

TESTIMONY OF GEOFF HASKETT, CHIEF, NATIONAL WILDLIFE REFUGE SYSTEM, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE U.S. HOUSE OF REPRESENTATIVES NATURAL RESOURCES COMMITTEE, SUBCOMMITTEE ON FISHERIES, WILDLIFE, AND OCEANS, REGARDING H.R. 767, THE “REFUGE ECOLOGY PROTECTION, ASSISTANCE, AND IMMEDIATE RESPONSE ACT”

June 21, 2007

Chairwoman Bordallo and Members of the Subcommittee, thank you for the opportunity to testify today on H.R. 767, the “Refuge Ecology Protection, Assistance, and Immediate Response Act.” I am Geoff Haskett, Chief of the National Wildlife Refuge System at the U.S. Fish and Wildlife Service (Service).

We concur with the principles embodied in the legislation, specifically those that reinforce the notion that a concerted, coordinated, and comprehensive effort by the private sector and the public sector together is critical to successful prevention and control of invasive species. However the goals of this bill can be met within existing authorities and programs, such as the Pittman-Robertson, Dingell-Johnson, State and Tribal Wildlife Grants, Challenge Cost Share, and Partners for Fish and Wildlife programs. For this reason, we are concerned that implementation of this program would likely be at the expense of funds requested in the President’s fiscal year (FY) 2008 budget for these existing programs. We also note that any funding to implement this legislation would have to compete with existing program priorities.

Addressing Invasive Species in the National Wildlife Refuge System

Invasive species are one of the most significant threats to the National Wildlife Refuge System, and one which the Service has identified as a priority Refuge Operations Needs project. Invasive species can destroy habitat, displace wildlife, and significantly alter ecosystems on national wildlife refuges. In 2006, over two million acres of refuge lands were infested with invasive plants. About 14 percent of these acres have been treated thus far. In addition, there are 4,471 invasive animal populations recorded on refuge lands.

In 2008, the refuge system budget allocates \$8.7 million to treat over 255,000 acres infested with invasive plants, and control infestations on 100,000 acres. In addition, the system will control 245 invasive animal populations. Invasive species management and control activities will include:

- continuing the operation of five Invasive Species Strike Teams in Arizona and New Mexico, south Florida, the Missouri-Yellowstone-Columbia basin, North Dakota and Hawaii and the Pacific Islands, which will prioritize early detection and rapid response to newly emerging infestations;
- utilizing the network of volunteers the system has established to monitor and map invasive plant infestations on 21 refuges around the country; and
- supporting georegional invasive species efforts in south central Florida and the Rio Grande Basin.

Although this represents a significant investment, the Service's Refuge Operations Needs System estimates that the total cost of managing invasive species on refuges is over \$300 million nationwide.

Examples of Threats to Refuges

I would like to describe several examples of invasive plant infestations on refuges and what the Service is doing to address them: *Spartina* in the northwest; *Lygodium* in Florida; and *Phragmites* along the eastern seaboard.

In 1894, *Spartina alterniflora*, a non-native cordgrass, was introduced to Willapa Bay in the State of Washington. At its peak in 2003, the infestation covered approximately 15,000 acres of tidelands, and was projected to occupy 56,000 of the 80,000 acres at Willapa Bay if left uncontrolled. This would have resulted in the complete loss of intertidal mudflats and native saltmarsh communities, which would have had a devastating effect on shorebird populations and impact to wintering Pacific Black Brant, anadromous fish such as salmon, and the viability of the area's oyster and hard-shell clam aquaculture industry.

Control and eradication of *Spartina* is difficult, dangerous, and expensive. The challenges posed by large tidal fluctuations, unconsolidated mud, costly herbicides and control equipment, a rapid rate of spread, and strict water quality regulations required unique problem solving. To initiate control efforts, an alliance of diverse organizations including universities, the oyster industry, conservation organizations, and the Willapa National Wildlife Refuge (located on Willapa Bay) developed a comprehensive eradication plan. This plan forms the basis for work currently underway and guides long-term strategies for *Spartina* control.

Federal funding to support this effort is matched by the State of Washington and the oyster industry. Since 2003, the federal government has invested over \$6 million in Willapa Bay to combat *Spartina*, and State agencies have contributed roughly the same amount over the same time period. In FY 2008, the Service has requested \$122,000 to treat 250 additional acres in the refuge for invasive plants, including *Spartina*. With these funds, the Service plans to hire a contractor to chemically control pest plants, assist in boat maintenance and piloting, and post boundary signs. Additional work will include mechanical and biological control methods.

Extermination of *Spartina* in Willapa National Wildlife Refuge and Willapa Bay has been largely successful, continued vigilance is necessary to keep *Spartina* from reestablishing itself on the refuge. There are some areas that the Service has identified that are hard to effectively treat or which are several years away from being targeted for treatment within Willapa Bay. In addition, Federal and state biologists also continue to survey the Washington coast for additional *Spartina* outbreaks.

The old world climbing fern, *Lygodium*, represents a greater threat than any other exotic plant to south Florida's natural areas, including the Everglades. If left unmanaged, it is predicted to overtake the five currently most invasive plants (melaleuca, Brazilian pepper, Australian pine, hydrilla, and water hyacinth) in combined coverage in south Florida by 2014. If left untreated, predictive models estimate this would result in several million acres infested with *Lygodium*.

At Arthur R. Marshall Loxahatchee National Wildlife Refuge, in Boyton Beach, Florida, *Lygodium* currently infests over 70 percent of the refuge and occurs in varying densities across every habitat found on the refuge. Especially vulnerable are tree islands, a unique and extremely rare habitat of the greater Everglades system, which provide important refugia for nesting wading birds and terrestrial wildlife. Once established, *Lygodium* envelopes these pockets of hardwood trees and dry ground, growing over the tree canopy and eventually smothering native plants and rendering the islands useless for native wildlife. In FY 2006, the Service treated 2,500 acres of climbing fern on tree islands in Loxahatchee National Wildlife Refuge. Control efforts have shown positive results in combating *Lygodium*, but continued efforts will be necessary to protect these crucial habitats and bring this invader under control.

On the eastern seaboard, *Phragmites* poses a threat to both wildlife habitat and the public. Prior to initiating control of this invasive plant at the Prime Hook National Wildlife Refuge in Milton, Delaware, the refuge's marshes were dominated by dense, tall stands of *Phragmites*. These stands reduced open water habitats and food resources needed by migrating and wintering waterfowl. In 1981, prior to initiating control, fall duck populations averaged 3,000 birds. Today, following control efforts, Prime Hook's fall duck numbers average over 50,000 birds with peaks of 85,000 ducks and 150,000 snow geese.

In addition to degrading wetland habitats, dead *Phragmites* stems posed an annual fire threat to three beach communities adjacent to the refuge. These developments contain over 750 homes with a combined value of over \$300 million. Since 2002, as part of a Wildland Urban Interface (WUI) Project funded through the Service's fire management program, Prime Hook NWR has partnered with several Federal and State agencies and over 250 private landowners to reduce the threat of wildfire by controlling *Phragmites*, both on-refuge and off. This work has created a 1000-foot buffer between the homes and stands of *Phragmites*. Continued control of this invasive species will require monitoring and re-treatment of areas when stands reach a threshold of five acres in size.

Approximately \$5.4 million in the Service's FY 2008 budget will be used for control of aquatic invasive species, including for the restoration of upland habitats by combating the infestation and expansion of invasive species. By directing \$803,000 to invasive species efforts, the Refuge System will focus on early detection and rapid response efforts and work with an existing network of volunteers and Friends groups to monitor and map invasive plant infestations on refuges around the country. These efforts will treat an additional 4,881 acres with invasive species, increasing by one percent the area which is being treated for invasive species.

The REPAIR Act

The REPAIR Act provides funding, through grants, for three types of projects, including grants to any eligible applicant to carry out projects to remove harmful invasive species and promote native species and their habitat on lands and waters in and adjacent to National Wildlife Refuges; grants to States to conduct assessment projects consistent with existing state fish and wildlife conservation plans; and short-term financial support for immediate response projects for newly detected invasive species that pose an imminent threat to a refuge and which are at a stage in which rapid eradication is possible. The legislation also provides direction for implementing the

program. Additionally, H.R. 767 would codify the Service's existing Cooperative Voluntary Invasive Species Monitoring and Control Program.

We applaud the bill's recognition of partnerships as key to the success of invasive species management on and off refuge lands, and we concur with the principles embodied in the legislation. As discussed below, however, we believe that the goals of this bill can be met within existing authorities, as there are a number of programs within the Service, and in the Department of the Interior, that can be used to fund invasive species control projects.

A Cooperative Conservation Approach

There are a large number of grant programs administered by the Service that are potential tools for addressing invasive species. Some of these include the Federal Aid in Wildlife Restoration Act, popularly known as the Pittman-Robertson Act, which provides funding for the selection, restoration, rehabilitation and improvement of wildlife habitat, wildlife management research, and the distribution of information produced by the projects. The Federal Aid in Sport Fish Restoration Act, commonly referred to as the Dingell-Johnson act, was modeled after the Pittman-Robertson Act to create a parallel program for management, conservation, and restoration of fishery resources.

In addition to these programs, and on a day-to-day basis, we work closely with nongovernmental organizations and private landowners to improve efforts for cooperative weed management in the west, water management districts in Florida, and small landowners everywhere who want to restore habitat for fish and wildlife.

The cooperative conservation component of the Service's Challenge Cost Share program emphasizes building partnerships for the conservation of natural resources and provides expanded opportunities for land managers to work with landowners and others to form creative conservation partnerships. Through these partnerships, our land managers can work with partner landowners and other citizen stewards to tackle invasive species, reduce erosion along stream banks, or enhance habitat for threatened and endangered species.

The State and Tribal Wildlife Grants program is designed to provide financial assistance for development and implementation of state- or tribally-directed programs and individual projects that address the needs of the species and habitats most in need of conservation, address the species conservation needs that are most in need of funding, and leverage federal funding through cost-sharing provisions. These programs exemplify our cooperative conservation approach by helping states tailor conservation efforts so that they best fit local conditions, and provides yet another tool for states to use to address the significant impacts of invasive species on native habitats. Based on the high level of interest from states and tribes, as well as the demonstrated need for cooperative conservations programs like State and Tribal Wildlife Grants, the President's 2008 budget includes \$69.5 million, a \$19.5 million increase over the funding level in the FY 2007 Continuing Resolution.

Finally, the Service's Partners for Fish and Wildlife program promotes private landowner cost-share projects for habitat restoration, including funds targeted for control of invasive plants and

subsequent restoration. The Partners Program has worked with private landowners across the Nation to remove, burn, biologically control, and otherwise combat invasive plants on thousands of acres of wetlands and upland. The program has also allowed us to develop a closer working relationship with USDA, and farmers and ranchers, by providing technical assistance for wetlands easements and restoration under the conservation provisions of the Farm Bill. This close association with soil and water conservation districts at the field level has yielded benefits not only to private landowners interested in conservation of migratory bird habitat or other species of local interest, but also helps us strategically improve habitats for rare and vulnerable species.

The Cooperative Voluntary Invasive Species Monitoring and Control Program

I would like to make brief mention of the invasive species monitoring and control program that the Refuge System has implemented over the past three years. This program, the Cooperative Voluntary Invasive Species Monitoring and Control Program, is a highly successful program that engages citizen volunteers in our national wildlife refuges.

The monitoring portion of this program focuses on training volunteers to map invasive plants using hand held computers and GPS devices. To date, 24,862 acres of refuge lands, in addition to over 200 waterbodies, have been inventoried and mapped by 198 trained volunteers. These dedicated volunteers have logged over 8,000 hours and provided valuable baseline data on the extent of invasive plant infestations on refuges. This, in turn, has assisted refuge managers with planning and prioritization of management actions and use of funding. Refuges participating in the program for the second and third year have engaged an additional 887 volunteers in invasive plant management actions including control and restoration measures.

Through the control portion of the program, funding is awarded through competitive grants to refuges for invasive species projects that directly involve Refuge Friends groups and volunteers. A wide variety of volunteers including college and university students, Boy Scouts and Girl Scouts, high school biology classes, Master Naturalists, garden clubs, Student Conservation Association and AmeriCorps participants, and other interested citizens have become engaged in controlling and managing invasive species on refuges. Funding awarded to refuges through these grants has enabled 1,748 volunteers to contribute over 39,000 hours to the treatment, inventory and restoration of over 144,000 acres of refuge land. In 2006 alone, 60 projects were selected and received over \$531,000 through the competitive grants program. This funding allowed 917 volunteers to contribute over 22,000 hours on 74,000 acres of refuge lands.

The Service greatly appreciates Congress's interest in this program and the recognition that engaging citizen volunteers is important to the future of the Refuge System.

Conclusion

As noted above, we believe the goals of this legislation can be met within existing authorities and programs. Moreover, any new funding to implement this legislation would have to compete with existing program priorities.

Ms. Chairwoman, I appreciate the opportunity to appear before your Subcommittee to discuss this important issue. This concludes my remarks and I would be happy to answer any questions the Subcommittee may have.