



TESTIMONY OF
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BEFORE THE
SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND
OCEANS,
SUBCOMMITTEE ON FORESTS AND FOREST HEALTH, AND
SUBCOMMITTEE ON RECREATION AND PUBLIC LANDS
OF THE
RESOURCES COMMITTEE
U.S. HOUSE OF REPRESENTATIVES
ON

H.R. 3558
THE SPECIES PROTECTION AND CONSERVATION OF THE
ENVIRONMENT ACT

MARCH 14, 2002

On behalf of the National Wildlife Federation (NWF), I would like to thank the Chairman, Ranking Minority Member and Committee members for this opportunity to testify on the **Species Protection and Conservation of the Environment Act (H.R. 3558)**. Thank you Representatives Rahall, Gilchrest and

Underwood for authoring H.R. 3558.

I am Mark Van Putten, President & CEO of the National Wildlife Federation. We are the nation's largest not-for-profit conservation education and advocacy organization with more than four million members and supporters, and nine natural resources centers throughout the United States. National Wildlife Federation's family also includes forty-six state and territorial affiliate organizations, including the Utah Wildlife Federation and West Virginia Wildlife Federation. Founded in 1936, the National Wildlife Federation works for the protection of wildlife species and their habitat, and for the conservation of our natural resources.

Mr. Chairman, I request that my full written testimony be included in the hearing record.

The conservation of our nation's natural ecosystems in a healthy and abundant state provides innumerable and irreplaceable benefits to society. To conserve these ecosystems and realize their benefits for all of us, we must address many complex issues, including human population growth, pollution, sprawling development patterns, unsustainable agricultural practices and global climate change. All of these are important issues and the National Wildlife Federation is actively working on each of them. However, another pernicious threat too often overlooked and the subject of today's hearing is the harm brought upon our natural ecosystems by invasive non-native species.

H.R. 3558 addresses this threat by authorizing cost-share grants to states for projects consistent with state plans; creating the Aldo Leopold Native Heritage Grant Program for implementing effective control programs; encouraging demonstration projects on national wildlife refuges where ecologically sound methods of controlling invasive non-native species can be tested; and promoting the development of a rapid-response capability. This latter measure will help us address urgent threats before they become ecological disasters beyond our control. Each of these measures is a necessary and vital step in tackling the problem of invasive, non-native species. The National Wildlife Federation therefore strongly supports H.R. 3558.

The National Wildlife Federation's affiliated organizations across the United States adopted a position statement on invasive non-native species in 2000, a copy of which is appended to my testimony. Our concern is that invasive non-native species can so radically change an area's physical and biological environment that the habitat requirements for native plants and animals no longer exist. After habitat loss, invasive non-native plants are the second greatest threat to native species. At least 5,000 non-native species, including more than 2,100 exotic plants and 2,000 insects, have invaded North America since the arrival of European explorers. Many of these species have been harmful to native wildlife and ecosystems. They overwhelm native species for food, space, water, and other needs. In some cases these species prey on native species and alter their habitat.

Hawaii, perhaps more than any other state, has suffered severe impacts from introduced species. At least 23 native bird species have become extinct and another 32 bird species endangered in the last 200 years in Hawaii. The non-native Indian mongoose, roof rat and feral cat are the primary reasons for this devastation of native fauna.

The impacts of invasive non-native species are not confined to our natural ecosystems. Agricultural and rangelands can be severely harmed by the spread of invasive non-native species such as cheat grass and Russian thistle, which absorb valuable nutrients and deplete soil moisture. Navigation on many of our nation's waterways has been hampered by dense growths of aquatic invasive non-native plants such as hydrilla and water hyacinth. Industry also has suffered due to the spread of invasive non-native plants and

animals into equipment and piping.

The harm to natural ecosystems caused by invasive non-native species is illustrated by two well-known species, melaleuca and the zebra mussel.

The Everglades and Melaleuca

Invasive non-native plants have become rampant in Florida in the last thirty years. According to the U.S. Department of Agriculture (USDA), just one species -- melaleuca, a non-native tree introduced from Australia -- is invading the greater Everglades ecosystem at a rate of about 11 acres per day. Melaleuca has already infested hundreds of thousands of acres in South Florida creating monocultures that destroy native plant diversity and provide little benefit to native wildlife species. Furthermore, the dense stands of melaleuca transpire enormous quantities of water, contributing to lowering of the water table in the Everglades, further expanding their impact on the natural wetlands that define the Everglades. The insidious spread of melaleuca and other invasive non-native plants like Brazilian pepper represent a serious threat to Florida's natural ecosystems and the habitat of endangered species such as the Florida panther, all at a time when we are embarking on an unprecedented effort to restore the greater Everglades ecosystem from decades of environmental mismanagement.

Once an invasive non-native species takes hold, it is often very expensive, if not impossible to eradicate. It has taken more than a decade to find a natural predator of melaleuca that will not threaten native flora and fauna. The USDA is now releasing melaleuca leaf weevils from Australia to control the spread of the tree, reducing the need to use potentially hazardous chemical controls.

The National Wildlife Federation has been educating people in the greater Everglades watershed about the threat of invasive non-native plants. Our *Backyard Wildlife Habitat*®, and *Keep the Wild Alive*™ educational programs have sponsored events focusing on habitat. NWF has shown people how to identify invasive non-native plants, especially melaleuca, replace them with natives in their own communities and take part in restoration activities in rural and wilderness areas. One event we co-hosted with the USDA last year took Boy Scouts out into panther habitat to collect weevils from one area of forest and release them into another forest currently being invaded by melaleuca.

The Great Lakes and Zebra Mussels

For decades, the National Wildlife Federation has worked to protect the biological integrity of the Great Lakes from numerous environmental threats. One of the most alarming threats to the Great Lakes, however, comes from invasive non-native plants such as Eurasian water milfoil, non-native fish such as the Eurasian ruffe and round goby, and the zebra mussel. These and other species were introduced into the Great Lakes from ballast water discharged by foreign ships using our coastal and inland waterways. Native to the Balkans, Poland, and the former Soviet Union, the zebra mussel is spreading across North America at an astounding rate. Dense zebra mussel colonies grow in pipes and on other hard surfaces, severely impacting water flow at power plants, water treatment systems and other facilities. Although the full biological impact of zebra mussels is not entirely known, it is clear that where zebra mussels invade, native mussel species quickly decline.

So great is the problem of invasive non-native species in the Great Lakes, that just last Friday, March 8, 2002, the National Wildlife Federation's affiliated organizations adopted the resolution "Protection of the Great Lakes from Exotic Species." In this resolution, which I have appended to my testimony, we identify the need for additional federal and state legislation requiring the treatment of ballast water in ships entering the Great Lakes.

Legislation

The Species Protection and Conservation of the Environment Act (H.R. 3558), is an important component of what should be a broad and diverse effort to minimize the impact of invasive non-native species, control their spread and prevent their introduction in the first place. The problem of invasive non-native species is so widespread and pervasive that no single program or action can address it comprehensively. This is particularly true where the spread of invasive species may be exacerbated by other environmental problems.

For example, last month National Wildlife Federation published a book entitled, *Wildlife Responses to Climate Change, North American Case Studies*. This book explores how global climate change has the potential to significantly increase the rates, intensities, and extent of species invasions and could correspondingly worsen the impacts of invasions on ecological systems throughout the United States. A summary of the study as it relates to invasive species is included with my written testimony.

Thousands of non-native plant and animal species, all with their own unique life history characteristics, have the potential to severely impact our natural ecosystems, not to mention agriculture and industry. Invasive non-native species are of concern on both public and private lands and water features, and will thus require private and public cooperation, including local, state, regional and federal agencies, to effectively address the problem.

Already, encouraging efforts are under way. On February 3, 1999 President Clinton signed Executive Order 13112 "Invasive Species" which established the National Invasive Species Council (Council). The Council helps coordinate the activities of 10 federal agencies with respect to invasive non-native species, including research, management and monitoring. H.R. 3558 takes a positive step forward by assigning the Council important consultation functions as grant programs authorized by the bill are designed and implemented.

The National Wildlife Federation would also look favorably on federal legislation permanently establishing the National Invasive Species Council and providing it with adequate funding. Such legislation would help ensure the continuity of programs and sustain focus during changing administrations, and therefore would help in effectively controlling invasive non-native species.

We are also encouraged by the introduction of other legislation to address the invasive non-native species problem. Specifically, I am referring to the Great Lakes Ecology Protection Act (S.1034). This legislation would finally close the loop hole which exempts ships entering the Great Lakes declaring that they have no ballast on board from regulation under the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. Experience has shown that these exempted ships can still transport invasive non-native species to the Great Lakes and other areas.

Although we embrace legislation authorizing funding for the control of invasive non-natives, two precautionary notes are in order. First, the ultimate test of Congress's commitment to controlling invasive non-native species is in the annual appropriations process. Unless adequate funds are appropriated, the problem of invasive non-native species will continue to grow unchecked.

Second, programs to control and manage invasive non-native species must be developed and implemented in such a manner that they are not harmful to our natural ecosystems. The introduction of non-native species to control other non-native species must be vigorously screened to ensure the species is host specific and non-harmful to other species and our natural ecosystems. Furthermore, all control methods should seek to minimize the use of pesticides, herbicides and other chemicals. In the few cases where use of chemicals may be appropriate, this use must be tightly regulated and carefully monitored to avoid harming non-target native species. All projects and programs addressing invasive non-natives should be evaluated according to

their success in implementing appropriate environmental controls.

Conclusion

The list of invasive non-native species destroying our native communities is already too long and is still growing. H.R. 3558 will help address the problem by encouraging cooperation among affected parties, including private and government interests, and authorizing funding to initiate needed programs. We strongly support H.R. 3558 and look forward to working with this committee as H.R. 3558 moves through the legislative process.

Again, thank you for the opportunity to testify. I would be happy to answer any questions that Members may have.

National Wildlife Federation
Resolution Number 1
2000

INVASIVE SPECIES

WHEREAS, some non-indigenous invasive plants, animals and other organisms have an adverse impact upon indigenous communities by reducing available light, water, nutrients, and space and can cause other long term changes in the area's hydrology, soil chemistry and erodibility, and the frequency of fires; and

WHEREAS, some introduced non-indigenous plants, animals and other organisms are highly invasive, capable of rapid reproduction and/or growth resulting in the displacement of indigenous species, and can radically change an area's physical and/or biological environment so that the habitat requirements for indigenous plants, animals and other organisms no longer exist; and

WHEREAS, non-indigenous invasive plants, animals and other organisms by nature are easily spread from one area to another; and

WHEREAS, the impact of non-indigenous invasive species threatens regional biodiversity in a manner that is not easily quantified; for example, the loss of an indigenous plant community to non-indigenous invasive species may mean the loss of an insect, animal or indigenous plant dependent upon that community; and

WHEREAS, according to the National Park Service, invasions of non-native plants are the second greatest threat to native species after direct habitat destruction; and

WHEREAS, the US Fish and Wildlife Service stated, "an estimated 42% of the nation's endangered and threatened species have declined as a result of encroaching exotic plants and animals"; and

WHEREAS, the problem of non-indigenous invasive plants is widespread and, according to federal and other accounts, now extend into more than 1.5 million acres of national park land and are spreading at a rate of 4,600 acres per day into federally owned land; and

WHEREAS, it is "estimated that in the 20th century, just 79 introduced plant and animal species have cost the US economy \$97 billion in losses to such industries as forestry, ranching, fisheries, tourism,

and utilities"; and

WHEREAS, research is required to establish best management practices to control and prevent the spread of non-indigenous invasive species; and

WHEREAS, international trade agreements and rules, regulations, and protocols related to international transportation and trade can significantly affect the possible transportation of non-indigenous invasive species into the United States and other countries;

NOW, THEREFORE, BE IT RESOLVED that the National Wildlife Federation in its Annual Meeting assembled March 16-18, 2000, in Seattle, Washington, supports the President's efforts in establishing the Invasive Species Council to integrate efforts of federal agencies to combat the problem and to prepare and issue the first edition of a National Invasive Management Plan that shall "detail and recommend performance-oriented goals and objectives and specific measures of success for federal agency efforts concerning invasive species"; and

BE IT FURTHER RESOLVED that the National Wildlife Federation supports increased federal funding for non-indigenous invasive species management in National Parks and on other federal lands and/or waters, and the continued funding of the Wildlife Habitat Incentives Program (WHIP) that, in part, provides cost sharing for private initiatives to control non-native (invasive) plants from natural ecosystems; and

BE IT FURTHER RESOLVED that the National Wildlife Federation encourages state and federal agencies, universities and other groups to work together to identify and list the highly and potentially invasive non-indigenous species specific to that state, and to promote that the list be used as an educational and managerial tool; and

BE IT FURTHER RESOLVED that the National Wildlife Federation calls upon state and federal agencies to carefully formulate regulations to control, reduce, or, if necessary, prohibit the introduction, transportation, propagation, sale, or distribution of non-indigenous plants known to be harmful or otherwise undesirable; and

BE IT FURTHER RESOLVED that the National Wildlife Federation encourages state and federal agencies, universities, and other groups to work with the nursery industry to establish policies to control and prevent the further introduction and spread of non-indigenous invasive species, and to promote a list of alternative, preferably native plants, that can be the basis of educational programs that will benefit growers, the public, and the environment; and

BE IT FURTHER RESOLVED that the National Wildlife Federation encourages state and federal entities engaged in research and development involving management of vegetation to intensify their studies of ecology and control of invasive non-indigenous plants; and

BE IT FURTHER RESOLVED that the National Wildlife Federation urges monitoring of areas that have endangered or threatened species and/or are relatively free of non-indigenous invasive species and encourages careful management practices to be used in the removal of non-indigenous invasive species; and

BE IT FURTHER RESOLVED that the National Wildlife Federation urges the Congress and federal

agencies to ensure that the United States' international trade obligations, including the World Trade Organization and its Sanitary and Phytosanitary Agreement, are formulated and implemented to provide sufficient flexibility to allow for regulations to control and prohibit intentional or unintentional introduction of non-indigenous invasive species and other organisms into the United States and other countries; and

BE IT FURTHER RESOLVED that the National Wildlife Federation urges the Congress of the United States to recognize the high environmental and economic costs associated with non-indigenous invasive plants, animals and other organisms and to appropriately fund efforts to control this enormous national environmental crisis through educational programs, research, and cost-share incentives to restore native habitats.

National Wildlife Federation
Resolution Number SC-2
2002

PROTECTION OF THE GREAT LAKES AND OTHER WATERS FROM EXOTIC SPECIES

WHEREAS, our Great Lakes, estuarine habitats, coastal and inland waters continue to be invaded by exotic (non-native) aquatic organisms and pathogens transported from foreign waters; and

WHEREAS, these organisms arrive in the ballast water discharged by ships using our estuarine, coastal and inland waterways; and

WHEREAS, previously introduced exotic species, such as Eurasian ruffe and round gobies, are being carried in ballast water from one Great Lakes port to another; and

WHEREAS, once introduced and established, these non-native aquatic organisms are expensive to control and almost impossible to eliminate; and

WHEREAS, the impact on sport and commercial fisheries is immense and disrupts the aquatic diversity of the Great Lakes, estuarine habitats, coastal and inland waters; and

WHEREAS, moreover, shoreline communities in the Great Lakes region alone are being forced to spend an estimated \$500 million annually on control measures to protect drinking water, power plants, and recreational facilities; and

WHEREAS, some of these aquatic organisms, such as zebra mussels and Eurasian water milfoil, are now making their way into inland lakes and streams across the United States where they are displacing native animal and plant species; and

WHEREAS, the ballast water that harbors these invaders is used to maintain the stability of cargo vessels when they are empty or only partially loaded and is pumped in or out of large holding tanks, as needed, before the ships enter or leave port; and

WHEREAS, although U.S. and Canadian laws currently require ships entering the Great Lakes to exchange their ballast water at sea, ship design makes it impossible to eliminate *all* of the ballast water; and

WHEREAS, the majority of ships entering the Great Lakes do so with "No ballast on Board" and ships in this condition are commonly referred to as NOBOBs; and

WHEREAS, ships in the NOBOB condition still carry sediment in their ballast that can harbor exotic species; and

WHEREAS, the average ship retains 42,000 gallons of ballast water and sludge when entering the Great Lakes or moving between ports; and

WHEREAS, exotic organisms are flushed into the lakes as ships take on and discharge residual ballast water in the course of their voyages; and

WHEREAS, ships in the NOBOB condition are currently exempt from requirement to exchange their ballast under federal law; and

WHEREAS, federal laws as they are currently administered have clearly failed to prevent exotic species in this residual ballast water from reaching the Great Lakes, estuarine habitats, coastal and inland waterways; and

WHEREAS, in the 106th Congress a bill was introduced that would have amended the Non-indigenous Aquatic Nuisance Control and Protection Act of 1990 and require ships traveling in and out of the Great Lakes, estuarine habitats, coastal and inland waters to replace or purify their ballast water or certify that any discharge or exchange within U.S. waters will not introduce any non-indigenous organisms; and

WHEREAS, the National Wildlife Federation believes the ultimate control has to come from the Federal government working in concert with Canada; and

WHEREAS, the National Wildlife Federation and many other organizations recognize the threat posed to the Great Lakes, estuarine habitats, coastal and other inland lakes and streams of the United States by the continued introduction of non-indigenous aquatic organisms carried in the ballast water of ocean going vessels.

NOW, THEREFORE, BE IT RESOLVED that the National Wildlife Federation, at its Annual Meeting assembled March 7-9, 2002 in Stone Mountain, Georgia, support the enactment of federal legislation to protect the Great Lakes, estuarine habitats, coastal and inland waters from undesirable exotic species and pathogens, by requiring treatment of ballast water of all ships entering or moving between the Great Lakes, estuarine habitats, coastal or inland ports, including ships with no ballast on board (NOBOBs) to eliminate viable exotic organisms without damage to the environment; and

BE IT FURTHER RESOLVED, that the National Wildlife Federation encourages the development, funding, and use of environmentally sound technologies that prevent the introduction of exotic species into the aquatic environment by minimizing or eliminating the uptake of organisms into ships' ballast tanks; and

BE IT FURTHER RESOLVED, that the National Wildlife Federation supports equally effective state legislation to regulate ballast water, including ships in the NOBOB condition in individual state waters to provide interim protection until such time as federal legislation is enacted to adequately protect all our Great Lakes, estuarine habitats, coastal and inland lakes and rivers.