#### Gun ownership drives PR excise taxes critical to wildlife conservation. **NSSF 14**[[1]](#footnote--1)

NSSF, representing manufacturers and sportsmen around the nation, takes great pride in supporting wildlife conservation efforts. Noted in the economic impact report are the significant taxes paid by member companies to federal and state governments and **the Pittman-Robertson excise tax** the industry pays on the products it sells — this tax **is the major source of wildlife conservation funding in America**.The economic growth America’s firearms and ammunition industry has experienced over the years has been nothing short of remarkable. Over the past couple of years, **the industry’s growth has been driven by an unprecedented number of Americans choosing to exercise their fundamental right to** keep and **bear arms** and purchase a firearm and ammunition.

#### PR is key to national park management. **NSSF 13**[[2]](#footnote-0)

What types of projects are funding by **P**ittman-**R**obertson? States use the apportioned funds to **restore and manage wildlife habitat, for both game and nongame species** alike, and to open and maintain access for hunting, shooting and other outdoor recreation. White-tailed deer, elk, turkey and antelope are some of the **many species** that **have seen their populations grow as a result of P**ittman-**R**obertson **funding**. Additionally, **the funds deliver** hunter **education programs and research projects focused on critical habitat management practices**. Why is Pittman-Robertson so effective? Pittman-Robertson creates a direct link between those that hunt and participate in the shooting sports and the resources needed to expand and enhance opportunities to hunt and shoot. Known as the North American model of wildlife conservation, this user pays public benefit model is extremely successful because sportsmen and women and the industries that serve them have always been willing to pay extra to enhance, expand and protect America’s hunting, shooting and conservation heritage.

#### National Parks are biodiversity hotspots. **Roman 9**[[3]](#footnote-1)

Many countries have **national parks** that **feature special landscapes and geological formations**: the volcanic caldera of Yellowstone, the Grand Canyon, Mount Kilimanjaro. In addition to these traditional and essential parks, there is a need to protect a carefully designed network of reserves on each continent and in every ocean. This global series, or archipelago, of biological refuges—**biodiversity parks—will preserve key features of the Earth’s biological legacy inherited from the evolutionary past into the future**. Such parks, in effect, would celebrate and honor the evolutionary heritage reflected in biological diversity, just as traditional national parks and monuments preserve special geological features or honor important historical events in human affairs. Rather than merely constructing museums that memorialize biocide, biodiversity parks would offer explicit protection for endangered species and evolutionarily distinctive ecosystems. The task is not as insurmountable as it might appear. By preserving and endowing just 25 biodiversity hotspots (less than two percent of the earth’s land area) we could help protect 44 of vascular plant species and 35 of all species of mammals, birds, reptiles and amphibians for $500 million a year7—less than 0.1 of the funds allocated to the United States’ Troubled Asset Relief Program (TARP) to bail out incompetent financial institutions. One difficulty with many current park systems is that reserves often tend to be on residual lands that are not very valuable for resource extraction or human subsistence. A study of new reserves in Australia showed that they were typically gazetted on steep and infertile public lands, areas least in need of protection.8 Without **proper planning**, ad hoc reserves can be ineffective, often occupying less productive land, **making the goal of protecting biodiversity more expensive and less likely to succeed**. Well-placed networks of sanctuaries, designed with an awareness of ongoing climate disruption and the unique biotic facets of the sites, **can help shepherd many species through the extinction crisis**. In discussing parks, we often think of landscapes, but the biodiversity crisis affects aquatic systems as well. Protection of the oceans requires safeguards against overfishing and networks of marine reserves that include rich nearshore habitats (such as coral reefs and upwellings) as well as deep-sea vents and abyssal plains. As on land, these protected areas should range from strict nature reserves where fishing and extraction are forbidden to seascapes that are managed for their cultural and ecological value. Areas that are open to exploitation should be managed sustainably to meet the long-term resource needs of local communities, while providing natural services such as recreational opportunities and water purification.9

#### Biodiversity loss in *specific hotspots* causes extinction. **Mittermeier et al 11**[[4]](#footnote-2)

Extinction is the gravest consequence of the biodiversity crisis, since it is¶ irreversible. Human activities have elevated the rate of species extinctions to a¶ thousand or more times the natural background rate (Pimm et al. 1995). What are the¶ consequences of this loss? Most obvious among them may be the lost opportunity¶ for future resource use. Scientists have discovered a mere fraction of Earth’s species¶ (perhaps fewer than 10%, or even 1%) and understood the biology of even fewer¶ (Novotny et al. 2002). **As species vanish, so too does the** health **security** of every¶ human. Earth’s **species** are a vast genetic storehouse that **may harbor a cure for**¶ cancer, malaria, or **the next** new **pathogen** – cures waiting to be discovered.¶ Compounds initially derived from wild species account for more than half of all¶ commercial medicines – even more in developing nations (Chivian and Bernstein¶ 2008). Natural forms, processes, and ecosystems provide blueprints and inspiration¶ for a growing array of new materials, energy sources, hi-tech devices, and¶ other innovations (Benyus 2009). The current loss of species has been compared¶ to burning down the world’s libraries without knowing the content of 90% or¶ more of the books. **With loss of species, we lose** the ultimate source of our crops¶ and **the genes we use to improve agricultural resilience**, the inspiration for¶ manufactured products, **and the** basis of the structure and function of the **ecosystems¶ that** support humans and all life on Earth (McNeely et al. 2009). Above and beyond¶ material welfare and livelihoods, biodiversity contributes to security, resiliency,¶ and freedom of choices and actions (Millennium Ecosystem Assessment 2005).¶ Less tangible, but no less important, are the cultural, spiritual, and moral costs¶ inflicted by species extinctions. All societies value species for their own sake,¶ and wild plants and animals are integral to the fabric of all the world’s cultures¶ (Wilson 1984). The road to extinction is made even more perilous to people by the loss of the broader ecosystems that underpin our livelihoods, communities, and economies(McNeely et al.2009). The loss of coastal wetlands and mangrove forests, for example, greatly exacerbates both human mortality and economic damage from tropical cyclones (Costanza et al.2008; Das and Vincent2009), while disease outbreaks such as the 2003 emergence of Severe Acute Respiratory Syndrome in East Asia have been directly connected to trade in wildlife for human consumption(Guan et al.2003). Other consequences of biodiversity loss, more subtle but equally damaging, include the deterioration of Earth’s natural capital. Loss of biodiversity on land in the past decade alone is estimated to be costing the global economy $500 billion annually (TEEB2009). Reduced diversity may also reduce resilience of ecosystems and the human communities that depend on them. For example, more diverse coral reef communities have been found to suffer less from the diseases that plague degraded reefs elsewhere (Raymundo et al.2009). As Earth’s climate changes, the roles of species and ecosystems will only increase in their importance to humanity (Turner et al.2009).¶ In many respects, conservation is local. People generally care more about the biodiversity in the place in which they live. They also depend upon these ecosystems the most – and, broadly speaking, it is these areas over which they have the most control. Furthermore, we believe that all biodiversity is important and that every nation, every region, and every community should do everything possible to conserve their living resources. So, what is the importance of setting global priorities? **Extinction is a global phenomenon, with impacts far beyond** nearby administrative **borders**. More practically, biodiversity, the threats to it, and the ability of countries to pay for its conservation vary around the world. The vast majority of the global conservation budget – perhaps 90% – originates in and is spent in economically wealthy countries (James et al.1999). It is thus critical that those globally ﬂexible funds available – in the hundreds of millions annually – be guided by systematic priorities if we are to move deliberately toward a global goal of reducing biodiversity loss.¶ The establishment of priorities for biodiversity conservation is complex, but can be framed as a single question. Given the choice, **where should action toward** reducing the loss of **biodiversity** be implemented ﬁrst? The ﬁeld of conservation planning addresses **this question** and **revolves around** a framework of vulnerability and irreplaceability (Margules and Pressey2000). Vulnerability measures the risk to the species present in a region – if the species and ecosystems that are highly threatened are not protected now, we will not get another chance in the future. Irreplaceability measures the extent to which spatial substitutes exist for securing biodiversity. The number of species alone is an inadequate indication of conserva-tion priority because several areas can share the same species. In contrast, areas with high levels of endemism are irreplaceable. We must conserve these places because the unique species they contain cannot be saved elsewhere. Put another way, biodiversity is not evenly distributed on our planet. It is heavily concentrated in certain areas, these areas have exceptionally high concentrations of endemic species found nowhere else, and many (but not all) of these areas are the areas at greatest risk of disappearing because of heavy human impact.¶ Myers’ seminal paper (Myers1988) was the ﬁrst application of the principles of irreplaceability and vulnerability to guide conservation planning on a global scale. Myers described ten tropical forest “**hotspots**” on the basis of extraordinary plant endemism and high levels of habitat loss, albeit without quantitative criteria for the designation of “hotspot” status. A subsequent analysis added eight additional hotspots, including four from Mediterranean-type ecosystems (Myers 1990).After adopting hotspots as an institutional blueprint in 1989, Conservation Interna-tional worked with Myers in a ﬁrst systematic update of the hotspots. It introduced two strict quantitative criteria: to qualify as a hotspot, a region had to contain at least 1,500 vascular plants as endemics (¶ >¶ 0.5% of the world’s total), and it had to have 30% or less of its original vegetation (extent of historical habitat cover)remaining. These efforts culminated in an extensive global review (Mittermeier et al.1999) and scientiﬁc publication (Myers et al.2000) that introduced seven new hotspots on the basis of both the better-deﬁned criteria and new data. A second systematic update (Mittermeier et al.2004) did not change the criteria, but revisited the set of hotspots based on new data on the distribution of species and threats, as well as genuine changes in the threat status of these regions. That update redeﬁned several hotspots, such as the Eastern Afromontane region, and added several others that were suspected hotspots but for which sufﬁcient data either did not exist or were not accessible to conservation scientists outside of those regions. Sadly, it uncovered another region – the East Melanesian Islands – which rapid habitat destruction had in a short period of time transformed from a biodiverse region that failed to meet the “less than 30% of original vegetation remaining” criterion to a genuine hotspot.

1. (National Sport Shooting Foundation, “Firearms industry economic impact nearly doubles in five years”, 4/6, <http://dailycaller.com/2014/04/06/firearms-industry-economic-impact-nearly-doubles-in-five-years/#ixzz3u0q1Bjui>) [↑](#footnote-ref--1)
2. National Shooting Sports Foundation. Trade association for America’s firearms industry. “Pittman-Robertson Excise Tax” http://www.nssf.org/factsheets/PDF/PittmanRobertsonFacts.pdf. Published by the NSSF. 2o13. [↑](#footnote-ref-0)
3. Joe Roman, Paul R. Ehrlich, Robert M. Pringle, and John C. Avise, February 2009, Joe Roman is a conservation biologist, author, and fellow at the Gund Institute for Ecological Economics and a McCurdy Visiting Scholar at the Duke University Marine Lab, Paul R. Ehrlich is the President of the Center for Conservation Biology, Stanford; Co-founder of the field of coevolution, Robert M. Pringle is a Graduate Student in Conservation Biology, Stanford University, and John C. Avise is Distinguished Professor, Ecology and Evolutionary Biology, “Facing Extinction: Nine Steps to Save Biodiversity,” http://www.thesolutionsjournal.com/feature\_article/2009-02-24-facing-extinction-nine-steps-save-biodiversity [↑](#footnote-ref-1)
4. (et al, Dr. Russell Alan Mittermeier is a primatologist, herpetologist and biological anthropologist. He holds Ph.D. from Harvard in Biological Anthropology and serves as an Adjunct Professor at the State University of New York at Stony Brook. He has conducted fieldwork for over 30 years on three continents and in more than 20 countries in mainly tropical locations. He is the President of Conservation International and he is considered an expert on biological diversity. Mittermeier has formally discovered several monkey species. From Chapter One of the book Biodiversity Hotspots – F.E. Zachos and J.C. Habel (eds.), DOI 10.1007/978-3-642-20992-5\_1, # Springer-Verlag Berlin Heidelberg 2011. This evidence also internally references Norman Myers, a very famous British environmentalist specialising in biodiversity. available at: http://www.academia.edu/1536096/Global\_biodiversity\_conservation\_the\_critical\_role\_of\_hotspots) [↑](#footnote-ref-2)