U.S. Fish & Wildlife Service

Fish & Wildlife News

September/October 1998

Babbitt Proposes Delisting Peregrine

The peregrine falcon is expected to be removed from the endangered species list according to a proposal announced in August by Interior Secretary Bruce Babbitt and Service Director Jamie Rappaport Clark.

"In 25 years, the people of the United States have rescued this awesome raptor from the brink of extinction. We have proved that a strong Endangered Species Act can make a difference... with the peregrine falcon," Babbitt said.

The peregrine once ranged throughout much of North America from the subarctic boreal forests of Alaska and Canada south to Mexico. A medium-sized raptor, it nests on tall cliffs or urban skyscrapers and hunts other birds for food, reaching speeds of 200 miles an hour as it dives after its prey.

Peregrine populations declined sharply after World War II because of widespread use of the pesticide DDT and other organocholorine pesticides. DDT caused peregrines to lay thin-shelled eggs that break during incubation.

After the Environmental Protection Agency banned the use of DDT in the United States, peregrine populations rebounded from a low of 324 pairs in 1975. Currently, there are at least 1,593 peregrine breeding pairs in the United States and Canada, well above the overall recovery goal of 631 pairs.

Babbitt announced the proposal to delist the peregrine falcon at Stone Mountain Park near Atlanta, Georgia. Clark made a simultaneous announcement of the proposal at The Peregrine Fund's World Center for Birds of Prey in Boise, Idaho. Founded in 1970 at Cornell University, the Fund helped lead the way toward recovery with a highly successful captive breeding program.

On the Cover:
Will she burp it? *Service Director Jamie Rappaport Clark feeds an orphan moose calf at Kenai NWR during her June trip to Alaska. See story, page 7. Photo by Connie M.J. Barclay.*

Clark Announces New Panda Conservation Policy

During an August press conference at the San Diego Zoo, Service Director Jamie Rappaport Clark announced a new policy that encourages conservation of giant pandas through long-term loans and lifts the five-year-old moratorium on processing live panda import permit applications.

The new policy clarifies the requirements for import permits for organizations carrying out work directly related to the conservation of wild panda populations in China and enhances the sustainability of the captive population in that country.

"The panda is unique," said Clark. "It is the only species that is both critically endangered—with fewer than 1,000 animals remaining in the wild—and at the same time, so beloved that it is capable of generating substantial profit when displayed."

To develop the new policy, Service biologists consulted with interested individuals and various conservation organizations including zoos, and worked with its sister agencies in China to ensure that all pandas imported into the United States would contribute to the health of wild populations in China.

Pandas are listed as endangered under the Endangered Species Act and on Appendix I of the Convention on International Trade in Endangered Species. Under these two measures, the Service must make the following determinations before it can issue a permit:

- the import cannot be for primarily commercial purposes;
- the purpose for the import must not be detrimental to the survival of the species in the wild;
- the importer must have facilities and the expertise to care for the panda;
- the import must enhance the survival or propagation of the species as outlined under the ESA, meaning that scientific research or the propagation of the species must benefit wild pandas; and
- the import must not jeopardize the continued existence of giant panda populations in the wild.

The Service imposed the moratorium on panda imports because of concerns about short-term exhibition loans and how the demand for such loans might impact pandas in the wild. Under the new policy, it is unlikely that the Service would issue an import permit solely for short-term exhibition purposes.

The Office of Management Authority will review applications and issue permits for giant panda imports when appropriate.

Critically endangered. *A new policy will allow long-term loans of giant pandas provided they are related to conserving the endangered species. Photo ©Zoological Society of Dan Diego.*

Mexican Wolf Born in the Wild

On July 15, Service biologists in the Apache National Forest, near Alpine, Arizona, made an exciting discovery: the first Mexican gray wolf pup born in the wild in the United States in nearly 50 years.

As wolf recovery biologist Wendy Brown told it, her colleagues spotted two Mexican gray wolves emerging from some trees "with a puffball following them. Looking through their field glasses, they saw it was a pup. The parents crossed a creek, but the pup stopped and whined. Then the parents coaxed it across."

The pup, about nine to eleven weeks old at the time, was estimated to weigh about 15 pounds, Brown said. Though its parents had kept close to their den in May, biologists were unable to confirm that any young had survived. The sighting came as a happy and dramatic surprise after hopes of finding any surviving pups had diminished.

"Having a pup survive to this point in the first year of the reintroduction effort is great news," said Southwest Regional Director Nancy Kaufman. "It's the first Mexican wolf born in the wild in the United States since the 1950s, and is thus a symbol of hope and progress in restoring wolves to their rightful place in Southwestern forests."

Success has been tinged by tragedy, however, as wolf #174, the pup's mother, was apparently killed by a mountain lion in early August. She was found lying just five yards from an elk calf carcass that appeared to have been killed by a mountain lion. The mountain lion had been seen in the area previous to the killing.

The dead wolf's mate and the pup appeared to be in good physical condition after the incident, and biologists did not to attempt to recapture or relocate either one. However, monitoring has been intensified to make certain the male is caring for the pup, which had been feeding on prey killed by its parents.

Nevertheless despite the death of the pup's mother and other setbacks, Dave Parsons, the project leader for the Mexican wolf recovery program, expressed cautious optimism about the new arrival.

Pioneering spirit. *Wolf #174 was killed in August, apparently by a mountain lion, a few weeks after giving birth to the first wild-born Mexican wolf pup in nearly 50 years. Photo by Jim Clark.*

"The birth of a wolf pup in the wild is an occasion to be celebrated," Parsons said. "But we must not be fooled into believing that recovery of the Mexican wolf will happen quickly. It will require the birth and survival of many pups in the wild and considerable patience, perseverance, and tolerance by humans. The project will experience both successes and setbacks, but I am convinced that, eventually, the successes will overwhelm the setbacks and, ultimately, Mexican wolves will thrive in the wilds of the Southwest."

Discovery of the wild-born pup has offset some early disappointments for the wolf recovery program.

On April 28, a camper shot and killed male wolf #156 of the Turkey Creek pack. Its pregnant mate, wolf #128, had no packmates to help her rear her soon-to-be-born pups. Biologists captured her and returned her to the wolf breeding facility at Sevilleta NWR.

A little more than a month later, wolf caretaker Colleen Buchanan discovered wolf #128 in her pen howling uncharacteristically, a dead pup lying prostrate at her feet.

Although depredation by the released wolves has been minor, two young female wolves were returned to captivity at Sevilleta in May after dispersing from their packs and interacting inappropriately with livestock.

In addition, a miniature horse was bitten, and a rancher's dog was killed by a released wolf, for which reimbursements were made by Defenders of Wildlife.

Of the eleven original wolves released, seven remain in the wild. Slowly, but surely, the wolves are demonstrating their ability to adapt to the wild. Biologists recently confirmed the successful kill of an elk by the parents of the newborn pup.

Ben Ikenson, Student Conservation Associate, Albuquerque, New Mexico

Editor's note: The Campbell Blue male cared for the wolf pup after the death of his mate on August 7. However, as of September 14, the pup had not been observed for 22 days, suggesting it has been lost to unknown causes. Project biologists emphasize that the losses of the Campbell Blue female and pup are expected and that they are encouraged by the successful transition these first wolves have made from captivity to the wild, establishing home ranges, learning to kill elk, and reproducing their first year in the wild.

PARDS and GARDS Named

If you want to know who has been named to the PARD (programmatic assistant regional director) and GARD (geographic assistant regional director) positions in all the regions, look no further. As of early October, nearly all the selections had been made, and *Fish & Wildlife News* is here to give you the roster.

"I'm really impressed by the high caliber of the people who have been reassigned or selected to fill these key positions," said Service Director Jamie Rappaport Clark. "They bring a tremendous range of experience and depth of knowledge to our regional offices. I know they will be effective advocates for the field stations and for the ecosystem teams, and that they will provide the programmatic experience and consistency that we need throughout the regions. I believe our constituents and partners will also find it easier to communicate with the Service, now that these new positions are in place."

The Service directorate decided to revamp the existing GARD positions and to establish PARD positions earlier this year. The decision was an outgrowth of the Ohio State University study on the Service's implementation of the ecosystem approach.

Region 1

PARDS

Fisheries—Dan Diggs
Ecological Services—Cynthia Barry
Refuges and Wildlife—Carolyn Bohan

*GARDS**

Bill Shake—Idaho; Oregon and Washington (east of the Cascades)
Dave Wesley—Hawaii; Oregon and Washington (west of the Cascades)

Region 2

PARDS

Fisheries—Steve Parry
Ecological Services—Bryan Arroyo
Refuges and Wildlife—Dom Ciccone

GARDS

Lynn Starnes—Oklahoma, Texas
Renne Lohoefener—Arizona, New Mexico

Region 3

PARDS

Fisheries—will be readvertised
Ecological Services—Charles Wooley
Refuges and Wildlife—Nita Fuller

GARDS

John Blankenship—Illinois, Missouri, Minnesota, Iowa
John Christian—Indiana, Ohio, Michigan, Wisconsin

Region 4

PARDS

Fisheries—Columbus Brown
Ecological Services—will be readvertised
Refuges and Wildlife—Dave Heffernan

GARDS

Linda Kelsey—Florida, Puerto Rico, Virgin Islands, parts of Alabama and Georgia
Steve Thompson—Louisiana, Arkansas, parts of Mississippi and Tennessee
Mitch King—Kentucky, North Carolina, South Carolina, parts of Georgia, Alabama, Tennessee, and Mississippi

Region 5

PARDS

Fisheries—Jaime Geiger
Ecological Services—Ralph Pisapia
Refuges and Wildlife—will be readvertised

GARDS

Sherry Morgan—Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont, parts of New Jersey
Rick Bennett—Delaware, Maryland, Pennsylvania, Virginia, West Virginia, parts of New Jersey

Region 6

PARDS

Fisheries—Susan Baker
Ecological Services—Paul Gertler
Refuges and Wildlife—Ken McDermond

GARDS

Skip Ladd—North Dakota, South Dakota, Montana, Wyoming
Joe Webster—Colorado, Kansas, Nebraska, Utah

Region 7

PARDS

Fisheries and Ecological Services (one, combined position)—will be readvertised
Refuges and Wildlife—Todd Logan

GARDS

Glenn Elison—southern Alaska
Dick Pospahala—northern Alaska

**Because GARDS may be responsible for ecosystems that overlap state boundaries, the geographic descriptions here are provided to give the reader an approximate idea of each person's area of responsibility.*

Video Message Tackles Funding Issue

Field station budgets will not be reduced to pay for the transition to PARD and GARD positions in the regions, Service Director Jamie Rappaport Clark told employees in a video message released in late September.

The video was sent to Service field stations, regional offices, and Washington office divisions. Copies of the transcript were provided via cc:mail.

In the video, the Director emphasized the Service's commitment to move forward with the implementation of the ecosystem approach. She said that the Service's success depends on strength at all levels of the organization. To ease funding concerns at the field level, she outlined belt-tightening measures that will be taken at the Washington and regional offices to help ensure funds for the transition. These measures are:

- When Washington office staff are selected to fill GARD, PARD, and program supervisor positions, the Washington office will fund the position for one year.

- Regional and Washington office budgets will be reduced by 10 percent of the amount they spent on travel in FY 1998. The savings will be used to help cover costs for the new positions.

- When vacancies are created in the regional offices as a result of filling GARD, PARD, and program supervisor positions, with few exceptions the Service will either abolish the position or delay backfilling the vacancy for at least a year. Regional directors will use their discretion in determining which vacancies to fill.

- Acting positions will be used at the Washington and regional office levels where funding is not available to fill vacancies.

The video arose from concerns raised by members of the Ecosystem Approach Implementation Team. The team, under the leadership of Deputy Director John Rogers, met in early September.

At the meeting, members of the Implementation Team reported that some field stations had serious concerns that their budgets would be reduced in order to fund PARD and GARD positions. When the team's concerns were reported to the Director, she decided to tape the video message to employees.

Rogers Takes Aim During Hunting Symposium

Speaking to more than 700 attendees at the August 12 opening day of the 1998 Governor's Symposium on North America's Hunting Heritage, Service Deputy Director John Rogers emphasized "…what is good for conservation of wildlife has generally been good for hunting and what has been good for hunting has generally been good for conservation."

In his remarks at the symposium, a bi-annual event which is held in a different state each time and designed to preserve and build North America's hunting heritage, Rogers hammered home the message that hunting and wildlife conservation "depend on the same thing—the availability and quality of wildlife habitat." He also sought the audience's interest in and support for pending Service proposals aimed at reducing the mid-continent snow goose population which is devastating large areas of fragile coastal nesting habitat on Hudson Bay.

Rogers, who was serving on a five-member panel, also reminded the audience of naturalist Aldo Leopold's abiding belief that real sportsmen are conservationists committed to the entire resource.

"As sportsmen and conservationists, we must seize hold of Leopold's vision and not let go," Rogers said. "We must be dogged in ensuring the public sees us as conservationists first and hunters second. We must ensure the next generation of hunters grasps Leopold's vision of sportsmanship. We must enforce our own ranks to squelch pettiness, shortsightedness and just plain greed. And, finally, we must remember we are under the watchful eye of a nonhunting public who will judge us by what they perceive."

Rogers' speech followed welcoming remarks by Pennsylvania Governor Tom Ridge and a keynote address by Shane P. Mahoney, a wildlife official with the Province of Newfoundland and Labrador. Governor Ridge, who described himself as an avid outdoorsman and hunter, spoke about the importance of hunting to Pennsylvania, where one out of every ten people hunt.

Mahoney warned that failure to develop strong leadership within the hunting and conservation communities could "contribute to a loss of the hunting/ conservation movement that has so powerfully benefitted wildlife and wildland across North America." He urged the hunters in the audience to "ponder deeply what identity we want to have."

Rogers' co-panelists during the general session were Donal C. O'Brien, chairman of the board of the National Audubon Society; Betty Lou Fegely, chairman of the board of the Outdoor Writers Association of America; Dr. Jody W. Enck a research associate at Cornell University; and Mark Damian Duda, director of Responsive Management, which assists fish and wildlife organizations in understanding their constituencies by conducting surveys, research and other activities to gauge public opinion.

Phil Million, Public Affairs, Washington, DC

Conservation first. *Deputy Director John Rogers echoed Aldo Leopold's belief in sportsmen such as the one pictured as conservationists above all. USFWS photo.*

A Tribute to Brooks Harper

The Service lost a true friend July 2 with the unexpected death of Wayne G. "Brooks" Harper, field supervisor at the Pacific Islands Fish and Wildlife Office in Honolulu. A strong supporter of protecting wildlife and their habitat for future generations, Brooks will long be remembered for his equal commitment to people and the various cultures of the Pacific Basin.

A Service employee for 20 years, Brooks started his career as a biological technician in the fisheries assistance office in Arcata, California, later becoming a fishery biologist and supervisory fishery biologist there. He served as assistant field supervisor and field supervisor in the ecological services offices in Laguna Niguel and Carlsbad, California, and moved to the Pacific Islands Office in 1992.

Whether dealing with complex negotiations to protect endangered species critical habitat, nudging an island government toward developing a habitat conservation plan, or reorganizing his own staff to reflect an ecosystem approach to conservation, Brooks had a special way of achieving his goals through consensus rather than confrontation. He leaves behind a legacy of conservation advancement throughout the Pacific.

A typical tribute to Brooks was published in the August issue of *Environment Hawai'i:* "Although he often found himself defending FWS policies against the charges of environmental advocates that they were weak or did not go far enough, everyone who worked with Brooks regarded him as an honest broker. He never gave anyone the least reason to suspect his love for the environment and dedication to its protection."

Brooks leaves behind his wife, Joan, and two sons, Bret, 15, and Blaise, 5. A memorial fund has been established for the future education of his sons. Contributions may be sent to Robert P. Smith, USFWS Pacific Islands Manager, Box 50088, Honolulu, HI 96850.

Barbara Maxfield, Pacific Islands Ecoregion, Honolulu, Hawaii

Coalition Strives for "Fishable Waters"

You might not think the year's premier bass fishing competition a likely place to hold a pep rally on behalf of a proposed amendment to the Clean Water Act. However, that's just what happened on August 6 at this year's Bassmasters Classic Tournament in Greensboro, North Carolina.

As the nation's top bass fishermen tried to coax a stringer of keepers from the murky waters of High Rock Lake, nearby in the tournament's headquarters hotel a group of public and private organizations known as the Fishable Waters Coalition unveiled the Fishable Waters Act, formally titled the "Fisheries Habitat Protection, Restoration and Enhancement Act of 1998."

The purpose of the act is to restore the remaining 40 percent of the nation's waters that, twenty-six years after passage of the Clean Water Act, are considered neither "fishable" nor "swimmable." The coalition estimated the proposed legislation has the potential of improving fishing in nearly one million miles of rivers and streams, which would generate about $2 billion in new economic activity.

Better for fish and people. *The proposed Fishable Waters Act would improve fishing in nearly 1 million miles of rivers and streams. USFWS photo.*

Coalition speakers at the rally said the legislation, which they hope will be introduced in the next session of Congress, will improve fish habitat by focusing on stream flows, non-point pollution source problems within watersheds and flood plain management strategies. The act also places major emphasis on habitat, access and fishing opportunities in urban areas.

To accomplish its purpose, the act calls for state governments and Native American tribes, working with state fish and wildlife agencies, to establish programs supporting the development of comprehensive plans and recommendations by locally-controlled watershed councils. The Secretary of Agriculture would approve these state or tribal programs, and federal funding would be available to support watershed planning and cooperative habitat improvement projects undertaken with willing landowners.

Some new money would be needed to administer the watershed councils but existing natural resource-related funds could be redirected to support specific projects. The Agriculture Department was selected as the lead agency because, through its Natural Resource Conservation Service, it has representation in nearly every county in the United States.

Under the Fishable Waters Act, the Secretary of the Interior would be responsible for three programs: providing funding and assistance to states for urban fisheries improvement projects; recommending plans to improve habitat in major waterways where watershed councils do not exist; and providing funds for acquisition of water rights in states that designate instream flow levels necessary to support fisheries.

Speakers during the two days of meetings about the act included Helen Sevier, chair of the Bass Anglers Sportsman Society; Mike Hayden, president of the American Sportfishing Association; Mike Dombeck, chief of the U.S. Forest Service; and Pearlie S. Reed, chief of the Natural Resource Conservation Service.

Phil Million, Public Affairs, Washington, DC

Agreement Safeguards Marine Mammals

Representatives of three federal agencies signed a memorandum of understanding in July that will allow marine mammals such as polar bears and sea otters to be transported more safely and humanely.

The Fish and Wildlife Service, the Commerce Department's National Marine Fisheries Service and the Agriculture Department's Animal and Plant Health Inspection Service, which share responsibility for marine mammal conservation under the Marine Mammal Protection Act and the Animal Welfare Act, signed the agreement, which streamlines regulations by facilitating communication to ensure that marine mammals are moved safely, promptly and in compliance with conservation laws.

Under the MOU:

- The Fish & Wildlife Service will make captive marine mammal inventories available to APHIS.

- APHIS will evaluate comparability of Animal Welfare Act standards for foreign facilities in the case of marine mammals to be exported.

- The Fish & Wildlife Service and APHIS will assist each other in situations involving the care of captive marine mammals. In specified cases the Fish and Wildlife Service may designate an APHIS employee as it agent to ensure humane treatment or health of the animal.

Prior to the 1994 amendments to the Marine Mammal Protection Act, the regulations often led to duplications of effort by the three agencies. After the 1994 amendments, however, the agencies began negotiating the memorandum of understanding to streamline and coordinate duties and responsibilities.

The MOU was signed July 21 by Fish and Wildlife Service Director Jamie Rappaport Clark, National Marine Fisheries Service Assistant Administrator Rollie Schmitten, and Animal and Plant Health Inspection Service Administrator Craig Reed.

Mary Maruca, International Affairs, Arlington, Virginia

Refuge Takes Shape in Virginia

Sparkling new jewel. *Former Defense Department land in northern Virginia became one of the newest additions to the national wildlife system as Occoquan Bay NWR was officially established in July. Photo by Debbie McCrensky.*

Nearly 600 acres of former Defense Department land in northern Virginia is the newest addition to the 514-unit National Wildlife Refuge System.

In July, Occoquan Bay NWR was established in northern Virginia when the Army transferred ownership of 586 acres from the Army Research Laboratory (formerly the Harry Diamond Laboratories) Woodbridge Research Facility to the Service.

"Occoquan Bay National Wildlife Refuge will open to the public soon with a walking trail and opportunities for wildlife-oriented nature study, hiking, bird watching and photography," said Gregory Weiler, manager of Mason Neck NWR which will oversee the new refuge near Woodbridge, Virginia.

"We have entrance signs ready to be installed, we have hired a biologist to staff the refuge, and we will hire an outdoor recreation planner," Weiler continued. In addition, Service engineers are converting the former guard house on Dawson Beach Road to a refuge visitor station.

More than a year ago, the Service began working on a comprehensive plan to guide wildlife management and environmental education on Occoquan Bay refuge. "The time we spent developing a solid plan will help ensure a better refuge for fish, wildlife and their habitats, and for people to enjoy," Weiler said.

The Woodbridge facility, owned by the Army since 1949, was closed in September 1994 as part of the 1991 Defense Base Realignment and Closure Act. Although ownership of the land has transferred at no cost to the Service, the Army will continue its program of environmental restoration on several small parcels of the site.

As this work is completed, additional areas on the refuge will be available for recreational use.

"We may be able to open an auto tour route in the near future," said Weiler.

The refuge's name, "Occoquan," is of Dogue Indian derivation and means "at the end of the water."

Director Takes Alaska by Storm

The international concourse at the Anchorage airport was Service Director Jamie Rappaport Clark's first stop on her two-week tour of Alaska this summer. The trip also included visits to the Alaska regional office and various field stations around the state.

At the airport Clark examined a stash of confiscated wildlife products such as three-snake wine, alligator boots and leopard coats. She met with reporters to explain the importance of the Service's wildlife inspection program.

"The goal of the U.S. Fish & Wildlife Service wildlife inspection program is to control the legal trade, and deter the illegal trade in wildlife and wildlife parts and products that move internationally," Clark told the reporters. "Wildlife inspectors ensure that wildlife shipments entering the United States meet the requirements of U.S. laws, as well as laws of foreign countries that have established special protections for their indigenous wildlife resources."

Clark and Wildlife Inspector Mike Kiehn searched luggage for illegal wildlife or wildlife products as the director continued to talk with the media about law enforcement.

"The United States remains the world's number one market for wildlife and wildlife products—both legal and illegal," she said. "More than 76,000 declared shipments came into or out of the United States in 1997. Our inspectors are extremely busy, as you can see."

In Anchorage, Clark also took the time to present a special achievement award to a group of federal, state and private organizations for its efforts to resolve Canada goose management issues in the area.

Later in her trip, Clark visited Kenai NWR in southern Alaska. Accompanied by biologists, photographers and public affairs specialists, Clark toured Kenai Wildlife Research Center, where she encountered native wildlife such as loons, caribou and moose and patiently posed for photographs despite a steady rain.

Connie M.J. Barclay, External Affairs, Anchorage, Alaska

Taking a Virtual Tour

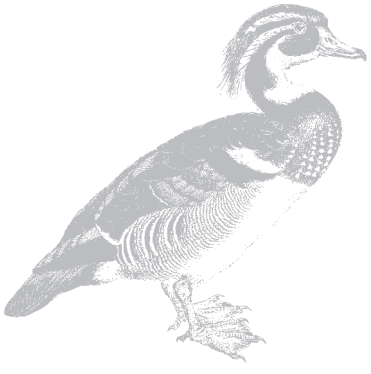
The "eyes of Texas" looked upon the National Conservation Training Center in July, along with those of 24 other state fish and wildlife agencies whose communications specialists met in Austin, Texas, for the annual conference of the Association for Conservation Information.

Applying the training center's new distance learning satellite technology, more than 120 ACI attendees were given a combined live and taped tour of the West Virginia facility on July 10 followed by an interactive question-and-answer session. Conceived by former Chief of Education Outreach Mike Smith, who is now the Service's Deputy Assistant Director for External Affairs, the broadcast was designed to acquaint public information specialists from state wildlife agencies with the training center and its capabilities, especially in instruction in the areas of media relations, communications, and education.

Education specialist Laura Penington-Jones served a dual role in the project – as training center "tour guide" during pre-taped segments of the production, and as a live participant and NCTC representative in Austin as the telecast concluded.

"What a pleasure it was to bring the NCTC, via satellite, to Austin, and feel the enthusiasm the broadcast generated," Penington-Jones said. "Everyone I spoke with expressed an eagerness to visit NCTC and was impressed with our commitment to collaborative learning."

Wyoming Game and Fish Department employee Walt Gasson, who is the training center's liaison with state agencies, served as an on-camera participant.



"State fish and wildlife agencies need training that's tailored specifically to the needs of their organizations and their people. That's what NCTC offers—training by fish and wildlife professionals for fish and wildlife professionals," Gasson said.

A videotape of the 55-minute telecast, "A Satellite Tour of the National Conservation Training Center," is available on loan from NCTC's Division of Training and Education Materials Production.

Also during this year's ACI meeting, the Service received three awards for communication products, including a first place prize in the video public service announcement category for the 1996 Hunter Safety PSA featuring Olympic Gold Medalist Kim Rhode.

"Big Muddy National Fish and Wildlife Refuge: A Part of Our Past - A Place in Our Future" took third place in the miscellaneous video category. The Service produced this video in conjunction with the proposed expansion of Big Muddy refuge to educate landowners, lawmakers and members of the public about the benefits of the refuge.

In the print categories, Region 1 received a second place award for its outreach newsletter "Out and About."

ACI conducts its annual awards program to advance craftsmanship through competition. This year there were 318 entries from 36 agencies and organizations in categories ranging from newsletters to television series.

Founded in 1938, ACI's membership consists mainly of professional communicators from the information and education offices of state and federal natural resource agencies, and some private conservation organizations. The Service works through ACI to coordinate information projects of mutual interest among the federal government and the states.

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

Steve Farrell, Federal Aid, Arlington, Virginia

NCTC Brings the Classroom to You

One step closer to bringing training opportunities to everyone's "front door," the Service now has its biggest classroom ever.

Distance learning in one of its several forms—in this case, high-tech interactive communications via satellite—became a reality for the Service on June 18 as seven sites across the country were linked in a pilot broadcast from the National Conservation Training Center in Shepherdstown, West Virginia.

The two-hour presentation, an introduction to the Endangered Species Act for agency employees, also was designed to demonstrate and test the capabilities of this new technology, which allows training by satellite to remote locations, coupled with an interactive feature for two-way communications between instructors and class participants.

Participants in the pilot broadcast deemed it a success worth waiting for.

"We've been dreaming about this capability for the past ten years," said Ken Goddard, director of the Service's National Fish and Wildlife Forensics Laboratory. "It's about time the future got here!'

Hosted by Marilet Zablan from the Service's Utah ecological services field office and Sandy Tucker from the Division of Endangered Species in Arlington, Virginia, the presentation offered a history of the Endangered Species Act and a review of the law's major sections, question-and-answer sessions, a mock interview with a Congressional staffer, and a video field trip to desert tortoise habitat in the Southwest.

During the broadcast, participant responses to an informal test on Section 10 of the Endangered Species Act were tabulated on-screen via the system's keypad response feature.

"Once you get over the novelty of the medium—and this happens fast—you find yourself 'in the room' with the instructors," said class member Marvin Moriarty, the Service's deputy regional director in Minneapolis. "The use of 'virtual field trips' helps drive home learning points much better than the usual classroom situation."

Training center Director Rick Lemon agreed. "This technology will help NCTC to provide conservation professionals and other conservation stakeholders with local access to exceptional training and education opportunities," he said. "Participating in these events will improve their ability to conserve, protect, and enhance fish and wildlife and their habitats."

The first use of the new learning tool drew about 30 participants from seven sites: regional offices in Minneapolis, Albuquerque, Denver; and Portland, Oregon; the forensics lab in Ashland, Oregon; Service headquarters in Washington D.C.; and the training center in Shepherdstown. Most of these locations used digital downlink satellite dishes to receive the broadcast.

By the end of September, offices in Anchorage; Denver; Hadley, Massachusetts; and Arlington, Virginia, also should have satellite dishes.

The training center also offers satellite telecasts on the topics of ethics and realty. Instructors for those courses are delighted with the new technology.

"I'm amazed at how quickly we can get all the regions into one classroom at one time!" said Lisa Deener, an ethics course instructor.

The distance learning team has planned more than twenty events over the next year, and invites suggestions from all Service staff on how distance learning can meet their individual training needs.

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

Biologists Puzzle the Mystery of Scaup Decline

On a downslide. *Biologists will gather in September to share information on scaup populations, which have been declining precipitously in the past few years. Photo by James C. Leupold.*

The Service this year recorded the lowest breeding population of scaup since 1955 when breeding waterfowl surveys began. Preliminary estimates from the 1998 survey show a total of 3.47 million scaup, a 16 percent decline from 1997.

Scaup are the most abundant and widespread of North American diving ducks, with populations extending from the northern tundra in summers to southern Mexico in winter. In 1972, the continental scaup population peaked at 8 million, but since the early 1980s it has gradually declined. The population has remained below 5 million through most of the 1990s.

Biologists in the United States, Canada and Mexico are mystified as to what has caused the precipitous decline in scaup populations.

Most scaup breed in the parkland, boreal (forest) or tundra habitats of Canada and Alaska and winter along the U.S. and Mexican coasts and on the Great Lakes. Although biologists are unable to pin down one specific cause for the drop in breeding scaup, they speculate it could be caused by a number of factors: lack of breeding success in the northern forest; contaminants in scaup's food sources in the Great Lakes and coastal United States; and potential biases in surveying methods.

The Institute of Wetland and Waterfowl Research of Ducks Unlimited Canada, in cooperation with the Louisiana Fish and Wildlife Cooperative Research Unit, is developing a new research initiative on scaup.

However, no obvious answer has emerged. In an attempt to gain some insight into the situation and possibly discover a cause for the scaup decline, the U.S. Geological Survey will host a multi-agency workshop in September to share information and discuss research needs and opportunities for collaboration.

Besides the Service, participants in the workshop, to be held at the Geological Survey's Northern Prairie Wildlife Research Center in Jamestown, North Dakota, will include representatives from state, federal and provincial agencies, as well as academics and biologists from private waterfowl agencies throughout the United States and Canada.

Biologists hope that this meeting of the minds will eventually lead to answers to this baffling mystery.

Reid Goforth, External Affairs, Arlington, Virginia

Illegal Mussel Take Nets Million Dollar Restitution

The Service, the U.S. Attorney's office in Memphis, and the State of Tennessee in July announced a million-dollar restitution in a plea bargain that culminated a four-year investigation into illegal wildlife trafficking by the Tennessee Shell Company.

On the banks of the Mississippi River in Memphis, Acting Southeast Regional Director H. Dale Hall; Veronica F. Coleman, United States Attorney for the Western District of Tennessee; and Gary Meyers, executive director of the Tennessee Wildlife Resources Agency, announced that the Japanese-owned Tennessee Shell Company pled guilty to a felony in U.S. District Court in Jackson, Tennessee, on July 24.

The company will pay $1 million in restitution for purchasing thousands of pounds of illegally-taken freshwater mussels from rivers in Michigan, Ohio, Kentucky and West Virginia.

This is the largest restitution ever paid as a result of a federal criminal investigation into the illegal, commercial exploitation of wildlife resources. Service special agents, state wildlife officers and the Department of Justice made the case after a four-year investigation into the company's multi-million dollar trade activities.

Tennessee Shell, the largest shell buying/exporting company in the United States, pled guilty to one felony Lacey Act count. The federal Lacey Act prohibits interstate commerce in wildlife protected under state or federal law and thereby enables federal law enforcement officers to assist states in protecting their wildlife resources.

According to U.S. Attorney Coleman, the Tennessee Shell Company purchased the large and valuable mussels from independent buyers and divers with the full knowledge that they had been taken from waters where state law prohibited their harvest.

"While freshwater mussels are not cuddly creatures with eyelashes, they are hugely important in the biological scheme of things," said Hall. "They are the proverbial 'canaries in the coal mine,' warning us of danger by detecting and filtering out pollutants and toxic chemicals in the water that may affect human health. They are also a food source for other animals and an anchor for plants on the riverbed. But they are being wiped out as a result of human activities, and, in this case, because of greed."

A federal grand jury in Jackson has indicted twenty individuals for 136 counts of violating the Lacey Act with regard to freshwater mussels. To date, nineteen defendants have pled guilty and one has entered a pretrial diversion agreement in district court in Jackson, resulting in a total of nearly $67,000 in restitution ordered to be paid to the State of Michigan (from whose waters many of the mussels were harvested), along with prison sentences and periods of supervised release or probation for these individuals.

The $1 million in restitution from Tennessee Shell will be paid to the National Fish and Wildlife Foundation to establish the Freshwater Mussel Conservation Fund for mussel research and recovery. The court accepted an initial payment of $250,000 from the company and handed over the check to the Foundation at the Memphis news conference.

Service special agents worked with state officers in Tennessee, Kentucky, West Virginia, Ohio, Michigan, Alabama and Louisiana, to follow the trail of evidence from the Ohio, Muskingum, Green and Grand rivers to the company's headquarters in Camden, Tennessee, and from there through West Coast ports to Japan.

According to Service Special Agent David Cartwright, who led the investigation, tracking the criminals' paper trail to gather evidence was an exhausting, time-consuming process.

Cartwright said the stolen shells were trucked to Tennessee Shell, where they were mixed with shells from legal sources, loaded into sacks, placed in 22-ton freight containers and exported to Japan by way of West Coast ports. Records recovered during the investigation revealed a $50 million annual domestic business for shell companies in the United States and a $5 billion annual foreign trade to meet the demands for pearls, fine jewelry and other products.

Ready for shipment. *Bags of mussels prepared for shipping. A full freight container would hold 22 tons of mussels. Photo by Tom R. MacKenzie.*

Freshwater mussels are one of the most endangered families of wildlife in America. While found on every continent except Antarctica, freshwater mussels are most diverse in the Mississippi and Ohio river drainages of the United States. Of the approximately 300 known species of mussels, 30 are extinct and another 70 are listed as threatened or endangered.

An estimated 70 percent of the nation's mussels are at risk from a variety of threats, reflecting an unparalleled level of collapse of a family of wildlife. Human-induced habitat loss is considered the major reason for the collapse.

Vicki Boatwright and Tom R. MacKenzie, External Affairs, Atlanta, Georgia

Reptile Dealer Faces Smuggling, Conspiracy Charges

A five-year investigation by Service special agents of illegal international trade in reptiles resulted in the August 6 arrest of Tommy Edward Crutchfield, a U.S. reptile dealer charged with wildlife smuggling, conspiracy and money laundering. He is the 18th person charged to date in this wide-reaching wildlife trafficking case that spans six continents.

Crutchfield was apprehended by federal authorities in Miami as he returned to the United States after being expelled from Belize. Last October, a federal grand jury in Orlando, Florida, returned a multi-count indictment against Crutchfield, his wife, two former employees and two other individuals alleging that the six were part of an international smuggling ring believed to have brought hundreds of rare and endangered snakes and tortoises out of Madagascar into Germany.

From Germany, the animals, worth hundreds of thousands of dollars, were smuggled into the United States and Canada where they were sold to wildlife dealers and private collectors. Protected reptiles from Australia, Indonesia, and various South American and Caribbean countries also were traded.

The smuggled reptiles, which typically were concealed in suitcases and transported aboard commercial airline flights, include highly prized Madagascar tree and ground boas, radiated tortoises, and spider tortoises—species that occur naturally only in Madagascar, an island off the southeastern coast of Africa.

These animals, and the other reptiles allegedly smuggled, purchased, and sold, are protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Crutchfield, who was named in all ten counts of the indictment returned by the grand jury in October, is charged with multiple offenses of smuggling, violations of the Lacey Act, a federal statute that allows the United States to prosecute individuals for violating international wildlife protection laws, including CITES; conspiracy; and money laundering.

If found guilty, Crutchfield could be sentenced to up to five years in prison and fined as much as $250,000 on each smuggling and Lacey Act count. Conviction on the money laundering charges could result in prison terms of up to 20 years and penalties as high as $500,000 per count.

Crutchfield was considered one of the largest reptile importer/exporters in the United States before he left the country in the spring of 1997. He was on supervised release following completion of a five-month prison sentence for a 1995 wildlife smuggling conviction when he fled to Belize after being notified by the Justice Department that he was under investigation. He also faces potential penalties for violating the supervised release.

The reptile investigation already has produced significant results, according to Service law enforcement officials. In addition to the charges against Crutchfield and his associates, four individuals from Germany, South Africa, Canada, and Japan have been arrested and successfully prosecuted in the United States.

"This case should send a clear message to those who traffic in rare and endangered reptiles that profiteering at the expense of wildlife will not be tolerated by the United States or by the world community," said Service Director Jamie Rappaport Clark.

Sandy Cleva, Law Enforcement, Arlington, Virginia

Law Bites Wildlife Dealer in the Wallet

A New York City natural history boutique owner will serve 16 months in prison and pay nearly $30,000 in penalties for trafficking in Native American human remains and endangered wildlife.

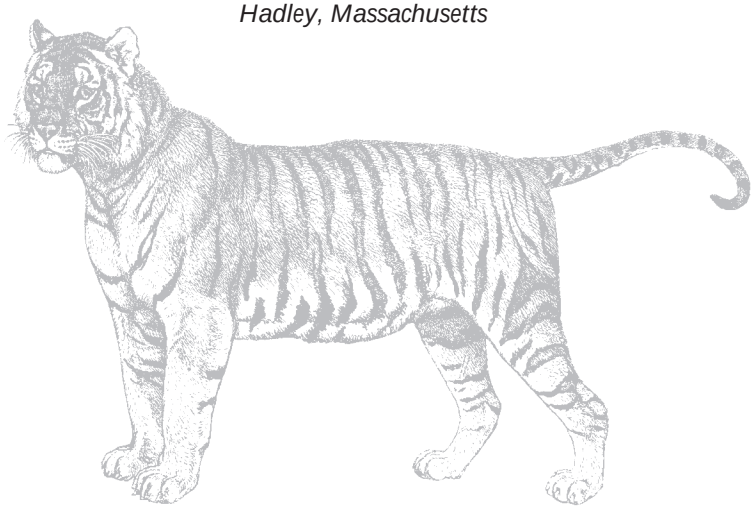
William Stevens, 49, in June received the first jail sentence imposed under the 1990 Native American Grave Protection and Repatriation Act for trafficking in remains and will serve concurrent sentences for violating the Migratory Bird Treaty Act, the Endangered Species Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

According to Service Special Agent Edward Grace of Valley Stream, New York, in 1997 wildlife inspectors intercepted a box of stuffed Indian cobras illegally mailed to Stevens from Thailand, launching an eight-month investigation. Subsequent airport seizures and an undercover visit to Stevens' store, Evolution Natural History in the SoHo section of Manhattan, revealed other violations.

Agents eventually seized many items, including a tiger rug, gorilla feet ashtrays, an elephant foot stool, wood turtle shells and other goods crafted from endangered species. It was discovered that Stevens sold or planned to sell the skulls and bone fragments of at least 20 Native Americans taken from burial sites in Florida and Missouri.

Remains recovered during the investigation will be returned to members of the Peoria and Seminole tribes for reburial.

Terri Edwards, External Affairs, Hadley, Massachusetts



Investigation Probes a Web of Smuggling

A 5 ½-year law enforcement investigation triggered by the seizure of eight tarantulas resulted in three prosecutions of spider dealers who smuggled more than 1,500 protected Latin American tarantulas worth hundreds of thousands of dollars into the United States.

"Operation Arachnid" also led to international protection for all species of *Brachypelma* spiders, some of the rarest in the world.

The investigation began in December 1992 when Service Wildlife Inspector Sharon Lynn seized a shipment of eight live Mexican red-kneed tarantulas at Chicago's O'Hare International Airport. The importer did not have a valid export permit for the tarantulas, which are listed on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

The importer eventually abandoned the tarantulas to the federal government in a pretrial settlement which also included fines, restitution and the forfeiture of other tarantulas he had illegally imported.

In March 1993 Sheila O'Connor, an officer with the Illinois Department of Natural Resources who is now a Service special agent, spotted a Mexican red-kneed tarantula for sale in a suburban Chicago pet store. She called Special Agent David Kirkby in the Chicago law enforcement office, who she knew was looking into the illegal tarantula trade.

Kirkby confiscated the tarantula, later dubbed "Elvira" by Chicago law enforcement staff, as evidence and began untangling a complex web of clues to trace her origin. After extensive investigation, Kirkby documented the smuggling activities of Thomas D. Schultz, the owner of a now defunct wildlife import business in Columbus, Ohio.

"We were able to trace shipments of more than 1,000 Mexican red-kneed tarantulas back to Schultz," Kirkby said. The spiders, destined for the pet trade, were driven over the Mexican border and peddled by Schultz to at least three different wildlife dealers.

In May, Schultz pleaded guilty to felony violations of the Lacey Act, the Endangered Species Act and U.S. smuggling laws. He could face up to five years in jail and a $250,000 fine.

Most recently, Operation Arachnid snared a Chicago pet store owner and wholesale importer for his illegal dealings in the tarantula trade. The charges against Bryant Capiz, who operates a store called "Arachnocentric," stem from his alleged attempt to smuggle 27 adult tarantulas of various species into the United States via O'Hare.

Wildlife Inspector Lydia Handy found the illegal animals concealed in Capiz's luggage. In an attempt to distract inspectors, Capiz also handcarried and declared a commercial shipment containing some 1,300 legal spiderlings.

The Service probe of the illegal spider trade reverberated far away as California where a federal jury recently convicted a Long Beach man on five felony counts for smuggling and selling 600 Mexican red-kneed tarantulas. The man, who was the subject of a separate Service investigation, is now serving a nine-year prison term, one of the longest sentences ever handed down in a wildlife-related case.

A pet store tarantula proved the next big break in Operation Arachnid, leading Kirkby to smuggler Thomas Schultz. This break in the case also launched the "public service" career of Elvira—Chicago's most famous resident tarantula (see sidebar story).

"Elvira": Service "Spokes-spider"

As one of the victims in a highly-publicized law enforcement case, "Elvira" the Mexican red-kneed tarantula has attracted her share of media attention.

Her presence at a June press conference with Service Director Jamie Rappaport Clark and two assistant U.S. attorneys and her other "outreach work" has helped spread the message about the detrimental effects of illegal wildlife trade.

Elvira, who lives in Special Agent David Kirkby's office at Chicago's O'Hare airport along with a dozen other tarantulas, is the highlight of talks presented by wildlife inspectors to school and community groups who visit the airport. She and some of the other tarantulas-in-residence, most of which were seized as evidence during Operation Arachnid, have appeared on several local television shows featuring the Chicago wildlife inspection program.

They have also made extended "guest appearances" at Chicago area institutions, including the Chicago Field Museum of Natural History, Chicago Academy of Sciences - Children's Museum and the Lincoln Park Zoo.

The June 3 press conference announcing the prosecution of a target of Operation Arachnid spotlighted the devastating impact of the illegal wildlife trade on species worldwide. The story aired on six television stations and was prominently featured in the *Chicago Tribune*.

Once again, Elvira stole the show.

"The seizures our inspectors make are often the opening we need to pursue and catch wildlife smugglers," Clark told reporters as she held Elvira in her outstretched hands and the camera crews moved in for a closeup. Assistant U.S. Attorney Matthew Crowl emphasized that his office takes wildlife crimes seriously and works diligently to prosecute the individuals who commit them.

Kirkby explained Elvira's appeal as a "spokes-spider" against illegal wildlife trade.

"Elvira makes wildlife smuggling real to people," Kirkby said. "Real animals are being removed from real places by criminals whose only motivation is greed. And if we don't stop that traffic, those animals, and any benefits that humans may receive from them, soon will be lost."

Sandy Cleva, Division of Law Enforcement, Arlington, Virginia

Rare Fish Return Home

Oh, what a tangled web we weave… *Service law enforcement agents spent more than five years tracking smugglers of rare spider species such as* Brachypelma smithi*, also known as the Mexican red-kneed tarantula. USFWS photo.*

The scope of these cases demonstrates the serious threat that smuggling for the pet trade poses to red-kneed tarantulas and other spider species, said Kirkby.

"These species, native only to Mexico and Central America, are prized for their colorful markings and docile temperament," Kirkby said. "They have been imported illegally because breeders have not been able to raise them in captivity and therefore cannot meet the commercial demand for the spiders."

The fact that captive breeding does occur occasionally added a unique challenge to the case, according to Kirkby.

"We had to be prepared to refute the claim that any tarantulas we seized were captive-bred," Kirkby explained. By consulting scientists and poring over written sources, the agent compiled as much biological information about the species as he could.

Kirkby documented the distinguishing physical characteristics of wild-caught *Brachypelma* and the many problems involved in breeding these species. Much of this information has been incorporated in the official CITES identification manual, a resource that helps enforcement officers worldwide spot contraband wildlife.

Sandy Cleva, Division of Law Enforcement, Arlington, Virginia

Until recently, Bylas Springs, a complex of three small springbrooks on the San Carlos Apache Nation in Arizona, was overrun with non-native mosquitofish and choked with thirsty salt cedar trees. The native Gila topminnow, once perhaps the most common fish in southern Arizona, had been displaced by aggressive mosquitofish and had become one of the most endangered vertebrates in the United States.

Today, however, the topminnow is making a return to the Gila River system where it once thrived in sloughs, backwaters and tributary springs, thanks to a cooperative reintroduction program spearheaded by the Service's Arizona Fishery Resource Office in San Carlos.

In 1968, biologists discovered the Gila topminnow in Bylas Springs. By 1980, these tiny fish were in big trouble. Mosquitofish had invaded the springs via a flooded Gila River where the species thrives.

This new inhabitant in Bylas Springs spelled doom for the native fish. The aggressive and predacious mosquitofish displaced the topminnow rapidly, prompting the Service to list the topminnow as an endangered species.

When biologists first discovered mosquitofish in Bylas Springs, the Service took immediate steps to protect the remaining Gila topminnow. They moved as many topminnow as possible to ponds at Roper Lake State Park and the Arizona State University Fisheries Laboratory, maintaining them for future reintroduction efforts.

Those efforts have paid off. A cooperative project undertaken by the San Carlos Apache Tribe, the Arizona Fishery Resource Office and the Arizona Game and Fish Department turned the springs back into an environment hospitable to native species such as the topminnow, as well as to native plants.

Biologists erected concrete barriers near the river to prevent mosquitofish from reentering the springs. Fences around the springs protect them from livestock trampling. Cottonwoods and willows have replaced water-guzzling salt cedars and are casting cooling shade on the water.

Bringing back a native. *Arizona Fishery Resources Office biologist Cliff Schleusner pours Gila topminnow back into a headspring of the Bylas Spring complex on the San Carlos Apache Nation in Arizona. Photo by Craig Springer.*

Along the springbrook biologists also created several large open pools—the favorite habitat of the topminnow.

"In our restoration efforts, we've tried to recreate the topminnow's natural habitat," said Service biologist Cliff Schleusner, who organized the project. "Historically we've found the topminnow in open pools of spring habitats. By protecting topminnow from the plants and animals that shouldn't be here and creating the pools, we're sure that we've indeed created their preferred habitat."

Schleusner points out that the released topminnow show a strong partiality to the open pools and are doing quite well. They have already reproduced.

Bylas Springs now harbors two of the eleven known populations of Gila topminnow and this imperiled fish is one step closer to recovery.

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

Service Firefighters Help Extinguish Florida Blazes

Throughout July, an average of 12,000 acres a day burned in the south, mostly in Florida, as wildfires raged, fueled by dry weather. Service firefighters from several North Carolina national wildlife refuges were among crews from state and federal agencies throughout the nation who helped to quench the blazes in Florida.

More than 20 firefighters from Alligator River, Mattamuskeet and Pocosin Lakes refuges in eastern North Carolina joined the effort to safeguard lives, homes, businesses, and wildlife.

Service crews brought firefighting equipment such as tank engines, helicopters, dozers and Flex-trac vehicles with fireplows, and tractor trailers for hauling equipment, personnel and gear.

Service firefighters generally worked rotations of 21 days, enduring heat indexes of 110 degrees and long hours of exhausting labor on the fire lines. Accommodations for firefighters often were makeshift, ranging from sleeping bags on rock-hard gymnasium floors, to tents in fire camps, to just about anywhere there was room to put tired, horizontal bodies.

To Amy Midgett, part of the Alligator River NWR firefighting crew, the close camaraderie that formed among the firefighters was automatic. She said that fire crew members from Alligator River were "scattered to the winds" in Florida, sent out not as a team, but individually where needed. They each fought the fire alongside a group of strangers.

Thrown together in a dangerous situation, they quickly got acquainted out of necessity, Midgett said.

"The adrenaline is pumping, because you never know what is going to happen," she said. "You immediately begin joking around and making friends on your assigned crew. It is very important that we become friends, because we depend on each other for our lives. That person you are having fun with will be watching your back in a critical situation."

Answering the call. *Amy Midgett of Alligator River NWR was part of a team of Service firefighters who helped fight blazes in Florida. USFWS photo.*

Midgett learned quickly that the intensive, often frantic labor of the fire crews in Florida did not go unnoticed. She told of the many Florida homeowners who had cooked chicken or made brownies for the crews. Some residents set up shade tents in their front yards to give the firefighters relief from the relentless heat.

Others carried water, Gatorade and other liquid refreshments to the hot, exhausted folks on the firelines.

"It really makes you feel good about your job when people take the trouble to show you how grateful they are for what you are doing," Midgett said.

Rhonda Clay, Alligator River NWR
Manteo, North Carolina

Group Keeps the Service High-Tech

Recent demographic reports indicate the Internet is past the CB radio stage. In order to manage and coordinate Service information on the Internet, a web publishing council has been formed and a Web Manager named.

Surveys have shown that Internet penetration of American and international households is rapidly increasing, and that growth may be faster than that for television in the 1950s or radio during the 1920s. More than 40 percent of American households are predicted to be online in two years.

To meet the demands of this new channel of communication, the Service has been publishing fact sheets, brochures, maps, planning documents and a wide range of other informational materials on the Web. There are approximately 20,000 pages of Service information currently available on the Internet.

In May, the Director established the web publishing council to develop a more coordinated approach to managing the large quantity of Service information currently on the Web.

With design assistance from contractors, the council will:

- Establish a high-quality, identifiable "image" for major Service home pages.
- Coordinate the inclusion of key outreach messages in materials and identify target audiences.
- Educate others on how to use the Web for outreach.
- Refine how the Service can evaluate the impact of Web publishing and use it most effectively as a communication tool.

For additional information, contact your regional External Affairs office, Craig Rieben in Public Affairs in the Washington office or Web Manager Charlie Grymes, IRM, also in the Washington office, or visit the "Webpublish" subdirectory on the Service's internal Internet.

Charlie Grymes, Information Resources Management, Arlington, Virginia

Residential Learning Center Opens in Minnesota

In an emotional day full of pride, joy and even tears, over a decade of effort culminated in the August 8 grand opening of the new Prairie Wetlands Learning Center in Fergus Falls, Minnesota, about 180 miles northwest of the Twin Cities.

The a residential facility is the result of a partnership which began in the 1980s among residents, the city of Fergus Falls, the State of Minnesota and the Service. The center's creation was a true partnership effort—the State of Minnesota provided funding for the building, which was constructed on land owned by the city of Fergus Falls. Now that construction is complete, the Service will take over the maintenance and operation of the center.

In her keynote address, Janet Ady, acting chief of education outreach at the National Conservation Training Center, cited the facility as an important regional education tool.

"Environmental education is a critical component of every student's education, and residential centers such as the Prairie Wetland Center, which actually immerse students in the curriculum over a period of days, are excellent education tools," she said.

Not only are these programs effective, Ady noted, but "the kids love 'em".

"When you provide hands-on training, where the kids actually get out in the field and 'get their hands dirty,' you can see the excitement in their faces—and you know they're really learning."

More than 1,200 people attended the festivities, which featured live bluegrass music, a prairie musical presented by local schoolchildren, and field activities in the water and on the rolling hills. In addition to the usual afternoon snack fare, those in attendance also sampled buffalo burgers and wild sumac tea.

Though speeches and activities ruled the day, the real attraction was the rolling northern tallgrass prairie surrounding the facility. Hues of gold, lavender and maroon stretched skyward from the prairie sod to heights of six feet or more. For visitors unable to hike the prairie trails, center staffers carried armfuls of colorful bluestem grasses indoors for all to admire.

New place to learn. *Surrounded by prairie sunflowers and bluestem grasses, the Prairie Wetlands Learning Center provides a place for adults and children to learn about the prairie pothole ecosystem first-hand. Photo by Greg Dehmer.*

The goal of the center is to educate students and the public on the prairie pothole ecosystem. Environmental education programs at the 320-acre site will include overnight residential programs, day programs, summer camps and special events for all visitors. Up to 96 students and instructors can be accommodated in the fully-accessible dormitory facility.

Ady observed the learning process first-hand as she donned waders and helped students collect pond samples at one of the 35 wetlands located at the center. When asked what he caught, one student replied simply, "bugs." A closer examination by staff biologists revealed 25 different types of invertebrates, a small sample of the creatures which lay claim to the fertile prairie wetlands.

After the event, harried but relieved Center Director Tim Bodeen reflected on the day.

"It took us a long time to get here," said Bodeen, gazing approvingly toward the horizon where prairie met sky. "But it was worth it. It was definitely worth it."

Bodeen and his staff now are preparing Graduation Standard packages for the Minnesota schools which will use the facility. He anticipates educators from across the Midwest will seek out the center as people become more familiar with the facility and what it offers.

Dan Sobieck, External Affairs, Minneapolis, Minnesota

"Collecting" Refuges: Only Fifty More To Go

Some people collect stamps; others collect coins. I collect national wildlife refuges.

It all started in 1965 when my parents were forced to take me to Horicon NWR in Wisconsin because I wanted to see all the Canada geese I'd read about in the newspaper. There were thousands darkening the skies, similar to the essay "Goose Music" in Leopold's *A Sand County Almanac*.

Theodore Roosevelt had the right idea in 1903 when he set aside tiny Pelican Island in south Florida as the first refuge. From that humble beginning, a system of 514 refuges was formed that now stretches from Maine to the south Pacific and from Alaska to the Virgin Islands.

My initial interest in refuges was solely for birding, and being a Wisconsin native my first few visits were to refuges there. Someone told me that wild turkeys nested at Necedah, and a trip there in eleventh grade gave me a new entry for my life bird list.

Later word came that a Bell's vireo was nesting at Trempeleau. A trip there netted another list entry. Big Stone in western Minnesota gave me a burrowing owl. I was convinced refuges were great places to watch birds.

I began working for the Service in Minneapolis in 1977, and was assigned to a group conducting field assessments of lands under consideration for addition to the refuge system. My work required extensive travel throughout the then-six-state Region 3. On each field trip, I would make it a point to visit refuge lands, be it Ottawa on the Lake Erie shore, or Agassiz in the north woods of Minnesota. Being an obsessive lister, I kept track of each refuge visited just I had birds observed.

The summer of 1978 found me on detail to the Northern Prairie Wildlife Research Center in Jamestown, North Dakota, studying grassland birds throughout the Dakotas, Montana and Wyoming. My refuge list continued to grow.

Celebrate wild things. *Refuges and other Service facilities across the nation will host a variety of activities in celebration of National Wildlife Refuge Week, October 11–17 1998. Look for a wrap up of Refuge Week activities in an upcoming issue of* Fish & Wildlife News.

A more permanent transfer to the Northern Prairie Wildlife Research Center in 1979 gave me six years to scour for songbirds. This was a bonus because there are 64 refuges and wetland management districts in North Dakota, more than in any other state. A serious case of duck hunting fever at the time drew me to most of those lands.

Since North Dakota, I've lived in Georgia, Nebraska and California before coming to Washington, D.C. Each location has been beneficial for spending my own time visiting refuges.

Flex time and really cheap airfare from National Airport have provided new opportunities to visit many refuges in recent years. And although I've visited all the well-known ones, the more obscure and logistically difficult ones to reach have meant the most.

Like swimming across a Florida river to reach Caloosahatchee NWR. Plunging in for the short sprint across the channel, I emerged into the watchful eyes of the largest cottonmouth I've seen.

Or the hundreds of bats emerging from Ozark Plateau in Oklahoma. A brilliantly orange troupial at Cabo Rojo refuge in Puerto Rico. Being swept downstream by a rain-swollen Missouri creek while making my way to Pilot Knob. Paddling a canoe across a Lake Huron bay to visit Harbor Island. Seeing the last vestige of tropical forest remaining on Guam. A zillion puffins whirling around a rocky island of Alaska Maritime NWR.

Each refuge has taught me a little more about why refuges are important and why we do what we do as an agency. And each new refuge raises more questions about conserving biological diversity.

Lamenting the destruction of an island off the South Carolina coast in one of his songs, singer Jimmy Buffett poses a question we should ask ourselves each day: "How can you tell how it used to be when there's nothing left to see?" Luckily for many of the critters facing a burgeoning human population, they can rely on the refuges for a piece of what "used to be."

My goal is to visit the 514th refuge in the system on the 100th anniversary of the day Theodore Roosevelt established the first one. It might be in a tropical setting like Samoa, or on a vast expanse of tundra in Alaska. But no matter which one is last it will teach me something new.

Only fifty more to go.

Craig Faanes, Division of Habitat Conservation, Arlington, Virginia

Bengal Tigers Quit the Spanish Circus, Retire in Texas

Four 400-pound Bengal tigers recently received extra special care from Service law enforcement agents who rescued the rare animals from a crowded and dirty trailer aboard a cargo ship bound for Spain.

When it made a routine stop at the international port of Brownsville, Texas in June, the *Gulf Champion* was hauling, among other things, ponies, camels and tigers that were part of a one-trailer circus scheduled for performances in Mexico. The ship originally had set sail in May from Bilbao, Spain, for Veracruz, Mexico.

At Veracruz the circus animals were not allowed into the country because camels and ponies from Spain are known to be potential carriers of hoof and mouth disease, and the circus owner could not present proper health certificates. The ship headed back to Spain.

At Brownsville, the circus owner failed to present paperwork required for the transport of wildlife, and Service Senior Resident Agent Jim Stinebaugh and Wildlife Inspectors Rob Mulkeen and Edward Marshall inspected the ship's cargo.

"The conditions were appalling," Marshall said. "The animals were cramped in too tightly, it was hot, and it was obvious they were not getting enough food. The tigers were weak and tired."

With another two months to go at sea, it would have been difficult for the animals to survive in those conditions, Marshall said.

After the Department of Agriculture denied the ponies and camels entry into the United States, Marshall ensured that proper pens were constructed for the animals before the *Gulf Champion* continued sailing. The tigers, along with their trailer, were confiscated because of violations of the Endangered Species Act, the Lacey Act, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Service agents arranged for a temporary visit for the tigers at Tigers of the Valley, the home of a wild cat breeder. Eventually, the endangered cats would take up permanent residence at the Texas Exotic Feline Foundation, near Fort Worth.

Safe at last. *Rescued from a crowded and dirty trailer aboard a cargo ship bound for Spain, these endangered Bengal tigers now live at an exotic feline refuge in Texas. Photo by Ed Marshall.*

These arrangements made, the task of getting the tigers to their new homes fell to Inspector Marshall.

Marshall washed and sterilized the tigers' trailer and winched it to the ground, only to discover that one of its two tires was flat. After a tiresome search for a match to the peculiar Spanish tire, a local man provided a tire "that would work," Marshall said.

The Brownsville Zoo lent a truck and a few days later, Marshall and Robert Dorsett, a zoo staff member, began to haul the trailer to Tigers of the Valley, 50 miles away in Edinburgh. The journey was, to say the least, frustrating.

"We moved at a snail's pace after five of the eight bolts holding one of the tires snapped under the weight of the trailer," Marshall recounted. "A man by the side of the road bearing a sign that said 'fix flat' could do no more than tighten the remaining three bolts so the tire didn't come off altogether."

Despite the wobbly tire and a troublesome transmission gasket on the truck, Marshall, Dorsett and their precious cargo made it to Tigers of the Valley. Their work, however, was not finished when they left the tigers in the care of breeder Pete Reyes.

Marshall made the 100-mile round trip between Brownsville and Edinburgh once a week to bring the tigers meat supplied by the zoo. After a 45-day stay at Tigers of the Valley, the four cats were transferred to the Texas Exotic Feline Foundation.

Again Marshall took the wheel to ferry the big cats to their next stop, but much to his relief, the trip went off without a hitch because the shaky trailer was hoisted onto the flatbed of an 18-wheeler for the 400-mile journey.

Though ensconced in more permanent digs, the tigers were not home free just yet. A hefty sum of $100,000 was required to ensure a long-term food supply and proper living quarters for the four newest tigers at the Foundation, which already houses 65 other wild cats.

Donations poured in from a variety of organizations including Ringling Brothers, as well as contributions from over 600 individuals around the country including, of course, many from Ohio, home of the Cincinnati Bengals football team.

Soon the tigers, whose age is estimated at four to five years old, will be living in style in a 15,000 square foot habitat currently under construction. The area will boast two pools with running streams and bamboo thickets which will give the cats shade and a cool place to hide out.

After being assured that the tigers were safe and healthy, Southwest Regional Director Nancy Kaufman praised Marshall and his colleagues for their diligence.

"I would like to thank everyone involved in the protection of these rare tigers, and I would especially like to acknowledge Inspector Edward Marshall for his outstanding and dedicated efforts," Kaufman said.

Ben Ikenson, Student Conservation Associate, Albuquerque, New Mexico

Remote Midway NWR Thrives

It may be best remembered for its pivotal role in World War II, but these days Midway Atoll serves an equally vital purpose as a national wildlife refuge. In June the refuge, which is supported financially by a unique private/government partnership, celebrated its one year anniversary.

Managing what amounts to a small city in the middle of the Pacific Ocean, population 150 people and about two million seabirds, has proven a challenge since the refuge was officially dedicated in April 1997, according to Manager Rob Shallenberger. However, the Service's partnership with a private cooperator, Midway Phoenix Corporation, has helped alleviate some of the budget constraints Shallenberger faced when he took the helm at Midway.

"Midway Phoenix Corporation invested in the operation and maintenance of Midway Atoll refuge and will eventually cover its costs through a wildlife-oriented public use program," Shallenberger said. "This partnership has benefitted both the Service and Midway Phoenix, and may open the door to other such cooperative efforts that could help keep Midway operating smoothly."

Midway Phoenix's owner, Mark Thompson, is a military aviation contractor who wanted to keep Midway's airfield open to support his military contracts, Shallenberger said. Thompson signed a cooperative agreement with the Service to operate and maintain Midway's facilities in the hopes that ecotourists, fishermen, divers and history buffs would discover the beautiful, remote atoll and help him recoup his sizable investment.

Those who have visited have given the island refuge rave reviews, Shallenberger said.

"Scuba divers and snorkelers have found that Midway's reefs support a wide diversity of colorful fish and the opportunity to search for shipwrecks and sunken military aircraft," said Shallenberger. "History buffs, including many former military residents, are coming to explore the dozens of buildings and other structures eligible for the National Register of Historic Places."

The real staple among Midway's diverse clientele has proven to be the wildlife enthusiast seeking to view, photograph and study nesting seabirds, endangered

Gaga for gooneys. *A Laysan albatross colony on Midway Island. Also known as "gooney birds," Laysan albatrosses dominate Midway's landscape. Photo by Rob Shallenberger.*

Hawaiian monk seals and threatened green sea turtles, Shallenberger said.

"Many people, including, thankfully, the owner of Midway Phoenix, have fallen victim to 'Midway Magic'," Shallenberger said. "This is a hard-to-explain malady that captivates those who have been exposed to the island's charms."

As charming as Midway is, however, Shallenberger acknowledges that the refuge has its share of "resource management challenges."

"Our biggest management challenge is dealing with the invasive plants that hitched a ride to this remote atoll and flourished in their new home," Shallenberger. "Most prominent among these invaders are ironwoods and a very hardy and, regrettably, attractive annual named Golden crownbeard. We are embarked on a very difficult, and probably never-ending, effort to keep these plants in check."

Shallenberger said he is encouraged, however, by the success he and his staff have enjoyed in the elimination of rats from Midway's three islands thanks to a poisoning project begun by the Navy several years ago. He has seen a dramatic increase in nesting success of burrowing birds, in particular, who previously had been forced out by rats.

Located less than 150 miles from the International Dateline, Midway is the second-furthest refuge from Washington, D.C. Geographically, it is part of the Hawaiian archipelago but is an insular U.S. possession, discovered in 1859 and annexed to the United States in 1867.

The Service's presence on Midway Atoll dates to the 1940s when biologists helped the Navy address aircraft-bird strike problems. The Service's growing role in wildlife management in recent years led to Midway's designation as an overlay national wildlife refuge in 1988.

In 1903, the same year that President Theodore Roosevelt established the first national wildlife refuge at Pelican Island, he signed an executive order putting Midway under Navy control to stop the slaughter of seabirds for their feathers and eggs.

Midway also served as a support base during the Korean conflict and the Vietnam War and was a rest and refueling stop for the trans-Pacific Pan American clipper flights of the 1930s. In its heyday, Midway supported more than 5,000 Naval personnel and their families.

In 1992, the Naval Air Facility closed. The federal government undertook a $90 million cleanup program that included removing more than 130 fuel tanks, demolishing 111 buildings, extracting more than 90,000 gallons of subsurface petroleum product, and excavating and treating nearly 3,000 cubic yards of PCB and DDT-contaminated soil.

After a year, Midway Atoll is still discovering how to "be" a national wildlife refuge. Slowly but surely, more people are sure to be lured to this tiny island to experience "Midway Magic" first hand.

Reflections on a Year at Midway

Hard at work even after retirement. *Volunteer Joe Mazzoni, former Region 2 assistant regional director for Refuges and Wildlife, cuts ironwood trees on Midway Atoll NWR. Photo by Rob Shallenberger.*

A little more than a year ago I traded the Beltway for a runway, leaving my job in the Division of Refuges to manage Midway Atoll NWR. As I celebrate the refuge's first anniversary I am more convinced than ever that the Midway Atoll is good for wildlife, good for the refuge system and, thankfully, great for me!

In my "prior life" I had the pleasure of visiting dozens of refuges, all special in their own way. However, I've never spent so much time among such a profusion of wildlife as I have at Midway.

Laysan albatross—the infamous "gooney" birds of Midway—are the most abundant birds. Riding a bike is like negotiating a slalom course of gooneys. The long-term residents tell me that since the Navy left, the gooneys don't look both ways before crossing the roads. As a wildlife manager looking for small successes, I take that as a compliment to our public management skills.

Living among wildlife requires some other adjustments as well. My wife has learned to accommodate the red-tailed tropic birds, white terns and bonin petrels that nest under, on and in her vegetable garden. It provides great entertainment while pulling weeds.

A highlight of my experience at Midway has been the diversity of the people who make this operation work, in particular the 120 Filipinos, Thais and Sri Lankans who work for our cooperator, Midway Phoenix Corporation. They have taught me how to enjoy hot curry, play cricket and even speak a few words of Sinhalese. In return, I'm teaching them to ride a unicycle, photograph wildlife and play the musical saw—cultural exchange, Pacific-island style.

My own staff is short in number but long on enthusiasm. We're bolstered by a wonderful crew of volunteers that come from all walks of life to help with wildlife monitoring and habitat restoration. Most of the volunteers stay for three months or more, and we've even had our share of former Service employees including Dave and Annie Laurie Olsen, Joe and Nancy Mazzoni and even Dick Smith, former Deputy Director.

The challenges ahead are substantial. Building a compatible public use program from scratch is tough, particularly given the cost of providing air transportation, housing and food in such a remote place. Midway's infrastructure lends new meaning to the concepts of "refuge operation" and "major maintenance." Most of the equipment we inherited from the Navy is better suited for a museum than for operating a refuge.

However, I'll gladly keep dodging gooney birds on this lovely island. Stay tuned for an update at the end of year number two…

Rob Shallenberger, Midway Atoll NWR, Midway Island

Volunteer Finds Midway "For the Birds"

by Dick Smith, former Service Deputy Director

When I arrived for my tour of duty as a volunteer at Midway Atoll NWR last spring, I had no inkling that birds would be a constant variable in my two months on the island.

Midway is the ultimate sea bird sanctuary—they nest on the ground, in the ground, in bushes, in trees, on buildings, on roads and just about anyplace that they can find space. I liken living on Midway to living in a chicken house, for day-to-day activities function around birds.

Because of birds, bicycles are the predominate mode of transportation on Midway. Airplanes land after dark to avoid hitting birds and most areas other than trails and roads are closed to the public because of nesting birds. It was one of the few places I have been where wildlife so completely dominated the environment.

Species such as Laysan and black-footed albatross, fairy terns, red-footed boobies, and Pacific golden plovers rule Midway island. Throw in some monk seals, green turtles, spinner dolphins and tropical fish and you have one of the most unique and diverse spots in the refuge system.

There are several challenges involved in managing—and volunteering at—Midway Atoll NWR. The purpose of the refuge is to increase bird populations while developing compatible human uses such as wildlife watching, recreational fishing and diving.

To meet this challenge, biologists must improve bird habitat by removing the bulk of the plant species, most of which are non-native, while reestablishing native plant species. This habitat modification must be done without disturbing nesting, which takes place for about ten months out of the year.

I spent two months at Midway working on habitat restoration, removing non-native plants through mowing, chopping, pulling, grubbing and the use of herbicide. I also planted native vegetation which may someday repopulate Midway, creating ideal habitat for birds.

John Glenn: Still Chasing Aliens

Close encounters. *Service Director Jamie Rappaport Clark was on hand to commend Senator John Glenn for his efforts to prevent the introduction of exotic aquatic species. The lower half of his plaque is decorated with a gold-plated zebra mussel. Photo by Tami Heilemann.*

Before becoming a member of the U.S. Senate, John Glenn gained world fame in 1962 when he orbited the moon in the Friendship 7 rocket.

Though he found no aliens in space back then, 36 years later Senator Glenn is pursuing aliens in the water. The interagency Aquatic Nuisance Species Task Force recently recognized him for his outstanding efforts to prevent and control invasions of alien aquatic species such as zebra mussels and round gobies.

The award was presented in June by the co-chairs of the task force, Service Director Jamie Rappaport Clark and Dr. D. James Baker, Under Secretary of Commerce for Oceans and Atmosphere.

Senator Glenn authored the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, which established the intergovernmental Aquatic Nuisance Species Task Force and encouraged coordination and cooperation among several federal agencies. The act galvanized federal efforts to detect, prevent, and control invasive aquatic species and earmarked millions in federal funds for research needed to support these activities.

"Senator Glenn has long recognized that invasive alien species such as the zebra mussel and sea lamprey can have a serious impact on our country," said Clark. "The Senator was a moving force behind passage of the Nonindigenous Aquatic Nuisance Prevention and Control Act and has worked tirelessly to call public attention to the problem of invasive species."

Many aquatic nuisance species have been introduced by ships' ballast water and the act addresses ballast water as a pathway for new introductions.

"Thanks to Senator Glenn's efforts, all ships entering the St. Lawrence Seaway must now exchange their ballast water on the high seas," Clark said. "This greatly reduces the likelihood of another pest like the zebra mussel invading Toledo, Chicago or Duluth." The task force also is sponsoring research on other methods of ballast water management.

Clark emphasized the serious environmental impacts of aquatic nuisance species. "Aquatic nuisance species are notorious for their ability to devour or crowd out native wildlife," Clark noted. "Alien species have upset the ecological balance in many of our waters and have played a role in the depletion of many fish and other aquatic species in the United States."

Zebra mussels, for example, attach themselves to any hard surface. The U.S. and Canadian governments spend $15 million annually to control another exotic threat, the sea lamprey, which has had a serious impact on sport and commercial fishing, which contribute $5 billion to the regional economy.

Members of the Aquatic Nuisance Species Task Force, established by the Nonindigenous Aquatic Nuisance Prevention and Control Act, include the Fish & Wildlife Service, National Oceanic and Atmospheric Administration, U.S. Environmental Protection Agency, U.S. Coast Guard, and the U.S. State Department.

Eric Eckl, Public Affairs, Washington, DC

Promoting Good Clean Fun

In an effort to promote good stewardship of water resources by boaters, marina operators, and boat dealers and manufacturers, the Division of Federal Aid joined federal and state agencies, private organizations and trade associations to sponsor the first-ever National Clean Boating Campaign.

Launched by the Marine Environmental Education Foundation, the campaign aims to improve water quality through a national outreach and education program. Campaign sponsors kicked off National Clean Boating Week, July 11-19, with a daylong festival in Rosehaven, Maryland, featuring exhibits, boat tours and demonstrations of clean boating practices.

The Service is participating in the campaign by providing funding to publicize the need for boaters to use pumpout stations to properly dispose of sewage from holding tanks and to use dump stations if they carry portable toilets.

"Sponsoring the National Clean Boating Campaign is a natural for the Service because the campaign promotes clean water. One of the ways to keep our waterways clean is by using pumpouts and dump stations," said Bob Pacific, the Service's National Pumpout Grant coordinator. "The pumpout grant program helps boaters avoid disposing their sewage in our waterways, a practice which can spread disease, contaminate shellfish beds, and affect fish and other aquatic life."

The campaign will spread its message throughout the year with boater education seminars, habitat restoration projects, fishing tournaments, regattas and clean boating demonstrations, Pacific said. These activities will promote proper boat sewage and waste disposal; the importance of using fuel, oil and bilge controls; regular boat maintenance; and best facilities management practices.

Learning to Restore a River

One hundred twenty-one years after water was first diverted from the Lower Colorado River to irrigate the Palo Verde Valley in California, attendees at an historic conference in Las Vegas last July discussed restoring natural function within the now severely modified river.

The Colorado River has long been considered the "lifeblood of the West," supplying vital water and power resources for more than 20 million people in Arizona, California and Nevada. The Hoover Dam was constructed to control the floods that damaged agricultural lands and facilities. The completion of the dam in 1935 had more significant physical impacts on that area of the river than any action before or since.

With the goal of reconnecting the remaining fragile, fragmented parts of the river's native ecology, the 150 assembled biologists, land managers and academics, representing both government and private organizations, engaged in lively and productive discussion en masse and in smaller breakout groups.

Southwest Regional Director Nancy Kaufman opened the conference with serious words.

"I open this symposium," she began, "not with a sense of optimism but with a sense of challenge, not with the idea that science and engineering will have the answers but that we in deadly earnest must apply ourselves to an ecological crisis, born of incremental loss."

The insights brought forth during the conference will serve as a foundation for coordinating future rehabilitation activities throughout the length of the Lower Colorado River. Over the next few years, interim conservation measures will address the immediate critical needs for certain endangered species.

One critical measure is the Lower Colorado River Multi-Species Conservation Plan which will protect more than 100 federal and state-listed, candidate and sensitive species and their habitat while helping to turn back the clock and restore natural function to the river.

Ben Ikenson, Student Conservation Association, Albuquerque, New Mexico

Refuge Blooms in the Desert

Back to the future. *Researchers from private and public institutions carry out projects aimed at preserving Sevilleta NWR and restoring it to its natural state. The refuge supports a variety of plants and animals such as mule deer. USFWS photo.*

Isolated in the desert of west-central New Mexico, Sevilleta NWR is internationally recognized as prime habitat not only for whooping cranes, mountain lions and bears but also another species: humans. Specifically, humans of the researching subspecies.

Sevilleta is a unique refuge in that five biomes, or distinct ecological communities, converge within its boundaries. Chihuahuan desert, great plains grassland, great basin shrub-steppe, pinon-juniper woodland and bosque riparian forest offer an expansive outdoor laboratory for from state and federal agencies as well as colleges and universities.

Researchers use the 229,700-acre Sevilleta refuge for a variety of conservation-oriented projects designed specifically to preserve the refuge and restore it to its natural state to resemble the land of 100 years ago. Native grasslands are re-emerging and indigenous species such as the peregrine falcon once again may be found Sevilleta, one of the nation's largest refuges.

Sevilleta became a national wildlife refuge in 1973 after The Nature Conservancy bought an initial parcel from the Campbell Family Foundation and donated it to the National Wildlife Refuge System. The mission of the refuge, as stipulated by the Campbell family is:

"To preserve and enhance the integrity and the natural character of the ecosystems… by creating a wildlife refuge managed…in its natural state, employing only those management tools and techniques that are consistent with the maintenance of a natural ecological process, that the land and the flora and fauna supported by it be managed to permit the natural ecological successions and processes typical of the area to prevail."

"To preserve and enhance the integrity and the natural character of the ecosystems…"

The Campbell family also required that the land be made available to educational institutions and conservation organizations for research and study. The deed limited most other activity on the refuge as well, prohibiting pesticides, herbicides and commercial exploitation, limiting motor vehicle use and regulating hunting on the refuge.

Because of this, the Service has limited public access to the refuge; and hence programs requiring limited human contact, such as the reintroduction of endangered Mexican wolves and desert bighorn sheep, have found homes on the Sevilleta.

Sevilleta also is the only national wildlife refuge to host one of 21 Long-Term Ecological Research Projects in the United States. These projects conduct research in natural phenomena over period of 25 years or more.

The refuge carries out its education and research mission by enlisting the skills and time of another group of humans: its invaluable employees and volunteers. Thanks to species both wild and tame, Sevilleta is fast becoming a vivid desert bloom on the vanguard of both modern technology and preservation of the past.

Sally Milton, Sevilleta NWR
San Acacia, New Mexico

It's Not Landscaping, It's BayScaping

A home for wildlife. *Schoolchildren and their teachers are among the many volunteers who have taken up BayScaping, creating environmentally-sound landscapes such as this one at Fort Meade, Maryland. Photo by Britt Slattery.*

The assault on Fort George G. Meade in Maryland began in broad daylight with 150 volunteers and dignitaries armed with shovels and trowels.

Their mission: change the sterile terrain into a BayScape, an environmentally-sound landscape that will benefit people, wildlife and the Chesapeake Bay.

The Service's Chesapeake Bay Field Office and the non-profit Alliance for the Chesapeake Bay developed the BayScapes program to serve multiple purposes: to help federal agencies in the Chesapeake Bay watershed meet President Clinton's 1994 directive to improve federal landscaping practices; and to fulfill the National Performance Review's recommendation to provide wildlife habitat, conserve water and prevent pollution while reducing costs for maintenance and the disposal of chemical fertilizers and pesticides.

Additionally, through the BayScapes program, businesses and citizens can reduce their input of chemicals to the Chesapeake Bay and create habitat for native species.

"Federal facilities such as Fort Meade are not the only areas reaping the benefits of BayScaping," said Britt Slattery, BayScapes coordinator for the Chesapeake Bay Field Office. "Anyone can practice BayScaping, whether they have hundreds of acres of land or a container garden on a patio."

Volunteers have planted BayScapes on various sites throughout the Chesapeake Bay watershed to serve as models for the public. One recent project is a 10,000 square foot garden on the Carroll County *Times* newspaper property in Westminster, Maryland. This BayScape eventually will tie into a riparian restoration and watershed management project on Longwell Run, a tributary of the Patapsco River in Maryland.

The Chesapeake Bay Field Office encourages private citizens to become BayScapers by providing information on native plants for use in landscaping and habitat restoration projects, as well as a list of nurseries that carry them.

"Using these planting guides, citizens are taking stewardship of the environment into their own hands, creating wildlife habitat in backyards while reducing the amount of pollution they contribute to local waterways," said Slattery.

The Fort Meade BayScape project included two "rain gardens" landscaped with native vegetation to provide habitat for migratory songbirds, butterflies and other local wildlife. Native plants require less maintenance, water, fertilizers and pesticides, thereby reducing chemicals added to the environment.

These plants also filter and retain water runoff during storms, cleaning the water and reducing erosion as it flows into a nearby stream that runs into the Patuxent River, one of the largest rivers flowing into Chesapeake Bay.

"The project sets the tone for the rest of development on the base and surrounding area," said Bill Matuszeski, director of the U.S. Environmental Protection Agency's Chesapeake Bay Program.

Kathryn Reshetiloff, Chesapeake Bay Field Office, Annapolis, Maryland

Memories of the "Woodcock Man"

He was known to his colleagues as the "Woodcock Man."

Anyone with questions about woodcock, or about forest habitat management for this tiny upland bird, turned to Greg Sepik, who spent more than two decades researching woodcock at Moosehorn NWR in eastern Maine.

Greg, who died suddenly in July, gained notoriety as a woodcock expert after authoring such documents as the "American Woodcock Management Plan," which guides woodcock conservation efforts in the Northeast today.

Greg was well-published in technical journals as well as conservation magazines and he created, edited and published the "Region 5 Biological Newsletter," spotlighting biological program achievements throughout the region.

The Maine chapter of the Wildlife Society bestowed its Professional Achievement Award upon Greg for his outstanding contributions to wildlife management.

A born teacher, Greg trained and led technicians in trapping and tagging woodcock for the many research studies he conducted in cooperation with the Patuxent Wildlife Research Center in Maryland.

He became so proficient at using the Geographic Information System that he developed a GIS training course for land managers offered through the National Conservation Training Center.

Widely known for his humor and practical jokes, many who have taken his courses will never forget the "Greg Dollars" he used to stimulate questions.

Fish and Wildlife…In Brief

Fondly remembered. *Wildlife biologist Greg Sepik was known far and wide as the "Woodcock Man" for his devotion to conserving the tiny upland bird. Photo by Jan Taylor.*

Greg Sepik was a biologist, woodworker, musician, hunter, scuba driver, husband and father. The loss of the "Woodcock Man" to the tiny bird with a loud "*peent….*" call also will be felt deeply.

A Greg Sepik scholarship fund has been established at Woodland High School, Woodland, Maine 04468.

Jan Taylor, Regional Field Biologist, Newington, New Hampshire

Newest Refuge Proposed for Louisiana
The Service has proposed establishing a new national wildlife refuge in south-central Louisiana. Swayze Lake NWR would be located on approximately 20,000 acres of bottomland hardwoods, agricultural fields, and wooded, shrub swamps in St. Landry Parish. The Service is seeking public comments on a draft environmental assessment and land protection plan for the establishment of the refuge. The 20,000-acre project area is located within the Atchafalaya River Basin, about five miles northwest of Krotz Springs, Louisiana. The Service is proposing to purchase approximately 9,000 acres in fee title from willing sellers. The remaining 11,000 acres would be sought through conservation easements, cooperative agreements, or fee title purchases.

Agreement Leads to Healthy Trout
Results from a recent health inspection at a Native American tribal hatchery yielded proof that healthy lake trout exist in Lake Superior and that their offspring can be raised successfully at the hatchery. Lake trout fingerlings being reared as part of a hatchery isolation program at the Keweenaw Bay Indian Community Hatchery near L'Anse, Michigan, recently were declared "disease-free" and given a clean bill of health after an inspection performed by the Service. The fish-rearing project is part of a two-year cooperative agreement between the Keweenaw Bay Indian Community and the Service under which the community isolates and raises three strains of lake trout for use as future brood stock. The Service will provide yearling lake and brook trout from its hatcheries to Keweenaw Bay and the community's reservation waters. Tribal staff have been nurturing the three strains of lake trout since last fall. If the fish remain healthy, they will be transferred as 10-inch fish to a Service hatchery in June 1999.

Service Proposes Refuges for Black Bears
To provide 48,000 acres of critical habitat in Louisiana for the threatened Louisiana black bear, the Service is proposing to establish two national wildlife refuges and add acreage to an existing refuge. According to Southeast Regional Director Sam D. Hamilton, the proposal would establish Glade Woods NWR on 13,000 acres in Tensas Parish and Bayou Teche NWR on 28,000 acres in St. Mary Parish, and would add 5,000 acres to the existing Bayou Cocodrie NWR in Concordia Parish. The project would facilitate the recovery of the Louisiana black bear by protecting currently occupied bear habitat, enhancing potential immigration areas, and establishing core areas to serve as key links in bear movement corridors.

Two Condors Found Dead
Service biologists found two juvenile California condors dead July 17 in a remote area of Los Padres National Forest in California. Initial tests on the birds, ages 16 months and 26 months, indicated that they drowned. They were found lying in a pool of water that had collected in a pothole atop a sandstone rock formation. Biologists speculate the birds may have slipped into the deep pothole while attempting to drink from it and been unable to climb back up the slippery sides.

Student Trainee Returns After 24 Years to Manage Refuge
The Service has appointed Mark J. Musaus refuge manager at Arthur R. Marshall Loxahatchee NWR in Boynton Beach, Florida. He succeeds Burkett Neely, who retired earlier this year. Masaus is a 24-year Service veteran who has served for the past eight years as deputy project leader at Savannah Coastal Refuges, headquartered in Savannah, Georgia. He began his Service career as a student trainee at Loxahatchee refuge during the summer of 1974, later working at refuges in Tennessee, Georgia, Florida and Alabama.

Service Law Enforcement: From Game Wardens to Special Agents

For nearly a century, federal law enforcement officers have been out in the field, working to protect wildlife, fish and their habitat. For some, Service law enforcement conjures up images of game wardens checking hunting licenses or bag limits. And for many years, we called our officers game wardens, game protectors or game management agents.

But even as long ago as 1900, when Congress passed the Lacey Act to prohibit interstate commerce in illegally taken wildlife and stymie the poaching industry, wildlife law enforcement had a bigger mission—one that contributes to the success of virtually everything we do in the Service.

Today Service law enforcement focuses on potentially devastating threats to our precious natural resources—illegal trade, commercial exploitation, habitat destruction and environmental contaminants. The special agents and wildlife inspectors who enforce our nation's wildlife laws, regulations, and treaties, and the forensic scientists who assist them, are crucial to our efforts to save endangered species, conserve migratory birds, preserve habitat, restore fisheries and promote international wildlife conservation.

The importance of law enforcement to so much of the Service's work prompted me last fall to elevate the function, which had been a division within Refuges and Wildlife, to a staff office reporting directly to me. The chief of the Division of Law Enforcement is now a member of the Service Directorate team. I want law enforcement to be at the table when we weigh policy options and decide program directions. I want law enforcement expertise to be more readily accessible to, and used by, all Service programs.

Several articles in this issue of *Fish & Wildlife News* highlight the benefits of that expertise in the recent conclusion of several major law enforcement cases.

The record of recent law enforcement accomplishments affirms my belief in the value of such cross-program integration. The $1 million in restitution that will be paid by the Tennessee Shell Company, for example, is only one payoff from law enforcement efforts to protect freshwater mussels and support Service work to restore dwindling mussel populations. Service special agents are full players on ecosystem teams addressing similar issues across the country.

Our efforts to combat the illegal wildlife trade depend on the import/export control and investigative work of law enforcement staff. The number of hours logged by uniformed inspectors at the nation's ports-of-entry, the breakup of smuggling rings dealing in such contraband as protected reptiles, exotic birds, and Asian medicinals, and work on undercover cases such as Operation Arachnid show the world how seriously we take our commitment to global wildlife conservation.

Working with the International Affairs program, law enforcement provided key support for U.S. implementation this spring of new protections for sturgeon under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (see article in May *Fish & Wildlife News*). This partnership also produced a successful two-week CITES enforcement workshop that drew participants from ten key Asian countries. Our international partners routinely tap the expertise of the Service forensics laboratory, which is showing the world the way to use science to solve wildlife crimes.

Although pursuing those who profit at the expense of wildlife is a Service law enforcement priority, our officers also target a different breed of wildlife criminal—those who destroy species by destroying or contaminating the places where they live. Special agents have worked with their colleagues in Refuges and Ecological Services to secure voluntary compliance from landowners. And they've built ground-breaking habitat destruction cases when the needs of species have been ignored.

From the Rockies to the Midwest and south to Texas and Oklahoma, agents have documented powerline, oil pit, and pesticide hazards that threaten eagles and other migratory birds. They have secured millions of dollars worth of remediation from companies. And they've done so, in many cases, by working in partnership with the industries involved.

I am proud and respectful of the dedication and commitment of our Law Enforcement colleagues to natural resources conservation. Federal wildlife law enforcement celebrates a century of service to the nation in the year 2000 when we mark the 100th anniversary of the Lacey Act. Our agents, inspectors, and other law enforcement staff will enter that centennial year as full partners in carrying out the Service's conservation mission.

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