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## Refuge Update – September/October 2004, Volume 1, Number 5

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National Wilderness Preservation System protects more than 105.7 million acres, including more than 20 million acres on 65 refuges.

RefugeUpdate

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“Conservation in Action” Theme Dominated National Wildlife Refuge Week



Hundreds of visitors traveled to Prime Hook NWR, DE, on Oct. 9 for the 3rd Annual Waterfowl Festival, part of the nationwide celebration of National Wildlife Refuge Week. The festival featured live music, guided hikes and canoe trips, among other events. (USFWS)



Volunteer Zeeger de Wilde, right, assisted a family in observing eagles during his eagle proual program at the 9th Annual Open House held Oct. 2 at Blackwater NWR, MD, in celebration of National Wildlife Refuge Week. (Maggie Briggs/USFWS)

“Conservation in Action” was the theme for the celebration of National Wildlife Refuge Week, Oct. 10-16, as thousands of people were introduced to the National Wildlife Refuge System at wildlife refuges that staged special events across the country.

- At Sherburne NWR, MN, visitors to the Wildlife Festival took horse-drawn hayrides and attended archery and air-rifle workshops.
Shark Day at Don Edwards San Francisco Bay NWR, CA, Oct. 16 gave thousands of people the chance to touch sharks and make shark tooth necklaces.
About 2,000 students entered the Youth Art Contest, open to grades K-12 in Johnston County, at Tishomingo

NWR, OK. The winner was announced Oct. 15. The Chickasaw Nation of Oklahoma and Citizens for the Protection of the Arbuckle-Simpson Aquifer sponsored the contest.

- Daily tours Oct. 13-15 brought scores of people for their first look at St. Vincent NWR, FL, the last undeveloped barrier island just offshore from the Apalachicola River.

National Wildlife Refuge Week was celebrated in Washington, DC, with a Refuge System reception at the Smithsonian Institution’s National Museum of Natural History, where portions of the acclaimed film Winged Migration were aired. The Refuge System’s history of protecting habitat for



# From the Director

## A Lasting Respect for Resources

**When I was growing up,** I often hunted and fished with my

dad. In more recent years, some of my greatest times with my son have been spent the same way.

Being outdoors in the crisp of an autumn morning, waiting quietly for a deer or scanning the sky for ducks, are times that allow parents and youngsters to bond while instilling a lasting respect for wild things and wild places.

I am proud to direct an agency that manages fish and wildlife populations, conserves and restores habitat, and offers hunting on more than 300 national wildlife refuges and wetland management districts.

Many of the earliest leaders of the conservation movement were hunters, and hunters continue to be vital to the North American conservation model. With the U.S. population expected to nearly double by the middle of this

century, the pressures on our natural resources will increase. Accordingly, it is crucial that we recruit new hunters while retaining the ones we already have.

We have worked through many avenues to spark an interest, appreciation and understanding of hunting. For example, through our Federal Assistance Program, the Service has provided a stable source of funding for hunter education programs. In fiscal year 2003 alone, the Service distributed more than \$14 million for hunter education. I can't think of a better way to spend Pittman-Robertson money that came from excise taxes on firearms, ammunition, bows and arrows. Working with the International Hunter Education Association, we are reaching kids through the Internet.

At the same time, scores of national wildlife refuges partner with states and nonprofit organizations to offer special youth hunts as well as hunts for people with disabilities. I thank the hundreds of employees and volunteers involved.

On another front, the Refuge System and the Service's Federal Assistance Program have worked with the Bowhunting Preservation Alliance and ArrowSport to encourage bowhunting, where compatible on national wildlife refuges.

I cannot list all the ways we support and encourage hunting. But I do believe that doing so is very important. Hunters are an essential component of our constituency and will play an important role in the Refuge System's future. By igniting and facilitating an interest in hunting, we help further the mission of wildlife conservation and the National Wildlife Refuge System.

This issue of *Refuge Update* gives you a flavor of hunting on wildlife refuges, but it hardly gives you a taste for the experience of seeing the mist rise from an isolated wetland as wings whistle overhead, or the magnificent bugle of a bull elk breaking through the mountain air. Hunting on a national wildlife refuge will provide memories that will last a lifetime.

— Steve Williams



## Chief's Corner

### *The Best Public Lands in the World*

As one hurricane after another pummeled Florida in August and

September, staff from the National Wildlife Refuge System and the Fish and Wildlife Service showed their mettle, motivation, training and dedication – making a real difference in people's lives. We have every reason to be proud.

Aug. 14. They worked around the clock to help local police secure homes and businesses.

About 90 refuge fire and other staff used 20 refuge-owned pieces of heavy equipment to help clear hundreds of downed trees and debris from power lines and roads across Sanibel and Captiva islands. The state of Florida thanked us for transforming what could have been six to eight weeks of work into a four-day job.

More than 50 employees from the Southeast, Southwest, Midwest and California used their skills to help Florida residents

*continued pg 20*

September, staff from the National Wildlife Refuge System and the Fish and Wildlife Service showed their mettle, motivation, training and dedication – making a real difference in people's lives. We have every reason to be proud.

Eight Refuge law enforcement officers from the Southeast Region Special Operations Response Team arrived just seven hours after getting the call on

# RefugeUpdate

*Gale Norton*  
Secretary of the Interior

*Steve Williams*  
Director – U.S. Fish and Wildlife Service

*William Hartwig*  
Assistant Director – National Wildlife Refuge System

*Larry Williams*  
Publisher

*Martha Nudel*  
Editor in Chief

*Bill Ballou*  
Graphic Design Coordinator

*Address editorial inquiries to:*  
Refuge Update  
USFWS-NWRS  
4401 North Fairfax Dr.,  
Room 634C  
Arlington, VA  
22203-1610  
Phone: 703-358-1858  
Fax: 703-358-2517  
E-mail:  
RefugeUpdate@fws.gov

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# Breton Refuge Celebrates Centennial

*Roosevelt's 1915 Expedition Recalled*



*Breton NWR, LA, provides habitat for nesting and wintering seabirds, including black skimmers. The refuge also protects the wilderness character of the islands and provides sandy beach habitat for a variety of other wildlife species. (Marie Celino)*

**The nation's second oldest** national wildlife refuge – Breton NWR, LA – celebrated its 100th birthday Oct. 4, but the festivities began earlier when Theodore Roosevelt IV, President Theodore Roosevelt's great-grandson, joined dignitaries June 25 to commemorate Roosevelt's historic 1915 expedition to the refuge.

Breton NWR is the only national wildlife refuge visited by Roosevelt, who established the National Wildlife Refuge System and 53 individual refuges.

Like Pelican Island, the first national wildlife refuge Roosevelt established, Breton Refuge was created at the urging of the Audubon Society. Pelicans, egrets and other shore birds and their eggs were being destroyed on Chandeleur and Breton islands. A day after hearing about the destruction, Roosevelt declared a number of the islands as Breton Bird Reservation.

In June 1915, members of the Audubon Society and the Louisiana Conservation Commission escorted Roosevelt and his

friend and political ally John Parker on a five-day journey to Breton. Parker became Louisiana's governor in 1920.

Roosevelt wrote about his trip in an autobiography, *A Book Lover's Holiday in the Open*. "I was very glad to have seen this bird refuge," Roosevelt recorded. "With care and protection the birds will increase and grow tamer and tamer, until it will be possible for any one to make trips among these reserves and refuges, and to see as much as we saw, at even closer quarters. No sight more beautiful and more interesting could be imagined."

Despite shifting coastal sands and Gulf coastal storms, Breton Refuge today looks much as it did when Roosevelt walked its shores. Breton's estuarine marshes, barrier island beaches, dunes and saltwater mudflats are home to a variety of wildlife, including the eastern United States' largest nesting colony of endangered Eastern brown pelicans – Louisiana's state bird.

Spanning about 5,000 acres of barrier islands in the Chandeleur chain off the eastern coast of Louisiana, Breton

Refuge's islands are remnants of the Mississippi River's former St. Bernard Delta, which was active about 2,000 years ago. All federally owned lands within Breton Refuge, except North Breton Island, became part of the National Wilderness Preservation System on Jan. 3, 1975. The waters surrounding Breton Refuge provide some of Louisiana's best commercial and recreational fishing.

To celebrate all that, Theodore Roosevelt IV, Robert Perciasepe of the Audubon Society and Blanc Parker, John Parker's grandson, joined USFWS Southeast Regional Director Sam D. Hamilton and Sidney Coffee from the Louisiana Governor's Office of Coastal Activities in the June ceremony. They celebrated Roosevelt's conservation legacy and recognized the importance of Breton today in protecting Louisiana's wetland resources.

"As President Roosevelt recognized 100 years ago, Breton Island represents the diversity of habitat that we are trying so desperately to protect and restore," said Louisiana Gov. Kathleen Babineaux Blanco. "I salute the efforts of the National Audubon Society in raising awareness of this important piece of coastal Louisiana and applaud the U.S. Fish and Wildlife Service and its refuge managers for preserving this pristine island for future generations." ♦



*More than 10,000 brown pelicans have been recorded as nesting on Breton NWR, LA. Bird colony and nest counts are performed yearly to determine population densities and dynamics. (Marie Celino)*

# Patuxent Refuge Manager Honored Nationally



*Brad Knudsen, refuge manager at Patuxent Research Refuge, MD, was one of five Interior Department employees who received the 2004 National Take Pride in America Federal Land Manager Award Sept. 13.*

**Brad Knudsen**, refuge manager at Patuxent Research Refuge, MD, was one of five Interior Department employees who received the 2004 National Take Pride in America Federal Land Manager Award. Presented annually, the Take Pride in America national awards recognize outstanding volunteer projects and efforts.

“These land managers have taken extraordinary steps to build strong and effective partnerships between citizen volunteers and professional staff,” Department of the Interior Secretary Gale Norton said, presenting the awards Sept. 13. “By harnessing this limitless volunteer potential at the places we enjoy, we have seen tremendous accomplishments and are building a lasting legacy of responsibility and community.”

“I was thrilled to receive the award,” said Knudsen, who has been Patuxent Refuge manager since August 2000. He has worked for the USFWS for 24 years, all but four of them with the Refuge System.

Under Knudsen's leadership, Patuxent Research Refuge hosts the most successful volunteer program in the USFWS' Northeast Region. Last year, 357 volunteers donated more than 34,000 hours in almost every aspect of the refuge's operation. The volunteer hours equate to more than 16 full-time staff positions.

“Our volunteers do everything, from biology and environmental education to

interpretation and delivering all the ‘Big Six’ wildlife-dependent recreation to the public,” Knudsen continued. “Anything you can picture happening on a national wildlife refuge has a volunteer component – except active law enforcement, of course. But they serve as are our eyes and ears in many ways while on the refuge, whether it is picking up litter; checking nest boxes or doing trail maintenance.”

One of the most outstanding aspects of Patuxent's volunteer program is its agreement with the Meade Natural Heritage Association, which helps the refuge manage one of the largest federal public hunting programs, as measured by season length and the number of hunters.

Knudsen believes some key approaches enhance a volunteer program:

- 🍃 Promote the volunteer program through many avenues, including newsletters, on the Web and at community events. Patuxent Refuge, for example, has a booth annually at a Bowie Bay Sox baseball game.
- 🍃 Match a volunteer's interests as closely as possible with appropriate projects. “Sometimes, we don't have room for everyone who wants to go on a wildlife survey, but you have to keep your volunteers happy and engaged.” ◆

## Refuge Week—*from pg 1*

migratory birds was highlighted at the reception by an exhibit of Duck Stamp art, coming just a week after the 2004 Duck Stamp contest winner was announced.

Illustrator and author David Sibley, who has turned millions of Americans into enthused birders, was honored for his conservation work as was Dr. Leigh Fredrickson, a renowned scientist whose research has focused on management of waterbirds and wetlands for more than 30 years.

Also honored were Rep. Jim Saxton (R-NJ), a staunch supporter of the Refuge System and an author of the National Wildlife Refuge System Improvement Act of 1997, and Martin MacDonald, vice president of Bass Pro Shops, Inc., which has partnered with the USFWS for several years. Bass Pro Shops has held several Nights of Conservation at the openings of new stores, earmarking a portion of the opening day sales receipts to national wildlife refuges in the community.



Clarence "C.S." Johnson with his hounds. (USFWS)

In the Words of 'C.S.' Johnson ... Gone From Seney Refuge, but Not Forgotten *has been painstakingly drawn from 14 years' worth of narrative reports at the famed northern Michigan refuge*

## Gone from Seney Refuge But Not Forgotten

By David Klinger

**Narrative reports** have been the bane of many a national wildlife refuge manager. But one storied giant of the Refuge System employed the annual reporting system to record thoughts and impressions of life on his station in prose so evocative that, a half-century later, it retains its ability to charm and beguile.

The writings of Clarence "C.S." Johnson have been compiled and reissued by the National Conservation Training Center in a small booklet edited by another contemporary star of the Refuge System, 91-year-old Elizabeth Browne Losey.

*In the Words of 'C.S.' Johnson ... Gone From Seney Refuge, but Not Forgotten* has been painstakingly drawn from 14

years' worth of narrative reports at the famed northern Michigan refuge, crucible to so much applied wildlife research since its establishment in 1935. The refuge was a training ground for dozens of managers whose experiences at Seney continue to shape the Refuge System.

The 29-page booklet records Johnson's successes and failures at coaxing the 153-square-mile landscape of burned and denuded Upper Peninsula pine forest back to health in the midst of the Great Depression. Johnson's unvarnished frustrations with tight budgets, oversight from his regional office and supervision of an especially contentious camp for conscientious objectors during World War II are related from journal entries that were faithfully recorded by a manager who lived by his innate common sense in

an era of hardship and privation.

Losey has spent most of her professional life in and around Seney Refuge, where she was hired in 1947 by Refuge System Chief J. Clark Salyer to become the USFWS' first female field research biologist. An accomplished biologist, historian and chronicler of the early North American fur trade, Losey is a volunteer at Seney Refuge. She remains active in field research, writing and photography.

Single copies of the booklet are available from USFWS Historian Mark Madison, 304-876-7276. ♦

*David Klinger is the senior writer-editor at the National Conservation Training Center, WV.*

"Wildlife refuges are not just critically important for wildlife, but they are important for the health of families and communities," noted USFWS Director Steve Williams. "There is no better place to reconnect with both wildlife and the family than on a wildlife refuge. Some of my best hours have been spent hunting and fishing on national wildlife refuges."

"We were thrilled to see so many people visiting a wildlife refuge during National

Wildlife Refuge Week," noted National Wildlife Refuge System Chief Bill Hartwig. "We encouraged people not just to visit, but to volunteer their time and talent. Wildlife refuges can engage a person's skills, passion and imagination." ♦

*Entrants in the woolly caterpillar race at Blackwater NWR, MD, prepared their caterpillars at the starting line during the 9th Annual Open House Oct. 2 in celebration of National Wildlife Refuge Week. (Maggie Briggs/USFWS)*



# Around the Refuge System



Lower Suwannee NWR, FL, Assistant Refuge Manager Mike Mitchell, left, and Wildlife Biologist Steve Barlow searched the refuge's 15,000-acre salt marsh to find three salt marsh voles, one of the world's most rare mammals. (USFWS Photo)

**Wildlife biologists** at the Lower Suwannee NWR, FL, in April found three endangered salt marsh voles, one of the world's most rare mammals. Prior to the discovery, just one population of the sub-species had been identified anywhere in the world: 15 were captured in 1979-80 in Waccassassa Bay, about seven miles south of the refuge boundary. The voles are mouse-like, brown animals that weigh about an ounce and live under seashore salt grass.

Although other researchers had searched Florida's Big Bend Region for voles since 1980, none succeeded until Wildlife Biologist Steve Barlow searched the refuge's 15,000 acres of salt marsh. To find potential sites, he evaluated plant composition, patch size, proximity to Waccassassa Bay, and protection from the Gulf of Mexico. Then he picked Assistant Refuge Manager Mike Mitchell to apply his trapping skills.

Scientists not associated with the USFWS verified the animals as salt marsh voles.

A trapping survey at a new site in July yielded no new finds, but Barlow and Mitchell plan to launch new searches and conduct detailed life history studies on the known population to get a better idea of their habitat needs and population density.

**Ronald Fowler**, coordinator of the Land Acquisition Priority System with the Refuge System's Division of Realty, celebrated 40 years of service with the USFWS on Aug. 14. He began his career as assistant manager at Delta NWR, LA. After serving in the Army in both Korea and Vietnam, Fowler worked at Mattamuskeet NWR, NC, and as assistant manager at Okefenokee NWR, GA. Over the span of his career, he worked in the Ecological Services Field Office in Lafayette, LA, and in the Washington Office of the Division of Refuge Management.

"I've been fortunate on this long journey to have some great role models," Fowler noted. "When you go to the National Conservation Training Center in West Virginia, take note of the portraits on the wall in the cafeteria. They depict people who have made wonderful contributions and who have been role models for all of us."



## The Migratory Bird Conservation Commission in

early September approved more than \$27 million for wetland habitat conservation, including acquisition of several important parcels for migratory bird habitat in the Refuge System:

- The Conservation Fund and the Gordon and Betty Moore Foundation will receive \$750,000 and contribute up to \$1.5 million for Phase III of the Izembek Refuge Complex, AK, to conserve more than 18,000 acres of wetlands.
- The USFWS, American Electric Power and The Conservation Fund will receive \$1 million and contribute up to \$2.2 million for restoration and expansion of Catahoula NWR, LA, to conserve more than 6,400 acres.

- Acquisition of nearly 11,000 acres to protect bottomland hardwood forest in the Tensas River NWR, LA.

Sen. Blanche L. Lincoln (D-AR) has been appointed to replace retiring Sen. John B. Breaux (D-LA) on the commission.

## Great Lakes/Big Rivers (Region 3)

Realty Chief Patrick G. Carroll received the Rudolph Dieffenbach Award at the National Wildlife Refuge System Leadership Meeting Aug. 12. He was cited for his considerable involvement in authoring Director's Order No. 164, which authorized an alternative valuation method in the acquisition of low-value, minimally restrictive wetland and grassland easements funded under the Migratory Bird Conservation Fund.

This method has cut down to a few days what once took more than eight weeks. The new process makes the Small Wetlands Acquisition Program more effective and is critical in helping the USFWS acquire high-quality habitat for migratory birds.

The Dieffenbach Award is one of three awards presented annually by the Division of Realty to honor Realty staff, USFWS employees, partner organizations and others for outstanding contributions to the Refuge System's land protection mission. It was named for the man who managed the Branch of Lands from 1929-47 and served as the first secretary of the Migratory Bird Conservation Commission.

# Connecting Nature to Social History in South Carolina

*On the Land, In the Classroom*

The air was still moist on the April 27 morning when the USFWS staff waited on Sandy Island, SC, for 57 students from Waccamaw Middle School, part of the 170 students to take extraordinary day-long explorations of the 12,000-acre island that lies in the heart of the Waccamaw NWR acquisition boundary.

The day crowned eight months of environmental study under the “Environment as the Integrating Context for Learning” (EIC) model, created by the State Education and Environmental Roundtable (SEER) to teach youngsters the natural and cultural history of Sandy Island.

Equally important, the program showed what a relatively new refuge – Waccamaw Refuge was established in December 1997 – with just one permanent employee can do when it joins forces with partners. “This collaboration shows how committed Service employees are to our cause, even beyond the refuge boundaries,” stressed Refuge Manager Craig Sasser.

Sasser, a SEER mentor during the program’s first year, provided the middle school with information and a video depicting conservation successes at Winyah Bay Focus Area. SEER is a cooperative of 16 states’ departments of education that seek to integrate environmental studies into the K-12 curricula.



Waccamaw Middle School is one of 11 South Carolina middle schools in the EIC program, which uses natural and community surroundings to foster an understanding of the interrelationships among natural and social systems. Guided by teachers and other members of an instructional team, students personalize the curriculum to develop basic life skills, citizenship and problem solving skills while learning about natural systems.

South Eastern Wildlife Environmental Education Association (SEWEE) partnered with the USFWS to bring students to the island, located between the lower reaches of the Waccamaw and Pee Dee rivers, whose rice plantations once made Georgetown County and South Carolina among the nation’s richest agricultural communities.

Sandy Island is home to about 140 residents, descendants of slaves. The island has no paved roads. Its wetlands are among the world’s most diverse. The South Carolina Department of Transportation owns nearly 9,200 acres, managed by The Nature Conservancy (TNC). Eventually, the entire island will be permanently conserved by TNC.

Here, students can see on the land what they learn in the classroom.

Staff from Waccamaw, Santee and Cape Romain refuges talked to the students about the island’s natural resources and conservation practices. Sasser discussed “Carolina gold”– the rice crop – and how the slaves built wooden rice trunk and dikes to control water flow to the fields. Trunks are still used to control water levels in refuge impoundments.

*Waccamaw NWR, SC, Manager Craig Sasser, far right, talked to students about “Carolina gold,” the rice once raised by slaves that made the state one of the nation’s most important agricultural centers. (USFWS)*



*SEWEE Educator Molly Olson led students as part of their scientific observation, challenging them to use their senses to find the elusive “pipe lizards,” pipe cleaners placed along a short stretch of trail. The students were asked to discuss the importance of color to an animal’s survival. (USFWS)*

Students sat on the porch of the former schoolhouse. There, they examined skulls of animals typically found in the coastal ecosystem. “Look at the teeth to tell whether the animal was a carnivore, omnivore or herbivore,” advised SEWEE Associate Director Karen Beshears and Charleston Ecological Services Outreach Specialist Jennifer Koches.

Surrounded by longleaf pines, Santee Refuge Park Ranger Kay McCutcheon and Cape Romain Refuge Park Ranger Tricia Lynch introduced students to the endangered red cockaded woodpecker and its recovery programs, including creation of artificial cavities and prescribed burns to enhance habitat.

Waccamaw Middle School students saw firsthand the beautiful, remote island where their Sandy Island classmates live and how they catch a “school boat” each day. This school year, the 7th graders will have the same chance since EIC is being adopted for their math, science, social study and language arts curricula. ♦



# FOCUS ...On Hunting



*Not only were hunters among early advocates of the Refuge System, but hunting is among the six priority wildlife-dependent uses identified by the National Wildlife Refuge System Improvement Act of 1997, the Refuge System's governing legislation. (John and Karen Hollingsworth)*

## Hunters Have Been Steadfast, Early Advocates

*They Taxed Themselves for Habitat*

*By Matt J. Hogan*

**In the frenetic pace** of modern America, hunting bestows a respite, a few cherished hours to connect in a most personal way with the natural places that the nation's wildlife refuges have protected for more than a century.

While the National Wildlife Refuge System has been shaped by a variety of public concerns, hunters were among the early, substantive voices. Those included such renowned hunter-naturalists as President Theodore Roosevelt, creator of the Refuge System, and George Bird Grinnell, founder of the first Audubon Society chapter.

Indeed, hunters have often clamored for creation of new wildlife refuges, as was the case with Upper Mississippi National Wildlife and Fish Refuge, MO, which, in

1924, became the first national wildlife refuge approved for hunting. The Izaak Walton League, a nonprofit organization composed predominantly of hunters and anglers, successfully petitioned Congress to establish the refuge, which stretches 250 miles and is the nation's longest refuge outside Alaska. It is still a popular destination for hunters.

But that was hardly the only refuge championed by hunters. A group of duck hunters in Alabama convinced congressional leaders to establish Eufaula NWR in 1964 as an overlay to a US Army Corps of Engineers' water project. The refuge lies on the eastern edge of the Mississippi Flyway in Alabama and Georgia.

Even earlier, during the Dust Bowl of the 1930s, when waterfowl populations plummeted, hunters came to the rescue of

## People Want to be Part of the Hunt

*Opening Opportunities for Disabled*

**When ACE Basin NWR, SC, began its** mobility impaired hunt in 1993 – the state's first such event for those in wheelchairs – the refuge couldn't fill its available blinds.

When the refuge holds its 12th annual hunt for deer and feral hog Nov. 12-13, the 17 hunters will have competed for their spots from a pool of at least twice that many applicants. Little wonder.

"People want to be part of the hunt, not just because of the harvest, but because of the comradery," said Bobby Harrell, president of the South Carolina Disabled Sportsmen Association. The association helped refuge staff build 15 permanent

blinds for the disabled. The annual hunt is held part of Friday and then a full day – 5 a.m.-10 p.m. – on Saturday.

The hunters, most of whom are wheelchair users, range in age, skill level and experience at the sport. Indeed, a 14-year-old girl with muscular dystrophy has participated as has an 80-year-old man.

What they have in common is their determination. Danny Caine and David Maybank, who were roommates at Shepherd's Spinal Center in Atlanta, launched ACE Basin's hunt. Both had fallen out of deer stands and severed their spinal cords. That didn't mean they turned away from hunting.



*Hunting is permitted on more than 300 national wildlife refuges and wetland management districts, attracting approximately 2.2 million visits each year. (Bill Krohn)*

wildlife habitat. They proposed to tax themselves through the Migratory Bird Hunting Stamp Act, which today is a reliable source of money to acquire refuge land.

Not only were hunters among early advocates of the Refuge System, but hunting is among the six priority wildlife-dependent uses identified by the National Wildlife Refuge System Improvement Act of 1997, the Refuge System's governing legislation.

Today, hunting is permitted on more than 300 national wildlife refuges and wetland management districts, attracting

approximately 2.2 million visits each year. Indeed, the Refuge System is dedicated to offering accessible hunting to all. The Refuge System also offers youth waterfowl hunting, specialty hunts, hunter education and a host of services that teach the techniques and ethics of hunting.

Certainly, hunting on refuges has an economic benefit for communities. Of the 247,000 visits to the 1.1-million-acre Charles M. Russell NWR, MT, more than 78,500 were made by hunters drawn to a refuge famous worldwide for its elk and mule deer. The refuge accounted for

about \$8 million in hunting expenditures in 2002, adding jobs and financial benefit to surrounding communities.

More importantly, hunting has been an important part of the Refuge System's legacy of wildlife conservation. The Refuge System's future is bright because hunters and others who appreciate the natural world have close and continuous contact with national wildlife refuges through wildlife-dependent recreation offered there.

All who appreciate the delicate link between wildlife habitat and a world of health and beauty will continue to help chart a course for the Refuge System as it works to protect and enhance a network of public lands that is the envy of the world. ♦

*Matt J. Hogan is deputy director of the U.S. Fish and Wildlife Service.*

“Rehabilitation centers want those returning home to return to hobbies they love, to return to their regular outdoor activities,” Harrell said. “The main problem for those with disabilities is getting to where you have to be to hunt. Without opportunities like this, many of these hunters would not have the chance to hunt and enjoy the special places and people – like those at ACE Basin.”

To solve the problem, the refuge recruits volunteers for each hunter, who can hunt from three different blinds during the weekend. Last year, hunters took 10 deer and three hogs, statistics that are similar to the kill rate of other hunters.

“Most of the mobility impaired hunters drive special vehicles that can't be taken to the blind,” ACE Basin Refuge Manager Jane Griess pointed out. Each hunter

must be driven to a blind. Because a man and his wheelchair can weigh as much as 400 pounds, several volunteers are needed to help a disabled hunter into the blind.

Volunteers are easily recruited, noted Griess, who believes that volunteers have as much fun as the hunters. Harrell and Griess suggested a few basic considerations in building blinds for the disabled:

- 👉 Blinds that are 10x10 feet provide plenty of room for a wheelchair and any helper the hunter wants to bring along. Indeed, Harrell sat in his wheelchair with his gun to help ACE Basin decide how the blind should be built. The blinds are universally accessible, allowing everyone to view the wildlife.

- 👉 Flooring is especially important because wheelchairs can bog down in wet

soil. Many refuges use plywood for the floor. ACE Basin has laid expanded metal, much like metal grating, that is quieter and will not warp as plywood does.

- 👉 Blinds need cover in case the weather turns wet, especially dangerous for those using electric wheelchairs. ACE Basin built the roofs with plywood covered by everyday shingles.

Disabled hunts have become more popular, if not common. There are now seven hunts in South Carolina alone. The National Wild Turkey Federation's Wheelin' Sportsmen program, in partnership with the USFWS, holds four hunts for the disabled each year on wildlife refuges.

“ACE Basin is such a special place anyway,” noted Harrell, “but this hunt is really special.” ♦

# FOCUS ...On Hunting

## “Earn A Buck” Increases Adult Doe Harvest

by Craig Bitler

In 1974, Great Swamp NWR, NJ, instituted a public deer hunt to reduce the deer population and protect habitat. Even though hunters were encouraged to take any deer that presented a safe shot, a significant number of hunters were passing up does and only hunting bucks. Consequently, the deer herd did not decrease.

After the refuge instituted an “earn a buck” program in 1999, the harvest of adult does increased by 60 percent because hunters had to check in an adult doe before they could take a buck. In the last five years of “earn a buck,” hunters have harvested more adult does than in the previous eight years of hunter’s choice.

Presently, the refuge’s deer density is about 38 deer per square mile. Research

Great Swamp Refuge’s “earn a buck” program has proven to be a win-win situation.

## Storied Refuge Carries On Big Game Hunting Tradition

In the Missouri River “Breaks”, September is busy, for it marks the beginning of hunting season on the Charles M. Russell NWR, a 1.1 million landscape that straddles the river in central and eastern Montana and is one of the nation’s premiere hunting destinations.

Named for the famed western painter Charlie Russell, who depicted the refuge’s lands in many paintings, CMR, as the refuge is widely known, was a heavily used hunting ground for several Plains Indian tribes. Today, it is routinely touted in national publications

for high quality hunting opportunities for mule deer, elk, pronghorn and, more recently, bighorn sheep.

The refuge’s fame presents Manager Mike Hedrick and the CMR staff with a challenging dilemma. “While we are proud that CMR is number one in the Refuge

System for recreation produced by big game hunting,” said Hedrick, “we remind people that hunting is only one of several important uses on CMR. Conservation of wildlife populations and their habitats is the most important purpose.”

What makes CMR such a popular hunting destination?

“There is the vastness – you could spend a lifetime at CMR and not see it all,” Hedrick noted. “Then the openness of the habitats, which lends itself to a ‘spot and stalk’ hunting that many find challenging. The variety of available wildlife is incredible. But most of all, hunters are attracted to the type of populations we manage.”

“CMR manages big game populations to exhibit a natural range of age and sex ratios in a hunted population after our hunting seasons are over,” explained Refuge Biologist Randy Matchett. “This maintains the biological integrity of these populations in accordance with Service policy and ensures that other wildlife uses that we manage for, like wildlife observation and photography, are not affected.

“To do that, you have to establish sound objectives not only for population density,



Charles M. Russell NWR, MT, launched its youth elk hunt in 2003, attracting 15 first-timers, ages 12-14. During Youth Hunt Field Day, young hunters could shoot at a life-sized elk silhouette, which had a metal plate in the vital zone so shooters knew instantly whether their shot would have been successful in the field. (Matt deRosier/USFWS)



has shown that deer densities above 20 per square mile impact forest regeneration and songbird species richness, abundance and habitat. By using the “earn a buck” program, the refuge hopes to reduce the deer herd to less than 20 deer per square mile.

was not the case for bucks. As a result, the refuge had a truncated buck age structure with less than 5 percent of the bucks living to three years of age. The “earn a buck” program has reduced the buck harvest by nearly 50 percent, and has improved the buck age structure by

*The “earn a buck” program at Great Swamp NWR, NJ, increased the harvest of adult does by 60 percent and ultimately improved the buck age structure on the refuge. (George Hall)*

While a significant number of does were being passed up during the years of hunter’s choice, this

allowing bucks that normally would have been harvested to advance in age. The harvest data indicate more than a threefold increase in the harvest of bucks at least three years old.

Great Swamp Refuge’s “earn a buck” program has proven to be a win-win situation. ♦

*Craig Bitler is the wildlife biologist at Great Swamp NWR, NJ.*

but also for male/female ratios and the age structure of the males,” Matchett explained. “You then have to monitor the results of the harvest strategies and change as necessary to meet the objectives.” Matchett estimates that monitoring requires about 90 hours of flight time annually after hunting seasons.

CMR expanded opportunities for disabled hunters by building a blind, which was most popular during the elk archery season. Located in prime elk habitat along the Missouri River, the blind will be used by at least two disabled hunters this year.

In 2003, the refuge initiated its first youth elk hunt for 15 first-timers, ages 12-14. The hunt for antlerless elk included a full day orientation, marksmanship training, hunter ethics and proper field care of a harvested animal. An experienced adult accompanied each youthful hunter.

Another youth hunt will begin Oct. 21 in cooperation with Montana Fish, Wildlife and Parks Department and the Montana Wildlife Federation, which participated in the 2003 event, considered a “resounding” success by Hedrick and those who participated.

### Archery Season

Nothing is more popular than CMR’s elk archery season, which attracts more than 3,000 avid bow hunters in a six-week period that is followed by the general three-week rifle mule deer season. These, and other big

game hunts, accounted for more than 85,000 visitor days in 2003.

Hunting on CMR generates substantial economic benefits to local communities. *The Banking On Nature 2002* study estimated big game hunting on the refuge generated more than \$7.6 million to local communities annually. Big game and upland bird hunting combined on CMR generated almost \$8.3 million locally in 2002. Participation continues to increase.

Asked about opposition to CMR hunts, Hedrick replied, “Rather than opposition, we have more hunters than we can accommodate and still maintain a quality hunting experience that promotes a greater understanding and appreciation of wildlife.”

What makes this all work at CMR? “Good biological information, achievable objectives



*Megan Berg bagged her second elk during the 2003 youth hunt on Charles M. Russell NWR, MT, which opened the hunt three days before the general big game season. Youth tags are also valid throughout the five-week general season. Megan plans to hunt again this year. (Bill Berg/USFWS)*

that emphasize quality hunting opportunities and quality populations, and a sound working relationship with our state fish and game agency,” said Hedrick.

“Everything takes place within the constraints of existing state seasons and bag limits, so extensive coordination with state partners is essential,” he concluded. ♦

# FOCUS ...On Hunting

## Taking the Hunting Message to the Public

By Andrea Stewart

Last hunted in 1974, the white-tailed deer population on the 2,550-acre Wertheim NWR, NY, was four times larger than the refuge's carrying capacity. The deer had stripped much of the regenerating ground and lower canopy layers. Nesting and feeding habitat for several species of migratory birds was virtually gone.

Even the refuge's Long Island neighbors knew something had to be done.

At four meetings in June – including two specifically for the

public – refuge staff outlined four management alternatives, including a controlled public hunt, the choice that staff preferred. In fact, the Wertheim family had used the land as a private hunting reserve before they deeded it to the USFWS in 1947.

Less than a handful of people opposed hunting during two hearings, which attracted about 100 refuge neighbors, conservation and sportsmen's groups and avid hunters. The vast majority favored a controlled public hunt.

The New York State Department of Environmental Conservation (DEC), the Friends of Wertheim, Ducks Unlimited and the Suffolk Alliance of Sportsmen supported the proposal. Three Long Island newspapers ran favorable stories about the refuge's efforts to work with the public.

How did the refuge garner such success?

### Meeting with Success

First, credit personal experience. With so many deer/car collisions, incidents of Lyme disease and chewed landscaping, many neighbors knew only too well the health and safety risks that accompany deer overpopulation.

Second, the Refuge always communicated openly with the community. Staff has made refuge management “an open book” by using personal communication, letters to neighbors and press releases regarding refuge events and issues. Information is readily available on the Web and in fact sheets.

Finally, because deer management is largely a state responsibility, refuge staff expanded its partnership with DEC, which strongly supported the option of a public hunt. The DEC provided hunt success and safety statistics, as well as advice on how to run and advocate a public hunt. They also participated in an aerial deer population survey to compare the number of deer in hunted areas with areas not hunted.

Benefiting from the state's experience and knowledge, as well as safety and scientific data, refuge staff reached an informed decision about the preferred deer management alternative. DEC's local staff, including the biologist, law enforcement personnel and citizen participation specialist, participated in all meetings to field questions about the effectiveness and safety of hunting on Long Island.

### 10 Steps to Outreach

When it came time to announce the refuge's management alternatives, staff worked from an outreach plan:

1. Identify potential audiences broadly. Leave no stone unturned.
2. If your issue is controversial, involve law enforcement personnel to discuss safety.



Supervisory Biologist Mark Maghini, right, fielded questions from a South Shore Press reporter on a trip to see deer “damage” firsthand. (USFWS)

3. Carefully craft your core messages and repeat them in all interactions, displays and correspondence.
4. Appoint an individual, who, along with the project leader, is the primary contact for inquiries.
5. Plan meetings with your audience's perspectives in mind. Wertheim Refuge organized meetings with elected officials and the media, detailing the problem and management alternatives and offering a field trip to demonstrate firsthand the effects of deer overpopulation. Separately, the refuge held an open house for the public, when staff gave a brief presentation similar to the one for elected officials and then made themselves available for one-on-one conversations. Comments from all meetings were recorded and addressed. Displays summarizing the presentation were available to the public.
6. Appoint a facilitator – preferably someone who will not make a presentation – to keep meetings in order and on schedule.
7. Provide informative communications, and announce meetings at least three weeks in advance. Refuge staff sent invitations and a press release, followed by faxes and phone calls, to elected officials and the media. Printed materials summarized the problem and the proposal for a controlled public hunt, in addition to meeting details. Similar material was sent to refuge partners, conservation groups, sportsmen groups, and all neighbors within 500 feet of the refuge boundary.
8. Remember that everyone's opinions and experiences are valid and should be respected.
9. Never underestimate the public's reaction. Based on conversations with community members, the refuge project leader got the sense that archery would be much more palatable than a shotgun hunt. However, during the public meetings, many people raised concern

that archery was less humane, fearing that the deer may not die as painlessly and quickly.

10. Continue communication well after the meetings. More than two months after the meeting and media coverage, people still asked about the proposed public hunt. Remember your core messages and repeat them to all callers.

### What's Next?

Wertheim Refuge expects to release a draft Environmental Assessment (EA) this fall and complete the opening package in the Federal Register. The EA will address questions and concerns raised by the public, including safety, hunter selection and effectiveness of the hunt. Refuge staff does not anticipate much opposition since the public cry for action still resonates.

The refuge's first controlled public hunt will take place in the 2005. No dates have been set. ♦

*Andrea Stewart is the outdoor recreation planner for the Long Island NWR Complex. She has a strong interest in public involvement.*

*The deer had stripped much of the regenerating ground and lower canopy layers. Nesting and feeding habitat for several species of migratory birds was virtually gone.*



*Outdoor Recreation Planner Andrea Stewart, left, explained meeting rules and logistics, while Refuge Manager Patricia Martinkovic, right, waited in the wings to present deer management options to the public. Less than a handful of people opposed hunting during two hearings, which attracted about 100 refuge neighbors, conservation and sportsmen's groups and avid hunters. (USFWS)*

# FOCUS ...*On Hunting*

## There's a Lot in a Bowl of Goose Soup *Spring Brings First Taste of Meat to Alaskan Natives*

By Mike Rearden

**The first time I encountered** traditional Alaskan goose soup, I was startled to find the head, feet and edible innards along with the requisite rice and potatoes. But then, many things in rural Alaska are different.

I soon learned it is proper etiquette – and culturally respectful – to eat every last remnant of meat off the bones. Those bones are not thrown into the trash. As a gesture of respect for all living things, the bones are returned to the land from which they came.



*Even youngsters provide for their families in rural Alaska. This photo was taken at Newtok, a village within the Yukon Delta NWR, AK, that relies heavily on waterfowl for subsistence food. (Paul Liedberg/USFWS)*

The native people's long tradition of respect for all living things is also reflected in the difference between the spring "subsistence season" on national wildlife refuges in Alaska, launched in 2003, and traditional fall hunting that has long been legal across America. The spring season provides for the nutritional needs of rural indigenous Alaska residents.

Fall waterfowl hunting is part of America's heritage. Hunters across the country prepare for the rituals and joys of bird hunting on the cold crisp days of fall and early winter. Likewise, spring waterfowl hunting is a rural Alaska tradition, when families across the "bush" begin longing for that first taste of fresh meat during the lengthening days of spring.

Winters are long in Alaska. Not everyone is blessed with easy access to caribou or moose. Many bush residents depend on fish and game throughout the winter for sustenance. Local stores don't carry much meat, and what little they do have is very expensive. It is easy to understand why people yearn for the taste of a fresh goose returning in the spring.

These two American waterfowl hunting traditions are sometimes at odds. The spring hunts were illegal since the Migratory Bird Treaty Act of 1916 closed waterfowl hunting annually from March 10-August 31. Although the act was a conservation milestone, it overlooked the nutritional needs of Alaska's native people.

### **Strong Hunting Tradition**

The USFWS largely failed when it tried to enforce the hunting closure in rural Alaska: the spring hunting tradition was strong, the need for food was real, and agents were too few. After many confrontations and meetings with hunters, the USFWS and others eventually recognized the nutritional need and permitted spring hunting in the late 1970s. Nonetheless, the hunts were still illegal and strained relationships between the Service and Alaska's native people.

Around 1984, the Hooper Bay Agreement, eventually renamed the Yukon Kuskokwim Delta Goose Management



*Alaska native people have long depended on waterfowl for food, particularly in the spring. Although this photo dates back to the 1950s, native people in rural Alaska today still hunt white-fronted geese, taking about 12,000 annually on the Yukon Kuskokwim Delta. (USFWS)*

Plan, was signed by the native people on the Yukon Delta, USFWS, the Alaska Department of Fish and Game and the states of Washington, Oregon and California to regulate subsistence hunting of Pacific Flyway geese.

Then, in 1997, Congress, supported by a diverse group of sporting groups, states, conservationists and the USFWS, amended the Migratory Bird Treaty Act to allow indigenous Alaska residents to harvest migratory birds during the closed period. Several years of public outreach and regulation development followed.

Finally, in 2003, for the first time in nearly 90 years, rural indigenous residents of Alaska were allowed to hunt migratory birds legally during the spring.

The federal, state and native members of the Alaska Migratory Bird Co-Management Council are responsible for recommending regional regulations annually for the spring hunt. Although they meet frequently and have progressed, concerns and misunderstandings linger. Some believe the regulations are too liberal; others feel they should stay that way. Typically a subsistence hunter shares his catch with many families and strict limits often don't fit subsistence needs.

The spring hunt on the Yukon Delta Refuge took place this year April 2-Aug. 31, but was closed for 30 days in June to protect nesting birds. On average, the annual harvest amounts to about 40,000 geese, 43,000 ducks and about 2,000 other birds, such as loons, seabirds, shorebirds and gulls.

So, if you have a bowl of hot goose soup on a cool spring day in rural Alaska, remember, tradition – in respect for natural resources and in hunting – is the main ingredient you're savoring. ♦

*Mike Rearden is refuge manager at Yukon Delta NWR, AK.*

*“I soon learned it is proper etiquette – and culturally respectful – to eat every last remnant of meat off the bones. Those bones are not thrown into the trash. As a gesture of respect for all living things, the bones are returned to the land from which they came.”*





*Fergus Falls Middle School 5th grader Lizzy Link collected data for a snow water content study, measuring depth, compaction and water content. (PWLC/USFWS)*

**“Other environmental education** experiences are rarely more than one-day interpretive field trips and social outings to refuges to escape the confines of the classroom,” observed Glenn Carowan, refuge manager at Chesapeake Marshlands Refuge Complex, MD, after visiting the Prairie Wetlands Learning Center at Fergus Falls, MN.

Not true, he noted, for the center’s Science Class program, which celebrated its first anniversary June 5.

To integrate a routine public school curriculum with environmental education, the program brought 50 5th graders to the learning center for two hours daily throughout the school year. The center’s environmental education specialists and interns helped as often as they could. The school system assigned two teachers to the program, one of whom worked at the Learning Center.

Most of the instruction in math, science and writing took place right in the field. Teachers reinforced math skills by asking students to measure the bill, wing and tarsus lengths when they banded mallard ducks, for example. Percentages were taught when youngsters compared nesting success with previous years. Students honed their writing skills by

# Prairie Science Class Celebrates Year of Learning

## *Program Can Be Replicated*

completing scientific reports on various environmental processes.

Students spent the rest of each day at their school, Fergus Falls Middle School, where math concepts, reading, social studies, physical education and health were covered.

While students enjoyed the program, they also realized they were learning in new ways. “I’m better at math,” said one student. “You know, like there are seven geese on the pond and so many blackbirds. Looking at all those geese, we can say, ‘A third of these geese is how many?’ and you don’t even realize you’re doing math. I think if I were just sitting in a classroom, I wouldn’t have learned as much.”

Parents were equally enthused. “My daughter has ADHD,” wrote one parent, “but you wouldn’t know it this year. I think that’s because this program was so good at focusing her. She had real trouble staying on task, but we hardly see any of that now because there is so much variety in the school day. “

“It’s important that students in environmental education programs come away with a greater awareness of our resources. All too often, that’s hard to do in typical one-day field trips to refuges,” said Supervisory Park Ranger Ken Garrahan. “This program demonstrates that daily contact can make a difference.”

### **Moving Forward**

The program will expand this school year to 100 5th graders. Other school districts are thinking about replicating the program, which is being formally evaluated to determine the educational impacts and how it affects environmental attitudes and resource stewardship. Because this program is unique within the USFWS, other refuges and

universities also are interested in the model.

But Garrahan does not believe a shift to this environmental education concept has to be costly in terms of new facilities, additional staff or greater operating expenditures. Rather, having a dedicated environmental educator as part of the USFWS staff is critical as are motivated personnel on both sides of the educational aisle – including refuge staff as well as the school superintendent, principal and teachers.

“Everyone must share the vision,” noted Garrahan. “You can’t overemphasize the importance of having the right teacher, someone who is passionate about the environmental and has a personal commitment to the project.”

The program is a partnership between the USFWS and the Fergus Falls Independent School District 544. The Friends of the Prairie Wetlands Learning Center, Fergus Falls Education Foundation, USFWS Region 3, Fergus Falls Fish and Game Club, Vinje Family, Bittenbender Family, Otter Tail Power Company, Ottertail Coaches, Toshiba Foundation and the National Fish and Wildlife Foundation also supported the program.

Right now, ideas are bubbling forth, including discussions about internships and university coursework to train people in such integrated, field-based instruction.

“The entire public teaching philosophy is changed here, along with the way Service staff do business,” Carowan observed. “‘Wow’ is the appropriate word.”

For more information, contact Kenneth A. Garrahan, 218-736-0938, or go to the Web, <http://midwest.fws.gov/pwlc> and click on the link for the Prairie Science Class. ♦

# Texas Brochures Turned Profits, Heads

*“Find What’s Unique About Your Area”*

Three years in development, the South Texas Refuge series of brochures on birding, butterflies and flowers have turned a profit and turned some heads with their beauty.

For Refuge Friends groups interested in creating similar brochures, the essential keys to success are starkly simple: format brochures so they are easy to handle; insist on high quality production; use marketing and writing professionals; and charge for the product.

“Sell brochures. That’s how people know something is worthwhile,” stressed Keith Hackland, treasurer of the Friends of Santa Ana Refuge, TX. “If you give something away, then people toss it because they think it is worth what you charge — nothing. Because we charge \$2 for each brochure, people pin it up on the wall, just to look at the photos.”

Each brochure has turned a \$10,000 profit, although the birding brochure is clearly the most popular. Each brochure also has a panel sponsored by a local business, which considers it a terrific advertising venue since every copy will be sold. For example, each of the 48 birds depicted in the brochure, which debuted in the summer of 2003, is sponsored by a local business that was given five lines of type for its description.

Advertisers along with sponsors of the nonprofit Valley Nature Center, where Hackland is president, paid for printing and production, which cost \$10,000 per brochure, including \$6,000 paid as



commission for \$20,000 worth of advertising. A professional photographer was hired; 32,000 copies of each brochure were printed.

The Friends group puts every dollar from the brochure’s sales back into the refuge. Advertisers can buy copies for \$1 each. Hackland has fashioned some basic rules that can be used by any Friends group interested in creating a refuge brochure:

- Production elements are critical. Because the overwhelming majority of people are right handed, brochures should open to the right. Varnish brochures because they last longer that way. Use solid 100-pound stock. Use a vertical fan fold because it is easier to handle and a fan is useful outdoors.

- An experienced marketing professional is key. “Hire someone who understands that you’re not looking for a handout, but are offering access to a specific demographic group that can help the advertiser,” Hackland noted.

- Content is crucial. Find a niche for the brochure and add information that is not readily available elsewhere.

“South Texas happens to have the most species of birds and butterflies of any region in the country,” Hackland summarized. “But every region has something unique that people will come to see. Talk to people who visit the area and see it through their eyes. Find out what they’re looking for and provide it.” ♦



*The National Wilderness Preservation System protects more than 105.7 million acres, including more than 20 million acres on 65 refuges. National wildlife refuges in Alaska, such as the Arctic National Wildlife Refuge, contain most of the Wilderness acreage within the Refuge System. (USFWS)*

**After 65 versions** of the bill, 18 hearings – including six in Washington, DC – thousands of pages of transcripts and eight years of wrangling, President Lyndon B. Johnson signed the Wilderness Act on Sept. 3, 1964 – 40 years after the Forest Service established Gila Wilderness Area as the first such protected place.

Unfortunately Howard Zahniser, who drafted the legislation and was its most ardent and vocal champion, had died in his sleep in May 1964, just days after testifying at the final congressional hearing on the bill.

Indeed, two of the early pioneers in the fight for wilderness protection had died decades earlier. Renowned conservationist Aldo Leopold, who, as a Forest Service official had originated the Gila Wilderness in 1924, died in 1949. Robert Marshall, founder of The Wilderness Society and head of the Forest Service lands division, died in 1939.

But their legacy lives in the National Wilderness Preservation System that

## Wilderness Act Still Protects

*We Enjoy Wilderness for Its Pure Challenge*

protects with the full force of statutory law more than 105.7 million acres, including more than 20 million acres on 65 refuges.

“Today, this idea of a system of protected lands seems perfectly obvious to us, but it was not always so,” wrote Douglas

Management protect and manage America’s wilderness heritage under the act’s aegis. Thanks to scores of laws passed since the 1964, the system includes more than 650 areas in 44 states.

With the act’s passage, the Forest Service was required to review the remaining 5 million acres of its primitive areas, which had been studied since the 1930s, while the NPS and the USFWS each reviewed their roadless lands for possible designation. Indeed, the Wilderness Act established the most advanced set of environmental study and public participation requirements of any law up to that time.

As the Wilderness Act was being implemented, Congress included some lands that had the fading marks of old logging and roads, including wilderness areas in national parks and wildlife refuges. “That Congress intended such formerly abused lands to be within the Wilderness Act’s pragmatic designation criteria was clear from the areas the act mandated for study under the 10-year wilderness review – areas such as Shenandoah and Great Smoky Mountains national parks and Seney and Moosehorn national wildlife refuges – each of which had a history of land abuse,” wrote Scott.

W. Scott, policy director of the Campaign for America’s Wilderness in *The Enduring Wilderness: Protecting Our National Heritage through the Wilderness Act*.

In fact, in the early 1940s, there was no national policy to recognize wilderness as a resource of value, no practical definition of “wilderness,” no consistent management guidance and no nationwide system of wilderness areas. Only a few government agencies had delineated wilderness areas. Others entirely ignored the idea of wilderness.

No one had more influence on wilderness thinking than Zahniser, often called the “midwife” of the Wilderness Act. He unveiled the draft proposal in a speech before the first Northwest Wilderness Conference of the Federation of Western Outdoor Clubs in April 1956. For the next decade, Zahniser was a tireless advocate for wilderness legislation, first introduced in the Senate in 1956 by Sen. Hubert H. Humphrey (D-MN) and in the House by Rep. John Saylor (R-PA).

When the Wilderness Act passed, it immediately incorporated more than 9.1 million acres of national forest areas in the National Wilderness Preservation System. Today, the USFWS, the National Park Service (NPS), the Forest Service and the Bureau of Land

### Setting the Stage for Alaska Protection

While no areas in Alaska came into the National Wilderness Preservation System in 1964, the Wilderness Act set the stage for the single bill that has had the most impact on the growth of the Refuge System – the 1980 Alaska National Interest Lands Conservation Act. The act set aside more wild country – 104.3 million acres – than had been preserved anywhere in a single act.

*continued pg 20*

# First Designated Wilderness in Refuge System

## *Great Swamp Refuge Was Born of Conflict*

The designation in 1968 of Great Swamp NWR, NJ, as the first wilderness area within the Department of the Interior is really the story of grass-roots passion facing a powerful Port Authority to save a community resource from becoming another vestige of urbanization.

The refuge was established in 1960, shortly after the Port Authority of New York and New Jersey proposed construction of a major jet port in the Great Swamp, located just 26 miles from Times Square. Outraged citizens launched a campaign that stopped the Port Authority, thanks in large measure to support from Remington Arms owner Marcellus Hartley Dodge.

Although the refuge was growing and had been designated a Registered National Natural Landmark in 1966, the jet port proposal was still rearing its head in 1967. Wilderness designation for about 3,700 acres of the Great Swamp Refuge seemed necessary to halt the relentless Port Authority.

First, Congress had to be convinced that “wilderness” was an appropriate designation for an area that was neither vast nor pristine. The public needed no convincing. Of the 6,212 individuals who commented on the proposal, just two were opposed. Support was voiced by 245 organizations and 30 elected and appointed officials.

Once President Lyndon Johnson signed the Great Swamp Wilderness Act in 1968, the USFWS began restoring the area’s wilderness character by removing buildings, bridges and a road and restoring previously drained wetlands.

“The designation of Wilderness at Great Swamp Refuge took vision,” stressed Refuge Manager Bill Koch. “It took foresight to understand that we could erase the handprint of man, restore the land and leave only our footprints that soon melt away.”

### **Wilderness Restored**

“It was a challenge from the first,” he continued. “There were intrusions – dumps, drained wetlands – but we dealt with them all. Where there were roads and bridges, we now have hiking trails. We have fulfilled the requests of Congress and our promise to the American people.”

Within the wilderness area, 5.5 acres became part of a Superfund site in the mid-1990s. Asbestos shingles had been dumped years before the land became part of the refuge. The 5.5 acres were opened to the public in spring 1998 after full remediation.

Today, just one structure remains: a barn owned by a woman in her 90s who retains a “life use reservation”. Eventually, it will be removed and wilderness restored

Indeed, support for Great Swamp Refuge and its wilderness area has grown, especially as the watershed becomes ever more developed and the refuge is the area’s only green oasis. Koch noted that the refuge regularly works with local land use decision-makers to help them appreciate the delicate balance that must be maintained to preserve the ecological integrity of the Great Swamp. Special distinctions such as designated Wilderness and Registered National Natural Landmark help to protect the refuge from outside threats and conflicts.

“This refuge was established in a partnership with people who cared passionately about the future of the Great Swamp,” Koch reiterated. “The wilderness designation has repeatedly been instrumental in protecting the refuge and is often endearingly referred to by those, who, with similar passion, stand up to protect it from new threats.

“Wilderness continues to serve us well,” he concluded. ♦

*“The wilderness designation has repeatedly been instrumental in protecting the refuge and is often endearingly referred to by those, who, with similar passion, stand up to protect it from new threats.”*



*“The designation of Wilderness at Great Swamp Refuge took vision,” stressed Refuge Manager Bill Koch. (USFWS)*

## Chief's Corner – from pg 2

after Hurricane Frances. That contingent included firefighters and fire managers, refuge managers, assistant refuge managers, law enforcement specialists, incident commanders, information officers, dispatchers and other who provided management or technical support. Gratefully, only one employee was mildly hurt in the line of duty. During the Conservation in Action Summit, we often talked about the Refuge System acting as a good neighbor. In those tumultuous and terrifying days of August and September, we acted as good neighbors and true friends.

Our people tired. They were away from their families for too many days. They may even have been frightened – and who could blame them. But in every instance, they acted with professionalism and the human touch.

They bestowed pride on the uniform we wear and on those of us who work alongside them every day. The actions of those on the ground, facing danger and human anguish, have brought a sense of honor and accomplishment to the entire Refuge System and to the Service.

## Wilderness Act – from pg 18

Just what has the Wilderness Act done for the Refuge System? Beyond charting a course that led to protection of millions of acres in Alaska, the act creates a sense of sanctuary when other proposals are raised, noted Nancy Roeper, the Refuge System's national wilderness coordinator.

Many of the act's accomplishments are qualitative, not easily quantified.

“Of course, millions of birds use Wilderness as nesting and wintering grounds and resting places when migrating,” said Roeper. “Rare and endangered species often require habitats that are relatively undisturbed.

Wilderness helps maintain the genetic material needed to provide a continuing diversity of plants and animal life.

Roeper noted that Wilderness is an irreplaceable “living laboratory” for medicinal and scientific research because it is comparatively unmanipulated.



*Havasu Wilderness in Havasu NWR, CA, extends down to the bankline on both the Arizona and California sides of the lower Colorado River. It offers quiet desert beauty for the prepared hiker. The first rule is to bring plenty of water. (USFWS)*

“Wilderness areas are scenic places where you can escape from crowds, cars and the noise of machines. We enjoy Wilderness for its pure challenge and its pure joy. The wild teaches us something about being human and our relationship to nature. Wilderness is a haven,” Roeper concluded. ♦

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## Send Us Your Comments

Letters to the Editor or suggestions about *Refuge Update* can be e-mailed to [RefugeUpdate@fws.gov](mailto:RefugeUpdate@fws.gov) or mailed to *Refuge Update*, USFWS-NWRS, 4401 North Fairfax Dr., Room 634C, Arlington, VA 22203-1610.



# RefugeUpdate

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4401 North Fairfax Dr.  
Room 634C  
Arlington, VA 22203-1610

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