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#### From the Director

Growing up in the hills of Harlan County, Kentucky, I never thought about the importance of connecting with nature; it was as much a part of my life as breathing. If I wasn't up in the mountains chasing squirrels, I was down on the Cumberland River fishing or making boats out of old car tops. Even though we didn't have a lot of money, I always felt rich.

For many kids today, however, exploring nature is fast becoming a thing of the past. Time in the woods has been replaced with time in front of a computer or television screen; unstructured play has been replaced by organized events run by adults; the art of daydreaming has been replaced by a non-stop schedule. Author Richard Louv, who writes about this in his book "Last Child in the Woods: Saving Our Children from Nature Deficit Disorder," believes one of the biggest problems is fear: parents are terrified of "stranger danger" and many view the outdoors as more of a threat than a sanctuary.

The result is a younger generation that is less active and less interested in spending time outside, which can lead to a host of physical and emotional problems. And you can bet kids who prefer virtual reality to nature are going to have a tough time understanding why they should care about conservation.

So what can we do?

The U.S. Fish and Wildlife Service has identified "Connecting People with Nature" as one of its six highest priorities. We have formed a Children and Nature Working Group – including representatives from every region and program – to identify ways to reach out to communities and build awareness that "nature play" is good for both children and adults.

Service employees from coast to coast have already embraced the importance of reconnecting children with nature. From the Don Edwards San Francisco Bay National Wildlife Refuge, where youngsters sample brine shrimp in the salt ponds or investigate bird and plant life with their parents, to the Chesapeake Bay Field Office, where students create schoolyard habitats outside their classroom door, our land base and our people are helping folks of every age to get outdoors. But we can always do more.

We should look for opportunities to connect children and families with nature as we go about our daily work and help them share in our conservation mission.

Connecting people with nature should not be just another box to check off on a performance plan; it should be something we want to do, something that is a part of us. Sometimes when I'm bass fishing on a lake and the sun is just breaking over the horizon and the birds begin to fly low across the water, I lay down my rod and realize I didn't come here to catch fish; I came for the healing power of nature and to feel better as a human being. I know many of you have had similar experiences and have a strong desire to help people – especially youngsters – rediscover what Rachel Carson called a "sense of wonder" for the outdoors. Now is the time for all of us to act on that desire.

John James Audubon once said, "A true conservationist is a man who knows that the world is not given by his fathers but borrowed from his children." It is time for us to pay back that loan and share the riches of nature with tomorrow's caretakers.

A Dale Hell



Dale Hall, connecting with nature
Photo by USFWS

## From the Regional Director

Last year, Director Dale Hall announced that "Connecting People with Nature" is one of the Service's top six priorities. This action plan describes the Midwest Region's approach to addressing this priority -- our current actions, and a look at the road ahead. Our Midwest focus on connecting people with the natural world preceded its official proclamation as a Service priority. For many years, our employees have devoted creativity, resources and extensive time (both on and off duty) to helping inspire the next generation of conservationists.

We have long invested in these efforts because they are meaningful to us. We care about our natural world and each of us has our own personal story about an experience, an event, a place or a person that helped us build our own personal connection with nature.

But our past efforts are not enough to address the daunting challenge of a growing disconnect between the public and natural resources. Now we are challenged to help a whole generation of young people, and their parents, make that connection for themselves. The reason we devote ourselves to this priority goes well beyond sharing our own good experiences and good feelings; we recognize that this connection is essential to building the next generation of conservation stewards.

Simply stated: connecting people with nature is essential to the future of natural resource conservation and the Service's mission.

Our Midwest Region action plan focuses on several paths to address this important endeavor. First, we acknowledge and recognize that there are already successful existing programs. From the Prairie Wetlands Learning Center that is part of our wetland management district operations in Fergus Falls, Minnesota, to the SEEDS partnership conducted by the Ecological Services office in Columbia, Missouri, we tip our hats across the Midwest Region to many employees and offices already dedicating themselves to connecting people with the natural world. We take inspiration and ideas from their good examples while we affirm their excellent efforts and encourage their continuation. We are in a unique position to offer quality outdoor ex-

periences to youth and adults alike. Examples of these include formal programs with large-scale support, such as the work that Ecological Services Project Leader John Rogner is supporting with Chicago Wilderness. Equally valued are individual efforts like those of Dave Myhrer, an equipment operator at Agassiz National Wildlife Refuge, who is a popular guest in school programs to teach trapping techniques to kids because, as he told me, "Who the heck else is going to do it?"

In addition to ongoing successful approaches, our Midwest plan includes examples and proposals for new ways to embrace technology and partnerships with the health, education, art and corporate communities, and make critical inroads with non-traditional natural resource partners in urban areas.

At the regional and national level we will continue to seek partners for our efforts, including the launch of the Servicewide "Let's Go Outside!" campaign, with communications and marketing materials to brand our effort and give us a Service umbrella under which all of our efforts can nest. However, if we are to be truly successful in connecting people with nature, it will be the creativity and passion of individuals that help guide our way. Employees throughout the region have encouragement and permission to find creative solutions within their programs and stations; we can all step forward to contribute to this priority.

Ten employees in our region have already stepped up to help guide our way as we address this priority. They comprise our People and Nature Working Group. Last December, they gathered with more than 100 Service employees to share successes and build a national strategy. In addition to distinguishing themselves for the efforts already underway in the Midwest, these ten dedicated employees have returned home motivated toward action. Their charge is to inspire us as well as guide us, and to keep this priority at the top of our agendas.

I've often remarked that the Service is a public conservation agency, and that we conserve what the public cares about conserving. Who will help the public care about our natural resources? We will. It's essential to our mission and it is now defined as a Service priority. Our Midwest plan helps guide our way.

Robyn Thorson



Water sampling at Whittlesey Creek NWR Photo by USFWS

## What is the Connecting People with Nature Movement?

What is the "Connecting People with Nature Movement"? Children are spending less time than ever before in the outdoors, in contact with nature. Research shows that an adult's affinity for and behavior toward nature is often linked to direct exposure to nature as a child. However, research also shows that it is never too late to develop a connection with nature that will lead to caring and positive behaviors toward nature. Conversely, there is a concern that if children and adults do not connect to nature through direct experience, they may not care about nature and conserving the natural world.

Recognizing this threat to the future accomplishment of our conservation mission, the Service adopted "Connecting People with Nature: Ensuring the Future of Conservation" as one of our six highest priorities. While the other five priorities emphasize our scientific and natural resources management work, Director Dale Hall often reminds us that if we do not find ways to connect American people with nature, thereby creating tomorrow's conservationists, all of our other work could be in vain.

As a result of the priority placed on connecting people with nature, and the realization that all Service programs can and should engage in this priority, the Service established a People and Nature Working Group comprising representatives of all regions and programs. These are collateral duty assignments, with people spending anywhere from 5 to 50 percent of their time on issues directly related to the working group's efforts to connect people with nature. The working group formed sub-teams to focus on communications, barriers, criteria and the development of a national workshop.

In December 2007, the Service held the Connecting People with Nature Workshop at the National Conservation Training Center. Participants heard a message from Dale Hall and attended sessions focused on changing demographics and lifestyles in America, the connection between lack of contact with nature and public health concerns, and program evaluation. Concurrent sessions covered a broad range of existing programs and efforts to connect children and adults with nature, including school yard habitats, archery, digital photography and geocaching. Participants also broke into regional teams to brainstorm approaches to connecting people with nature within their regions.

While there are many existing efforts within the Service to connect people with nature, we need to "brand" our efforts to more effectively communicate internally and externally. We need to communicate our goals and programs in an easily understood message that resonates both with our employees and the public. A subteam of the Children and Nature Working Group has begun efforts on a communications plan and will work with NCTC/External Affairs on an outreach campaign built around the catchphrase "Let's Go Outside!"

#### Let's Go Outside!

## The Midwestern Approach

The 2007 designation of "Connecting People with Nature" as a Service priority came as welcome news to the Midwest Region. For Service employees across the Midwest, building the next generation of conservationists has always been a priority.

The land ethic in the eight Midwest states is woven into the historical fabric of its peoples. From explorers to farmers, hunters, trappers, anglers and tribal members, this is a place that values the outdoors as part of its heritage.

Yet even a population with conservation in its blood is not immune from nature deficit disorder. The core group of hunters and anglers is leveling off or declining in numbers. Competing priorities and electronic media vie for our children's time and attention, robbing many of the opportunity or desire to embrace the wild.

This is not the end of the story though, as we have the opportunity—and the mandate—to reverse this trend. With this action plan, we seek to capitalize on the spirit of the Midwesterner. We believe our actions will provide opportunities to unearth the conservationist in each of us.

Our action plan focuses on eight areas:

Health Community: Health professionals are critical partners in the Connecting People with Nature movement. It is their connection of the physical and mental health consequences of nature deficiency that will legitimize the movement in the minds of many. Their studies of nature's affects on childhood diabetes, obesity, ADHD, and general well-being will assist in public awareness and shape legislative priorities surrounding the importance of our natural resources. We seek to partner with the health community on projects, research, and outreach to maximize resources and impact, as well as refine our processes for maximum effectiveness.

**Adult Audiences:** Much of the Connecting People with Nature movement stemmed from the Children and Nature movement. Yet it isn't only children who derive value from the natural world. Nature deficit disorder

has been around long enough that we have already raised a generation—now adults—who didn't grow up with value placed on access to the outdoors. We seek opportunities for adults to experience nature—to maintain the support we already have, while reconnecting other adults (and their children) who haven't had the same background.

**Technology:** Long maligned for its role in plugging kids in and taking them away from the outdoors, technology has become the bogeyman in the Connecting People with Nature movement. Instead of having contempt for technology, we should embrace technological opportunities as a magnet to bring people outside. We realize separating people from the technology they rely on is futile. We seek opportunities and creative solutions where technology can integrate, support and promote outdoor opportunities.

Education: One of the greatest opportunities to instill the conservation ethic is while children are in an educational setting. Yet the curriculum demands on teachers, administrators and students make "one more good thing" difficult to embrace. Our current successes and future planning capitalize on assisting educators in integrating a conservation focus to meet (and exceed) curriculum standards, rather than as a stand-alone subject. We partner with schools in the development and execution of integrated technology. We are not "one more good thing," we are "a thing that makes learning more effective."

**Urban Outreach:** Statistics show people from a variety of backgrounds use the outdoors for different purposes. While our hunting and fishing partners remain critical, it is also imperative to reach out to



Youngster at a Fishing Day event catches his first fish Photo by USFWS

non-traditional audiences, particularly in urban areas. We seek to provide awareness, access and opportunities to bring people to wild areas such as national wildlife refuges for the first time. In the past we have tried to explain to urban audiences why they should embrace conservation by asking them to come to where we are. We also need to understand and celebrate the many purposes the outdoors serves for a diverse population. We will seek opportunities to cross cultural bridges and develop opportunities designed to appeal to an all-inclusive audience.

Partnerships: We realize we are not the sole source of good ideas, and we seek to capitalize on the expertise and resources of other organizations. By working with nongovernment organizations, state and federal agencies, corporations, and others, our reach is extended and we have a reciprocal and long lasting effect. Because no additional funds have been appropriated specifically for connecting people with nature, we will focus on creative means and partnerships to provide opportunities.

The Arts: As with technology, integration into the art community adds new members to the natural resource community. Not everyone has a desire to hunt or fish, yet they may still be captivated by the magnificence of nature. We seek to build partnerships and opportunities with the art community, so those who capture fish and wildlife via brush or lens rather than hook or bullet are inspired, empowered and able to apply their trade and

further the reaches of the natural world to those who may view their work.

The "Big Six": The National Wildlife Refuge System is the Service's the major land base. In 1997, the Refuge Improvement Act identified wildlife-dependent recreation activities to be provided for refuge visitors whenever possible. The activities, often called the "Big Six," are the basis for connecting people with nature on our national wildlife refuges in the Midwest Region and across the nation. We will continue to maximize this existing treasure by seeking creative opportunities within the Refuge Improvement Act mandate.

## The Health Community

Do you remember that time as a child when spring had finally arrived, and you came home after having played outside all day? Your cheeks were rosy from the wind, your hair was messy from running and your shoes and socks were all covered in mud. You knew how good it felt to climb up a tree; you were quite sure of the fun you had building a fort with your friends. What you probably didn't realize was that you were as healthy as any child could be at that moment. What Rachel Carson told us years ago, and research in children's health tells us today, is that playing outdoors and making strong

Enjoying time on Lake Superior Photo by Valerie Redmond



connections with nature may be necessary for healthy development. Studies show children who grow up in nature are comparatively emotionally stable and spiritually grounded, and have heightened sensory awareness, well developed social and motor skills, and high academic performance. The physical health benefits of playing outside and being active are enough to encourage some health care professionals to prescribe nature to their patients as part of their overall health plan.

The Service is making connecting people with nature a top priority, not only to prepare the next generation of conservationists, but to help ensure the health of that generation. Partnering with health care professionals is a powerful way to boost kids' health.

For example, the Healthy Kids Club in Winona, Minnesota, is a community-wide program that encourages kids to live healthy. The program offers a variety of activities to teach kids how to eat healthy, get active and set wellness goals. The Upper Mississippi River National Wildlife and Fish Refuge is an active partner, providing a variety of activities and education for children and families involved in the program.

Partnerships such as these can be quite powerful in increasing the overall health of communities. With the support of other community health services, such as hospitals, clinics, health and environmental health departments, we can communicate the message to "get healthy and get outside!" effectively to children and their families.

Hoping for a bite at Ice Fishing Day Photo by USFWS



To help in creating these partnerships and raise awareness of the Service's "Let's Go Outside" initiative, we are developing an informational brochure that communicates the importance and goals of the initiative to health care professionals. Ways to initiate health community partnerships include attending community health fairs, leaving coloring books and other outreach materials in waiting rooms at health care clinics, or simply contacting a county health nurse about activities at your station.

### Adult Audiences

Adults also enjoy being outside, interacting with the natural world and experiencing things that they can see, touch, hear, and smell. While connecting children with nature is important and will help promote environmental literacy in the future, current trends indicate that adult education programs are desperately needed, too, and that neglecting adults will minimize the success of the Connecting People with Nature movement.

"Environmental Literacy in America," a 2005 report by the National Environmental Education and Training Foundation, says that "many leading environmental problems, ranging from water quality to ecosystem management, will require the efforts of more skilled non-experts acting as individuals or as community leaders." According to the report, the vast majority of Americans (86 percent) agree that government agencies should be involved in educating adults about environmental issues.

The Midwest Region's focus on adult audiences is extremely evident on national wildlife refuges. The Prairie Wetland Learning Center, for example, hosts a series of workshops, open to the public, where adults can take part in sessions ranging from prairie chicken observations to earning a Master Naturalist certification. Educators can learn about teaching in outdoor classrooms, nature journals and observation skills.

Opportunities for the Service to reach adults can be found through our partnerships with other agencies and groups. Following is a sampling of programs and activities aimed at connecting people with nature that are currently being implemented in the Midwest Region. Opportunities for the Service include providing instruc-

structors, facilities, equipment, materials and/or funding for these programs.

Becoming an Outdoors Woman: This nationwide program, begun by the University of Wisconsin-Stevens Point in 1991, teaches women outdoor skills such as hunting, fishing, birdwatching, camping and canoeing. Research has shown that women who participate in these workshops increase their participation in outdoor activities. Every state in the Midwest Region currently provides this program.

**Teacher Training:** There is a need for qualified instructors to provide teacher training in outdoor education, and it makes sense that we support teacher training so that these adults can help their students connect with nature. Many states already sponsor various award-winning environmental education programs such as Project WILD and Project WET, and would welcome our participation to increase hands-on, experiential learning.

Naturalist Certificate Program: Developed by the Morton Arboretum, this program was implemented more than a decade ago to provide adults with knowledge and field experiences focusing on Chicago-area biological diversity. Many graduates of this program have become valuable volunteer stewards of the natural

Learning how to bait a hook Photo by USFWS



al areas in northeast Illinois. This program can serve as a model for high-quality adult education elsewhere.

National Garden Clubs - Environmental Studies School: The National Garden Clubs, Inc., offers environmental studies schools for the enrichment and educational growth of its members. Although the courses are intended primarily for garden club members, they are typically open to the general public. Since garden club members are often community leaders, they are concerned about the environment, and could serve as valuable partners.

# Technology

Are outdoor enthusiasts trading in their hiking boots and backpacks for cell phones and GPS units? Not exactly, but these electronic devices, and others, are drawing a new interest group to the outdoors and enhancing the experience of even seasoned nature lovers. Throughout the Midwest Region, refuges and other field offices are finding ways to use technology to connect people with nature.

The Upper Mississippi River National Wildlife and Fish Refuge created a geocaching (JEE-oh-CASH-ing) series. Geocaching is a high-tech scavenger hunt using a handheld Global Positioning System, or GPS, unit to find a treasure or cache, such as a small container. Traditional geocaching is illegal on national wildlife refuges because it leaves "litter" on the land. At Upper Miss, refuge staff created a "cache" out of their existing interpretive signs at overlooks and boat landings. Instead of locating cache containers, geocachers download clues and directions from the refuge Web site to find these public places. The answers to the clues are found within the interpretive messages on the signs.

"Technology is here to stay, and I think we need to embrace it in a way that also safeguards the resource and the experience we want visitors to have," says Refuge Manager Don Hultman. "To many, a GPS unit is a catalyst to get outside, to see a refuge in a new way, and help us gently lead people to the places and message we want to share."

With its geocache listed on the Web site Geocaching. com, the refuge receives feedback from users, which tells them a little about their visitors. For example, one visitor wrote, "Cool way to get us to check out these locations, all with great river views." A visiting family wrote, "We took the kids out on this adventure today and all 5 of us learned a lot! I think that this is a great tour of the NWR and everyone should really try to get this one logged!"

GPS units, along with digital cameras, became the tools of the day for middle school students at Tamarac National Wildlife Refuge.

The students worked on three real world project scenarios with Refuge Biologist Wayne Brininger. They collected data, mapped invasives and wrote about their experiences. Here's an excerpt from one student's assignment. In "My Tamarac Experience," Shea Henderson wrote, "My Tamarac Experience was fantastic. It was the best field trip I have been on in a long time. I think the GPS grant that the Team Quest got was very worth its while, because no one had really done anything like it before. It made it even more fun that the data from our activities was really going to be used as a reference for Tamarac."

The Midwest Regional office is embarking on a community television show titled "Just Escape." Episodes will encourage people to escape from their hectic lifestyles and connect with nature. Shows will air on Minneapolis Television Network, which reaches 77,000-plus viewers.

Have you ever been to a site and wished that a ranger could be along on the trail to share some helpful hints about the area, such as what to look for or what the place looks like during a different season? Soon visitors will be able to carry a "Pocket Ranger" on their visits to Mingo, Middle Mississippi, Cypress Creek, and Crab Orchard national wildlife refuges. By connecting to stand-alone touch-screen terminals, visitors will be able to download information onto their digital device (camera, iPOD, MP3 player, etc.) so they can take a "guided tour." Crab Orchard is working with a recreation class at Southern Illinois University to develop and record the video/audio clips onto their digital device (camera, iPOD, MP3 player, etc.), visitors can take a "guided tour." Crab Orchard is working with a recreation class at Southern Illinois University to develop and record

Student from Detroit Lakes Middle School uses a GPS unit during an activity at Tamarac National Wildlife Refuge Photo by Denis Mudderman video and audio clips, while Mingo is exploring a partnership with Southeast Missouri State University.

Mingo refuge ranger Vergial Harp said, "The Pocket Ranger project is an exciting, cutting-edge idea. Our visitors will be able to enjoy the refuge at their own leisure and hear messages on their own handheld device."

One thing refuges are known for is wildlife, and that certainly can be a draw for wildlife photographers. Crab Orchard National Wildlife Refuge was able to attract just over a dozen people to a volunteer-conducted digital photography workshop.

This is just a snapshot of ways we are connecting people with nature using technology in the Midwest requests that we scheduled another workshop and a workshop specifically for kids.

This is just a snapshot of ways we are connecting people with nature using technology in the Midwest Region. Other projects are being developed at various refuges, national fish hatcheries, wetland management districts and private land offices. We are finding ways to embrace technology and safeguard the resources within the region.

Future initiatives:

**Refuge Photo Scavenger List**: Lets visitors print a scavenger list and go out on the refuge and "capture" the images.



**Cell Phone Tour:** This summer, visitors traveling the Great River Road will use their cell phones to dial in and hear messages about the Upper Mississippi River National Wildlife and Fish Refuge.

Interactive Trail Guide: Visitor services specialist and SCEP student Ashley Berkler wants to develop an Interactive Trail Guide for DeSoto National Wildlife Refuge. As an undergrad student, Berkler created a Web-based project for the Columbia National Fish and Wildlife Conservation Office in Missouri called "Fishing for Science."

Wildlife Refuge Manager's Game: An interactive game on the Midwest Region Web site, this activity lets children pretend they are managing a refuge. Virtual managers plan and direct refuge activities, set policies, represent the refuge at community events, prepare annual budgets, and manage staff. They learn about the life cycles of wildlife that inhabit refuges and the various events that occur each season of the year. This game has been among the top ten visited Web pages on the Midwest Region Web site.

## Environmental Education

Through environmental education we provide information about nature and how it functions. Our national wildlife refuges, wetland management districts and national fish hatcheries provide access to the natural world for children and their families. Employees in every program—from Ecological Services to Joint Ventures—serve as ambassadors for the Service, participating in community events that reach thousands of children each year.

Neal Smith National Wildlife Refuge is approaching environmental education in a way that involves students in hands-on research. One of the most popular programs allows students to work together to map all the burr oaks within a particular area. As teachers bring their classes back and map the same areas over subsequent years, the students look at the data collected previously and work with Service staff to begin asking questions. The data the students collect and the inquiries they make can help staff develop long-term, effec-



Educational research at Whittlesey Creek NWR Photo by USFWS

tive restoration techniques for oak savannas throughout the refuge.

The refuge also connects students to the land by having them restore designated areas of the refuge around the Prairie Visitor and Learning Center. Students hand-harvest prairie seeds in the fall and grow the plants over the winter with the help of Service staff, either at their school or in the refuge's greenhouses. During the return trip in spring, students plant their harvested seed in the area maintained by their school. Students see the improvements to their site over time, the different plant species that grow and the variety of seeds they harvest. They also get a taste of the challenges of a restoration project, including managing invasive species.

Whittlesey Creek National Wildlife Refuge's environmental education programs are based at the Northern Great Lakes Visitor Center and involve federal, state, and non-profit partners. In Bayfield County, Wisconsin, refuge staff partnered with Washburn School sixth-grade teachers to spark "Caring for the Creek," a program that incorporates water quality concepts into the curriculum. Each year, 6th graders work alongside biologists from the Iron River National Fish Hatchery, Ashland National Fish and Wildlife Conservation Office and the refuge, taking water quality samples, helping stock fish, plant trees, and sample invertebrates. The success of the partnership has resulted in the integration of the refuge into the curriculum for integrated water science study at Washburn School.

DeSoto National Wildlife Refuge initiated an environmental education partnership with the Blair Communi-

ty Schools in 2007. With overwhelming support from the school's administration and teachers, the 5th, 7th and 11th/12th grade environmental science students make multiple visits to the refuge as an extension of their classroom. The curriculum is created by teachers with resource assistance from refuge staff on diverse topics such as sensory awareness and fire ecology. The enthusiasm, creativity, and dedication of the Blair Community School's administration and teachers is just the beginning of the refuge's efforts in connecting children to their natural environment.

The Columbia, Missouri, Ecological Services Field Office has planted SEEDS - Students, the Environment, and Endangered Species, a program that aims to enhance environmental awareness among Missouri children through interactive learning, outdoor activities and hands-on interaction with Service staff. The field office became a Partner in Education with Lee Expressive Arts School in Columbia in 2007. Currently, 337 students representing 17 countries attend Lee, and more then 50 percent of them live in poverty. Service biologists and staff accepted the challenge of connecting children with nature in this inner-city environment as an opportunity to implement Director Dale Hall's priority to connect people with nature.

The Columbia, Missouri, National Fish and Wildlife Conservation Office participates in "Wonders of Wildlife," which offers a variety of classes that get people off their couches and into the Great Outdoors. Participants attend classes such as "Nature Photography for the Budding Enthusiast," "Crafting with Nature" or "River Wranglers." Classes provide instruction, followed by an opportunity for participants to explore and connect with nature independently, sparking curiosity

Students learn about habitat at DeSoto National Wildlife Refuge Photo by USFWS





Students participate in SEEDS Photo by USFWS

and raising questions. Instructors provide basic skills and discuss the importance of conservation, outdoor ethics and safety, but do not tell participants what to do or how enjoy nature. Instructors take extensive "teach the teacher" training prior to participating.

At Jordan River National Fish Hatchery, an afterschool program called "Imaginature" provides rural children who are geographically and socially isolated with an opportunity for unstructured and structured time outdoors. Activities are selected by school staff and the public outreach coordinator for Jordan River National public outreach coordinator for Jordan River National Fish Hatchery, with input from students. One activity, "Field Frolics," allows the children an opportunity to explore with a goal or mission in mind. After time "in the field" on Service lands, students return with an object or question. Partner and mentor volunteers assist the students in identifying objects such as pine cones, insects or rocks using books and the Internet. Another activity, "Baby Brookies," involves elementary and middle school students in the process of raising brook trout, touching on curriculum components such as ecosystem processes, biology and, through sample counting and feed calculations, mathematics. The trout that project participants raise are stocked for their own local children's fishing events. Through trips to the hatchery to care for the trout, the students gain pride of ownership of and responsibility for their natural resources.

In the past year Service biologists and staff introduced fifth-grade classes to the endangered species they might find living in their home county. Students learned about the habitats and behaviors of the pallid sturgeon, bald eagle, Topeka shiner, and the Indiana and gray bats. In coordination with the U.S. Forest Service, live bats were brought into the classroom, a traveling aquarium featured a live shovelnose sturgeon in the school's media center and the University of Missouri Raptor Rehabilitation Center introduced the class to live birds of prey.

The Prairie Wetlands Learning Center at Fergus Falls Wetland Managment District has partnered with the Fergus Falls Public Schools to offer the Prairie Science Class. This program uses the local prairie wetlands ecosystem as an integrating and motivating context to engage 5th grade students in science, applied math, language arts, and health through real world, field-based learning experiences. After three years of successful operation, the State of Minnesota recognized the significant value of this partnership and in 2007 provided \$2 million in bonding to expand the center, allowing the program to include 4th grade students, as well. In the 2008-2009 school year, 200 students will spend half of every school day at the center, spending time outside daily in both structured and student-directed learning activities.

In fall of 2008, eight teachers will instruct Prairie Science Class students, with four teachers stationed at the center and four at the Fergus Falls Middle School. Student teachers, an environmental education specialist, an instructional systems specialist and environmental education interns from the center will continue to assist with field activities on a weekly basis. Through daily contact with nature, students develop deeper relationships with nature, have repeated contact with the Service mission, and cultivate a stewardship ethic.

#### urban Outreach

There are a number of social, economic and political reasons why the Service launched the Connecting People with Nature initiative. The integration of technology into family lifestyles plays a significant role in the disconnect between people, particularly children, and the natural world. Another reason is that this country continues to experience a huge demographic shift. Richard Louv, in his book, "Last Child in the Woods," points out that the young in this country are more culturally and ethnically diverse than ever. According to demographics expert Emilyn Sheffield, 45 percent of U.S. children under five are children of color, and the percentages are higher in the South, Southwest, coastal and urban areas. Sheffield points out that research

and urban areas. Sheffield points out that research shows a consistent relationship between visitation/use and support for preservation and conservation. Visitation profiles are not consistent with the demographics. Clearly, this presents a challenge to the Service as there is a clear disconnect between people in general and nature, but particularly with children and people of color.

In the past, young people have been overlooked due to a focus on a more traditional, but now shrinking, adult support base. But the reality is that young people are future decisionmakers. They are people who will make up political constituencies. If we pay attention to them, they will, we hope, be committed environmental stewards.

Another challenge of connecting urban communities with nature is lack of awareness. Many people simply do not know that outdoor facilities exist and are available for public use and enjoyment. Others are deterred by rising gas prices and entrance fees. Still others are simply afraid—afraid of animals and sometimes even that others will hurt them should they venture out.

The sheer number of people of color in the U.S. population speaks to the urgency of resolving the disconnect and dictates action on the part of the Service to connect people with nature.

Current and planned activities in the Midwest Region to meet these challenges include:

**Let's Go Outside!:** We have added a regular section in our monthly newsletter titled "Let's Go Outside!" We invite our regional staff to submit stories of their personal nature encounters as well as innovative ideas

Wildlife photographer Dudley Edmondson Photo courtesy of Dudley Edmondson



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Special Events: In celebration of Black History Month, Dudley Edmondson, wildlife photographer and author of "Black and Brown Faces in America's Wild Places," exhibited his work, signed books and encouraged urban dwellers to discover the beauty and solitude of the natural world in a presentation at the Minnesota Valley National Wildlife Refuge in Bloomington, Minnesota. The public was invited to bring cameras and walk the refuge with Edmondson, whose visit was publicized in the local media, schools and targeted community newspapers. Edmondson and a Service staff member appeared on "Urban Agenda," a radio program. Edmondson will also appear on two local television programs: "Bloomington Today" and "Just Escape."

Project Get Outdoors (Project GO): Upper Mississippi River National Wildlife and Fish Refuge is partnering with Project Get Outdoors, or Project GO, in Minnesota. The mission of Project GO is to connect youth with nature in their communities. The program is not designed to be an environmental education program but rather a recreation education program where children learn to feel comfortable outdoors and to observe the natural resources around them through frequent recreational interactions in nature. Over the past two years, Project GO children have participated in the refuge's ice fishing clinics in February. Many of the children participating in this program are Hispanic.

Minnesota Valley NWR Partner Schools Program: Minnesota Valley National Wildlife Refuge has initiated a new environmental education model that empha-

Taking a dip in Lake Superior Photo by Valerie Redmond



ated a new environmental education model that emphasizes long-term learning for students and their teachers. The Refuge Partner Schools Program is an approach that provides teachers and students with multidisciplinary, standard-based curriculum that includes handson, real-life experiences with plants and wildlife, as well as recreational opportunities to immerse students in nature throughout the seasons. The program reaches a wide audience of students with an emphasis on diverse, inner-city youth.

Blue Goose Bus Fund: The top teacher-identified limitation to the Refuge Partners Schools Program described above is transportation costs. Despite the fact that Minnesota Valley National Wildlife Refuge does not charge participation fees, school budgets have left many schools, especially inner-city, low-income schools, unable to absorb busing costs. In response, Refuge Friends, Inc., a non-profit organization, has established the Blue Goose Bus Fund. Schools that join the Refuge Partner Schools Program are eligible to apply for partial or total busing scholarships through this fund. Scholarships are awarded based on ethnic diversity of the student population, percentage of students on the government-funded school lunch program, school location, and the level of teacher participation in refuge curriculum and event development.

**Borrowing Closet:** The Borrowing Closet operates in association with the Minnesota Valley Refuge Partner Schools Programs, serving diverse, underserved communities that do not have the gear to participate in outdoor activities. Labeled boxes at the Midwest Regiona office and the refuge allow people can donate coats, hats, gloves and other outdoor clothing for distribution for student activities.

#### Chicago Wilderness

Chicago Wilderness is a regional nature reserve that includes more than 225,000 acres of protected natural areas stretching from southeastern Wisconsin, through northeastern Illinois and into northwestern Indiana. The protected areas of Chicago Wilderness are forest preserves state parks, federal lands, county preserves, and privately owned lands. In 2007, more than 200 Chicago Wilderness member organizations formalized their long-standing commitment to forge a connection between children and nature with programs like camping trips, nature scavenger hunts and birding hikes. In 2008, Chicago Wilderness members will begin offering



Photo by USFWS

all-new programs including a Chicago Wilderness Field Book that encourages fun and educational visits to local natural areas. This "Leave No Child Inside" initiative comprises hundreds of year-round events in nature that involve millions of children throughout the region.

**Public Awareness Campaign:** The Midwest Region will issue press releases to regional media outlets about the Connecting People with Nature initiative, Service events and the availability of our natural resources for vacation and recreation. Standard text will be developed to communicate about this initiative to the public.

**Health Providers:** Regional staff members are meeting with Southside Community Health in Minneapolis to determine how we can collaborate. SCH has provided health services to the community for more than 30 years and has a unique commitment to improve health through its Community Outreach division.

Corporations: The Service will explore partnerships with regional corporations with similar missions, such as General Mills and Health Partners. The American Dietetic Association Foundation, the President's Challenge, and the General Mills Foundation are partnering to improve youth nutrition and fitness through the General Mills Champions for Healthy Kids initiative. A key component of the initiative is the Champions for Healthy Kids grants, where the General Mills Foundation will award 50 grants, \$10,000 each, to non-profit organizations with innovative programs that help youth develop good nutrition and fitness habits.

## Partnerships

Because additional dedicated funding to supplement the Connecting People with Nature initative appears unlikely, it is critical to partner with organizations who share our vigor for reconnecting the American public with the outdoors. By finding and developing unique partners, we share ideas, maximize our reach and preserve resources. Though the Service is taking an ambitious role in this issue, we are neither the sole solution nor the lone source of ideas.

A unique aspect of the Connecting People with Nature initative is that it is a source of collaboration rather than competition. It is a "big tent" issue whose effects span cultural, political, corporate and societal boundaries. Because of that inclusiveness, there are inherent opportunities that few other critical issues enjoy. To capitalize on those opportunities is to reach across multiple aisles and seek out unique partners.

The Midwest Region already has a robust partnership effort regarding connecting people with nature. This plan seeks to enhance and expand those efforts, while taking advantage of the issue's appeal.

In our partnership with Wildlife Forever, for example, we support that groups effort to educate and inspire children across the nation through artistic and hands-on opportunities such as Wildlife Forever State-Fish Art Contest. Our traditional partnerships with long-time friends Pheasants Forever and Ducks Unlimited afford

opportunity within the hunting and conservation communities. The region sits at the table with both the national and local Children and Nature Networks as a trusted partner and federal entity recognized for its devotion to the issue. This provides exposure, research, partnership opportunities, and ideas with the support of the national experts.

Our field stations are teaming up with educational, political and social leaders to bring conservation lessons and opportunities to an urban audience that was little served previously.

Among these partnerships, and literally hundreds of others within the Midwest Region, rest untapped ideas, inspiration, new partners and new directions. On March 1, the region brought one new friend, wildlife artist Dudley Edmondson, to speak to federal and urban audiences about connecting people of color with nature.

Additionally, coalitions with corporate partners are being explored with the support of the National Fish and Wildlife Foundation. The regional People and Nature Working Group will continue to identify and promote these opportunities—letting our relationships serve as a "force multiplier" to enhance the effects of our efforts.



Students get a lesson in drawing landscapes Photo by USFWS

#### The Arts

Regardless of type or format, art is a medium that allows observations, connections and understanding to be conveyed to a diverse audience. Art transcends cultures and languages. One piece of art can hold meaning to its creator, yet its interpretation by another person can evoke emotion, connection, understanding and relevance no book or lecture could ever create.

The use of art as an educational tool allows the Service to channel observations and connections with nature into a tangible object that can be shared with countless others. Art reflects interest in a detail of a time and place, but guidance may be needed to translate those thoughts into something that yields a genuine and meaningful connection to the resource.

Integrating art into conservation is not a new idea, but it is a vital one. Intertwining the two has helped fund conservation efforts, engage people, justify school participation and reach millions of people time and time again. The Midwest Region recognizes art as an important part of connecting people - especially children - with nature.

For young children to begin to care about environmental issues, they must hone their powers of observation so that they can become aware of the natural world and their connection with it. And since making and recording accurate observations are necessary skills for scientific fields, helping children develop their observation skills is also shaping them for possible careers in conservation. Encouraging children to observe the world around them and record their thoughts and impressions in a written journal or in sketched artwork is an effective way to begin connecting them with nature and conservation issues.

**Journaling:** Many refuges use journaling as an exercise for students to record their observations to help with identification, mapping, scientific inquiry, and data gathering skills. Trail guides that allow space for journaling and sketching also offer ways for the public to make a lasting connection with the places they visit.

Student writes in her journal Photo by USFWS





Resident Artist Jocham displays his work at Necedah NWR Photo by USFWS

The Prairie Wetlands Learning Center in Fergus Falls, Minnesota, will host a "Nature Journals and Observation Skills for the Classroom" workshop this spring. Teachers learn how to use nature journals and techniques to enhance curriculum and field experiences. In addition to getting one graduate credit, teachers also gain additional skills that they can use to teach children in the outdoors.

Journaling and Creation of Art: Sketched artwork and notes taken in a journal can lead to an interest in nature. Refuges, hatcheries and other Service field offices play a vital role in providing places for people to experience this interest and see, smell and touch nature.

Resident Artist Jocham paints, inspired by an outdoor scene at Necedah NWR
Photo by USFWS



A project called River of Words® at Whittlesey Creek National Wildlife Refuge, near Ashland, Wisconsin, uses journaling as a way for 4th grade students to collect their thoughts while working with the refuge, a local poet and a local artist to understand what a watershed is. Using their journals, the students create poetry and art that reflects what they learned about the refuge and its watershed. In addition to a public display of their work, the art and poetry is published each year. Their journals, artwork and poetry help connect them, their communities and visitors with Whittlesey Creek. The journal entries are also integrated into other projects in the classroom, reinforcing students' ability to articulate what they have learned and what they want The journal entries are also integrated into other projects in the classroom, reinforcing students' ability to articulate what they have learned and what they wantto convey to others about the unique place in which they live.

Artists at Work: At Rice Lake National Wildlife Refuge near McGregor, Minnesota, and at Necedah National Wildlife Refuge in Wisconsin, artists have used the refuge for inspiration. Jacques Art Center's Plein Air Contest painters have used Rice Lake refuge to capture scenes while painting in the outdoors. Their paintings are then displayed in nearby Atkin, Minnesota. At Necedah, local painters, writers, ceramists and others take a two-week residency on the refuge. Artists then donate a piece of their work that is reflective of their experience to the refuge for a free public art exhibition.

Junior Duck Stamp Contest: The Federal Junior Duck Stamp Program is a great way to connect children with nature. Many field stations in the Midwest Region assist local communities and help them participate in the Junior Duck Stamp art competition. Children who participate in the contest learn about waterfowl and their habitat requirements. Then students pull their knowledge together in a "visual term paper." By actively learning about their subject matter while creating artwork students become connected with nature.

Art in any shape or form is a way for many people to express their love of nature, it plays a vital role in keeping and creating connections between people of all ages to the wild places and things we work so hard to conserve



# The "Big 6"

In 1997, the National Wildlife Refuge System was given a fantastic tool in the Refuge Improvement Act, which identified wildlife-dependent recreation activities that were to be provided for our refuge visitors whenever possible. The activities, often called the "Big Six," are hunting, fishing, wildlife observation, wildlife photography, interpretation, and environmental education.

Hunting and fishing are traditional uses of the land that have their roots as a means of survival. Today, they are more recreational but still are a direct connection with the land. Hunters and anglers were the first conservationists, and that tradition continues today. Refuges and wetland management districts provide public hunting opportunities and programs to promote hunting in youth and other "non-traditional" audiences by offering special programs, clinics and events. These public lands, along with our fish hatcheries, support fishing, not only by providing a place to cast a line, but also through special events such as Kid's Fishing Days and National Hunting and Fishing Week.

Wildlife observation and photography capture different audiences. Birders are the largest and fastest-growing group of users of the outdoors. Service lands provide excellent places for birders and other wildlife watchers, along with casual and professional photographers. New initiatives such as the National Birding Initiative, "Big Sit," and locally sponsored birding trips are growing in popularity.

There is opportunity to continue to grow and connect people with nature through photography. Field stations

Children making field observations Photo by USFWS

are beginning to partner with local nature photography clubs to offer clinics for budding photographers. This has potential to connect urban youth with nature.

Since 1997, the largest expansion has been in interpretation and environmental education. It is through these two activities that we can greatly influence our future by instilling a sense of wonder in today's youth. These programs make the personal connection that is critical in developing a conservation ethic for tomorrow. By partnering with schools, whether through a refuge, wetland management district, fish hatchery, or ecological services office, the Fish and Wildlife Service can affect the future of conservation.

The one thing all these activities and programs have in common is that they connect people with nature by letting the individual experience nature first hand to gain an understanding and appreciation that leads to caring and stewardship.

#### Near-term Actions

Though the Midwest Region is currently conducting extensive connecting people with nature activities, the formation of the national working group and the call for action plans serve as timely opportunities to formalize and enhance the process. Within the scope of our existing efforts, the region will complete a number of near-term actions:

**Regional Working Group:** Form a 10-member Regional Working Group to serve as ambassadors in the



Girls discover birdwatching Photo by USFWS

region. Working group members will help keep the issue of connecting people with nature in the forefront region-wide and spark dialogue within their own programs. The group will also serve as the executors of this action plan.

**Inventory of Opportunities:** The working group will create and publicize an inventory of existing actions and opportunities to help capitalize on existing efforts and provide ideas and inspiration.

**Internal Publicity:** We have a monthly article in our regional newsletter, and will submit articles regularly to Fish and Wildlife Service News, People Land and Water, and other internal publications. This will give credit to successes and reinforce our commitment to this priority.

**Standard PowerPoint:** We will develop standard PowerPoint templates that articulate the regional and national perspective on connecting people with nature. Field personnel will be able to quickly personalize and use these templates as they visit schools, parent-teacher organizations, potential partners, etc.

**Inreach:** We will focus on our employees—the true leaders of this movement. In addition to internal publications, we will ensure each major regional Service meeting has a block of information on the status of the movement.

**Urban Audiences:** We will continue to develop opportunities to reach partners in urban audiences, particularly those not served by hunting and fishing communities. We will develop cultural leader contacts in each of the major cities in our region to serve as partners in developing and implementing programs.

**Standard Materials:** We will develop standard press releases, fact sheets and talking points that articulate the issue and our approach to it. These materials will empower our workforce to carry this priority as extended outreach specialists.

Maximize Technology: Technology serves as both the cause and potential cure for the disconnect from the outdoors. We will seek opportunities to use technology—including our Website—to reach the next generation of conservationists.

**Serve:** We will join, attend, volunteer and serve in organizations that may support, benefit from, or assist in this effort.

## Connecting People With Nature: Midwest Region Action Plan

"I know many of you have a strong desire to help people--especially youngsters--rediscover what Rachel Carson called a 'sense of wonder' for the outdoors. Now is the time for all of us to act on that desire."

--Fish and Wildlife Service Director H. Dale Hall

For more information, visit http://www.fws.gov/children