### **National Park Service**



Roger G. Kennedy, Bureau Director Ricardo Lewis, Bureau Editor

# **Restoring Natural Quiet** in the Grand Canyon

At peak visitor seasons, the south rim of the Grand Canyon is noisier than Times Square on

New Year's Eve, as up to 100 tour aircraft fly across parts of the national park every hour. The excessive noise from these commercial flights mars the natural experience visitors seek and has been a continuing source of irritation and frustration for those who use and love the canyon.

"Too often, we wait until peace and NPS Director tranquility are destroyed before realizing Roger Kennedy that they are landscape values worth protection," said Secretary Babbitt in explaining a major Interior initiative with the Department of Transportation to restore substantial natural quiet in Grand Canyon National Park. "This time we're doing it right."

At a news conference on December 31, Secretary Babbitt announced a new regulation and a proposal for another that takes major steps to reduce aviation noise in the park. "The new rule and proposed rule strike an appropriate balance between our great desire to preserve natural tranquility in this very popular park and the requests for sightseeing by air, said Department of Transportation Secretary Federico Peña. "We believe that reducing aircraft noise will make Grand Canyon National Park a more enjoyable place to experience and learn about nature."

"It is my hope," Secretary Babbitt said, "that the hard work that has gone into establishing this process will become a template for other parks facing increasing noise problems from commercial overflight tours." The initiative also prohibits tour flights over Rocky Mountain National Park while the federal government develops a long-term policy

#### **Babbitt Lauds Honorees**

Interior Secretary Bruce Babbitt paid tribute recently to Interior employees and private citizens who have served with valor and distinction and have made significant contributions to the Department's mission.

"These dedicated public servants are the pillars of their services, our department, and of the federal government. They inspire us to take pride in our work and challenge us to match the high standards of their achievements," the Secretary said.

for tour flights over national parks.

National Park Service Director Roger G. **Kennedy** explained that management plans at Grand Canyon and Yosemite, among other parks, are based on the legal requirement that the parks be managed to preserve them and permit the public to enjoy them. "That means enjoying the special, quiet qualities of these placesunimpaired by the use of other visitors," Kennedy said. "The balancing of preservation and use is a

profession. People in the Service

spend lifetimes learning how to do that. That's one more reason why not just anyone can manage the national parks in the best interests of the American people.'

#### National Parks Overflight Act

In 1987 the Congress, at the urging of Senator John McCain of Arizona and many other friends of the Grand Canyon, enacted the National Parks Overflight Act, which included specific provisions to regulate air traffic over the canyon. The Act required the National Park Service to prepare and propose to the FAA measures for substantially restoring the natural quiet and experience of the park.

On April 22, 1996, as part of his Earth Day proposals for improving the National Park System, President Clinton directed Secretaries Babbitt and Peña to accelerate their efforts to achieve the statutory goal of natural quiet. He specifically directed them to implement new protective rules by the end of 1996.

### **Virginia Diner Joins National Register**

Burnett's Diner in Chatham, Virginia, was rooted in hot dogs and streetcars, and is now rooted in American history. The story began in the 1930s with a wooden-board counter set atop two fifty-gallon steel drums with a canvas providing shelter overhead-the first hotdog stand in the small town of Chatham, Virginia.



Secretary Babbit and FAA Acting Administrator Linda Daschle announce new regulations for restoring natural quiet to the Grand Canyon

The Service estimates that between 80,000 and 95,000 tour flights cross the Grand Canyon annually, many of them along two air corridors at the eastern section of the canyon. In the 1960s there were only a few hundred a year. The tour industry estimates that 800,000 passengers a year see the canyon by air, generating more than \$100 million in ticket sales annually.

To ensure that the rules provide a fair solution to all parties, the FAA and the Park Service are committed to joint development of a comprehensive noise management plan within five years. The plan will offer a flexible approach to noise mitigation and management and will provide for full public involvement in resolving overflight issues.

In the meantime, the new rule establishes additional flight-free zones over Grand Canyon, modifies others, and sets curfews for commercial sightseeing operations. It also caps the number of commercial aircraft that can fly over the park at 1996 levels. The proposed rule phases out noisier aircraft for park tours.

Legal challenges to the rules have already begun. A few days after the announcement, a coalition of environmental groups sued the FAA in the U.S. Court of Appeals for the District of Columbia, claiming the plan for flight restrictions is insufficient.

A coalition of air tour operations has asked the same court to block the rules, saying they are unneeded and could drive smaller companies out of business. The final and proposed rules are available on the World Wide Wed at the following addresses:

http://www.faa.gov/avr/arm/nprm.htm http://www.access.gpo.gov/su\_docs/aces/aces140.html

### **New Visitor Center** at Everglades

The Everglades National Park in Florida recently completed the last major step in rebuilding and recovering from the devastation of 1992's Hurricane Andrew—the opening of a new visitor center. The center, which replaces one seriously damaged by the storm, has been named for Ernest F. Coe, widely regarded as the father of Everglades Nation

Department Valor Award winners, honored at a December 9 awards convocation, include the following National Park Service rangers:

James L. Detterline, Intermountain Field Area (Colorado); **Richard Scott Evans**, Midwest Field Area (Nebraska); Michael Fellner, National Capital Field Area (Washington, D.C.); Jack Finley, Southeast Field Area (Atlanta); Randall K. Flanery, Pacific West Field Area (San Francisco); Richard P. Martin, Intermountain Field Area; and Daniel R. Mason, Pacific West Field Area.

For the stories of their valor, see page 4.

It was named Bill's Diner, after its operator, William Lewis Fretwell, who later bought a single-truck street car in Reidsville, North Carolina. Fretwell's lucrative diner business influenced Henry, Frank, and James Burnett to buy a retired double-truck Thomas Company Car, from the Danville Power and Traction Company around 1939. The brothers hauled the retired streetcar 20 miles north to Chatham on Booker Stone's flat-bed truck. The diner soon opened and continued business into the 1960s.

"Burnett's Diner represents a purely American form of building," said Roger G. Kennedy, Director of the National Park Service. "It is one of the finest surviving examples of a converted streetcar diner in Virginia and possibly in the eastern United States." Burnett's Diner was listed in the National Register of Historic Places on December 16, 1996.

Park.

The dedication also marked the beginning of a year-long series of events which will take place in 1997 to commemorate the park's 50th anniversary. The ceremony concluded with the presentation of the annual Ernest Coe award to Dante Fascell, who represented south Florida in the House of Representatives for 38 years and was instrumental in enhancing the protection of Everglades NP and creating Biscayne National Park, Florida Keys National Marine Sanctuary, and Key Deer National Wildlife Refuge.

Fascell also led efforts to restore the greater Everglades and south Florida ecosystems, and to obtain emergency funding for the post-hurricane recovery effort in south Dade County, including the funds to build the new visitor center. More than 300 people attended the December 6 dedication, which was followed by a reception and open house tour of the new facility.

### **Director Kennedy Resigns**

National Park Service Director Roger Kennedy announced his resignation January 13. Kennedy was

appointed by President Clinton in 1993. His resignation will not take effect until a successor has been confirmed by the Senate, a process that could take several weeks or months after a successor has been nominated by the President

"Roger has ably served the President, the professionals of the National Park Service, and the American people for four years in a manner which has exemplified the best of citizen service to one's country," said Secretary Babbitt.

country," said Secretary Babbitt. "It is with a great deal of respect and affection that I thank him for his service and wish him well. As Director, Roger has set a new standard of excellence in articulating the purpose of our diverse national park system to the public, the Congress and the world," Babbitt said. Never before have the parks had such an eloquent spokesman, advocate, and friend as Roger Kennedy."

Kennedy said, "Four years ago, I promised Secretary Babbitt that I would do my best to serve him, the President, and the National Park Service for a full four-year term. Having fulfilled that commitment, I have expressed to him my desire once again to



retire. Since he has asked me to remain in office until a successor can be confirmed, I have agreed,

grateful to serve a great Secretary and the splendid, patriotic people of the Service itself."

As Director, Kennedy led the Service through its first comprehensive restructuring since World War II; gave heightened emphasis to public education as a primary function of the Service; championed wilderness and ecosystem management of parks while stressing that all parks are cultural at their roots; successfully battled against efforts to dismantle the System; forged new, lasting

partnerships with the private sector in support of the parks; and upheld and renewed the Administration's commitment to enhance the careers of the professionals of the Service.

Kennedy is the 14th person to serve as Director of the National Park Service since the agency was established in 1916. The national park system today consists of some 374 units in 49 states, the District of Columbia and 5 territories. In 1995 the System enjoyed 274 million visits, spread among the 80 million acres managed by the 20,000 career professional employees of the Service.

### **Around the National Parks**

#### 100 Years of Gold!

The Centennial of the Klondike Gold Rush begins in earnest this summer, and **Klondike Gold Rush National Historical Park**, Alaska, is a must-see destination. The National Park Service manages the American side of the 33-mile Chilkoot Trail, the path to the Klondike for thousands of adventurers. More people are expected on the trail in 1997 than in any year since the Gold Rush. Figure on three to five days for hiking the trail. On July 5 in Skagway, the park will dedicate the newly restored Moore House. Bernard Moore was the co-founder of Skagway; the house contains exhibits and artifacts depicting the transition from Gold Rush boom town to family life. The Moore House is one of a dozen Gold Rush era buildings restored by the NPS.

#### Bears 'R Us

The Brooks River area of **Katmai National Park** in Alaska is the state's most popular brown bear viewing area, and growth in visitation is bringing changes that will make managing the human critters a little easier. The park will open a reservation system this winter for day visitors coming in the summer of 1997; campground reservations also are required. The NPS hopes to move buildings out of the critical bear habitat; they're sitting atop one of the state's great archaeological sites. There also are the other four million acres of Katmai lakes, fish, volcanoes, ocean coastline, and wild rivers to explore!

#### Russian America

#### A Glacier Adventure

Board a cruise ship in the morning, lecture as you glide up the bay looking at glaciers and an emerging glacial landscape, have a nice meal and motor home in the evening. This is the workday for several seasonal park rangers at **Glacier Bay National Park**, Alaska. Occasionally journalists come along to observe and are back at park headquarters in time for an evening kayak trip. They'll probably have seen whales, salmon, seals, and many seabirds, along with a sample of life on the cruise ships. While you can do it in a day, we recommend you slow down and report on the area over several days to get a feel for life in this 71-year-old park and the neighboring town of Gustavus.

#### Name Change at Coulee

**Coulee Dam National** Recreation Area (Washington State) was officially renamed Lake **Roosevelt National Recreation Area**, effective January 1. The name change more accurately reflects the primary resource being managed and removes the confusion visitors often experience when looking for Lake Roosevelt (as the irea has been kno regionally since 1946) or the Grand Coulee Dam.

# The Giants of Congaree Swamp

Congaree Swamp National Monument in South Carolina contains one of the tallest broad-leaved forests in the world, according to a recently completed study conducted in cooperation with the School of Forestry, Auburn University. The report says "no area in eastern North America has a greater concentration of super-tall trees (well over 10,000 acres with mean heights of dominants varying from 130 to over 160 feet)."

Resource manager **Rick Clark** noted that as a result of the study, 26 trees, representing 23 species, became new state champions, and four individuals from three species, including a possumhaw, two persimmons, and a water hickory, became national champions.

Virtually all other old-growth forests measured in eastern North America are smaller in extent and have much shorter trees. Congaree Swamp oldgrowth stands are impressive on a world-wide basis as well. They are taller than old-growth forests in Japan, virtually all of the temperate deciduous forests in Europe, and the Himalaya Mountains, and are similar to or taller than old-growth temperate forests of southern South America. Most tropical seasonal and dry forests are shorter than the Congaree Swamp old-growth. Even rich tropical rain forests are not much taller. Many have main canopy heights about the same as at Congaree Swamp, but have emergent species up to 200 feet or more in height.



#### **Mather Award**

The 1996 Stephen Tyng Mather Award was presented by the National Parks and Conservation Association to **Riley G. Hoggard** of Gulf Islands National Seashore, Texas. "Hoggard exemplifies the type of persistence a Mather award winner must have," said Association president **Carol Aten**. "He placed the welfare of the park above his own and fought for what was best for the resource against strong opposition."

Hoggard, a resource specialist and a native of Elizabeth City, North Carolina, has been with the National Park Service for almost 20 years and at Gulf Islands for three years. The battle to protect Gulf Islands began in October 1995, when Hurricane Opal destroyed a seven-mile section of Highway 399. Hoggard and others saw this act of nature as an opportunity to move the

Once the capital of Russian America, Sitka, Alaska, is now a year-round destination for visitors from around the world. **Sitka National Historical Park** features the Russian Bishop's House, one of the few remaining buildings from the Russian colonial period. The park has an easy walking trail past several historical totem poles, and the park headquarters houses a museum and visitor center, and hosts the Southeast Alaska Indian Cultural Center where local Native artisans practice many of the traditional Southeast Alaska arts.



road to a better location.

If moved, the road would no longer impede the natural migration of the sand dunes. According to Hoggard, if the road was rebuilt in the same location, it would result in an artificially steep beach which could adversely affect the sea turtles and other animal life that inhabit or visit the park. About ten months later, the Service decided moving the road was the best idea and relocation was scheduled.

Curious and honest visitors were critical to a new fossil find in Badlands. In late October, when they reported their find at the Buffalo Gap National Grasslands Visitor Center in Wall, South Dakota, they set off a series of actions to protect the find and learn more about the site. The visitors, who didn't leave their names, drew a map so that others could find the site; then Grasslands staff called **John Donaldson**, Cedar Pass District Ranger at Badlands, and he picked up the fossil in Wall and reported the find to park paleontologist **Rachel Benton**.

Visitors Discover Ancient Fossil

In early November, the first fossil specimen of a Mosasaur in the park was verified. Part of the jaw and some vertebrae were recovered. This marine lizard lived in a sea about 75 million years ago and fed on fish. **Dr. Gordon Bell**, visiting professor at the South Dakota School of Mines and Technology and a Mosasaur expert, was on the field team. The individual found was a juvenile about 15 feet long, perhaps half of adult size. Benton hopes additional fossil material and more stratigraphic information will be revealed during field work this spring

### **U.S. Fish and Wildlife Service**



John G. Rogers, Acting Director Janet L. Carroll, Bureau Editor

#### Stewardship Award to Champion International

Mitch Snow

**Secretary Babbitt** recently presented the U.S. Fish and Wildlife Service Corporate Stewardship Award to Champion International Corporation of Stamford, Connecticut, in recognition of the company's outstanding contributions to fish and wildlife conservation.

Champion has supported a range of activities designed to protect endangered and threatened species and their habitats over the past several years. The company's efforts include adopting specialized land management techniques that benefit birds and fish and educational programs for their employees and contractors.

In 1994, Champion signed a cooperative agreement with the Service, the USDA Forest Service, and the State of Texas to advance restoration goals for the endangered redcockaded woodpecker.

Under the agreement, Champion manages 2,000 acres of its Brushy Creek Wildlife Management Area in east Texas to protect existing woodpecker colonies and to provide additional nesting habitat for transplanted woodpeckers. The company has also built and installed artificial nesting cavities, conducted prescribed burns, and established open stands of longleaf pine to benefit the woodpecker.

In its role as one of Maine's major forest landowners, Champion helped establish the Salmon Habitat and River Enhancement, or SHARE, Project. SHARE has become a focal point in developing cooperative solutions to conserving Atlantic salmon.

As part of this effort, Champion contributed funds, personnel, and equipment to map salmon habitat, clear obstacles to spawning, repair water control structures, and build and tend weirs to track returning fish.

Champion has also worked with the Service to arrange or fund endangered species training for its contract loggers. It produced an illustrated guidebook to endangered species in Alabama and developed a series of educational videotapes about endangered species in the South. Because of the success of these ongoing efforts, Champion is developing endangered species guidebooks for each of the 17 states in which it operates. The Mexican wolf is among the smallest of North American gray wolves.

# **Returning El Lobo to the Southwest**

Tom Bauer and Megan Durham

The Fish and Wildlife Service has recommended reintroducing Mexican gray wolves, now extinct in the wild in the United States, to part of their historic range on public lands in Arizona and New Mexico. The wolves would be classified as a "nonessential experimental" population under the Endangered Species Act, a provision that would allow them to be managed with fewer restrictions than those normally covering endangered species.

The recommendation came in a final environmental impact statement issued December 19. If the plan is approved, Mexican wolves would be released first in eastern Arizona's Apache National Forest and allowed to disperse into Gila National Forest in New Mexico. The combined Apache and Gila national forests comprise the Blue Range Wolf Recovery Area. If deemed necessary and feasible, other wolves could later be released at the White Sands Missile Range in New Mexico.

Under this plan, the wolf recovery areas will include only public lands. If wolves move beyond the



recovery area boundaries onto private or Tribal lands, they would be removed unless the land owners want them to remain. The wolves that would be released would come from a captive population maintained in zoos, wildlife sanctuaries, and other facilities in the United States and Mexico.

The Mexican wolf, also known as the "lobo," is among the smallest of North American gray wolves. Adults weight 50 to 90 pounds, average 4-1/2 to 5-1/2 feet in total length, and reach 26 to 32 inches in height at the shoulder. Its pelt color varies. It is genetically distinct from all other wolves and is one of the rarest subspecies of gray wolf in the world. Intensive predator removal efforts from the late 1800s to the mid-1900s extirpated this wolf from the U.S. portion of its range. Its status in Mexico is uncertain but there have been no documented sightings since 1980. It was listed as "endangered" under the U.S. Endangered Species Act in 1976. There are currently 149 Mexican gray wolves in captivity.

### **Peabody Makes Way for Duck Stamps**

#### Janet Tennyson

The famous ducks in the Peabody Orlando Hotel's lobby fountain are helping feather the nests of their wild cousins. In a first-of-its-kind partnership with the Fish and Wildlife Service, Peabody Orlando recently agreed to make Duck Stamps available for sale the hotel lobby. "The Peabody partnership will help us expand on the Federal Duck Stamp's tremendous success in protecting millions of acres of waterfowl habitat," said **Robert Lesino**, chief of the Federal Duck Stamp Program.

The Peabody Orlando in Florida and its sister hotel, the Peabody Memphis in Tennessee, are world-famous for their fountain-dwelling, farmraised mallards and duck decor. Beginning with a prank in the 1930s, when the manager of Peabody Memphis and his hunting partner placed live ducks in the fountain, the hotel's waterfowl theme now extends to duck-shaped soaps, butter pats, and stationery, as well as eateries named Dux and Quackers.

The Peabody ducks are much-sought-after celebrities, making visits to local schools, clubs, and charities. "Through the Peabody Orlando ducks, we are able to talk to children about caring for and respecting all living creatures and how they can positively impact our environment," said **Alan C. Villaverde**, Peabody Hotel vice president and general manager. "Selling the Federal Duck Stamp was a natural extension of Peabody Hotel's commitment to promoting wildlife conservation."

On January 27, Lesino and Robert Hautman of Plymouth, Minnesota, winner of the 1996 Federal Duck Stamp Contest, visited the Peabody Orlando during an exhibit of the top 20 1996 contest entries. They discussed the Federal Duck Stamp program with members of the Society of American Travel Writers.

# Reptile Smuggler Sentenced

#### Anne-Berry Wade

One of the most severe sentences ever handed down in a reptile smuggling case was imposed against a German national involved in an international smuggling ring. In Orlando, Florida, on January 10 federal **Judge Ann Conway** sentenced **Wolfgang Michael Kloe**, 33, of Rauenberg, Germany, to serve 46 months in jail for his role in a reptile smuggling scheme. Kloe was also fined \$10,000. **Simon David Harris**, 25, of Blairgowrie, South Africa, and a partner in the smuggling conspiracy, received 3 years probation and 6 months in a community corrections facility. A federal grand jury indicted Kloe, Harris, and four others for participating in a wildlife smuggling operation that moved hundreds of protected reptiles from Madagascar through Europe and Canada into the United States. During a two-year period, these individuals smuggled at least 107 Madagascar tree boas, 25 spider tortoises, 51 radiated tortoises, and two Madagascar ground boas into the United States where they were purchased by collectors of exotic reptiles and commercial reptile breeders.



Dick Olson, left, chairman and chief executive officer of Champion International Corporation, and Dick Porterfield, center, the company's executive vice-president, accept the U.S. Fish and Wildlife Service's Corporate Stewardship Award from Secretary Babbitt in a ceremony in Washington, D.C. On August 14, 1996, Orlando International Airport officials found 61 Madagascar tree boas and four spider tortoises concealed in Harris' personal baggage. Harris had arrived on a commercial flight from Frankfurt, Germany, to attend a large commercial reptile trade show. He cooperated with the investigators and identified Kloe as the intended recipient of the smuggled reptiles. Kloe was arrested two days later. The wildlife seized in this case had an estimated commercial value of more than \$250,000. The United States is the world's largest importer of wildlife and the demand for live reptiles has increased rapidly in the past few years.

These species occur naturally only in Madagascar and are protected under the Convention on International Trade in Endangered Species and Wild Fauna and Flora (CITES), an international treaty signed by more than 130 nations designed to regulate and monitor the trade of rare plants and animals throughout the world. The radiated tortoise is also classified as endangered. It is considered one of the most brilliant species of tortoises, with a bright yellow head and high-domed black shell with yellow starburst designs. In October, Kloe pleaded guilty to smuggling, conspiracy, Lacey Act violations, money laundering, and attempted escape. The United States has begun extradition procedures against defendant Enrico Joseph Truant of Windsor, Ontario, Canada. Other defendants not yet arraigned are Frank H. Lehmeyer, Roland Werner, and Olaf Strohmann, all of Germany.

### Mummichogs, Mosquitos, and Good Intentions



It seemed like the right thing to do at the time—in the depths of the depression, when legions of workers were unemployed. A national public works project in Maine dug ditches to drain marshes on and near what is now the Rachel Carson National Wildlife Refuge.

"The ditches were constructed to remove mosquito breeding areas," said **Jan Taylor**, a U.S. Fish and Wildlife Service biologist for the northeast. "However, the work often improved mosquito habitat instead. Once marshes were drained, habitat that once supported mummichogs, a fish that naturally feeds on marsh mosquitos, deteriorated," Taylor explained. "Without mummichogs, the number of marsh mosquitoes noticeably increased."

Coastal marshes drained for mosquito control, salt hay production, and other kinds of development also have led to a decline in many kinds of wildlife—including herons, bitterns, shorebirds, and ducks —that depend on wetlands for breeding, migration, and wintering. "Wetlands were once considered wastelands, so many areas were drained,

### Ducks Soared, Buffalo Roamed, Condors Flew

#### Rachel Levin and Mitch Snow

The past year offered many bright spots for species from buffalo to butterflies. "The American people are making an impressive effort to restore wildlife across the Nation," said Acting Fish and Wildlife Service **Director John Rogers**. "At each year's end, we take a moment to reflect on some of the good news that people may have overlooked during the busy year."

Among wildlife's good news stories in 1996:

An estimated 90 million **ducks** flew south from their northern nesting grounds, the highest figure since the Service began estimating the fall flight in the 1950s.

Striped bass are rebounding along the Atlantic seaboard. There are more juvenile **striped bass** in the Chesapeake Bay this year than at any time in the last 43 years.

ditched, and developed, creating a whole host of unexpected problems," Taylor said.

However, the staff of Rachel Carson National Wildlife Refuge have joined with a private landowner and a local contractor on a project to restore 17 acres of these degraded salt marshes and solve some of those problems.

"The project is designed to restore the diversity and native vegetation of coastal wetlands, enhance migratory bird habitat, and return mosquito-eating fish to marshes in three environmentally important areas," said Refuge Manager **Ward Feurt**. "Once the beneficial results of this work are evident, we look forward to helping other interested private landowners with the technical help they need to complete restoration projects on their lands."

The private contractor, SWAMP Inc. (Save the Wetlands and Manage Pests) is using three methods to bring water back to the wetlands. The main effort is digging pond holes to provide healthy habitat for minnows, other small fish, and underwater aquatic

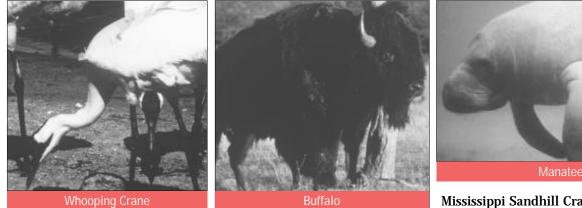
At left, Ward Feurt, left, the manager of the Rachel Carson National Wildlife Refuge, joins Jan Taylor, a U.S. Fish and Wildlife biologist, at a briefing on the cooperative effort to restore salt marshes, at far left, near the Maine towns of Kittery and York.

plants. Plugs made of clean mud are then used to fill sections of the old drainage ditches to allow water to back up and form the large pools or ponds. Finally, small connecting ditches are dug, allowing fish and other wildlife to get to the different ponds of water.

These permanent pools with small deep reservoirs will support larger populations of mummichogs. That should cause the mosquito population to decline. Pools with gently sloping banks also will encourage the growth of many kinds of emergent plants, provide habitat for invertebrates, and produce valuable wildlife habitat for migratory birds.

The work at the two refuge sites in the towns of Kittery and York is funded by the North American Waterfowl Management Plan, a federally-sponsored international program that protects and enhances habitat for migratory waterfowl. The Service's Partners for Wildlife program provided the money to restore the privately held land. The program works directly with willing landowners to restore important habitat for wildlife on their land.

At all three sites, the Service contributed a trained equipment operator and specialized lightweight equipment designed for use in fragile salt marshes. Service biologists will monitor the sites before and after the restoration work to ensure that the objectives are being realized. The Service hopes to restore more than 40 additional acres of saltmarsh wetlands next year, Taylor said.



The Service produced and distributed approximately 165 million **fish** and 140 million eggs from national fish hatcheries to restore and enhance the Nation's fishery resources. Aggressive stocking programs combined with efforts to control the sea lamprey and improve water quality resulted in the restoration of Lake Superior **lake trout**. In FY 1996, the Service discontinued stocking lake trout into Lake Superior. It will increase its efforts on the other Great Lakes.

Reintroduction of the **gray wolf** in Yellowstone National Park in Wyoming and in central Idaho has been so successful that no new releases will be made in either area in 1997. Wolf recovery team leaders say that further wolf releases will be considered on a year-by-year basis. Mississippi Sandhill Crane National Wildlife Refuge, where most of the

remaining wild population of this endangered crane resides, reported a record 13 nesting pairs in 1996, the highest number of nesting pairs recorded in 30 years of monitoring. Today there are 95 Mississippi **sandhill cranes** in this country, 23 of them hatched in the wild, compared to only 30 in existence in 1975.

About 170 **whooping cranes** are expected to arrive this year at Aransas National Wildlife Refuge in Texas, up from 158 last year. Only 16 whooping cranes were left in the wild in the 1940s.

**Despite losses last winter caused by red tide along Florida's southwest coast, manatees** are doing well at Crystal River National Wildlife Refuge in Florida and populations may top last year's record high of 304 animals. By the end of November, 283 manatees had already congregated in the warm waters of the Gulf of Mexico.

Six **California condors** were released into the wild in northern Arizona after an absence of 72 years. The six condors, which were bred in captivity in California and Idaho, were held in acclimation pens at the release site for several weeks before they were set free in mid-December. The huge birds nearly became extinct during the 1980s and have been restored through captive-breeding in zoos and releases to their former range.

For the first time since the mid-19th Century, **buffalo** are again home on the range in Iowa amid the tall prairie grasses of Walnut Creek National Wildlife Refuge near Des Moines. Fourteen buffalo from herds at Wichita Mountains National Wildlife Refuge in Oklahoma and Ft. Niobrara National Wildlife Refuge in Nebraska were brought to Walnut Creek. The Service hopes the Walnut Creek herd will eventually number 100-150. Eighty-two young **bald eagles** were fledged from 58 active nest sites at the Upper Mississippi River National Wildlife and Fish Refuge in Minnesota. Nine of the nests produced triplets. By comparison, in 1986, there were nine active nests, each producing only one young.

In August, biologists reported the first recorded breeding of northern **fur seals** on the Farallon Islands off California since 1817. Biologists observed a bull, several females, and a pup on West End, a wilderness area of the Farallon National Wildlife Refuge, 30 miles west of San Francisco's Golden Gate Bridge. San Miguel Island in the Channel Islands is the only other northern fur seal breeding colony in California. More than 250 endangered **Schaus swallowtail butterflies** were released into their historic habitat near Miami. The butterfly, which occurs only in Florida, was on the verge of extinction in 1991; populations have been on the rise since mosquito spraying was halted on northern Key Largo during the Schaus breeding season.

Endangered **black-footed ferrets** are now breeding in the wild. Surveys at Charles M. Russell Refuge near Lewistown, Montana, confirmed the presence of approximately 20 black-footed ferret kits in 7 to 9 new litters. At least two of the litters were born to last year's wild-born females.