroad. The partnership's success is due in part to the different strengths each brings to the table.

As a smaller, private, non-profit organization, the Foundation can often react to breaking issues more quickly than its larger parent. It can award grants quickly and launch programs with a minimum of lead time.

The Foundation also has greater freedom to interact with corporations and private foundations offering innovative solutions to challenging problems. In many cases, the Foundation can be an effective liaison with the private sector in a way not possible for a federal partner. This puts the Foundation in an excellent position to be a crucible for untried but potentially valuable approaches to tough problems.

By the same token, the Service has the financial and personnel resources needed to sustain long-term commitments to natural resource issues beyond the Foundation's capacity. The Service has on-the-ground management and conservation capabilities, whereas the Foundation does not directly manage land. With talented staff in every corner of the landscape, the Service is often first to uncover new ideas and export them throughout the system.

The first Foundation/Service partnership for birds launched the North American Waterfowl Management Plan in 1986. The fledgling Foundation delivered funds to Canada and individual states for the first projects in what was destined to become the flagship conservation project for wetlands and waterfowl. The Foundation continues to support this effort with millions of dollars annually for acquisition and other projects through our Wetlands and Private Lands Initiative.

Similarly, the Foundation and the Service have proven an effective team in addressing the conservation needs of declining neotropical migrants and other nongame



Canvasback Duck. USFWS photo/William Vinje

birds. When data from the Service's breeding bird survey revealed long-term declines in many species, the Foundation orchestrated a solution in just a few months. At a 1990 action workshop, more than 150 bird conservationists crafted Partners in Flight as an innovative approach to the challenges posed by declining songbirds.

continued on page 18

1956

Fish and Wildlife Act—This frequently amended act established a comprehensive national fish, shellfish and wildlife resources policy to be administered with regard to the "inherent right of every citizen and resident to fish for pleasure, enjoyment and betterment, and to maintain and increase public opportunities for recreational use of fish and wildlife resources."

1966

First breeding bird survey conducted.

1972

Office of Migratory Bird Management established.

1974

Regional migratory bird coordinator positions established.

1972

Migratory Bird Convention with Japan—

This law amended the title of the 1918 Migratory Bird Treaty Act to read: "An Act to give effect to conventions between the United States and other nations for the protection of migratory birds, birds in danger of extinction, game mammals and their environment."

1976

Migratory Bird Convention with the Soviet Union

1980

Fish and Wildlife Conservation Act—Among other things, this legislation required the Service to "identify lands and waters in the United States and other nations in the Western Hemisphere whose protection, management or acquisition will foster the conservation of nongame migratory birds."

1986

North American Waterfowl Management Plan initiated—The Service developed this innovative plan in response to plummeting waterfowl populations. Though international in scope, the Plan is implemented at the regional level by a series of joint ventures, coalitions of concerned state and federal agencies and private organizations. The ten U.S. and 2 Canadian joint ventures develop projects to advance waterfowl and wetland conservation.

1990

Partners in Flight—Led by the Service, this international group of government agencies and private organizations aims to conserve and restore migratory bird populations throughout the Western Hemisphere.

Partners in Bird Conservation (continued)

Through Service and Foundation leadership, Partners in Flight has fostered a community of cooperation and coordination never before achieved for bird conservation. Dozens of new partners, including American Bird Conservancy, Colorado Bird Conservancy, Point Reyes Bird Observatory, and Cornell Laboratory of Ornithology, have taken prominent roles in the program and in partnership with the Service and Foundation.

The record of success of Service/Foundation partnerships comes as no surprise to those who recognize these organizations' complimentary assets.

Partners in Flight has helped bring the Service and Foundation together at both the administrative and field level. For example, the Office of Migratory Bird Management, the Foundation, and several other partners helped coordinate a new approach for identifying bird species of concern, now known as the Watch List. Managed by National Audubon Society, the Watch List reduced confusion created by unrelated ranking systems and provided a means to measure individual species' conservation successes.

Even more dramatic and important results have been achieved in the field. Through Partners in Flight, game and nongame bird conservationists are working more closely than they ever dreamed possible just a few years ago. Focusing on the common need for both groups—habitat—makes it easier to develop cooperative approaches.

The Service and the Foundation also work hand in hand to educate the public about bird conservation needs and to stimulate interest in birding and nature tourism. Through International Migratory Bird Day, hundreds of thousands of people have participated in education activities centered around birds.

Similarly, the Service and the Foundation are working to stimulate the economic benefits of birding through festivals and other events. Demonstrating the economic value of avitourists to local communities is a sure-fire way to bolster conservation efforts. Jointly funded economic studies reveal that income to communities from birders visiting refuges can be millions of dollars annually.

The list of Service/Foundation partnerships goes beyond these programs, from small habitat restoration projects at refuges to international conservation initiatives. This record of success comes as no surprise, however, to those who recognize the complementary assets of both organizations. Dwindling habitats, increasingly complex problems, changing public demographics, and a host of other challenges face bird conservationists in the new millennium. Fortunately, these are just the kind of challenges for which the Fish & Wildlife Service and National Fish and Wildlife Foundation were established.

Editor's note: Peter Stangel is the Director of the Southeastern Partnership Office and Neotropical Migratory Bird Initiative for the National Fish and Wildlife Foundation.

Road Map to Bird Conservation



Following the flight plan. Newly-designed regional conservation plans will further the efforts by Partners in Flight to preserve species such as the red-tailed hawk. Photo by Phil Million.

Partners in Flight is a consortium of agencies, organizations, businesses and industry associations, private landowners, foundations, universities and individuals dedicated to maintaining healthy bird populations throughout the Western hemisphere.

Committed to "Keeping Common Birds Common," members of Partners in Flight believe that conserving bird populations before they require Endangered Species Act protection is the most economically, biologically, and socially responsible way to ensure that future generations will reap the benefits offered by wild birds.

Since the group's establishment in 1990, the Service, because of its legal mandate to conserve nongame migratory bird species, has been the leader among the 15 federal agency members.

Now this international initiative is poised to enter a new era as it produces a set of scientifically sound conservation plans—road maps to guide wild bird conservation to its intended destination: restoring dwindling populations of many types of migratory birds.

Tracking Songbirds in the Grasslands



Using the best scientific information available, Partners in Flight biologists, along with representatives from dozens of conservation organizations and agencies, will produce more than 50 regional and state-level conservation plans. Each plan will consider national and international priorities and identify needed conservation actions in all parts of the United States, serving as a launch pad to restoring and enhancing migratory birds for the benefit of people.

Biologists will create each new regional conservation plan following the four steps outlined in Partners in Flight's Flight Plan, the overall conservation strategy which identifies priorities by considering migratory birds occupying local management units in the context of larger regional populations.

Over the past 30 years, populations of dozens of neotropical migratory birds and other landbirds—including warblers, tanagers, sparrows and raptors—have declined at rates exceeding 2 percent per year. The highly migratory nature and wide geographic ranges of these species make it impossible for a single agency or organization or nation to preserve the rich diversity of birdlife in North America.

From chairing national and regional committees to providing scientific guidance for developing conservation plans to leading the way in migratory bird outreach and education, the Service has played a critical role in guiding Partners in Flight over the past 7 years.

While the Office of Migratory Bird Management has spearheaded many Partners in Flight efforts, numerous other Service programs, including International Affairs, the Division of Refuges, the North American Waterfowl and Wetlands Office, and the Office of Public Affairs, also have played key roles. The Service's seven regional migratory bird programs coordinate their efforts to maximize migratory bird conservation on the ground.

Mila Plavsic, Office of Migratory Bird Management, Arlington, Virginia

Human activity over the last quarter century has altered the native grassland ecosystem of the Great Plains, causing populations of bird species endemic to those areas to decline dramatically. Service biologists still do not fully understand the dynamics of declining grassland species, so they initiated a status assessment to learn the needs of these species.

The resulting conservation plan, published last year, identified the highest priority conservation and research needs of Baird's sparrow, a tiny brown grassland bird. Continuing studies on national wildlife refuges in Montana and North Dakota focus on the status and reproductive success of Baird's sparrow, Sprague's pipit and four other grassland species.

At Bowdoin NWR, in northeastern Montana, Service biologists are studying the productivity and reproductive natural history of these grassland species in an undisturbed mixed-grass prairie. They located and monitored 205 nests of six different species during 1997, and 225 nests of thirteen species in 1998. Results showed wide fluctuations in nest success between years, following changes in weather patterns and management actions.

Because of extensive habitat loss around the turn of the century, Baird's sparrow and Sprague's pipit will probably never recover to historic population levels. Baird's sparrow populations remain high in portions of their range, while Sprague's pipit continues to experience steep declines.

Biologists say that long-term conservation of these species will depend on the conservation of the prairie ecosystem. The only viable approach to recovering and protecting these species is to properly manage the remaining native grasslands and tame grasslands with native characteristics.

Studies such as the one at Bowdoin, which determine the habitat requirements and management actions to create these habitats, are the first step to reaching this goal.

Baird's sparrow is a small, streaky brown sparrow that breeds in the northern Great Plains. Naturalist John James Audubon discovered this species in 1843 during a two-month visit to the area of Old Fort Union, North Dakota.

Audubon's companions on this trip included Isaac Sprague (Sprague's pipit), Ed Harris (Harris's sparrow) and John Bell (Bell's vireo). Audubon also invited Spenser Fullerton Baird, the man who later was the first ornithologist to be Secretary of the Smithsonian. Only 20 years old at the time, Baird was forbidden by his mother to go on such a dangerous trip.

Baird's sparrow and Sprague's pipit are true grassland species, restricted to grasslands as both breeding and wintering grounds. While Baird's sparrows prefer to run through the grass rather than fly, Sprague's seldom seem to touch ground. These birds' beautiful songs contain high rolling trills of a clear, bell-like quality and serve as a pleasant reminder that you are somewhere in the northern Great Plains.

Stephanie Jones, Office of Migratory Bird Management, Denver, Colorado

Paula Gouse, Bowdoin NWR, Malta, Montana

Threats to Landbirds Come from Wildlife and People

Landbirds fall into two categories: resident (non-migratory) species and those that migrate some distance between breeding and wintering areas. About 300 migratory landbird species breed in temperate areas of North America and winter from the southern temperate zones to the tropics and southward. Biologists are concerned that a number of these bird populations are declining throughout their range.

This group of birds faces problems in three major areas: breeding grounds, wintering grounds and during migration. Research and habitat management actions eventually will focus on addressing all three areas.

Problems on breeding grounds stem from habitat loss and fragmentation, both of which have had the greatest impact on those species with the least flexibility regarding nest site selection. The most profoundly affected species nest in floodplain forests of the southeast, grasslands in the Midwest, riparian habitats in the Southwest and second growth forests of the Northeast.

Populations of these birds often are depleted by changes in habitat that bring about increased predation by other animals and parasitism by pests such as the cowbird. Cowbirds lay eggs in the nests of other songbirds, often removing one or more of the eggs already there. Young cowbirds often hatch earlier and are larger than the other baby birds, out-competing them for food from the parent.

Problems on wintering grounds are directly related to habitat loss; currently the most serious wintering habitat loss issue is tropical deforestation. Neotropical migrants are more concentrated on their wintering grounds than short-distance migrants and have fewer alternative habitats to choose from. Even in intensive agricultural regions, the loss of isolated trees, hedgerows and wooded waterways can harm wintering bird populations. Biologists are also concerned about the widespread use of pesticides in these landscapes.



In danger. Landbirds such as Kirtland's warbler face perils such as loss of habitat and predation by other animals. Photo by Richard Baetson.

Habitat loss is also a major conservation concern during migration. Often large concentrations of landbirds congregate at stopover sites, especially along coastal areas. Development of beachfront property is the primary threat to these migrants; another concern centers around Midwestern woodlots where oak trees that are critically important feeding and resting areas for migrants are being lost at a rapid rate.

Migrating birds also die in increasing numbers as a result of collisions with communication towers, mirrored glass buildings and cars. Biologists are just beginning to realize the magnitude of bird loss associated with these man-made objects.

Concerned land managers, planners and researchers may be overwhelmed with the spectrum of threats facing migratory landbird populations. Fortunately, large cooperative groups such as Partners In Flight are tackling these issues head on, providing the best science available to direct population recovery and stabilization efforts.

*Barbara Pardo, Joint Venture Office,
Fort Snelling, Minnesota*

Japan and the United States Meet on Migratory Bird Initiatives

When the United States and Japan met in February to discuss migratory bird conservation issues for the first time in nearly 20 years, the U.S. delegation to the meeting, led by the Service's Al Manville, hoped simply to renew relations with Japan, confirm conservation project goals and discuss ongoing migratory bird research efforts.

They were in for a pleasant surprise.

"The meeting results far exceeded our expectations," said Manville, the former chief of the branch of policy coordination and communications in the Migratory Bird Management Office. "This historic meeting was a tremendous success."

Results of the meeting included:

- The United States and Japan for the first time agreed to a joint investigation to study the habits, flight patterns, movements, and staging, breeding, wintering and stopover grounds of the dunlin, a shorebird in decline.
- Japan invited the United States to join both the Anatidae Network, which focuses on ducks, geese and swans, and the Shorebird Working Group. The Service is designating coordinators to these groups.
- Delegates discussed short-tailed albatross conservation, including issues of management, recolonization, bycatch reduction, satellite tracking and endangered species protection of this seabird. Details will be worked out later.
- Japan agreed to expand the Shorebird Sister Schools Program to their schools. This program allows students, teachers, and parents to track Arctic nesting shorebirds to their nesting grounds in Alaska and Canada.
- The two countries agreed to another meeting in May 2000.

Pacific States Program Focuses on Western Habitat

The meeting resulted from an informal discussion with Japan's Wildlife Protection Division—its counterpart to the Fish & Wildlife Service—about the need for and benefits of a meeting between Japan and the United States on migratory bird issues. Although the United States ratified the migratory bird treaty with Japan in 1972 to protect nearly 200 shared bird species, the two countries had not met since 1981.

Kent Wohl, Region 7 nongame migratory bird coordinator, scheduled a discussion under the auspices of the treaty. Members of the U.S. delegation, headed by Manville, included Janet Hohn, Region 7 assistant regional director for International Affairs and Science; Heather Johnson, Region 7 migratory bird education specialist; Irene James of the Washington International Affairs Office; Sumiko Mito of the U.S. Embassy; and Wohl.

The director of the Wildlife Protection Division of the Environment Agency of Japan led the Japanese delegation, which also included ten others from his agency, one member of the Japanese Ministry of Foreign Affairs, four representatives from the Fisheries Agency of Japan, and 12 scientific and academic specialists.

Following the two-day meeting, the future of cooperative U.S.-Japanese bird conservation looks extremely bright, according to Manville.

"We both understand the importance of improved management of shared bird populations between our two countries and we both recognize our mutual responsibilities for bird conservation and protection," he said. "I offer a special thank you to all who helped make this meeting such a success."

The National Fish and Wildlife Foundation is pleased to announce its new Pacific States Conservation Program in support of strategic projects to protect and improve habitats important to western landbirds.

Through a partnership with the David and Lucile Packard Foundation, grants will be awarded in support of demonstration projects that help to achieve the objectives of Partners in Flight in Washington, Oregon and California. Partners in Flight is an international coalition of federal, state and local governments, as well as private non-profit and industry groups seeking to conserve the landbirds of North America and their habitats to "keep common birds common."

Projects aimed at reversing declines in Western migrant and resident bird populations and maintaining productive populations will be selected not only according to their ability to effectively conserve habitat, but also their scientific underpinnings, strategic focus, and outreach to local resource-based constituencies. Specifically, the Foundation seeks to fund projects that:

- Protect or improve habitat management
- Engage private landowners in innovative programs designed to increase wildlife habitat values on their land while maintaining their ability to make a livelihood.

■ Leverage existing sources of funding with complementary or overlapping objectives. Examples of funding sources include federal, state and private conservation programs.

■ Build partnerships among non-traditional associates, for example game/non-game interests, farmers and ranchers/government agencies, or forest products industry/local conservation groups.

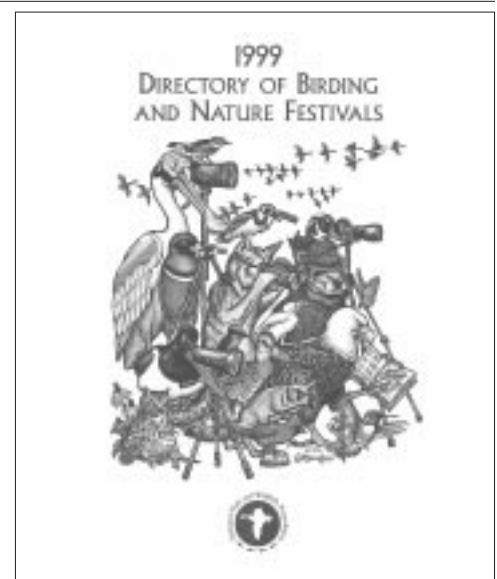
■ Address problems and restore or protect important bird habitats in the West on an ecosystem scale.

■ Conduct outreach to (1) bring valuable management information and techniques to a wider audience and promote use of these new techniques (e.g. ways to time harvest/mowing/grazing to minimize disturbance of nesting birds), or (2) mobilize the birding/ecotourism community on behalf of conservation action.

In fiscal years 1999 and 2000, the Foundation will disburse \$900,000 in the three Pacific states for this program. For more information, check the Foundation Web site at <http://www.nfwf.org>.

*Greg Elliot, Pacific States Program,
National Fish & Wildlife Foundation*

Looking for some excitement for your summer vacation? Check out the *National Fish and Wildlife Foundation's 1999 Directory of Birding and Nature Festivals*. Published through a partnership between the Foundation, Service and the American Birding Association, this handy reference guide is packed with information about more than 250 birding and nature events across North America. The guide is distributed at national wildlife refuges around the nation, or you may obtain a copy through the Service's Publications unit by calling 304/876 7302.



Conservation Initiative Sends Cooperative Message



Cooperation is key. *Migratory birds such as the ruby-throated hummingbird will be among the hundreds of avian beneficiaries of the North American Bird Conservation Initiative, a fledgling multi-nation migratory bird conservation effort.*
Photo by John C. Jones.

Last November, a group of Service employees attended one of the most interesting, and perhaps most important, meetings in the history of North American bird conservation.

They joined a U.S. delegation of 35 people and some 70 representatives from Mexico and Canada to set the direction for the new North American Bird Conservation Initiative, which will integrate ongoing bird conservation efforts within and among the three nations.

Spawned by the Commission for Environmental Cooperation, part of the environmental side agreement to the North American Free Trade Agreement, the North American Bird Conservation Initiative attempts to capture bird conservation methods among initiatives such as Partners in Flight and the North American Waterfowl Management Plan, as well as the three signatory nations to NAFTA—Mexico, Canada and the United States.

Paul Schmidt, the Service's deputy assistant director for Refuges and Wildlife, attended the meeting and served on the nine-member steering committee that laid the groundwork for the gathering. Representatives from the three nations met for three days in Puebla, Mexico in November to discuss mapping, monitoring, conservation objectives, implementation and support issues.

A steering committee for the North American Bird Conservation Initiative will lead in establishing cooperative conservation goals for birds in every North American geographic area. They will have assistance from monitoring and support subcommittees devoted to gathering the science and money needed for good conservation efforts.

The Service is fully engaged in developing and implementing this new initiative, Schmidt said, and plans this year to support projects spanning U.S. borders with Canada and Mexico.

"We herald this new drive to integrate waterfowl, landbird, shorebird and colonial waterbird plans across North America as a turning point in bird conservation," Schmidt said.

"The nature of the North American Bird Conservation Initiative will evolve over time," he said, "but given the determination and momentum emerging from the Puebla meeting, it has the potential to become an important presence in wildlife conservation."

Mila Plavsic, Office of Migratory Bird Management, Arlington, Virginia

Shorebirds: Linking the Hemisphere, Top to Bottom

Biologists call shorebirds international ambassadors for bird conservation. In their annual travels, shorebirds inhabit wetlands throughout the Western Hemisphere, from the Arctic Circle to Tierra del Fuego.

The Western Hemisphere Shorebird Reserve Network links wetlands throughout North and South America that are essential to shorebirds for breeding, migrating and wintering. The network is a voluntary, nonregulatory program of research, training, habitat management and protection, and environmental education.

Launched in 1985 by the World Wildlife Fund, the International Association of Fish and Wildlife Agencies and the Academy of Natural Sciences of Philadelphia, the network brings together more than 120 wildlife agencies, private conservation groups and other organizations.

The Service has long been a major partner in the Western Hemisphere Shorebird Reserve Network. Twelve national wildlife refuges have been designated as network sites of hemispheric or international significance. Service biologists conduct workshops on shorebird identification and counting, and the agency supports publication of the group's newsletter to promote dialogue between network sites and participates in the Western Hemisphere Shorebird Reserve Network Council, which advises on long-range strategies.

Western Hemisphere Shorebird Reserve Network operations are currently coordinated by the Manomet Center for Conservation Sciences, a nonprofit organization in eastern Massachusetts, in partnership with Wetlands International-Americas. Partners are working toward five main goals:

- Identify and protect sites critical to migratory shorebirds in the Americas.
- Promote and support the development of conservation organizations and their efforts to protect shorebirds and their habitats.

Loss of Southeastern Forests Affects Numerous Bird Species



The power of networking. To conserve birds such as the piping plover, the Western Hemisphere Shorebird Reserve Network links the resources of government groups and conservation organizations. Photo by James P. Mattsson.

- Build strong public support for wetlands and shorebird conservation through education and public awareness.

- Develop and support international, national and local policies to help ensure long-term protection and management of migratory shorebirds and critical wetlands in the Americas.

- Compile, analyze and distribute information on shorebird distribution, migration, habitat, and biology.

The network currently links more than 30 wetland sites of significance for shorebirds in seven countries: Argentina, Brazil, Canada, Mexico, Peru, Suriname and the United States.

Additional information about the Western Hemisphere Shorebird Reserve Network may be found on the Internet at <http://www.manomet.org/WHSRN.htm> and at <http://wetlands.ca/wi-a/whsrn/whsrndex.html>.

John L. Trapp, Office of Migratory Bird Management, Arlington, Virginia



Searching for security. Service biologists are working to stem habitat loss and fragmentation of forests in the Southeast so that migratory birds such as the golden-cheeked warbler have places to live. Photo by Steve Maslowski.

If you had been one of the first human beings to inhabit the southeastern United States some 10,000 years ago, or among the first Europeans to meander across the Southeast 500 years ago, or an observer on the trail with William Bartram as he documented the region's flora and fauna for the first time in the late 1700s, what types of landscape and birdlife would you have seen?

Most likely, say modern-day biologists, you would have seen forests dominated by frequent large-scale disturbances from fires, storms, flooding, bison and elk herds, and beaver ponds. Mounting archeological and tree-ring evidence suggests these conditions most likely affected Southeastern forests well into the nineteenth century.

In the Southeast, birds depend on a variety of types of forest: spruce-fir forests along the highest peaks of the Southern Appalachians, maritime forests along the Atlantic and Gulf coasts, the mangroves and tropical hardwood forests of South Florida and the Caribbean, and pine and hardwood dominated communities; the latter comprise the vast majority of Southeastern forestlands.

Pine and hardwood forests have suffered greatly, with millions of acres lost since the Europeans settled the area. Nearly all of the remaining 70 percent of forested wetlands in the Southeast has been cut over at least once and frequently fragmented in the process.

This fragmentation has further contributed to the decline of many Southeastern bird populations. Species dependent upon very large tracts of mature and old-growth forests, such as the passenger pigeon and the Carolina parakeet, are now extinct. Ivory-billed woodpeckers and Bachman's warblers are protected under the Endangered Species Act and are perilously close to extinction.

Service biologists are working to secure a healthy future for these forest-dependent birds in the Southeast.

Among their priorities:

- Determine the relative importance of fire for lowland species such as Bachman's and Henslow's sparrows and upland species such as Bewick's wren and the golden-winged warbler.

- Encourage conservation of Caribbean native forest bird habitat by such methods as using shade-grown coffee from Puerto Rico, Hispaniola and Jamaica.

- Manage and conserve mangrove-lowland tropical hardwoods, which serve as important breeding and wintering habitats for many priority species in peninsular Florida and throughout the Caribbean.

Chuck Hunter and Roger Boykin, *Refuges and Wildlife*, Atlanta, Georgia

Ambassador Initiative Takes Wing

We value birds for more than just their beauty. Birds of all shapes and colors protect the environment by consuming insect pests in agricultural fields and forests, and they help pollinate and disperse the seeds of many economically important plant species.

Widespread habitat loss, pollution and environmental contamination greatly endanger bird populations. Many imperiled birds are long-distance migrants, some of the more than 350 bird species that breed in the United States and migrate south of the border for the non-breeding season. Effective conservation efforts incorporate the multitude of countries and habitats upon which these species depend.

Through its Winged Ambassadors initiative, the Service's Western Hemisphere Program has been conserving birds in Latin America and the Caribbean for over 15 years. Winged Ambassadors helps residents of these regions to protect key bird habitat; provides training to resource managers in bird conservation techniques; and promotes environmental education programs to inform communities about the plight of birds.

The recent tragedy of the Swainson's hawk underscores the need for international efforts to save birds. After thousands of these hawks died in Argentina during the winter of 1995-96, groups from Argentina, Canada and the United States quickly came together to find out why. Once biologists determined that the pesticide monocrotophos caused the huge dieoff, Winged Ambassadors supplied funding to three Argentine conservation agencies to conduct an education campaign to stop its misuse.

This year, Winged Ambassadors is continuing to support Argentine efforts to monitor pesticide use and conserve wildlife in agricultural ecosystems. Through its dedication to habitat protection, training and education, Winged Ambassadors is working to prevent disasters such as the Swainson's Hawk dieoff from occurring in the future and to provide conservation benefits to all birds of the Americas.



Shining example. *Partners in the Western Hemisphere Program's Winged Ambassadors initiative sprang into action when thousands of Swainson's hawks died in Argentina. Cooperative action helped bring Swainson's populations back from decline. Photo by Brian Woodbridge.*

Over the next few years, the Winged Ambassadors program will increase its efforts to protect birds in the Western Hemisphere. The initiative will expand the Centers of Excellence for Migratory Birds and Ecosystem Management in Latin America, which offers short courses to train wildlife science, management and enforcement personnel in the principles of migratory bird conservation.

In addition, a new reserve manager training program in Central America will emphasize the importance of maintaining bird habitat in that region. Latin American graduate students will receive scholarships to study resident and migratory birds. Local groups in Argentina will be linked to the continent-wide network of shorebird conservationists, opening an important channel of information about shorebird migration in South America.

*Laurie Hunter and Gil Cintron,
International Affairs, Arlington, Virginia*

Wash, Boil and Serve? The Legend of Bird Bands

It is one of the enduring legends in the Fish & Wildlife Service. The story about the person who washed, boiled and served a bird according to instructions on the band and then wrote to the Service to complain is nearly as old as the bird banding program itself.

Different versions of this agency legend exist. In some, the letter writer was a farmer, a hunter or a camper... Sometimes he did the cooking, sometimes his wife did... They followed instructions on the bird or on the leg tag and it tasted horrible... It was the worst thing they had ever eaten.

And so on.

Though he is "unable to determine if in fact any such letter was ever received by the Department of the Interior," John Tautin, chief of the U.S. Geological Survey's bird banding laboratory in Laurel, Maryland, maintains that the story is based partly in fact.

In 1927, Tautin says, Frederick Lincoln, then head of the bird banding program, recounted some of the incidents associated with the abbreviated mailing address inscribed on bird bands.

After describing the various inscriptions used by the Bureau of Biological Survey, Lincoln noted, "Any of these [inscriptions] is however, sufficiently complete to insure delivery of a letter, as the post office officials have been fully advised of the work and have delivered promptly envelopes bearing such enigmatical address as: 'Mr. Biol. Surv., 23171, Wash. D.C.'; 'Biol. Survey Co., Wash. D.C.'; and 'Boil Service, Wash. D.C.'"

The word "boil" in the last example, Lincoln said, was due to a curious misprint in one lot of bands which transposed the "o" and "i."

Influx of Birds Means Influx of Bucks

"In addition to complicating matters for postal employees, this error caused many humorous comments from bird-banding cooperators, one of whom was fearful that the legend would be misunderstood as cooking instructions, since the bands plainly stated: wash, boil and serve," Lincoln said.

That, says Tautin, is likely the origin of the myth. Lincoln's account was published in a book entitled *Flyways: Pioneering Waterfowl Management in North America*, produced by the Service in 1984.

The Biological Survey became part of the U.S. Fish & Wildlife Service in 1940, and legends on bird bands changed accordingly, Tautin says.

"'Fish & Wildlife Service' was included in the address on some bands, but the most commonly used legend was 'Avis Bird Band Write Washington DC USA,'" Tautin says.

Today the bird banding program is under the direction of the U.S. Geological Survey's Biological Resources Division, formerly the Fish & Wildlife Service's research division, but contemporary bands make no reference to federal agencies. Instead, most carry the simple, unambiguous instruction, "Call 800/327 BAND."

Got something to say about what you're reading? *Fish & Wildlife News* invites your letters to the editor. Send them to:

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1849 C Street, NW, Room 3024
Washington, DC 20240

fax: 202/219 9463
e-mail: rachel_levin@fws.gov



For food and profit. Feeding birds is not only pleasurable, it is also profitable. Americans spend billions of dollars each year on feeders, food and other equipment for feeding and watching wild birds. Photo by Nan Rollison.

For many people, seeing birds—a jay in their yard, perhaps, or a hawk perched on a power line along a highway—represents their only day-to-day contact with wildlife.

Birds connect humans to the environment, from city dwellers in high-rise apartments to farmers in rural communities. This connection draws an estimated 63 million Americans to birdwatching, putting more than \$20 billion annually into the U.S. economy.

"We have long known that migratory birds are an excellent indicator of the overall health of an ecosystem, but what many people do not realize is that birds also contribute to the health of state and local economies," said Robert Blohm, acting chief of the Office of Migratory Bird Management.

One in every 3 adults engages in birdwatching and bird feeding, making these pursuits among the fastest growing recreational activities in the United States—outpacing golf and rivaling gardening in numbers of participants.

According to the 1996 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, birdwatching is most popular with people between the ages of 30 and 70. Still, 1 in 5 adults between the ages of 16 and 29 say they watch birds.

Birdwatching is also a growing business. Americans spend more than \$3.5 billion annually on bird seed, houses, baths and feeders. Altogether, bird and other wildlife watchers pumped \$29 billion into the U.S. economy in 1996, according to the National Survey. At the time this information was collected by the Service and the U.S. Census Bureau, these figures would have placed bird-related recreation in the top 100 of Fortune 500.

Communities surrounding birdwatching sites benefit the most. The number of people who took trips from home specifically to watch birds—nearly 18 million adults annually—has skyrocketed since 1980. On these trips, birdwatchers purchase gasoline, food, camera film, souvenirs and other supplies. They rent hotel rooms and cars, eat at restaurants and buy airline tickets.

Birdwatchers spend an average of \$100 million in each state, directly supporting more than 200,000 jobs and generating more than \$1 billion in state and federal taxes.

Julie Anne St. Louis, Office of Migratory Bird Management, Arlington, Virginia

Migratory Bird Trivia

Did you know...

■ Two state birds are on the Endangered Species List: the nene (Hawaiian goose) of Hawaii, and the brown pelican, Louisiana's state bird.

■ Thirty-nine states chose a total of 21 migratory songbirds for their state birds.

■ The gray jay is often called the "moose bird" because of its habit of perching on moose.

■ The Carolina wren is sometimes called the "mocking wren" because it is so proficient at imitating other birds.

■ Brown-headed cowbirds never build nests and never raise their own young; instead they deposit their eggs in nests of other birds, particularly sparrows and buntings.

■ Bald eagles mate for life and return to the same nest year after year, each year adding new nesting material. Bald eagle nests can reach 7 to 8 feet in diameter and 12 feet in depth, and they can weigh as much as two tons, making them the largest nests built by any single pair of birds.

■ By contrast, the nest of the ruby-throated hummingbird is approximately the size of half a walnut shell.

■ At rest, the ruby-throated hummingbird's heart beats 615 times per minute. The crow's resting heart rate is 342 beats per minute and the turkey's is 93 beats per minute.

■ The largest bird in North America is the California condor, with a wingspread of 9 feet. The smallest is the calliope hummingbird, which has a total length of 2¾ inches.

■ At household nectar feeders, hummingbirds consume the equivalent of twice their body weight each day.

■ The bristle-thighed curlew spends all of its time in our last two states, summering in Alaska's mountain peaks before making a 6,000 mile non-stop journey across the Pacific to winter in Hawaii.

■ Hummingbirds are the only birds that can fly backwards.

■ On September 18, 1492, Columbus noticed flocks of songbirds flying south. He changed course to follow the birds, probably golden plovers, and made landfall on October 12, 1492.

■ John James Audubon wrapped silver wire around the legs of eastern phoebes in Pennsylvania in the first recorded bird-banding experiment in North America.

■ Massachusetts passed the first state law for seasonal protection of game birds.

■ Blue is a relatively rare color in nature. While several birds are partially blue, only three—the indigo bunting, blue-gray tanager and mountain bluebird—are all blue.

■ Since European settlement, 90 percent of the original forest cover in the lower 48 states—home to warblers, vireos and flycatchers—has been logged or lost to natural factors.

■ Properly reclaimed strip mines can provide excellent habitat for grassland birds.

■ Several Major League baseball teams have avian names and mascots, three of them songbirds: Baltimore Orioles, St. Louis Cardinals, and Toronto Blue Jays. Other professional sports teams with birds as mascots include the Atlanta Falcons, Atlanta Hawks, Baltimore Ravens, Philadelphia Eagles, Pittsburgh Penguins, Seattle Seahawks and Phoenix Cardinals.

■ Sixty-five million people in the United States engage in bird feeding or some other type of bird-related recreation each year.

■ The world's first monument to a songbird was dedicated in Mio, Michigan, in 1963. It features a 4 foot high statue of a Kirtland's warbler, one of the rarest of North America's warblers. Mio is located in the heart of Kirtland warbler nesting range.

■ International Migratory Bird Day is the hallmark outreach event of Partners in Flight and is celebrated in more than 10 countries in the Western Hemisphere.

■ The first International Migratory Bird Day was sponsored by the Smithsonian Migratory Bird Center in 1993. The number of events has grown from a few dozen in that first year to more than 500 events in 1998.

Flying Along the Information Superhighway: Sites of Interest

For all of you high tech birders, here are some migratory bird-related sites on the World Wide Web.

Note: All addresses begin with <http://>

Fish and Wildlife Service Office of Migratory Bird Management

www.fws.gov/r9mbmo/homepg.html

Bird web sites (general list)

www.ntic.qc.ca/~nellus/links.html

North American Waterfowl Management Plan

www.fws.gov/r9nawwo/nawmphp.html

Partners In Flight

www.PartnersInFlight.org

U.S. Shorebird Conservation Plan

www.manomet.org/USSCP.htm

North American Colonial Waterbird Conservation Plan

www.nacwcp.org

Western Hemisphere Shorebird Reserve Network

www.manomet.org/whsrn.htm

Northern Prairie Wildlife Research Center

www.npwrc.usgs.gov

Patuxent Wildlife Research Center

www.pwrc.usgs.gov

International Migratory Bird Day

www.americanbirding.org/imbdgen.htm

Birding festivals

www.americanbirding.org

Ducks Unlimited

www.ducks.org

State DNRs

www.tcarms.com/tca/fishgame.htm

National Fish and Wildlife Foundation

www.nfwf.org

Planting Takes a Combined Effort



Group effort. *In previous years, tree planting at St. Catherine Creek NWR was done on a regular basis. This year, however, refuge staff and volunteers raced against time to plant more than 250,000 trees before flood waters on a nearby river crested. USFWS photo.*

For three years, because of prolonged flooding from the Mississippi River, staff at St. Catherine Creek NWR in southeastern Mississippi had been prohibited from planting trees. However, the Lower Mississippi River ecosystem team decided at a recent reforestation meeting that despite the refuge's vulnerability to flooding, the team would dedicate all available resources to planting at St. Catherine Creek if the river held its banks until after January 1.

The 1999 planting season at St. Catherine Creek NWR began in earnest on January 6. For thirteen days, a team of refuge personnel from around the Southeast, along with several volunteers, worked 12 hours a day with 4 tractors and planters. Workers dedicated nearly 1,200 hours to reforestation efforts, not knowing when they would again have the opportunity to plant or when the river would rise and spill its banks.

Normally, the refuge begins to flood when the Natchez river gauge reaches 33 feet; two days after planting halted, the gauge read 35 feet.

Nine refuges, one wildlife habitat management office and two volunteers provided personnel or equipment or offered assistance in the effort. Two private companies provided money and resources for the operation. The two volunteers gave their time and energy willingly despite the fact that Jack Culpit missed the last two days of deer season and Dale Hill, whose son Nathan works at St. Catherine Creek, was supposed to be enjoying a vacation from wintry Minnesota.

Staff from Bayou Cocodrie, Noxubee, Yazoo, Lake Ophelia, Catahoula and D'Arbonne refuges and the Southeastern Louisiana Refuge Complex worked hard during the intensive planting effort, as did Ray Aycok of the Service's Wildlife Habitat Management Office in Jackson, Mississippi, and Clyde Stewart, district forester for the Lower Mississippi ecosystem team.

In addition, American Forests, the National Tree Trust and a grant through the North American Wetlands Conservation Act provided funds and trees for the project.

On January 18, with the majority of the planting accomplished, planters and tractors went home, along with a group of people who had not seen their families in two weeks. By then, more than 250,000 trees, representing nearly 1,000 acres, had been compressed into the soil.

Jim Hall, St. Catherine Creek NWR, Sibley, Mississippi

Like Fine Wine, NCTC Gets Better with Age

The best presents are the ones that engage the mind, tap potential, unlock possibilities and expand horizons.

The Service opened its Christmas gift ahead of the holidays in 1997 as it raced down the stairs and discovered a shiny new gadget under the tree called the National Conservation Training Center.

Since then, we haven't been able to put it down.

NCTC has been a wonderful gift to ourselves and to conservation. 1998 was the inaugural year for a place that's been seven years in the making, and many more as a goal of this agency.

In 1998 we created a curriculum, built a staff, managed a campus, joined a community, fed and housed the population of a small town, magnified our voice by satellite, created a home for the Service, and welcomed the world to our doorstep.

In our debut year, wolves invaded the auditorium, a museum opened and our agency's directorate went back to ecosystem class. A library emerged, five Service directors reminisced, noted authors lectured and a butterfly garden sprouted for butterflies.

Not bad for starters.

"One cannot help but be amazed at the progress you have made in less than a year," said Doug Wheeler, California's natural resources secretary. "A first-rate staff and faculty, a substantive curriculum, and (an) exceptional facility are all in place. NCTC could readily become, in the years ahead, a kind of national headquarters, or institutional home, for conservation leaders."

Nearly 10,000 people came to NCTC in its first year, for instruction and for a variety of meetings, workshops, planning sessions and brainstorming discussions. We trained 4,400 students in NCTC-sponsored courses.

continued on page 28

Like Fine Wine, NCTC Gets Better with Age (continued)

It is fulfilling different needs for different sectors of American—and international—conservation. A scan of registry names and parking lot license plates points to the diversity of NCTC visitors in 1998, stretching from Annapolis to Zimbabwe.

That diversity is mirrored in the file of complimentary letters in NCTC Director Rick Lemon's office.

Whitney Roberts, who hails from Shepherd College, barely 4 miles down the road from the training center, wrote that NCTC will give his students a better perspective on fish and wildlife and environmental studies.

Viktor Merkushov wrote that NCTC was an impressive institution whose innovative construction and energy-efficiency features generated ideas for him to carry back home. Merkushov is from the Ukraine.

That nearly as much learning goes on outside the classroom as within has not been unanticipated at NCTC. It was expected, and specifically designed into this place.

By pairs and by handfuls, people huddle in hallways, congregate by a fireplace, and wander the paths along the Potomac River, engaged in lively and animated discussions of their work and of conservation in America.

Rich Howard, a Service biologist from Boise, felt moved enough to write West Virginia Senator Robert Byrd, an early proponent of NCTC, "I want to thank you for having the vision to give the U.S. Fish and Wildlife Service a home."

This gift—this home—we have given to conservation can still be molded into virtually anything we want it to be. Classroom. Think tank. Learning laboratory. Living museum. Home base. Watering hole.

Or, all of them.

It is ours—and conservation's—to use as we will.

It's been a good year.

David Klinger, National Conservation Training Center, Shepherdstown, West Virginia

Revealing the Roots of the First Refuge

Editor's note: Staff at the National Conservation Training Center, aided by the newly-formed Service Heritage Committee, continue to assemble a burgeoning collection of historical items and documents chronicling the agency's rich conservation history. Fish & Wildlife News will devote a page in each issue to exploring some of the treasures donated by retirees and unearthed at field stations around the country.

Although we all know that Teddy Roosevelt was an ardent conservationist, staff at the National Conservation Training Center recently discovered a startling fact: a Service surveyor's oversight may have influenced the designation of the first national wildlife refuge at Pelican Island, Florida.

While sorting through documents donated to the Service's archives at NCTC by the family of late Service employee Phil DuMont, someone discovered the original 1902 survey of Pelican Island. Handwritten and sketched on legal-sized notebook paper, the survey apparently was never officially submitted to the U.S. government, possibly because the surveyor wanted to ensure the island remained free of inhabitants. Therefore, the government did not list the property as available for homesteading by Americans migrating southward.

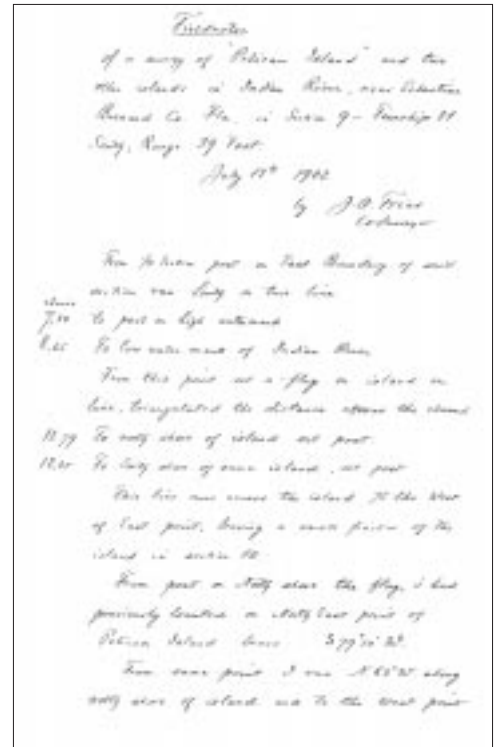
The lack of settlers on this "unofficial" island cleared the way for President Roosevelt to issue the executive order declaring Pelican Island the first national wildlife reservation for birds and wildlife.

Surveyor J.O. Friel described the tiny island in meticulous detail.

"Pelican Island is of a triangular shape, contains 4 [and] $\frac{35}{100}$ Acres," he wrote. "At low water [its] greatest height above water level is 2 _ to 3 feet; very seldom at high storms it is overflowed for a few days."

Friel also described the inhabitants he encountered on Pelican Island and two smaller islands off its east coast.

"These two islands, on U.S. chart marked as one, are during spring and early summer used by the Pelicans as roosting places," he reported. "On the East island, I saw signs and remnants of nests..."



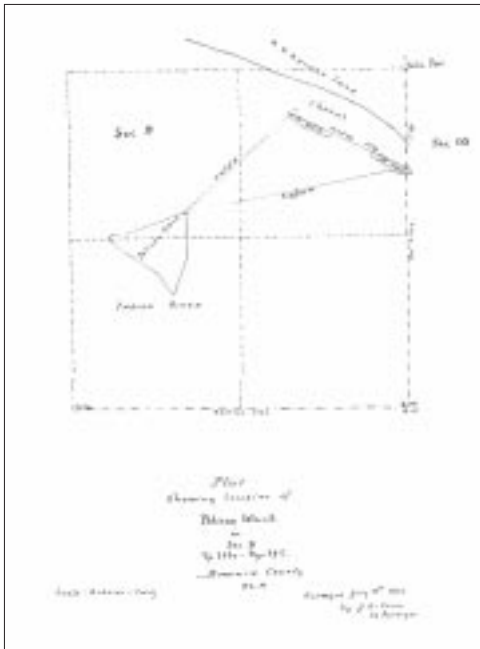
A Service employee from the 1920's through the 1960's, Phil DuMont worked alongside Ira Gabrielson, J. Clark Salyer, and other legendary contemporaries in the National Wildlife Refuge System. His son, Paul, recognized the importance of his archives to the Service, and donated those relating to his father's tenure with this agency to NCTC even before the facility was completed.

The documents included original letters from Jay N. "Ding" Darling pertaining to the establishment of what was to become "Ding" Darling NWR in Sanibel, Florida, letters to and from legendary refuge manager J. Clark Salyer, and the 1902 Pelican Island survey, which NCTC staff members reported to be in excellent condition.

During his tenure as President, Roosevelt designated 66 other properties as national wildlife reservations, laying the foundation of our present-day refuge system.

Jeanne Harold, National Conservation Training Center, Shepherdstown, West Virginia

Clark Moves to Identify, Protect Service History



A bit of history. Museum staff at NCTC recently unearthed this original 1902 survey of Pelican Island. USFWS photo.

The National Conservation Training Center encourages retirees to donate books, maps, letters, papers and other historical items to the Service's growing collection of archives. Contact Anne Post Roy at the Conservation Library (304/876 7399 or anne_roy@fws.gov) or Jeanne Harold at the museum (304/876 7285 or jeanne_harold@fws.gov) for more information.

In a major step toward identifying and protecting documents, artifacts and the personal recollections of longtime Service employees and retirees, Director Jamie Rappaport Clark has appointed a Heritage Committee made up of current and former Service employees from around the nation.

Clark tasked the committee, chaired by Southeast Deputy Regional Director Dale Hall, with locating and preserving important historical documents and artifacts reflecting the color, character and evolution of the Service as the world's pre-eminent conservation agency, and using these materials to foster recognition and appreciation of the Service's long and diverse history.

"I have appointed this committee," Clark explained, "because despite our agency's prominence in the world of conservation there has been no sustained effort to document, collect or preserve important aspects of the Service's past.

"I expect this committee will move quickly to set in motion the national effort needed to accomplish this task," she said, "not only for the Service and for those who would benefit from the historical research opportunities such an undertaking would create, but also for the benefit of the American public. I believe that the time is absolutely right for this effort."

According to Hall, the Heritage Committee's first order of business was to:

- Develop an expanded oral history program, using both audio and video recording, to capture the flavor of the Service's history through the eyes of our employees;
- Collect and archive important Service objects at the National Conservation Training Center, D.C. Booth National Historic Fish Hatchery in Spearfish, South Dakota, and other appropriate locations; and

■ Gather appropriate materials for the creation of a Service video, as well as for a new book that would detail the personalities and political forces that have shaped the agency over the past 100 years.

Clark recently named Mark Madison as Service historian. Madison, who has an undergraduate degree in biology and a Ph.D. from Harvard focusing on the history of science, will work at NCTC. He will research and document Service history and bring that history alive for Service employees through writings, video, a Web page and training programs.

Clark emphasizes that the task of preserving and interpreting our rich heritage will require the involvement of all Service employees.

"As Service employees we should be proud of our heritage," she said. "I hope all Service employees will enthusiastically support our efforts to preserve and honor our past as we chart our future."

Spence Conley, External Affairs, Hadley, Massachusetts

Members of the Heritage Committee include:

Dale Hall, Atlanta, Georgia (Chair)

Ron Anglin, Portland, Oregon

Jeff Fountain, Albuquerque, New Mexico

Spence Conley, Hadley, Massachusetts

Arden Trandahl, Spearfish, South Dakota (retiree)

Staff from NCTC, D.C. Booth National Historic Fish Hatchery, and the Service's Historic Preservation Officer serve as ex-officio committee members.

Lower Mississippi Ecosystem Team Raises the Bar with New Approach

Nearly 60 members of the Service's Lower Mississippi River Valley Ecosystem Team met in Memphis, Tennessee, in February to embark on a new way of doing business.

The team's new approach to ecosystem conservation—creating natural resources focus areas within the ecosystem—is recognized by Service Director Jamie Rappaport Clark as an important way for the Service to be more successful in implementing ecosystem-based strategies.

Team members believe this focus area approach—essentially dividing the huge ecosystem into five geographic subdivisions—will enhance efforts to establish and nurture collaborative resource partnerships. Service-led, cross-program teams for each focus area will identify critical resources and the high priority actions needed to address those issues, and will work with various partners to complete projects.

"We are going in the right direction with the ecosystem approach," Clark said as she addressed the meeting. "It's helping us to look beyond individual programs to accomplish what is best for the country's fish and wildlife resources.

"What you are doing here is bigger than just your own team mission," she continued. "Your success will send out signals across the agency."

The Lower Mississippi River's ability to transport and assimilate nutrients and chemicals has been impaired to the point that most water bodies in the river valley do not meet state and federal water quality standards, and a hypoxic zone as large as 7,000 square miles exists in the Gulf of Mexico during the summer.



Up the River.
Employees from Region 4 joined Service Director Jamie Rappaport Clark on a tour of the White River sponsored by Ducks Unlimited. Photo by Matt Young/Ducks Unlimited.

Human intervention over the past century, in the form of the construction of 16 cut-offs to straighten the Mississippi for navigation, has shortened the river by 150 miles. Hundreds of miles of levees and rock dikes have essentially stopped the natural processes of the river; it is now fixed in place, both creating and destroying a wide variety of fish and wildlife habitats such as oxbows, sand bars, and side channels.

Equally damaging is that the river is now denied access to its flood plain. Flooding into the enormous alluvial plain once provided fish spawning sites, nutrient and sediment exchange and a wealth of varied aquatic habitats. The challenges of restoring the Mississippi are immense.

"I liken it to the task of organizing the work for a special project," said Steve Thompson, geographic assistant regional director for the several states that encompass the Lower Mississippi Ecosystem. "We've got a whole lot of players in this game, and unless we work with them all, the river, and the ecosystem, will suffer."

Ecosystem team leader Randy Cook explained the significance of the recent meeting.

"The purpose of our team's three-day meeting was to clarify our goals for this vitally important ecosystem, to improve our efforts to communicate the resource needs of that area, and to begin implementing a focus-area approach to achieve even greater success," he said.

Cook also said that the focus area approach provides an excellent mechanism for such a diverse group to agree on needed resource actions and for achieving on-the-ground results.

"We may have different groups of partners for each specific issue, but the process is the same," said Cook. "The focus area approach provides the best forum for involving Service employees and our partners in the geographic area that they know the most about," he said. "It's just a better way of getting the job done."

Following the Service meeting in Memphis, a second meeting, sponsored by Ducks Unlimited, delved into the environmental value of the White River Basin in eastern Arkansas and examined the challenges facing the natural resources of that area.

*Tom MacKenzie, External Affairs,
Atlanta, Georgia*

Fish & Wildlife... In Brief

Refuge Roundup

Federal Aid Survey Wins National Award

The 1996 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, produced by the Division of Federal Aid and the Bureau of Census, took first place at the 1998 Blue Pencil/Gold Screen Awards Competition sponsored by the National Association of Government Communicators, an organization for information disseminators in federal, state and local government. Its membership includes writers, graphic and video artists, editors, broadcasters, photographers and public information officers from across the United States.

Refuge to Gain Valuable Red-Cockaded Woodpecker Habitat

The Nature Conservancy of Louisiana announced in January the purchase of nearly 5,000 acres from Plum Creek Timber Company, to be transferred to the Service over a five-year period to add to the existing Upper Ouachita NWR for migratory bird conservation. The acquisition, valued at approximately \$8.7 million, represents the largest financial transaction in the history of The Nature Conservancy of Louisiana. The property will add approximately 4,750 acres of natural pine forest to the existing 37,000-acre Upper Ouachita NWR, providing a corridor connecting the two existing units of the refuge.

Group Plans Peregrine Falcon Celebration

The Peregrine Fund, the Santa Cruz Predatory Bird Research Group, The Raptor Center, and Canadian partners announce the North American Peregrine Falcon celebration to be held at The Peregrine Fund's World Center for Birds of Prey in Boise, Idaho, August 20 and 21, 1999. For more information write or call: Peregrine Celebration, 566 W. Flying Hawk Lane, Boise, Idaho 83709, telephone 208/362 3716, fax 208/362 2376, or e-mail tpf@peregrinefund.org.

New Manager for Pee Dee

Daniel W. Frisk is the new manager of Pee Dee NWR in northwest North Carolina. Frisk has spent the past 10 years working in wildlife-related positions in the Southeast. He comes to Pee Dee refuge from the U.S. Army base at Fort Bragg, near Fayetteville, North Carolina, where he served as a wildlife biologist. During his six years at Fort Bragg, he spent much of his time working on the recovery and management of the endangered red-cockaded woodpecker. Frisk also spent four years conducting research on bald eagles in Kentucky and Tennessee, focusing on nest site selection and productivity of bald eagle nests as it relates to human disturbance.

Group Honors Service Engineer of the Year

The National Society of Professional Engineers recently honored Billy J. Umsted, chief of Environmental and Facilities Compliance in the Division of Engineering, who had previously been named the Service's Engineer of the Year. Umsted played a major role in developing and directing a highly effective Servicewide environmental compliance and hazardous waste remediation program. He assisted in producing a comprehensive audit manual and certifying regional staff specialists to conduct compliance audits. In addition to his environmental compliance work, Umsted supervised the establishment of a hazardous materials/hazardous waste training program for field personnel. A registered environmental manager, Umsted also supervised the design, remediation and construction management for 15 environmental contaminants cleanup sites.

■ The National Audubon Society has teamed up with St. Martin's Press to produce a series of regional travel guides that will feature 300 national wildlife refuges. About 15 freelance writers across the United States will write the series. The Service will support the Audubon effort with information, contacts and other services; the four-color guides are to debut in bookstores across the country in January 2000.

■ The Center for Tourism Research at the University of Texas Pan American conducted a telephone survey of 400 residents of the Lower Rio Grande Valley last November, asking 17 questions about the environment, tourism and recreation. Positive responses revealed residents' attitudes. For example:

■ 90 percent felt the Lower Rio Grande Valley needed more environmental protection

■ 78 percent believe wildlife refuges and parks are a good place for families to visit

■ 94 percent believe their children need more opportunities to learn about the environment

■ 71 percent agree that birdwatching is a major tourist attraction in their area

■ 75 percent would drive more than 30 miles to visit a wildlife reserve

The area surveyed is home to the Lower Rio Grande Valley and Santa Ana national wildlife refuges.

■ *Outdoors Unlimited* magazine gave the National Wildlife Refuge System high marks in an article about access for the disabled in outdoors activities. "A good example of...extra effort appears in the work that refuge personnel at national wildlife refuges exert for physically challenged hunters, anglers and wildlife watchers," the article said. "...Throughout the national wildlife refuge system, numerous fishing facilities accommodate the physically challenged public..."

*Ken Burton, Public Affairs,
Washington, DC*

The Migratory Bird Crisis

America's passion for migratory birds is reflected in the Service's pantheon of heroes: Paul Kroegel, Ding Darling, Rachel Carson. Throughout our history, with defining efforts like the North American Waterfowl Management Plan, we have laid the foundation for bird conservation on a hemispheric scale.

It is time to renew and strengthen the Service's commitment to and leadership of migratory bird conservation efforts. I have heard it said that I made migratory bird conservation a priority for the Service. In fact, I cannot take the credit; migratory bird conservation has always been a Service priority. What I have done is make it one of my personal goals to have my tenure as Director marked by great progress in this area.

The challenges of today include not only continuing population declines for many grassland and forest bird species, but also overabundant species, such as the snow goose, that pose a threat to biodiversity. To meet these challenges we need the strength of our science and the power of our partnerships to drive an ecosystem approach to conservation that delivers the full spectrum of bird conservation efforts across North America. With landscape-level plans like the North American Waterfowl Management Plan, the North American Bird Conservation Initiative, Partners in Flight and the Colonial Waterbird Plan, we are poised to advance migratory bird conservation to a higher level. By expanding our ecosystem approach, we can address the major causes of our migratory bird conservation challenges: habitat loss and bird mortalities caused by human actions and man-made structures.

Habitat Loss

Habitat loss is the primary cause of declining migratory bird populations and species extinction. Migratory birds are part of every ecosystem, and by ensuring natural habitat for them, we also provide habitat for many other species.

The Service is presently working with its international partners, states and nongovernmental organizations on a North American Bird Conservation Initiative that will expand our land protection efforts under the North American Waterfowl Management Plan by including other habitat types in addition to wetlands. We have an opportunity to grow domestic joint ventures, and, through our International Affairs Office, to foster migratory bird conservation efforts throughout Latin America and the Caribbean.

Partnerships covering all habitats and all migratory bird species should be our conservation mantra. All of the Service's programs and ecosystem teams must play a role to make this vision a reality. Further, our state, tribal and nongovernmental partners must be willing to support, and when necessary, lead in this effort. Working together, we can raise habitat conservation to a higher level.

Bird Mortalities

Biologists fear tens of millions of bird deaths can be attributed to skyscrapers, communication towers and power lines. The flashing lights on tall structures often confuse migrating birds, causing them to collide into the structure or to circle until they plummet to their deaths from exhaustion. And power lines have been known to electrocute large birds that perch on them. Millions of additional birds are killed each year by stray and uncontrolled

domestic cats, and a significant number of others die in oil drilling waste pits and as by-catch in commercial fishing nets.

It is particularly disquieting that decades after Rachel Carson's *Silent Spring* was published, there is evidence that suggests pesticides kill more than 67 million birds in the United States annually.

We must address these issues through education, partnerships, voluntary efforts and law enforcement. The Service will put a priority on working with citizens and businesses to reduce the number of bird deaths that can be attributed to these causes.

Migratory birds connect us all, from our farms to our cities, across states and across national borders. They can serve as powerful conservation symbols, rallying the public to our cause. We must seize the opportunities they offer us to spur public action before the birds disappear. In 1962, Rachel Carson decried a world without bird song. We must heed her warnings and listen for the alarms of today—the fading chirp of the dickcissel and the increasingly deafening high-pitched bark of the snow goose. Let us draw passion from our love for the birds and inspiration from the proud tradition of the Service, and work together to elevate migratory bird conservation to a higher level.



Jamie Rappaport Clark

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