George Horne Deputy Executive Director South Florida Water Management District

Testimony Before the House Subcommittee on Crime, Terrorism and Homeland Security United States House of Representatives

H. R. 2811 to amend title 18, United States Code, to include constrictor snakes of the species Python genera as an injurious animal

November 5, 2009

Written Testimony on H.R. 2811, To amend title 18, United States Code, to include constrictor snakes of the species Python genera as an injurious animal By George Horne, Deputy Executive Director, Operations and Maintenance, South Florida Water Management District

As matter of great importance to the South Florida Water Management District, we thank you for the opportunity to submit this testimony on H.R. 2811, To amend title 18, United States Code, to include constrictor snakes of the species Python genera as an injurious animal. While our regional agency maintains more than 2,600 miles of flood protection and water management canals/levees in 16 Florida counties, the South Florida Water Management District is also charged with protecting and restoring the greater South Florida ecosystem, including Lake Okeechobee, the largest natural lake in the southeastern United States, and America's uniquely diverse Everglades *River of Grass*. Additionally, the South Florida Water Management District is the largest single landowner in the region with more than one million acres of public land within our boundaries. Our continued ability to successfully restore and manage these important natural resources is hampered by the growing presence of exotic giant, invasive constrictor snakes, which are now found free-ranging in Florida's vast wilderness areas.

Our written testimony today focuses on the importance of limiting introductions of non-native, giant constrictor snakes. We have a long history of successful invasive plant management and experience, but only recently have we had to commit more and more resources to the emerging populations of the Burmese python and other non-native constrictors appearing across our landscape. If effective preventative programs were in place to limit introductions of non-native constrictors, such as the legislation now under consideration, these much-needed taxpayer-funded resources could be redirected to other important resource management efforts. Today, however, the negative impacts from the unlimited importation of new pest animals require active responses on our part. Effective prevention of additional introductions of potentially-invasive constrictor snakes, as proposed in this bill, is the only path to prevent these costs from continually increasing.

While Florida, California and Hawaii are among the states most impacted by introduced invasive species, every state is affected. Globally, exotic invasive species, including pest animals, weeds and pathogenic diseases, are a major cause of global biodiversity decline. In particular, non-native animals compete for food and habitat, upset existing predator/prey relationships, degrade environmental quality, spread diseases and, in our case, may threaten the integrity of flood protection levees and canal banks, and electrical power delivery. Nationally, more than 50,000 species of introduced plants, animals and microbes cause more than \$120 billion in damages and control costs each year (Pimentel 2005). Already, 192 non-native animal species are established in Florida, calling for the development of methods to forecast and respond to the potential economic loss, environmental damage and social stress caused by both new non-native animal introductions and long-established invasive organisms.

Collaborative management, education, training and broadening public awareness, along with baseline population analyses, may provide a foundation for building effective control strategies and tools. Several states, including California, Hawaii and Idaho, are devising non-native animal

invasion prevention programs and/or lists. This bill makes an important contribution towards prevention by limiting the importation of two snake species with high invasion potentials in the U.S.

Specific support for H.R. 2811, To amend title 18, United States Code, to include constrictor snakes of the species Python genera as an injurious animal.

The South Florida Water Management District strongly supports the draft language of H.R. 2811. Prompt action is needed at the federal level to limit the number of invasive pythons released into the wild. Designating these species as injurious to the welfare and survival of the wildlife resources of the United State is an important step toward that goal. Our specific comments on the draft bill include:

- The South Florida Water Management District petitioned the U.S. Fish & Wildlife Service to include the Burmese python as an injurious wildlife species under the Lacey Act (18 U.S.C. 42) in June 2006. To date, the Service has not made a determination for listing this species. This amendment to the Lacey Act recognizes the clear and present threat of the Burmese and African python, and provides immediate limitations on their importation.
- The inclusion of the African Rock python (also known as Northern African python) is timely given recent evidence of breeding Northern African pythons in Miami-Dade County near the Everglades. This giant constrictor shares many physical and ecological traits with the Burmese python, prompting concern that this species may become highly invasive in Florida and elsewhere.
- African rock python is an English common name used for two closely-related African python species, *Python sebae* and *P. natalensis*, which are indigenous to northern and southern Africa, respectively. To avoid confusion, some prefer to use the common names, Northern African python and Southern African python, to distinguish these species. Although the Southern African python is less common in international trade, it is rarely distinguished from *P. sebae* among importers. Therefore, we support amendments to H.R. 2811 that unambiguously designate both species of African pythons (*P. sebae* and *P. natalensis*) as injurious wildlife.
- The amendment could also be expanded to include all giant constrictor species determined by the U.S. Geological Survey, or USGS, to have medium or high invasion risk potential. The recently published USGS risk assessment for giant constrictors (Reed & Rodda 2009) ranked nine species as having either a medium or high overall risk potential for invasion in the United States. These species include the Beni Anaconda, Boa Constrictor, Burmese Python, DeSchauensee's Anaconda, Green Anaconda, Northern African Python, Southern African Python, Reticulated Python and Yellow Anaconda. We strongly support inclusion of these species in H.R. 2811 in order to immediately limit importation of species that our best science predicts will be invasive. Rather than wait for the next Burmese python to become established in the United States, a proactive approach such as the proposed legislation being discussed today is urgently needed to protect our environment, economy and quality of life not just in Florida but throughout the nation.

Current measures

In 2005, the Florida Fish and Wildlife Conservation Commission created an invasive animals management section. One of its key recommendations led to a new Florida rule limiting commerce in "reptiles of concern," including the world's five largest non-venomous snakes and the carnivorous Nile monitor. These animals were selected as most threatening because of their large size and extreme predatory natures. Now in force in Florida Administrative Code, the rule requires \$100 annual possession permits, and they must be identified via implanted microchip. Prior to this action, however, these species were already present in Florida's pet commerce and, to varying degrees, have been reported in Florida's wilds. In fact, Burmese pythons are now thoroughly established in South Florida's natural areas. According to the U.S. Geological Survey, Burmese python population estimates range from 5,000 to more than 100,000 in the Everglades.

The Florida Fish and Wildlife Conservation Commission's exotic animals section is engaged in serious management efforts against species present only in isolated areas and in small populations. Broader management efforts would benefit from federal engagement.

Burmese Pythons in Florida

Upfront prevention of the introduction of new pests will not only prevent damages to natural areas but would also preclude economic loss stemming from an injurious species' gaining economic value in the pet trade only to be regulated later. For example, the non-native Burmese python is a top predator that is known to prey upon more than 20 native Florida species. Notable among these are the federally listed Key Largo wood rat, white-tailed deer, American alligator, bobcat and numerous wading birds common to the Everglades, including the wood stork. The South Florida Water Management District is deeply committed to preserving and restoring South Florida's environmental health and, unfortunately, the Everglades ecosystem is now home to this invasive snake. Attempts to manage Burmese pythons divert taxpayers' funds from these other urgent primary restoration and protection tasks. Yet, failure to do so will leave this aggressive animal as a serious impediment to our Everglades restoration progress. The Burmese python also threatens agricultural interests as small livestock are also likely prey. In 2008, the U.S. Geological Survey published a climate tolerance model predicting that this snake will likely survive throughout most Southeastern states and westward across the southern reaches of the country to the Pacific.

The significant value of current sales of the Burmese python would be affected if commerce in the species is regulated. Such economic loss could have been avoided if the Burmese python had earlier been identified as a serious potential pest and trade had focused on less threatening snakes.

Since 2000, the South Florida Water Management District and Everglades National Park, have removed 1,248 Burmese pythons from the Everglades. As a top predator and prolific breeder, Burmese pythons threaten ecosystem restoration efforts and natural wildlife, including species already threatened or endangered. Adverse experience already gained in Florida strongly indicates the need to regulate the importation and sale of this snake. Without stronger regulation and control resources, adverse impacts of Burmese pythons will continue to get worse, and the python's population will continue to expand north of the Everglades and likely into South Florida's urban areas.

Florida's Other Non-Native Giant Constrictors

Given South Florida's abrupt boundaries between dense human population centers and vast subtropical wilderness areas, it comes as no surprise that numerous giant constrictor species have been observed in Florida. While most observed animals are presumed to be released pets, three additional constrictor species are now considered established or potentially established in Florida—the common boa, Northern African python and yellow anaconda. All three species are identified in the USGS risk assessment as having a high overall risk of establishment in the United States. The common boa has been repeatedly observed in South Florida, primarily on the Deering Estate in eastern Miami-Dade County, but also near Everglades National Park. Between 1989 and 2005, 96 common boas were captured in South Florida (Snow et al., 2007). Recent confirmed sightings of Northern African pythons near the eastern boundary of the Everglades and yellow anacondas near Big Cypress National Preserve and Myakka State Park in southwest Florida are also cause for alarm. All three of these species share traits with the Burmese python that are considered important factors for invasive potential (Reed & Rodda 2009), and like the Burmese python all three species will be very costly to control should they become widely established.

Conclusion

As the South Florida Water Management District and other agencies try to contain the documented damage and growing threat of the Burmese python and other invasive animals in Florida, the flow of potentially harmful exotic animals across our borders continues. To use just one example, roughly 144,000 boa constrictors were imported into the United States between 2000 and 2007 (LEMIS data). Federal action is needed now to address the immediate threat posed by giant constrictors which have or are likely to establish in our nation's wilderness areas. Without preventative measures to limit future introductions, we will continue to inherit costly and permanent management responsibilities at taxpayers' expense. Quite simply, prevention is not only financially efficient, it is the only feasible means of controlling invasions of adaptive and cryptic organisms like the Burmese python. While this amendment does not meet the larger need to modernize the injurious wildlife provisions of the Lacey Act, it is an important stopgap to limit importation of high risk giant constrictor species – and that is a sorely-needed measure to help us protect and restore the Everglades ecosystem.

Citations

Pimentel, D., L. Lach, R. Zuniga, and D. Morrison. 2005. Update on the environmental and economic costs associated with alien-invasive species in the United States. Ecological Economics 52:273-288.

Reed, R.N., and Rodda, G.H., 2009, Giant constrictors: biological and management profiles and an establishment risk assessment for nine large species of pythons, anacondas, and the boa constrictor: U.S. Geological Survey Open-File Report 2009–1202, 302 p.

Rodda, G. H., et al. 2007. Climate matching as a tool for predicting potential North American spread of brown treesnakes. <u>In</u>: Proc. of managing vertebrate invasive species symposium. 7-9 August 2007, Ft. Collins, CO. USDA APHIS Wildlife Services, Ft. Collins, CO.

Snow, R.W., Krysko, K.L., Enge, K.M., Oberhofer, L., Warren-Bradley, A., and Wilkins, L., 2007. Introduced populations of *Boa constrictor* (Boidae) and *Python molurus bivittatus* (Pythonidae) in southern Florida, in Henderson, R.W., and Powell, R., eds., Biology of the boas and pythons: Eagle Mountain, Utah, Eagle Mountain Publishing, p. 416–438.