U.S. Fish & Wildlife Service

Volunteer, Friends and Partnerships

Annual Update FY 2012

People Making a Difference

Kodiak National Wildlife Refuge Volunteers

Volunteers

People Making a Difference

Volunteers, Friends and partners are valuable allies of the U.S. Fish and Wildlife Service (Service). These individuals and groups are vital to fulfilling the Service's mission and goals. Each year, they give generously their time, expertise and resources to the National Wildlife Refuge System, the National Fish Hatchery System, the Migratory Bird Program, the Office of Law Enforcement, Ecological Services and the National Conservation Training Center. They play an important role in serving the more than 47,059,171 million visitors who enjoy public lands managed by the Service.

During Fiscal Year 2012 (October 1, 2011 – September 30, 2012) 56,133 volunteers donated 2,155,300 hours. The value of their labor was $46,963,987 - the equivalent of 1,036 full-time employees. With more than 9,000 service employees, volunteers work equals approximately 10 percent of our workforce. More than 230 Friends organizations and many more national and local partners help support the work of the Service.

There is no better way to show the value of our volunteers, Friends and partner than to share their successes. Along with volunteer achievements and special initiatives focused on volunteers, Friends and partners, this report also highlights projects involving partners such as Take Pride in America, National Public Lands Day and the Student Conservation Association.

What Authorizes the Service to Accept Volunteers?

The Fish and Wildlife Act of 1956, as amended by the Fish and Wildlife Improvement Act of 1978, and the National Wildlife Refuge System Volunteer and Community Partnership Enhancement Act of 1988 authorize the Service to accept volunteer services. Congress reauthorized the Volunteer and Community Partnership Enhancement Act in 2010, affirming its desire to involve Americans as stewards of our nation's natural resources and wildlife. As a result, the National Wildlife Refuge System expanded its volunteer program, and environmental education programs, recreational opportunities and community-based partnerships increased.

How Do You Find Out About Volunteer Opportunities?

Volunteer positions with the Service are posted at www.volunteer.gov. You may also contact the field office where you would like to volunteer, the volunteer coordinator in the region where you are interested in volunteering or the national headquarters. For more information about the Service's volunteer program, visit www.fws.gov/volunteers, or call 800/344 WILD. Contact information for our national and regional volunteer coordinators is at the end of this report.

Who Are Our Volunteers?

Our volunteers are people who want to give back to their communities and are interested in the work of a refuge, hatchery or Service program. They are parents who want to model environmental stewardship, retirees willing to share a wealth of knowledge and experience, outdoor enthusiasts wishing to spread the word about America's great natural treasures and concerned citizens of all ages interested in making meaningful contributions while learning about conservation. Whether it is an environmental ethic, a love of bird watching or enthusiasm for the outdoors, like-minded volunteers gather to share their passions while contributing to the good of their communities.

What Do Our Volunteers Do?

Volunteers perform a variety of tasks. Some work full-time; others give a few hours a week or month; and still others help during special events. We match our volunteers' talents and interests to work to be done, which varies from site to site. Whenever possible, we put special skills and experience to work to achieve our conservation goals.

Volunteers conduct fish and wildlife population surveys, band birds, lead tours and educational activities for school groups and other visitors, do laboratory research, manage cultural resources, perform administrative duties, work with computers and other technical equipment, maintain Service facilities, and much more. Many volunteer projects use groups of people in "work parties." These events are as social as they are productive. Friendships are formed while important work is done.

How Do We Calculate the Value of Our Volunteers?

Although volunteers' skills, knowledge, and time are priceless, the Service uses the figure calculated annually by Independent Sector, the leadership forum for charities, foundations and corporate giving programs, to put a monetary value on volunteer contributions. For FY 12, an hour of volunteer time was worth $21.79. Volunteers complete tasks that would otherwise go undone. The Service uses a full-time equivalent, or the hours worked by a full-time employee in a year, to figure the number of staff positions filled by volunteers. A full-time equivalent (FTE) equals 2,080 hours. In FY 12 that meant that volunteers' hours were the equivalent of 1,036 FTEs.

Service-wide Volunteer Contributions - FY 03-12

Fiscal Year	Number of Volunteers	HOURS	Hourly Value	Value of Service
2003	44,126	1,628,550	$17.19	$27,994,775
2004	37,958	1,532,123	$17.55	$26,888.76
2005	37,996	1,478,797	$17.55	$25,952.89
2006	36,169	1,447,421	$18.04	$26,111,475
2007	37,881	1,491,152	$18.77	$27,988,923
2008	39,765	1,557,764	$19.51	$30,391,976
2009	42,198	1,611,388	$20.25	$32,630,607
2010	44,307	1,691,957	$20.85	$35,277,303
2011	46,880	1,718,369	$21.36	$36,704,362
2012	56,133	2,155,300	$21.79	$46,963,987

Volunteer Contributions by Service Program - FY 12

Program	Number of Volunteers	Hours	Value of Service	Full-Time Equivalent
Refuges	42,809	1,594,246	$34,738,620	766
Fisheries	4,387	128,236	$2,794,263	62
Other*	8,940	432,818	$9,431,104	208
Total	56,133	2,155,300	$46,963,987	1,036

*Other Service Program Divisions includes Endangered Species, Law Enforcement, Migratory Birds, Ecological Services field offices, NCTC and Headquarters offices, i.e., International Affairs Volunteers.

Volunteer Contributions by Service Regions in FY 12

Region	Number of Volunteers	Hours	Value of Service	Full-Time Equivalent
1 (Pacific)	7,145	219,357	$4,779,789	105
2 (Southwest)	4,853	330,463	$7,200,789	159
3 (Midwest)	9,255	223,397	$4,867,821	107
4 (Southeast)	16,632	751,966	$16,385,339	362
5 (Northeast)	7,319	272,513	$5,938,058	131
6 (Mountain-Prairie)	2,882	132,704	$2,891,620	64
7 (Alaska)	707	72,961	$1,589,820	35
8 (Pacific Southwest)	7230	139,103	$3,031,054	67
9 (Headquarters)	110	12,836	$279,699	6
Total	56,133	2,155,300	$46,963,987	1036

Volunteer Contributions by Activity by Service Region in FY 12

Region	Wildlife & Habitat	Maintenance	Wildlife Dependent Recreation	Cultural Resources	Other**	Total Hours
1 (Pacific)	92,378	19,842	81,848	7,285	18,004	219,357
2(Southwest)	118,117	60,192	112,364	4,404	35,290	330,367
3(Midwest)	88,312	33,287	77,363	2,972	21,558	223,493
4(Southeast)	203,624	206,304	276,601	2,414	63,023	751,966
5(Northeast)	102,146	41,397	100,836	1,259	26,875	272,513
6(Mountain-Prairie)	41,521	34,170	37,911	6,081	13,021	132,704
7(Alaska)	44,297	1,554	18,435	1,062	7,613	72,961
8(Pacific Southwest)	87,949	12,144	32,634	1,096	5,280	139,103
9(Headquarters)	3,813		1,084	3,462	4,477	12,836
Total	782,158	408,890	739,076	30,035	195,141	2,155,300

**Other Activities includes administrative duties such as filing, updating the library, archiving, digitizing and translating documents and brochures, or any other activity not included in the categories listed.

Interagency Volunteer Pass

As a sign of appreciation for those who volunteer, Congress authorized the issuance of an annual Interagency Volunteer Pass. The Interagency Volunteer Pass may be issued free of charge to volunteers who accrue 250 volunteer hours provided that they do not already have a valid Interagency Pass and is good for one year.

National Wildlife Refuge System Volunteer Highlights:

Volunteer of the Year:

The National Wildlife Refuge Association's 2012 Volunteer of the Year is Bob Ebeling. Mr. Ebeling received the Volunteer of the Year award in recognition of more than 10,000 volunteer hours at the **Bear River Migratory Bird Refuge** in Utah. His accumulation of hours ranged from using his professional engineering skills to providing visitor services in the Education Center, and countless other invaluable efforts over the past 23 years. Mr. Ebeling played a key role in the restoration of Bear River Migratory Bird Refuge after it was devastated by the flood of the Great Salt Lake in the mid-1980s. In just 6 months, Mr. Ebeling organized and led a group of 50 volunteers to complete the momentous task of restoring the impoundments while simultaneously repairing the 12-mile public auto tour route to allow the refuge to be opened to the public. The total cost of both projects was paid for in full by volunteer donations, including man-hours and financial support.

Volunteer Fran Mauer, a FWS retiree, contributed 120 hours assisting with a cliff-nesting raptor survey on the Porcupine River in the **Arctic National Wildlife Refuge**, **AK**. His expertise in identifying raptors and locating their nests was instrumental to the success of the survey, which involved canoeing 100 miles from the Canadian border to the Yukon Flats and assessing raptor occupancy and productivity at approximately 50 historic raptor breeding territories.

Seasonal volunteers at **Buenos Aires National Wildlife Refuge, AZ** helped with the completion of the first half of a sign-posting project – placing numbered posts for all roads within the refuge – over 250 miles. This project enhances safety for visitors, researchers, and volunteers who may be disoriented, have vehicle trouble, or need to report their location or illegal immigrant activity. Volunteers also renovated Willow Pond along the refuge's popular birding trail. Cattails had choked the open water. Now the pond attracts birds and birders.

The Holgate portion of **Edwin B Forsythe National Wildlife Refuge, NJ** was the site of a beach clean-up in March, 2012. The clean-up was led by members of the New Jersey Beach Buggy Association (NJBBA), over 70 volunteers removed two 20-yard dumpsters worth of trash and debris. Once news of the cleanup was announced, fishing clubs in the area were quick to volunteer.

The **Sacramento National Wildlife Refuge Complex, CA** has a very successful volunteer program that assists mainly with refuge visitor services. Volunteers assisted with environmental education programs that reached over 2,000 students, weekend interpretive programs, staffed the visitor center and bookstore every weekend November – February, worked in the hunt area and assisted with special events.

Volunteer leads an auto tour at Sacramento NWRC. Photo: FWS

Two 20-yard dumpsters of debris were removed during the beach clean-up at Forsythe. Credit: D Woeller.

There were 14,155 total volunteer hours reported in FY 2012 for the **Farallon National Wildlife Refuge, CA** contributed by 153 volunteers. Twenty of those volunteers were stationed on this remote island year-round conducting biological monitoring of pinnipeds, land birds, sea birds, weather conditions, salamanders and much more. In order to support these volunteers there is a volunteer organization known as the Farallon Patrol, comprised of 78 boat owners who volunteered their time(936 hours) and vessels to support the logistics of maintaining a permanent remote field station. There are also 34 volunteer shoppers who volunteer their time (260 hours) to purchase the necessary food and supplies and to ensure it is delivered on time to make it on each boat trip. In addition, 8 volunteers spent 833 hours on the island conducting invasive plant control activities. Three of these volunteers spent seven days (August 3-10) spraying herbicide to control New Zealand spinach and cheese week. Known as Team Spinach, this effort was responsible for treating 90 percent of New Zealand spinach on the island.

Volunteers Jennifer Taylor and Bryan White prepare their spray equipment during Team Spinach on the Farallon Islands. Photo: FWS

Invasive Species Management in the National Wildlife Refuge System

Invasive species continue to alter wildlife habitat and pose challenges to managing the National Wildlife Refuge System (NWRS) lands. Recent climate change information predicts that some invasive species may have more competitive dispersal and survival characteristics than native species as temperature, water availability, and weather patterns change. In FY 2012, there were 2.5 million acres infested with non-native invasive plants within the NWRS of which 257,000 acres, about 10%, were treated. Many refuges have prioritized the treatment of small incipient infestations, early detection species, to protect pristine areas rather than focusing on treating larger established infestations. There are more than 3,800 invasive animal populations residing on NWRS lands. Invasive animals and plants can be especially detrimental to island ecosystems where more than 50% of extinctions are known to be caused by invasive species.

Invasive & Volunteers Grant Program Update

In FY 2012, each region was allocated $100,000 to distribute to the region's refuges. Invasive species proposals contain the following criteria: early detection and rapid response, mapping, 'Friends' or volunteer participation, and long-term monitoring to ensure success. One of those projects is at **Occoquan Bay NWR, VA**. A study is being implemented by a non-profit called Earth Sangha. The project area is a 12.5 acre meadow. The experimental plot is mowed once a year by staff to interrupt succession. The project goal is to suppress the invasive species, and steer the monotypic stands of native eastern gamagrass towards a more diverse meadow community.

A variety of techniques were assessed that included hand pulling – 18 volunteer field events/152 volunteers/560 hours; herbicide – 2.5 acres of the heaviest infestations with future plans to re-plant natives; solarization – covering infested areas with tarps for up to two months (~12,000sq.ft.); and hand mowing – a scythe was used to mow ~2.5 acres. In 2013, Earth Sanha will re-vegetate treated portions of the research area with local ecotype seed and/or stock that is native to the lower coastal plain.

National Fish Hatchery System Volunteer Highlights:

Many hatcheries are open to the public and continually host outreach events and visitation from school groups and social organizations. Very often volunteers and Friends organizations are in the role of principle liaison for the Service or, at a minimum, in the role of educational interpreters for these field trips.

Volunteers excavating at Camp Lawton

On October 1-5, 2012, "Time Team America" filmed archaeological investigations at a Confederate-run prisoner of war camp (Camp Lawton) that spans portions of **Bo Ginn National Fish Hatchery, GA** and Magnolia Springs State Park near Millen, GA. The investigations occurred on the FWS-owned portion and included the use of remote sensing techniques, such as ground penetrating radar, magnetic susceptibility, magnetometry and intensive metal detecting in a grassy block behind the hatchery's residence. The objectives were to identify the stockade wall alignment; identify the magnetic and GPR signatures of features, such as the shebags (prisoners' huts), activity areas, and brick ovens; and examine previously identified artifact clusters or items having ferrous signatures. The investigations were made possible by volunteers from Georgia Southern University, Kennesaw University, Lamar Institute, Cypress Cultural Consultants and descendants of former Union prisoners and Confederate soldiers.

Many of the accomplishments of the **Tishomingo National Fish Hatchery, OK** would not have been possible without assistance from volunteers. The annual Kids' Fishing Derby was attended by over 1,000 visitors. Volunteers assisted with preparation, parking, crowd control, and helping the fishermen. The hatchery also had a record year for paddlefish production with numbers exceeding 50,000. Volunteers assisted with all aspects of paddlefish culture including monitoring water quality, feeding, cleaning culture units, and tagging. This year's paddlefish volunteers included professors and graduate students from San Francisco State University and Oklahoma State University who were interested in learning about captive propagation of paddlefish. Volunteers are relied upon heavily for the alligator snapping turtle research and propagation efforts. This year's record number of hatchling turtles produced on station and critical nesting data collected were significantly enhanced by efforts of volunteers from Missouri State University.

Three of the volunteers at the **Idaho Fish Health Center, ID,** were veterinary students who were highly motivated and very interest in the field of fish health. They were each able to gain valuable experience including analysis for pathogens in diagnostic and monitoring exams using standard protocols for laboratory assays. One of the students was able to return for additional experience of wild fish health survey sampling during field season.

It was a family affair at Hotchkiss National Fish Hatchery, CO where volunteer Tami Zimmanck assisted the staff with all fish culture activities from egg enumeration to fish stocking. She also helped out with vehicle, equipment and ground maintenance and since May, 2010, has volunteered over 3,500 hours. Tami's son, Frankie, contributed over 500 volunteer hours and her nephew, Austin Drake-Gregory, came to visit over the summer and ended up volunteering at the hatchery.

During field operations in FY 2012, Alpena Fish and Wildlife Conservation Office, MI enlisted the help of 25 volunteers who contributed over 207 hours of their time. These volunteers helped in a variety of projects that included Lake Sturgeon setline assessments in the Detroit River, contaminants of emerging concern – fish collection efforts, Lake Whitefish survey, juvenile lake trout survey, data entry, Eurasian ruffe detection survey, trap-net survey on Pendills Lake, and artificial Lake Trout Spawning Reef evaluation.

Volunteer Ciana Ball prepares for collecting fish health samples for the National Wild Fish Health Survey

Additional Service Program Highlights:

Five volunteers contributed 1,240 hours working in the **Division of Diversity and Civil Rights, OR**. Activities included maintaining databases for the Annual Supervisors and Managers EEO/Diversity training, helped in the development of new outreach materials for the Pathways program, updated the Division's video and book catalogues and created special observance event flyers. They helped out at the Portland State University Career Fair, participated in audio conferences and training related to Federal employees and still had time to learn about the life cycles of Steelhead and Coho Salmon at Eagle Creek National Fish Hatchery.

Division of Diversity and Civil Rights volunteer Jake Doherty learns about the life cycles of Steelhead and Coho Salmon at Eagle Creek National Fish Hatchery.

Volunteers at the National Fish and Wildlife Forensics Laboratory, OR provide support assistance to the miss of the Lab from research activities in genetics and chemistry to preparation of study specimens. Volunteer Barbara Massey is the principal preparatory of bird skeletons, as well as the go-to person for updating bird references in EndNote, whereas Sue Polich single-handedly carries out all feather preparation, scanning, Photoshop work, and uploading information onto the Lab's Feather Atlas website. In FY 12 Sue completed and loaded 198 new scans, representing 40 new species. The website received over 1.2 million page views in FY 12.

And Will Fain, a volunteer from Southern Oregon University, contributed to an ongoing project developing improved methods for obtaining DNA from tanned leathers to identify the species source of wildlife products interdicted in this highly profitable international trade.

The Wonderland Cave in Bella Vista, Arkansas has a rich history that spans decades. Historically, the cave was utilized in many different ways including a supposed hideout for the "James Gang", led by Jesse James, a night club with bands and a dance floor, a fallout shelter commandeered by the US government, and a winery. Wonderland Cave was suspected historically to support federally listed endangered gray bats (Myotis grisescens) as well as other cave adapted species. However, over the years the cave has been abandoned by previous owners, continually broken into, and severely vandalized. This abandonment and years of vandalism has caused the accumulation of decades of trash and graffiti and is also a potential cause for abandonment by gray bats.

Wonderland Cave is a historically significant cave that is cherished by the local community and was in need of a cave clean-up. The **FWS Arkansas Ecological Services Field Office**, in partnership with members of the Bella Vista community, came together to restore the cave back to a more natural environment by removing trash from the cave. The removal of trash from the cave will be beneficial to the overall ecosystem of the cave, including the potential to improve the water quality of the stream that flows through the lowest passage of the cave.

Volunteers removing trash from Wonderland Cave

At the FWS's **National Conservation Training Center (NCTC), WV** 28 volunteers contributed 3010 volunteer hours helping with the native wildflower planting beds, provided library assistance and worked in the archives cataloging, researching, data entry and transporting film collections. In the photo below, volunteer Michele helps examine white ash trees at NCTC for signs of emerald ash borer.

Michele also assists FWS employee (Casey) map and measure trees as part of a forest health study.

This is the 21st year that the **Chicago Ecological Services Field Office, IL** has been working with volunteers to monitor the Federally-threatened eastern prairie fringed orchid (Platanthera leucophaea). Volunteers visit their assigned population at least three times per year and oftentimes more. Because not all orchids bloom at the same time, the volunteers will visit their populations on at least two different occasions during the bloom period, which can vary from the middle of June to the middle of July, depending on the location of the population. During these visits they search for orchids that are in bloom and, when found, they tag each plant with an identification number, they take demographic data from each individual plant, record the data in the site's data log book, and finally hand-pollinate the plants.

Volunteer Lisa Culp hand-pollinates a Federally-threatened eastern prairie fringed orchid by placing pollen on the stigmatic surface of two different plants to ensure cross pollination and seed set. Photo credit: FWS.

The **Office of Migratory Birds, Non-game Branch, AK**, had the help of 54 volunteers who contributed to a wide variety of field projects throughout Alaska. Some examples include shorebirds surveys in Barrow, Cape Krustenstern, and Nome; seabird surveys in Prince William Sound and the Bering Sea; and a study of migrating birds on Middleton Island.

Most volunteer hours are spent assisting the staff at the **New Mexico Ecological Services Field Office, NM** with wolf captures. Without the help of volunteers the field station would not be able to capture these animals for necessary physical examinations, yearly vaccinations and occasional transfers. One volunteer, Trevor Smith, has given close to 416 hours of his time to the project this year. He has been essential in maintaining our captive facility and completing various projects.

This summer, Spanish Fort High School senior Katie Dankovic spent eight weeks volunteering with the Alabama Ecological Services Field Office, AL as a scholar in the 2012 Hutton Junior Fisheries Biology Program. The Hutton Program was created by the American Fisheries Society in an effort to get females, minorities and members of underrepresented communities interested in fisheries science careers. Fifteen students were chosen out of 79 applicants, and biologists from the Alabama Ecological Services Field Office were selected as Katie's mentors. Service Biologists took Katie under their wings, and helped her gain hands-on experience in science. Katie participated in a variety of activities, including mussel surveys, necropsies, and the removal of invasive island apple snails. This fall, Katie entered the University of South Alabama as a freshman, where she is majoring in marine biology.

Volunteer Katie Dankovic

Friends Organizations

What are Friends Organizations?
Friends are private, independent, community-based, nonprofit organizations formed primarily by citizen volunteers who support the mission and purposes of a national wildlife refuge or other Service office. There are more than 200 Service Friends groups, with about 10 new organizations created each year. Some support single refuges or hatcheries, while others are connected to a refuge complex or an entire state.

What do Friends Do?
Friend's organizations are crucial to the National Wildlife Refuge System's mission of conserving and protecting the wildlife of this great nation. From its start in 1903, the Refuge System has owed its very existence to concerned citizens eager to protect America's natural resources. Friends help millions of Americans understand that their actions today determine the legacy we leave for tomorrow – and they are inspiring a new generation of conservationists.

These important allies assist their field stations by educating local communities and elected officials, encouraging community participation in programs and building long-term support. They raise funds and offer volunteer staff to do work that might otherwise go undone. They help with education programs and special events. Friends are an essential link to the community to promote land stewardship. They give time, skills and resources for wildlife conservation.

Where can I find more information on Friends Groups?
To find refuges or hatcheries with Friends organizations, go to www.fws.gov/refuges/friends/find.html and click on a state, or contact the Division of Refuges Refuge Friends and Partnership Coordinator at 703/358 2392.

Friends of the Year
Friends at Maga Ta-Hophi Waterfowl Production Area (WPA), SD, received the Friends of the Year Award for their outstanding efforts to increase the name recognition and local and regional support for the Huron Wetland Management District in South Dakota. By offering a diverse array of free outdoor activities and taking special consideration for the needs and interests of the community, the Friends at Maga Ta-Hophi WPA, in just five short years, have developed a year-round environmental education program, and contributed to everything from wildlife surveys, maintenance projects and citizen science efforts. Additionally, the Friends strive to connect their local achievements with national efforts by regularly attending classes at the National Conservation Training Center and advocating for the National Wildlife Refuge System in Washington, DC with their South Dakota Congressional Representatives.

Friends of Maga Ta-Hophi WPA President, Frank Amundson, leads an environmental education program for local youth.

Friends Organization Highlights:

It's an uncommon introduction to common species: a full color, 12-page pocket naturalist guide to birds, waterfowl, mammals and mussels, reptiles, fish and insects, found o the **Upper Mississippi National Wildlife and Fish Refuge, MN**. Cortney White, a former STEP (Student Temporary Employment Program) employee, designed the guide withinput from **Friends fo the Refuge Headwaters** board members and funding from a National Fish and Wildlife grant. Friends sold half of the first printing of 1,000 to other Friends groups along the river as well as to outside organizations such as the Minnesota Marine Art Museum and the National Mississippi River Museum and Aquarium in Dubuque, IA. The guides are perfect for the "Let's Go Outside" backpacks lent to families visiting the refuge because they show easily identifiable images of wildlife people can expect to see.

A partnership between Carneys Point Generating Plant and **Friends of Supawna Meadows National Wildlife Refuge, NJ** has given some Pennsville High School students a chance to have a rare outdoor field trip. The generating plant, a staunch supporter of several major Friends projects on the refuge, provided $5,000 to pay for books, water testing kits, field guides and bus transportation for students in an environmental science class. A curriculum was developed and the refuge provides the on-site activities. The plan is to have students come to the refuge for half a day twice each year. The students' measure evergreen and deciduous trees, identify migratory birds and their habitats, and collect soil and water samples. They also net and identify aquatic organisms before posting their data on charts back in the classroom.

Formation of a formal Friends Organization at **Dale Hollow National Fish Hatchery, TN** has resulted in a dramatic upsurge in volunteer hours. There were over three times the number of volunteer hours reported FY 12 as in FY 2011. This was due primarily to the Friends Organization's involvement in the area of environmental education. The Friends assisted with the annual Kids' Fishing Rodeo which attracted 295 children and 300 adults this year and presents a unique opportunity for families to spend quality time together and to connect children with nature. The Friends also assisted with the hatchery's open house and taught students attending the annual U.S. Army Corps of Engineers Conservation Camp how to cast a fly rod. They have also taken the lead on the hatchery Trout in the Classroom program and are working with the Tennessee Ecological Services Field Office to help support the biology/science curriculum in local primary schools.

Seeking to attract visitors who are new to the refuge and to camping, **Friends of the Desert National Wildlife Refuge Complex, NV** last spring held its first overnight camping event. The Friends provided food – hot dogs, quesadillas and s'mores while REI provided the tents and sleeping bags. An educator from the Southern Nevada Agency Partnership led a guided evening walk. Fifteen campers participated, with 30 on the waiting list. Next year the Friends plan to use experienced campers who will serve as mentors for the beginners.

Twelve water trails at **Lower Suwannee and Cedar Keys National Wildlife Refuges, FL** are now featured on laminated paddling guides for visitors in kayaks and canoes. The front of each 11 x 17 guide shows a map, trail length, required skill level, time to paddle and directions. The back describes the various bio-zones along the trail-open water, salt marsh, transition marsh, and maritime hammock along the Shired Creek trail. The $10,000 project was funded by the refuge and executed by **Friends of the Lower Suwannee and Cedar Keys Refuges.**

Happy 30th anniversary - Three of the oldest refuge Friends organizations are celebrating 30 years of work – the **Friends of the Minnesota Valley, MN; Friends of Arthur M. Marshall Loxahatchee National Wildlife Refuge, FL; and the "Ding" Darling Wildlife Society, FL.**

The **Friends of the Minnesota Valley** began as an effort to establish the refuge and now support the entire Minnesota River watershed. Key accomplishments are Community Clean-ups for Water Quality and leading opposition to construction of a nearly 20,000-seat amphitheater next to the refuge. The **Friends of Loxahatchee** president stated that the single most important thing is the dedication of members which over 300 dues-paying members. And the **"Ding" Darling Wildlife Society** took on a huge endeavor when 11,000 visitors came to the new visitor center during its first month – and the refuge staff turned to volunteers for help!

From the wildlife drive on **Edwin B. Forsythe National Wildlife Refuge, NJ,** the skyline of Atlantic City is clearly visible. This juxtaposition created an exciting opportunity for the **Friends of Forsythe**. A fleet of privately-owned jitney mini-buses serves Atlantic City. When the jitneys were updated to newer, compressed natural gas-powered models, an owner/operator who lives near the refuge offered to donate an old vehicle to the Friends organization. In the late fall 2011, the first two-hour tour of the refuge was led by a volunteer Master Naturalist and the bus was driven by a certified driver volunteer. Tours are scheduled every Saturday except during the summer. The first tour had one participant, now there's a waiting list.

Working with our Partners

National Environmental Education Foundation (NEEF)
National Public Lands Day (NPLD), sponsored by the NEEF, is the nation's largest hands-on volunteer effort to improve and enhance the public lands Americans enjoy. Designed as a "work day," volunteers give back to the resource through project work, while learning about their public lands. Held the last week in September, this year's event drew over 170,000 volunteers at more than 2,200 sites around the nation. These projects contributed an estimated $17 million in improvements to Federal, state and local public lands. Seventy Nine (79) Service sites hosted NPLD volunteer activities. Below are just a few.

Over 250 volunteers showed up at **Arthur R Marshall Loxahatchee National Wildlife Refuge, FL,** to pick Cypress seed pods off the trees and remove the seeds. At **Chincoteague National Wildlife Refuge, VA,** 50 volunteers planted seaside goldenrod to attract monarch butterflies.

Thirty volunteers at **Balcones Canyonland National Wildlife Refuge, TX,** repaired trails and worked on the refuge's pollinator gardens. Talks on pollinators and native plants were provided. At the **Prairie Wetland Learning Center, MN,** 73 volunteers helped remove invasive species, plant native vegetation and collect native plants, and at **Coleman National Fish Hatchery, CA,** 30 volunteers attended an annual orientation meeting where they received training in leading field trips to the hundreds of students who visit to witness the run of chinook salmon return from the Pacific Ocean to spawn. Volunteers lead these students and explain the functions of the hatchery as well as the life cycle of the salmon. They also guide the students along a two mile riparian trail along Battle Creek.

In addition to sponsoring National Public Lands Day, NEEF also sponsors "Every Day Capacity Building Grants." These grants, up to $5,000, are available to nonprofit organizations. In FY 2012 three Refuge Friends organizations received grants. **St. Marks Refuge Association, FL**, will purchase a computer and donor management software to grow membership and strengthen its financial base; **Friends of Sherburne National Wildlife Refuge, MN** will work with a consultant to develop a funding strategy to make annual giving a part of the organizational culture; and **Friends of Squaw Creek National Wildlife Refuge, MO** will use grant funds for its "iNature iNdulgence" project – positing digital QR codes on the auto tour loop and hiking trails to promote the Friends, projects that need funding, the Nature Shop, upcoming events and educational information.

Take Pride in America
Take Pride in America is a national partnership set up by the Department of the Interior to inspire Americans to volunteer in caring for their public lands. Take Pride's goal is to instill in every citizen an active sense of ownership and responsibility for natural, cultural and historic resources and to support and recognize the effort of those who volunteer on public lands. Take Pride recognizes and honors outstanding volunteers at its annual national awards, ceremony. Individuals, groups, organizations, programs and Federal land managers are honored for their contributions to our public lands and innovative use of volunteers.

Friends of St. Croix WMD with their Take Pride in America volunteer award

"It is a joy to be an outreach extension of the Fish and Wildlife Service to our community," said Clarence Malick about the 2012 Take Pride National Volunteer Award given to **Friends of the St. Croix Wetland Management District (WMD), WI.**

In fact, it is because of the Friends outreach that the young organization is as vibrant as it is. The Friends organization is committed to raising awareness of the St. Croix WMD by engaging the public in resource conservation through volunteerism. The Friends has a long list of projects and accomplishments, ultimately offering 46y8 local community members opportunities to volunteer 4,807 hours.

The Prairie Plug Partnership introduced more than 100 local high school and middle school students to the importance of native prairie flowers and grasses as wildlife habitat. Student volunteers germinated more than 4,000 prairie plugs. Friends and Neighbors Night Out introduced the surrounding community to local ecology and resource management and Conservation Day brought 400 volunteer Boy Scouts, parents, educators and partners to St Croix. Scouts helped remove invasive species in an oak savanna restoration site. The Friends produced a 29-page full color birding guide to the WMD's auto tour route which helps promote the importance of these public lands for many species of non-game birds.

Also honored for his work with volunteers and partners, Andrew French, Project Leader at **Silvio O. Conte National Fish and Wildlife Refuge, VT** received Take Pride's Federal Land Manager of the Year - FWS.

Andrew French was recognized for his leadership, determination, and creativity and a strong and productive partnership with the Friends of Silvio O. Conte National Fish and Wildlife Refuge and numerous other volunteer partnerships. The Refuge lies within the Connecticut River Watershed, which is home to thousands of species of flora and fauna, includes more than 1.5 million acres of conservation land, and encompasses 396 communities in which approximately 2.16 million people reside.

Andy uses protected refuge land as a foundation to connect with other public and private organizations to form partnerships and recruit volunteers on a large landscape basis. Andy has considerable experience working with volunteers, and refuge staff often join in with Friends, partners, and other volunteers to form work parties in celebration of Earth Day, National Trails Day, and the annual Connecticut River "Source to the Sea" Clean-up along the Connecticut River. Volunteers are a vital part of the Refuge, and the value of their participation includes conservation, education, recreation, programming, outreach, research, monitoring, and maintenance activities across approximately 400 miles.

He also worked with the Friends of Silvio O. Conte National Fish and Wildlife Refuge to develop the Connecticut River Watershed Blueway-Actions and Stewardship proposal which attracted national attention. The Connecticut River was prominently showcased in the Interior's 50-state initiative outlining 101 priority projects to reconnect Americans to the natural world and outdoor recreation as part of the America's Great Outdoors Initiative. He also helped launch the "Adopt a Habitat" program to establish long-term relationships with schools, organizations, and individuals to encourage them to adopt a local area and manage it to promote healthy habitat for plants, wildlife, and people on public and private land. Presently, about 1.5 million acres of land in the watershed have been conserved by public and private organizations and agencies.

Andrew French, Take Pride's Federal Land Manager of the Year – FWS.

American Hiking Society
In 2012, the FWS hosted four Volunteer Vacations on FWS lands. Project locations included Ottawa NWR, OH; Sunkhaze Meadows NWR, ME; and Canaan Valley NWR, WV (two projects). A total of 25 American Hiking Society volunteers worked on these projects, contributing 1,000 hours of labor, worth an estimated $21,760. These same volunteers built, maintained or re-vegetated 6 miles of trails.

Canaan Valley NWR, WV trail work

Other Partnerships

Nestucca Bay National Wildlife Refuge, OR is partnering with the **Institute for Applied Ecology (IAE)** and several dedicated volunteer groups to convert 30 acres from highly aggressive, non-native pasture grasses and other invasive plants to native coastal grasses and forbs with an emphasis on the species and structure required for all life stages of the threatened Oregon silverspot butterfly. It is imperative that permanently protected, high quality habitat be established as quickly as possible so that the butterfly does not continue to decline. Because this habitat is urgently needed, volunteers are essential to monitoring success of each treatment and helping to determine timing and be ready to restore the habitat when the invasive have been successfully controlled.

As part of an Alternative Spring Break program and through a partnership with **Tulane University,** students participated in an extensive debris pickup on **Big Branch National Wildlife Refuge, LA.** Flooding from Hurricane Isaac had deposited trash in many of the interior marsh units and students helped to reclaim a section of this vital habitat. The low water levels helped to gain access to some heavy debris that had been buried since Hurricane Katrina in 2005.

In 2012, the **Friends of Green Lake National Fish Hatchery, ME** continued construction of a 3.2 kilometer nature trail that connects people and communities with nature while serving as a living classroom for all to learn about the natural resources in the area. A $1,500 grant from **The Maine Council Atlantic Salmon Federation** was awarded to the Friends organization for trail construction. **Exhibits Management and NOAA Preserve America Initiative,** along with **Capital Exhibit Services** donated their time and effort to professionally edit and redesign the interpretive signs for the trail that will be installed in the fall.

The **Hopper Mountain National Wildlife Refuge Complex, CA**, in partnership with the **Santa Barbara Zoo** manages a volunteer nest monitoring program as part of the California Condor Recovery Program. Volunteers undergo training nest monitoring and data collection protocols and spend long hours at remote observation points observing nests. On October 24, 2012, Bill Langford, a volunteer with the program since 2006, watched one of the most symbolic of events for condor recover – the first flight of a wild condor chick!

Volunteers pulling invasive species

Bill Langford has volunteered watching condor nests at the Hopper Mountain NWRC since 2006. Photo: FWS

Volunteers doing trail work

Youth in Natural Resources Initiative

Boy Scouts of America
Marais des Cygnes National Wildlife Refuge, PR was very grateful for the work of Eagle Scout, Chase Allison. Allison constructed a photography blind as his Eagle Scout project. The blind will be set at a premier birding area that and will remain there for visitors to use for years to come. This project would not have been possible without the idea for the need of the photography blind and the 194 volunteer hours that came from Allison and his helpers.

Eagle Scout Chase Allison with his completed volunteer project

On April 22, 2012 (Earth Day), 15 volunteers from the National Key Deer Refuge, FL Boy Scout Troop 573, Florida Keys Wildlife Rescue, and the Big Pine Senior Center got together to plant 15 large fruit-bearing trees (figs, blolly, black torch and pigeon plum) for wildlife. This tree planting event was part of the Refuge's "Give a Smidgen for the White-Crowned Pigeon" campaign that promotes landscaping with native plants to provide food and habitat for the imperiled white-crowned pigeon and other wildlife species.

Earth Day volunteers at Key Deer NWR

Student Conservation Association

At **Kenai Fish and Wildlife Field Office, AK** a SCA fisheries intern assisted with monitoring salmon escapements in the Kwethluk River. Duties included weekly collection and entry of biological data, maintenance of the weir, camp, boats, and associated gear and equipment. Another intern worked on the Funny River Salmon Assessment project that involved estimating abundance and migration timing of Chinook salmon using an underwater video system at a weir.

In the fall of 2012, Coleen Gentles served in a Student Conservation Association (SCA) internship with the **National Wildlife Refuge System, Division of Visitor Services in Headquarters, Arlington, Virginia.** She worked with the National Friends and Partnership Coordinator in planning, implementing and executing support programs for Friends organizations, community partnerships and volunteers. One of her signature projects was the creation of an evaluation form to measure the effectiveness of Friends Academy, an annual gathering of 24 Friends board members. This evaluation form captures the board members experiences at Friends Academy, while also quantifying the successes of their Friends Organizations post Friends Academy. Coleen also learned new skills through this internship, including how to create a fillable form using Adobe Acrobat 8 Professional software. She designed a PDF template that will be used to create the Profile forms of the Friends Academy participants for many years to come.

There were many memorable moments for Coleen, from conference calls, in-house staff meetings, and off-site meetings through this internship, but two trips in particular stand out. The first was attending the grant review process for the National Wildlife Refuge Friends Grant Program (administered by the National Fish and Wildlife Foundation). The second was visiting the Service's National Conservation Training Center (NCTC) in Shepherdstown, West Virginia where she assisted the National Friends and Partnership Coordinator with the "Working with Friends Organizations" session for Service staff participating in the Introduction to Visitor Services course.

Coleen Gentles with the NWRS's blue goose mascot.

In its second year, the **Tribal College Internship Program** reaches out to under-represented students enrolled in tribal colleges through a partnership with the SCA. One example of the 11 students that participated this year is a student named Dominick Harris, a native Alaskan from the Aleut tribe who currently attends the North Seattle Community College. Harris worked as a biology intern on the 25,000 acre **National Elk Refuge, WY** spending most of his summer inventorying and mapping vegetation, but also working on various other projects such as noxious weed eradication, collecting scat for a climatology study, counting bison and monitoring their movement onto and off the refuge, conducting forage sampling surveys with the staff biologist, and entering historic elk collar data from the 1970s and 80s to aid in assessing elk migration trends.

The 2012 **Trails Inventory Program** was the conclusion of the nationwide effort begun in 2011 to compile a comprehensive and accurate database for all trails and trail assets within the FWS system. In 2011, over a 10-month period, ten SCA participants traveled to nearly every state collecting the necessary spatial data to include all new trails completed since the very first inventory was completed by Federal Highways in 2006. The 2012 program completed the overall survey in four months with six interns, "ground-truthing" all the existing trails in the refuges not visited in 2011. By collecting the footprint of trails as well as their associated features and deficiencies, the SCA has provided the FWS and Federal Highways Administration with a full account of their trail systems' values and conditions. Data was from 114 field stations in 38 states and 480 miles of trails inventoried. Using this completed database, the Service can make more educated assessments and plans for repair and management of our trail systems in the future. Several experiences of those who participated in 2012 are highlighted below.

Anastasia (Nastia) Abramova – "In these four months I have seen more of the U.S. than of my own country. I had a chance to do canoeing in Okefenokee NWR, GA, rafting in Idaho, and biking on flooded trails in National Key Deer NWR, FL. This internship justified once again my choice of becoming a geographer. This internship gave me an opportunity to learn more GIS, GPS, trail building and timber work details. My favorite refuges are located in the deserts of Arizona, Oregon, California and Nevada."

Refuge biologist Eric Cole, right, received help from Dominick Harris during his forage sampling work.

SCA Trails Volunteer Nastia Abramova

Katie Auer – "After graduating from college in May, I flew out to Boise, ID, where I have spent the summer working for the FWS National Trails Inventory program. While doing this trails inventory I have had the opportunity to gain many new skills and have many new experiences. I had the chance to visit 22 states and 49 NWR's and hatcheries. In addition, I have gained new GIS and GPS skills, as well as improving my organization and planning skills by managing a 3 week schedule that included planning lodging, transportation, and refuge schedules while on the road."

Michael Vasquez – "Traveling to NWRs from Louisiana to Alaska, I have seen some of the most beautiful areas this country has to offer. Over the course of the program, I visited many parts of the country that I never thought I would ever explore, while at the same time learning the in-and-outs of GPS and GIS software, working with NWR managers throughout the country, and learning the logistics behind planning trips of this magnitude.

SCA Trails Inventory participant, Michael Vasquez

The **Division of Natural Resources and Conservation Planning in Refuge Headquarters**, in partnership with the **American Conservation Experience (ACE),** established the **Wilderness Fellowship Program** in 2011. ACE is a non-profit organization dedicated to providing rewarding environmental service opportunities that harness the idealism and energy of a volunteer labor force to help restore America's public lands. The program commences its second year in cooperation with 12 refuges across six regions, providing opportunities for students or recent graduates to gain valuable career experience while advancing stewardship of wilderness resources. Each Wilderness Fellow spends up to six months in a wilderness refuge to support the development of wilderness character monitoring and associated tasks. Fellows focus on wilderness character by producing baseline assessments, entering data into the interagency database, recording observations of wilderness experiences, and advancing the inventory and monitoring strategy.

Field stations visited in FY 12 by Wilderness Fellows were **Alaska Maritime National Wildlife Refuge, AK; Bitter Lake, NM; Wichita Mountains, OK; National Key Deer and St Marks, FL; Monomoy, MA; Chincoteague, VA; Assateague Island National Seashore (NPS), MD; Fort Niobrara and Valentine, NE; Chase Lake, ND; Crab Orchard, IL; and Mingo, MO.** Accomplishments included surveying gopher tortoise burrows, sea turtle nesting beaches, endangered sea beach amaranth, rare butterfly density and heavy metal contamination of bullfrogs. Additional activities included mapping of invasive plants to inform herbicide management needs and mapping habitat for an endangered butterfly, along with data collection by way of water quality sampling, stream-flow data to monitor impact of climate change and increasing irrigation demand.

As part of the FWS's **Children in Nature** initiative, **Pea Island and Alligator River National Wildlife Refuge, NC** staff, over the past three years, have relied on students from **First Flight High School's Advancement Via Individual Determination Program (AVID)** to help make Wildfest a success. This multi-organization event provides a fun-filled day of learning about wild lands and wildlife for lower elementary school children. The AVID students enjoy dressing up in one of the four critter costumes that wander around the outside area while children are participating in activities. The Wildlife Olympics activity, face painting and build a bird tables are also popular with the volunteers. Each year a select number of students are selected to act as guides for the individual class groups that arrive. The students also dress up in the costumes for local parades.

Young volunteer at Wildfest

Fiscal Year 12 was the second year of the Kodiak National Wildlife Refuge Youth Leadership (KRYL) volunteer program. The environmental education specialist at **Kodiak National Wildlife Refuge, AK** recruited and trained 9 students ages 13-17 to participate as weekly instructor aides for Salmon Camp. The program has been hugely successful and the refuge recently recognized one volunteer participant for her contributions thorugh a nomination for the Alaska Spirit of Youth Award.

Young volunteer face painting at Wildfest

Arnav Mehra began volunteering at **Assabet River National Wildlife Refuge, MA** when he was 11 years old. He would joyfully welcome visitors to the visitor center and talk to them about what trails to take. Since then he has lead a fundraiser walk to help raise funds for our Friends group, helped distribute our compost into our garden beds, and helped clean the Massachusetts threatened Blanding's Turtle tank, as well as help measure the turtles. It is very helpful having him as he cuts down the tasks of many chores by at least 50%.

Volunteer Arnav Mehra spreading compost

Regional Volunteer and Friends Coordinator Contacts

Region 1 - Pacific Region (Idaho, Oregon, Washington, Hawaii and the Pacific Islands)

U.S. Fish and Wildlife Service
Ridgefield National Wildlife Refuge
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Volunteers/Friends Ph. 360-887-4106

Region 2 - Southwest Region (Arizona, New Mexico, Oklahoma and Texas)

U.S. Fish and Wildlife Service
500 Gold SW, Room 4504
P.O. Box 1306
Albuquerque, NM 87103-1306
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Balcones Canyonlands NWR
24518 FM 1431
Marble Falls, TX 78654
Friends Ph: 512/339-9432 x50

Region 3 - Great Lakes-Big Rivers Region (Illinois, Indiana, Iowa, Michigan, Missouri, Minnesota, Ohio and Wisconsin)

U.S. Fish and Wildlife Service
One Federal Drive
Fort Snelling, MN 55111-4056
Volunteers/Friends Ph: 612/713-5167

Region 4 - Southeast Region (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Puerto Rico/Virgin Islands, South Carolina and Tennessee)

U.S. Fish and Wildlife Service
1875 Century Blvd., NW, Suite 420
Atlanta, GA 30345
Volunteers/Friends Ph: 404/679-7178

Region 5 - Northeast Region (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia and West Virginia)

U.S. Fish and Wildlife Service
Edwin B. Forsythe National Wildlife Refuge
PO Box 72
Oceanville, NJ 08231
Volunteers Ph: 609-652-1665

300 Westgate Center Drive
Hadley, MA 01035-9587
Friends Ph: 413/ 253-8498/8568

Region 6 - Mountain-Prairie Region (Colorado, Kansas, Montana, North Dakota, Nebraska, South Dakota, Utah and Wyoming)

U.S. Fish and Wildlife Service
Division of Education and Visitor Services
134 Union Blvd., Suite 600
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Volunteers Ph: 303/236-4392
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Region 7 - Alaska

U.S. Fish and Wildlife Service
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1011 East Tudor Road, MS 235
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Region 8 - California and Nevada

U.S. Fish and Wildlife Service
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Headquarters – National Conservation Training Center (WV)

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Headquarters – National Volunteer Coordinator (Washington DC)
National Friends Coordinator

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U.S. Fish & Wildlife Service
http://www.fws.gov

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