



DEFENDERS OF WILDLIFE
PRESIDENTIAL TRANSITION WHITE PAPER

NATURE EDUCATION AND STEWARDSHIP OF PUBLIC LANDS

Revised October 28, 2008

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CHALLENGE

As the needs of an ever growing global population increasingly presses up against the limits of the earth's resources and ecosystems, preserving the natural environment has become one of the dominant issues and challenges of the 21st century.

The National Science Foundation's Advisory Committee for Environmental Research and Education confirmed this in a 2003 report, noting that "in the coming decades, the public will more frequently be called upon to understand complex environmental issues, assess risk, evaluate proposed environmental plans and understand how individual decisions affect the environment at local and global scales. Creating a scientifically informed citizenry requires a concerted, systematic approach to environmental education..."ⁱ

But today's children and adults are more disconnected with nature than ever before. Not only is this trend linked to problematic societal trends such as rising obesity, juvenile diabetes and related health problems, but numerous studies consistently indicate a rapidly declining environmental literacy in the U.S.ⁱⁱ

As Richard Louv put it in his groundbreaking book *Last Child in the Woods*, "...healing the broken bond between our young and nature – is in our self-interest, not only because aesthetics or justice demands it, but also because our mental, physical, and spiritual health depends upon it. The health of the earth is at stake as well. How the young respond to nature, and how they raise their own children, will shape the configurations and conditions of our cities, homes – our daily lives."

Many business leaders increasingly believe that an environmentally literate workforce is critical to their long term success and profitability, with better environmental practices and improved efficiencies impacting positively on the bottom line while helping to better position and prepare their companies for the future. Charles O. Holliday, Jr., Chairman and CEO of DuPont, speaks for a growing number of his peers in declaring that: "an

environmentally sustainable business is just good business, given the growing concern for environmental problems across America. A key component of an environmentally sustainable business is a highly educated work force, particularly involving environmental principles.”ⁱⁱⁱ

Fortunately, our nation has made a significant commitment over the last century to conserve our native lands, cultural icons, wildlife and wild places in a vast array of federal lands that are treasured and visited by millions of Americans. Together, our national wildlife refuges, national parks and national forests comprise more than 350 million acres of lands for the American people.

These public lands are more than just open space and resources— they are living classrooms that provide insight into the workings of nature and a connection to the world’s rarest wildlife and most spectacular landscapes. In an era when most children spend the majority of their time indoors, these natural spaces are crucial connectors to the world of nature so essential for all life on Earth.

ACTION

First term:

The new administration should restore and maintain education programs throughout the national wildlife refuge, national park, national forest, and other federal public land systems.

National Wildlife Refuges

The National Wildlife Refuge System provides nearly 100 million acres of habitat for wildlife and endangered species, countless recreational opportunities, clean air and drinking water, as well as hands-on learning for thousands of children and students of all ages. Around 40 million people annually visit our nation’s 548 refuges, many of whom harbor a deep passion for understanding wildlife and protecting wild lands.

Despite the refuge system’s widespread popularity, in recent years it has been battered by consistent underfunding. In 2004, the refuge system stopped filling job vacancies in recognition that funding was not keeping up with rising costs, inflation, and a sizeable operations and maintenance backlog. Now four years later, over 300 positions have been eliminated. Educators, interpreters and scientists were the first to go. This funding shortfall has had far-reaching consequences for our children. At refuges such as Ding Darling National Wildlife Refuge in Florida, Cross Creeks National Wildlife Refuge in Tennessee, and Cypress Creek National Wildlife Refuge in Illinois, funding and staffing cuts have drastically reduced educational and public use programs. Many others are in the same predicament.

To accomplish education and outreach goals in the most cost-effective manner, additional financial resources should be dedicated to appropriate visitor infrastructure. Standardizing regional and refuge web sites will attract a wide range of potential visitors, and also improve

efficiency and realize cost savings. Regional web sites should also be used to communicate to the public any significant monitoring or research occurring on refuges.

With demographics changing rapidly in the U.S., it is imperative that the refuge system provide bilingual opportunities for visitors. In many areas, the opportunity to engage minorities has never been greater, as there is often close overlap between states with high minority populations and a relatively large number of wildlife refuges, such as in California, Arizona, Texas, Hawaii, and North Carolina.

In addition, kiosks, observation platforms, interpretive panels, and up-to-date bird checklists and other brochures can provide an educational experience for children and adults, even without an on-site staff presence. These items can be funded through the Visitor Facilities Enhancement (VFE) account. Utilizing the VFE account stretches federal dollars farther than they would otherwise go. Once instructive materials or infrastructure is developed, visitors can enjoy educational experiences without a need for on-site refuge staff, thus saving money while still attracting and educating visitors. But even with greater priority given to the VFE account, it will still be necessary to increase the number of visitor services staff and also further encourage volunteer opportunities through community outreach and strategic partnerships. A commitment to increasing visitor services staff results in multiplied benefits, since volunteers already perform 20 percent of the work on national wildlife refuges, and increasing staff levels only increases the refuge system's capacity to organize even more volunteers and host more educational opportunities for visitors.

Funding shortfalls in recent years have necessitated the development of strategic downsizing plans for the refuge system, which call for the loss of approximately 160 visitor-services staff. To return staff to many of the more than 35% of refuges that now have no on-site staff whatsoever, the new administration should restore funding for recovering many of these lost positions. In addition, the administration should support and fully utilize the Visitor Facilities Enhancement account, which provides funding for non-staff educational and recreational visitor opportunities, such as interpretive displays, brochures or wildlife viewing platforms.

National Parks

Covering some 79 million acres and welcoming 270 million visitors a year, the national parks are some of the most recognized and visited lands in our country. The National Park Service preserves the "natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations." An important piece of the National Park Service's mission is to "educate park visitors and the general public about their history and common heritage." Clearly, with the number of visitors the parks attract, they provide one of the best opportunities for educating the public on the natural world.^{iv}

Over the past few years, budget increases for National Park Service operations have not kept up with inflation, which has severely impacted the real dollars the agency has to operate. So while the parks received modest budget increases in the past that budget increase was spent

on basic necessities such as the electric bill. Therefore, many park superintendents have been forced to leave both full-time positions and seasonal positions unfilled.

Fortunately, after years of insufficient staff for interpretive and education services in the national parks, Congress last year provided funding to return 3,000 rangers to the national parks. Many of these rangers are seasonal interpreters who are helping to welcome and inspire visitors to the national parks during the summer of 2008 in preparation for the upcoming 2016 centennial of our National Park System. Continuing to fund these rangers will ensure that the Park Service can provide the important educational opportunities that visitors have come to expect from this premier land agency. ^v

National Forests

The Forest Service manages 193 million acres of national forests and grasslands which are practically the backyards for many communities throughout 46 states. Gifford Pinchot, the first chief of the Forest Service, summed up the mission of the Forest Service in this way-- "to provide the greatest amount of good for the greatest amount of people in the long run."^{vi}

These lands and their recreational infrastructure of trails, roads, visitor centers and campgrounds, provide opportunities for solace and solitude, challenge and adventure, hunting and fishing opportunities and outlets for keeping physically fit. These lands represent an important conduit for society's connection to nature.

The Forest Service provides interpretive and educational programs to ensure memorable and meaningful learning and recreational experiences aimed at forging intellectual and emotional connections between people and their natural and cultural heritage through interpretive and educational programs. With limited funds, the Forest Service works to stretch every dollar by providing opportunities for partners to donate matching funds to afford as many education opportunities as possible. Yet, even with these matching funds, the demand for these programs continues to be beyond the resources made available.

A prime opportunity for education and outreach is through the Forest Service visitor centers. These centers provide high levels of public contact and offer place-based learning activities. Visitor centers are also focal points for community outreach and therefore, are increasingly important to local communities and their economies. There are 30 significant visitor centers established on the 155 national forests and 20 national grasslands. Over the past couple of years staffing has been reduced at some of the centers. Resources are needed to staff the existing centers with highly skilled interpretive and educational specialists, as well as maintain their world-class exhibits.

The demand for Forest Service youth programs far exceeds the resources presently available. A new effort was launched in 2007 called "More Kids in the Woods," designed to engage children in recreation activities, nature-based learning and stewardship programs so they begin to establish meaningful and lasting connections with nature, received 250 proposals totaling \$6 million. The Forest Service was able to award \$510,000 to 24 projects, leveraging over \$1 million in partner contributions. In 2008, the Forest Service awarded \$500,000 to

the program, continuing its commitment to connect kids to nature. Sixteen projects were funded, leveraging over \$1.5 million in partner contributions.

The Forest Service is also assisting educators through the “Forest for Every Classroom” program which provides professional development program for educators. The teacher-developed curricula integrate hands-on natural and cultural explorations that address concepts in ecology, sense of place, stewardship, and civics. The program is currently operating in New Hampshire, Vermont and Texas but could be replicated in other states if additional funding becomes available.

One of the most established programs is the NatureWatch Program, which has been in existence for over 20 years. Events and activities such as Kids Fishing Days, Migratory Bird Day, Be Bear Aware, Eyes on Wildlife, Every Species Counts and Animal Inn have garnered significant national and local partners. To increase and expand wildlife habitat restoration and Naturewatch opportunities the new administration should seek \$65.5 million in funding for FY 2009. ^{vii} These funds would ensure that every project was funded, restoring more than 1 million acres of wildlife habitat and double the funding for wildlife program activities.

Clearly, the Forest Service has a tremendous opportunity to reconnect thousands of children and adults through their vast array of programs and help them to better understand how healthy forests and grasslands contribute to the quality of life. The only hurdle is providing the funding to meet the demand.

Visitor centers roll out the welcome mat at Forest Service lands across the country. Appropriate levels of funding should be allocated to ensure that these centers are sufficiently staffed to enhance the public’s understanding of the broad ecosystem and societal values of our nation’s forests and grassland. The centers and staff are also critical for working with community partners and volunteers in the delivery of visitor services and staging stewardship projects and community events.

The new administration should request increasing the funding for these Forest Service programs, which will allow many more students and adults to gain enhanced knowledge of nature in order to be good stewards of our lands. The next administration should support doubling the funding for the new and tremendously successful “More Kids in the Woods” program. In addition, the Naturewatch programs should be expanded and the “Forest for Every Classroom” program should be replicated in other states.

The new administration should support enactment of the No Child Left Inside Act.

While the federal land management agencies play a vital role in education generations to care for our lands, wildlife and vital natural resources, they cannot do it alone. Our nation’s schools can play a crucial role in educating youth about the natural world.

The No Child Left Behind Act of 2001 has added new accountability to our nation’s schools. But its strong focus on high-stakes tests has crowded out other subjects beyond math and reading. Because of these requirements, teachers across the country have been

forced to cut back on the time they can devote to environmental education, in large part because the subjects covered in such instruction are typically not tested.

This has resulted in teachers giving up on field trips and other environmental explorations as schools devote more and more time to subjects that will be tested. Clearly, considering the impacts of global warming and the important role environmental education provides to our young, it would behoove us to not consider this merely an optional topic.

Legislation such as the “No Child Left Inside Act” would authorize major new funding for states to provide high-quality, environmental instruction. This legislation would ensure that students have a basic environmental literacy, equipping them to understand key environmental challenges, including global climate change.

The No Child Left Inside Act would amend the No Child Left Behind Act to include:

- Funding to train teachers to deliver high quality environmental education and utilize the local environment as an extension of the classroom.
- Incentives for states to develop State Environmental Literacy Plans to insure that every student is prepared to understand the environmental challenges of the future.
- Encouragement for teachers, administrators, and school systems to make time and resources available for environmental education for all students.
- Integrate environmental education across core subject areas.^{viii}

The new administration should support enactment of the No Child Left Inside Act and work with the nation’s schools to implement it.

ⁱ http://www.cbf.org/site/PageServer?pagename=act_sub_actioncenter_federal_nclb_why

ⁱⁱ Chesapeake Bay Foundation
http://www.cbf.org/site/PageServer?pagename=act_sub_actioncenter_federal_nclb_problem

ⁱⁱⁱ Chesapeake Bay Foundation
http://www.cbf.org/site/PageServer?pagename=act_sub_actioncenter_federal_nclb_why

^{iv} National Park Service, <http://www.nps.gov/legacy/mission.html>

^v Andrea J. Keller Helsel, interviewed by author, 21 July 2008, Washington DC, email.

^{vi} US Forest Service web site <http://www.fs.fed.us/aboutus/>

^{vii} US Forest Service Wildlife Program FY 2009 Opportunities fact sheet, USDA Forest Service

^{viii} http://www.cbf.org/site/PageServer?pagename=act_sub_actioncenter_federal_nclb_benefit