

Facts

National Wildlife Refuge System



“Greatest Hits” of National Wildlife Refuge Management

National wildlife refuges are places where wildlife comes first. To keep the nation’s wildlife resources healthy and abundant for future generations to enjoy, refuge managers use a variety of techniques. Wildlife monitoring, tree planting, prescribed burns and clearing fish passageways are among the many activities occurring at refuges year-round. We have prepared these “Greatest Hits” to tempt your interest with a small sample of the stories that are waiting for you -- and to help you get started figuring out how to get them.

The people of the National Wildlife Refuge System are eager to work with you to educate the public about the wildlife and habitat whose care we are entrusted with. We thank you for your understanding and patience with our limited staff resources. Help us help you ensure a successful production by alerting us to your interest and discussing your production needs as far in advance as possible. We may need this time to arrange for permits, transportation, staff to accompany you in sensitive areas if necessary, etc.

Wild animals are notoriously disinterested in your schedule, and staying in touch with refuge staff prior to your arrival can also save you a lot of time and money. Although nobody can predict precisely when the warblers will arrive, when the salmon will run, or when the geese will depart in any given year, refuge staff carefully monitor the conditions that influence wildlife behavior and can help you time your arrival as closely as possible to the event you wish to film or cover.

The U.S. Fish and Wildlife Service has two central repositories of public domain footage and images of many national wildlife refuges. In addition, many refuges have videos they have produced for their visitor centers. Review this footage as you prepare for your trip to familiarize yourself with the lighting and terrain, and feel free to use it to supplement your own footage in your final production.

...and always remember, this list is just the tip of the iceberg!

*For more information about the refuge system,
point your browser to <http://refuges100.fws.gov> or call 202-208-5634*

—Northeast—

“Headstarting” for Turtles

Last June, staff at Massasoit NWR said a fond farewell to six endangered Plymouth redbelly turtles that had been involved in a “headstart” project at the eastern Massachusetts refuge. Federal and state biologists and volunteers from across the state are involved in raising the turtles from hatchlings for 9 months, then releasing them in the spring on the refuge. Elementary schools and aquariums also get involved in saving a species by raising turtles and releasing them into their preferred shallow, muddy-bottom ponds. When they are released, thanks to a hearty diet of donated lettuce, the turtles--though less than a year old--are the size of five to seven-year-old turtles, making them less vulnerable to predators and giving them a better chance at surviving in the wild.

When: Headstarting--September-May; turtles are released to the wild in Spring
Where: Near Plymouth, MA, 45 miles south of Boston
Contact: Great Meadows NWR, (978) 443-4661
Website: <http://easternmanwrcomplex.fws.gov>

Returning Fire to the Pines

Located on the densely populated Eastern Seaboard--home to one-quarter of the U.S. population--Edwin B. Forsythe and Cape May national wildlife refuges are adjacent to southern New Jersey's Pinelands Reserve, at 1.1 million acres in size the largest body of open space between Richmond and Boston. The reserve is underlain by aquifers containing 17 trillion gallons of some of the purest water in the nation--yet it includes portions of seven counties with more than 700,000 permanent residents. Continued development in this internationally important ecological area makes protecting and enhancing habitat specifically for migratory songbirds, shorebirds and waterfowl and other wildlife even more crucial. Using a combination of selective cutting and prescribed burning, staff at Edwin B. Forsythe and Cape May NWRs rejuvenate pine, oak and cedar forests for the sake of a number of resident endangered species and nearly 100 species of migratory songbirds that use the area each year. Carefully conducted prescribed burns also help eliminate Phragmites, an invasive plant that chokes off the productivity of the region's marshes.

When: Year-round
Where: Southern New Jersey, 11 miles from Atlantic City
Contact: Edwin B. Forsythe NWR, (609) 652-1665
Website: <http://forsythe.fws.gov>

—Southeast—

Planting Trees for Teddy Bears

The last confirmed sighting of an ivory-billed woodpecker in the United States was at Louisiana's Tensas River NWR in the 1940s. Though a college student reported spying a pair in 1999, a team of scientists failed to find the bird and this largest North American woodpecker remains a long-departed memory in the swampy Louisiana forests. But thanks to refuges such as Tensas River and the new Bayou Teche NWR, another legendary to species, the threatened Louisiana black bear -- the original “Teddy Bear” spared by President Theodore Roosevelt on a 1907 hunting expedition -- still survives in the region's bottomland hardwoods and oxbow lakes. Ensuring survival of the black bear is becoming more difficult, though. Tensas River refuge manager Jerome Ford manages the refuge's 64,000 acres to maintain ideal habitat conditions for black bears, but he must keep a wary eye out for bear poachers while overseeing an extensive effort to replant the heavily logged forests, improving habitat for the bears and some two-dozen species of colorful warblers that pass through twice a year.

When: Spring
Where: Tallulah, LA, 67 miles from Jackson, MS
Contact: Tensas River NWR, (318) 574-2664
Website: <http://tensasriver.fws.gov>

Island Partnership

Restoring wildlife habitat on an island is a challenge, but a partnership of federal and local governments and private citizens committed people, money, and equipment to do just that on Florida's Sanibel Island, home of J.N. “Ding” Darling NWR. “Ding” Darling NWR, the City of Sanibel and Sanibel-Captiva Conservation Foundation signed an agreement in 1996 and today Sanibel Island is well on its way to being free of invasive exotic plants and is a model of what partners can do to improve wildlife habitat on refuges and private land. The partnership provided a cost-effective way for private property owners to rid their land of invasive non-native plants such as Brazilian pepper and Australian pine. A jointly funded bulldozer and refuge equipment operator serve all three partners, helping to remove exotic plants, conduct prescribed burns, and restore degraded wetlands on more than 7,000 acres in the city of Sanibel. Additionally, the refuge operates an exotic plant disposal site that allows permitted contractors on the island to dump exotic vegetation removed from private property; refuge staff then pile and burn the debris.

When: Year-round
Where: Sanibel, FL, 15 miles southwest of Ft. Myer
Contact: J.N. “Ding” Darling NWR, (941) 472-1100
Website: <http://dingdarling.fws.gov>

Florida Panthers Looking for a Winning Streak

At one time, 3,000 Florida panthers roamed the landscape of Florida, Georgia and other southeastern states. Today only 30 to 50 of these cats remain in the wild, making Florida's official state animal one of the world's most endangered mammals. To protect the panther and the wetland habitat it depends on, some 30,000 acres have been set aside as Florida Panther NWR—part of a one-million-acre network of protected habitat for the big cat. Biologists have radio-tagged the five to 11 panthers that use the refuge in any given month for hunting and denning, and each January a team of federal and state biologists use radio signals to locate panthers and den sites, and determine breeding sites and travel patterns.

When: January
Where: Naples, FL, 125 miles from Miami
Contact: Florida Panther NWR, (941) 353-8442
Website: <http://floridapanther.fws.gov>

Low-Tech Methods Still Work in a High-Tech World

In the shadow of the most advanced aerospace facility in the world--Florida's Kennedy Space Center--Merritt Island NWR meets its aerial photography needs using startlingly simple technology – model airplanes. Outfitted with tiny cameras, refuge staff steer the aircraft over 140,000 acres of brackish estuaries, coastal dunes and forests scrub that are home to more endangered species than any other of the nearly 540 national wildlife refuges.

When: Call refuge for times
Where: Titusville, FL, 42 miles from Orlando
Contact: Merritt Island NWR, (321) 861-0667
Website: <http://merrittisland.fws.gov>

—Midwest—

A Pretty Pest, a Homely Solution

It may be pretty, but purple loosestrife is a big problem – it has escaped from domestic confines as an imported European ornamental plant and now runs amok through the nation's ever-scarcer wetlands. It's nearly impossible to whack these weeds fast enough to prevent them from choking precious wildlife habitat and garden plants and flowers, and chemical treatment can cause as many problems as it solves. With good options in short supply, biologists at national wildlife refuges around the country are turning to biological control. They are releasing European beetles known to voraciously consume loosestrife in the most heavily infested areas, offering hope that one day purple loosestrife may be eradicated from public lands—and backyard gardens--nationwide.

When: Summer
Where: Saginaw, MI, 90 miles from Lansing
Contact: Shiawassee NWR, (517) 777-5930
Website: <http://midwest.fws.gov/Shiawassee/>

—Mountain West—

A Reconnaissance Mission for Prairie Dogs

A former military installation now being rejuvenated as a national wildlife refuge, Rocky Mountain Arsenal is home to a variety of wildlife including swift foxes, bald eagles, hawks and rattlesnakes. Prairie dogs are the main food source for the 80 wintering bald eagles that roost on the refuge, but habitat loss and disease have lowered prairie dogs numbers significantly. Over the past few years the Fish and Wildlife Service has changed how it manages land in this area to benefit this important species. The Service has relocated nearly 6,000 prairie dogs on the refuge in four years, monitoring changes in prairie dog populations using annual mapping of active prairie dog towns with global positioning system. mowing and otherwise improving areas to allow for prairie dog town expansion, and conducting visual counts or marking and recapturing to determine abundance.

When: Spring, summer and fall
Where: Commerce City, CO, 8 miles from Denver
Contact: Rocky Mountain Arsenal NWR, (303) 289-0232
Website: <http://rockymountainarsenal.fws.gov>

—Northwest—

Organic Farming Feeds Waterfowl

At Umatilla NWR in eastern Washington State, flocks of hungry birds arriving during the spring and fall migrations are so large that creative measures are needed to provide enough food for them. With the help of some willing allies—local organic farmers--the refuge has put an innovative twist on an old concept – sharecropping. Each year, the farmers raise grain on the refuge, and at harvest time they leave a portion of the crop in the field for the birds--who probably appreciate that their food was raised without synthetic pesticides and chemical fertilizers.

When: Early summer
Where: Umatilla, OR, 188 miles from Portland on the Oregon/Washington border
Contact: Mid-Columbia River Refuges, (509) 545-8588
Website: <http://midcolumbiariver.fws.gov/>

Rotating Between Croplands and Wildlands

In many parts of the country, wetlands that were once drained and plowed for agriculture are now eyed for their restoration potential. But how long does it take for restoration to take hold and wildlife to return? Can a piece of property be used alternately as cropland and wetland--and be successful at both? At Tule Lake NWR on the California-Oregon border, researchers are discovering that even temporary conversion of farm fields back to wetlands not only provides important wildlife habitat, but also rejuvenates the area for subsequent agricultural use. The research offers dramatic "before and after" photographic opportunities, and this story has important implications for the entire country.

When: Spring-Fall
Where: Tulelake, CA, just south of the Oregon-California border
Contact: Klamath Basin NWR Complex, (530) 667-2231
Website: <http://www.klamathnwr.org/>
Footage: (202) 208-5611

Different Fish, Common Problems

An isolated population of redband trout in the high desert of southeastern Oregon faces the same challenges as salmon in the Columbia River: the need to bypass dams to reach upriver spawning habitat. Malheur NWR is playing a key role in keeping redband trout off the endangered species list by providing fish passage at five dams on the Blitzen River, and screening irrigation canals to prevent the trout from being diverted. State-of-the-art fish ladders and solar-powered, self-cleaning fish screens have already been installed through cooperative ventures with Oregon Department of Fish and Wildlife, Oregon Trout, and Ducks Unlimited. The refuge also is improving aquatic habitat in the sections of the river and its tributaries that had been altered prior to refuge acquisition.

When: April (primary spawning run)
Where: Blitzen River, 30-60 miles south of Burns, OR
Contact: Malheur NWR, (541) 493-2612
Website: <http://pacific.fws.gov/malheur/>
Footage: (541) 493-2612 (digital photos)

—California Coast—

Decoys Lure Common Murres

A 1986 oil spill along the California coast killed 6,000 common murres and wiped out an entire breeding colony at Devil's Slide Rock, part of Don Edwards San Francisco NWR. In an effort to lure murres back to the area, each year biologists climb sheer cliffs above pounding surf to

deploy bird decoys, three-sided mirrors and solar-powered sound systems on Devil's Slide Rock. Begun in 1996, the social attraction project to lure common murres back to the abandoned colony was an instant success – six pairs returned to nest the first year and recently biologists counted 70 newly laid eggs, 59 fledged chicks and 136 adult murres in just one day. Restoration of the colony continues, with about 100 pairs now coming to Devil's Slide Rock each year to breed. This multi-faceted project also involves local students in painting decoys and other educational activities.

When: Decoy deployment in December-January; peak common murre breeding activity in June; decoy painting in September
Where: 25 miles south of San Francisco
Contact: Don Edwards San Francisco Bay NWR Complex, (510) 792-0717
Website: <http://desfbay.fws.gov>
Footage: (510) 928-0497

Hate Mosquitos? Then You Have to Love Bats

It's a different world out there at night. An entirely distinct array of wildlife is active that we rarely get to see, but biologists are learning more about them through nighttime surveying. Bats are a nocturnal species that tell us about the health of our environment—and most people know that bats consume mosquitos and other insects. Come with refuge biologists as they conduct a bat survey under cover of the night, learning how many and what types of bats inhabit the populated urban and suburban areas around San Diego NWR. Biologists begin preparing for the survey at about 5:30 p.m. by setting up mist nets adjacent to or across waterways to catch the bats as they pursue insects. Bats caught in the nets are identified by species, age and gender and then released. An audio recorder catches the vocalizations of the bats that miss the nets on a device called an "anabat," and frequency lines appear on a laptop computer, enabling biologists to identify the species present.

When: September-November
Where: Jamul, CA, 15 miles east of San Diego
Contact: San Diego NWR Complex, (760) 930-0168
Website: <http://sandiegorefuges.fws.gov>

—Alaska—

Tracking Brown Bears at Kenai NWR

The small brown bear population on Alaska's Kenai Peninsula is not only geographically isolated, it is also at great risk from development activities on the Kenai, one of Alaska's most developed and fastest growing regions.

Biologists at Kenai NWR use global positioning system (GPS) collars on captured brown bears to collect data on habitat use, food sources, denning locations and bears' avoidance of developed areas. Each spring and summer, pilots and biologists from the refuge and the Alaska Department of Fish and Game locate and capture brown bears leaving their winter dens, and biologists deploy GPS and conventional radio collars on the bears. They monitor the bears throughout the summer and recapture them to remove the collars in early fall in order to recover the locations stored in memory chips within the GPS collars. The information obtained has been used to develop a cooperative conservation strategy for brown bears on the Kenai Peninsula.

When: May-July (capturing and collaring), September-October (recapturing and collar removal)
Where: Kenai Peninsula of Alaska
Contact: Kenai NWR, (907) 262-7021
Website: <http://kenai.fws.gov>

Join Alaska's "Rat Patrol"

The delicate balance of an island ecosystem is especially vulnerable to disruption by the unwelcome arrival of aggressive invasive species. One of the top conservation concerns along Alaska's Aleutian island chain is the prospect of shipwrecked rats devouring the eggs of defenseless seabirds. Many of the Aleutians are part of Alaska Maritime NWR, which is a member of a rapid-response unit equipped to quickly reach the scene of potential "rat spills." Join the crew of the M/V *Tiglox* as they spend days—sometimes weeks—steaming past breaching whales, sea otters and thousands of scenic islands and outcroppings on the lookout for signs of rodent trouble. Their "Shipwreck Response Team" has been trained and equipped to contain "rat spills" anywhere in the Alaska Maritime Islands; when the crew is not responding to emergencies, they are conducting other research: monitoring seabird colonies, reestablishing endangered habitat types, identifying archaeological resources, monitoring human impacts on habitats and populations, and maintaining remote field facilities.

When: call refuge for details; voyages often last for several weeks
Where: Home port for the M/V *Tiglox* is Homer, AK, 227 miles southwest of Anchorage
Contact: Alaska Maritime NWR, (907) 235-6546
Website: <http://alaskamaritime.fws.gov>

Tracking Birds Takes Ingenuity as Well as Equipment

Many of the nearly 540 national wildlife refuges were established along the four flyways—the major corridors for bird migration. Back in 1903, when the first refuge was established, biologists had limited information about where birds go during their migrations and what the conditions are along the way. Today that has changed. In the sagebrush of southeastern Oregon and northwestern Nevada, biologists surgically implant downy sage grouse hatchlings with tiny transmitters that allow them to observe the chicks and their mothers for weeks. In Minnesota, scientists ferret out shy American bitterns by broadcasting tape-recorded mating calls in the birds' marsh habitat; they then attach transmitters and release the bitterns so they can track these imperiled marsh birds on their long migrations. And in New Jersey, red knots—the long-distance haulers of the migratory bird world—are fitted with transmitters that monitor them by satellite from northern Canada to the southern tip of Argentina. As the refuge system stands on the brink of its second century, its traditional commitment to migratory bird conservation has not wavered—but biologists have plenty of modern tools at their disposal. Satellite technology allows biologists to implant tiny transmitters in birds and track them along their migration routes, discovering where birds stop, what conditions they encounter and why some populations might be in decline. Contact individual refuges to find out when they are tagging birds and doing other survey and monitoring work.

Three national wildlife refuges that use satellite transmitter devices to track migrating birds:

Sheldon-Hart Mountain NWR, headquartered in Lakeview, Oregon, near the Nevada border

When: May-August (most implanting done in June)
Contact: Sheldon-Hart Mountain NWR Complex, (541) 947-3315

Agassiz NWR, headquartered in Middle River, MN, 85 miles from Grand Forks, ND

When: Late April-late July
Contact: Agassiz NWR, (218) 449-4115
Website: <http://midwest.fws.gov/Agassiz/>

Edwin B. Forsythe and Cape May NWRs, in southern New Jersey, 11 miles from Atlantic City

When: May
Contact: Forsythe NWR, (609) 652-1665
Website: <http://forsythe.fws.gov>
<http://capemay.fws.gov>