TESTIMONY OF DAN ASHE, DEPUTY DIRECTOR, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE HOUSE JUDICIARY SUBCOMMITTEE ON CRIME, TERRORISM, AND HOMELAND SECURITY ON H.R. 2811, TO AMEND TITLE 18, U.S. CODE, TO INCLUDE CONSTRICTOR SNAKES OF THE SPECIES PYTHON GENERA AS AN INJURIOUS ANIMAL

November 5, 2009

Introduction

Chairman Scott, Ranking Member Gohmert, and Members of the Subcommittee, I am Dan Ashe, Deputy Director of the U.S. Fish and Wildlife Service (Service) within the Department of the Interior (Department). I appreciate the opportunity to testify before the Subcommittee today on H.R. 2811, which as introduced would have amended Title 18 Section 42, U.S. Code, to include constrictor snakes of the *Python* genus as an injurious animal. As reported by the House Judiciary Committee, H.R. 2811 was modified to include only two species of the genus, which are the Burmese python and northern African python. The Department appreciates Congressman Meek bringing attention to this important conservation issue.

While the Department generally prefers the administrative process to run its course, we support H.R. 2811, as reported, and we recommend amending the legislation, in light of the recently released U.S. Geological Survey (USGS) risk assessment, to include all nine species of large constrictor snakes. The nine species that were assessed include the Burmese python, northern African python, southern African python, reticulated python, green anaconda, yellow anaconda, Beni or Bolivian anaconda, DeSchauensee's anaconda, and boa constrictor.

The threat posed by the Burmese python and other large constrictor snakes is evident. H.R. 2811 includes only a subset of the *Python* genus, while the USGS risk assessment indicated that other large constrictor snakes also pose a risk to the health of the ecosystem. The nine large constrictor snakes evaluated in the risk assessment will be the focus of the Service's internal assessment under the Lacey Act.

Before I discuss the specifics of the injurious wildlife provisions of the Lacey Act and injurious wildlife evaluation of large constrictor snakes, I would like to share some background information about the effects the Burmese python has had in the Everglades and other parts of Florida. More than 1,200 of the snakes have been removed from Everglades National Park since 2000, with others having been removed from the Florida Keys, along Florida's west coast, and farther north along the Florida peninsula. Burmese pythons threaten many imperiled species and other wildlife. Two Burmese pythons were found near Crocodile Lake National Wildlife Refuge, and the remains of three Key Largo wood rats were found in their stomachs. The Key Largo wood rat is listed as Endangered under the Endangered Species Act, with estimates suggesting about 200 individuals remain in the wild in one isolated location.

Burmese pythons and other large constrictor snakes are highly adaptable to new environments and opportunistic in expanding their geographic range. Unfortunately, there is no silver bullet that will comprehensively address the conservation challenges raised by the introduction of Burmese pythons and other large constrictor snakes in the Everglades. Steps to help address these challenges include: trapping and other control technologies, increasing public awareness, rapidly responding to sightings of snakes in the wild, and detecting the snakes and preventing their further spread. To meet these challenges, the Service is working with many partners, including the National Park Service (NPS), USGS, the South Florida Water Management District, the Department of Agriculture, the Florida Fish and Wildlife Conservation Commission, the Florida Wildlife Federation, and The Nature Conservancy.

In addition, State and Federal regulatory approaches play an important role in this effort. In 2008, the State of Florida enacted regulations requiring owners of Burmese pythons and other reptiles of concern to pay an annual \$100 fee and demonstrate that they have the capacity to safely hold the animals. The State has also shown tremendous leadership by hosting several Nonnative Pet Amnesty Days, during which owners of exotic pets can turn in unwanted animals, no questions asked, rather than turning them loose in the wild. The Florida Fish and Wildlife Conservation Commission is now considering developing additional regulatory strategies, and legislation has been introduced at the State level to further regulate Burmese pythons and other species of concern.

The Service has also partnered with the Pet Industry Joint Advisory Council and the National Oceanic and Atmospheric Administration's Sea Grant Program to develop the HabitattitudeTM campaign, which encourages aquarium hobbyists and water gardeners to be environmental stewards by not releasing pets and plants into natural habitats. We are working toward expanding this campaign to terrestrial plants and animals and developing Burmese python-specific messages for Florida.

Despite the efforts of a broad array of partners, our work has only begun. There is evidence indicating thousands of Burmese pythons are now breeding in the Everglades, and we have only started to develop the techniques needed to address this threat. The reality is that no effective techniques were created to control an invasive snake of this size before our current effort; we are forging a new path. In addition, Burmese pythons are not the only concern. Other species of large snakes are or may be breeding in the Everglades now—boa constrictors and northern African pythons—and other species may pose a similar threat. Given the value of the Everglades, its biological diversity and the threat of invasive species, the Service is committed to addressing this concern and restoring the ecosystem.

Injurious Wildlife Provisions of the Lacey Act

Under the Lacey Act, the Secretary of the Interior is authorized to regulate the importation and interstate transport of species determined to be injurious to humans, the interests of agriculture, horticulture or forestry, and the welfare and survival of wildlife resources of the United States. Species listed as injurious may not be imported or transported across State lines by any means without a permit issued by the Service. The Service considers a variety of factors when evaluating a species for listing as injurious, such as the species' survival capabilities, its ability to spread geographically, its impact on habitat and ecosystems, its impact on threatened and endangered species, its impact on human beings and resource-based industries, and resource managers' ability to control and eradicate the species.

If a species is found to be injurious, the Service publishes a proposed rule in the *Federal Register* to add the species to the list of injurious wildlife and seeks public comment on the proposal. We evaluate public comments received and any additional data gathered, and either publish a final rule to add the species to the list or a notice explaining why the species will not be listed. This evaluation process and the timeframe under which we accomplish it varies based on the availability of data and the complexity of the analyses as well as considerations under the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act, executive orders, and other mandates.

The Lacey Act does not regulate intrastate transport; consequently, State regulatory protocols can play an important role in addressing the threat of large constrictor snakes and other invasive species.

Injurious Wildlife Evaluation of Large Constrictor Snakes

In June 2006, the Service received a request from the South Florida Water Management District to list Burmese pythons as an injurious species under the Lacey Act. At the time the petition was submitted, no scientific information had been compiled on Burmese pythons that would enable a rigorous assessment of risk and potential impacts to the Everglades and other ecosystems. As a result, in 2007 the Service partnered with NPS to jointly provide funds to USGS towards completion of a risk assessment of nine non-native boa, anaconda, and python species considered invasive or potentially invasive in the United States. USGS finalized the risk assessment on October 13, 2009. The risk assessment evaluates each species according to multiple factors associated with either risk of establishment or consequences of establishment, and concludes with an Organism Risk Potential that assigns risk as low, medium, or high for each species. Species assessed were the Burmese python, northern African python, southern African python, reticulated python, green anaconda, yellow anaconda, Beni or Bolivian anaconda, DeSchauensee's anaconda, and boa constrictor.

The selection of these giant constrictor species was based on concern over the size of the potential invaders combined with their prevalence in international trade. Many of these large snakes are popular as pets, and are associated with a large domestic and international trade. Over the past 30 years, about a million individuals of these nine species have been imported into the United States, and current domestic production of some species likely exceeds import levels. The international trade in reptiles as pets is the primary pathway by which these species enter the country.

The Burmese python is currently distributed across many thousands of square kilometers of south Florida and a population of boa constrictors is established south of Miami. Additionally, recent evidence strongly suggests a reproducing population of northern African pythons on the western boundaries of Miami. There is as yet no evidence for reproducing populations of the various anacondas or the reticulated python, although representatives of both groups have been captured or sighted in the wild in Florida and elsewhere.

Of the nine large constrictors assessed, five were shown to pose a high risk to the health of the ecosystem, including the Burmese python, northern African python, southern African python, yellow anaconda, and boa constrictor. The remaining four large constrictors—the reticulated python, green anaconda, Beni or Bolivian anaconda, and DeSchauensee's anaconda—were shown to pose a medium risk. None of the large constrictors that were assessed was classified as low risk. As compared to many other vertebrates, giant constrictors pose a relatively high risk as potential invasive species, especially in terms of risk to stability of native ecosystems.

Because there are no native snakes that reach similar sizes, giant constrictors represent a novel predation risk to native prey species, and their remarkably broad diets would allow them to consume most native birds and mammals. Giant constrictors potentially represent a serious threat to birds and mammals of conservation concern, especially threatened or endangered species in wetlands or those on islands. Some of the giant constrictors are known to reach relatively high densities in their native ranges, and this trend is reinforced by the apparent high densities of invasive Burmese pythons in parts of south Florida. The traits shared by the giant constrictors include many of the traits that either increase the severity of their probable ecological impacts or exacerbate the challenge of controlling or eradicating them, including that the species are habitat generalists, arboreal when young, tolerant of urbanization, sit and wait predators, very low detectability in the wild, high fecundity, long distance dispersers, rapid growth, early maturation, generalist predators, and as previously mentioned high population densities. Thus, in comparison to potential invaders lacking these traits, this group of snakes constitutes a particularly high risk. While a few of the very largest species have been known to attack humans in their native range, such attacks appear to be rare.

The difficulty in detecting these species in the field complicates efforts to identify the range of invasive populations or deplete populations through visual searching and removal of individuals. There are not currently available control tools that would appear adequate for eradication of an established population of giant snakes once they have spread over a large area.

The USGS risk assessment used a method called "climate matching" to estimate those areas of the United States exhibiting climates similar to those experienced by the species in their respective native ranges. Considerable uncertainties exist about the native range limits of many of the giant constrictors, and myriad factors other than climate alone can influence whether a species could establish a population in a particular location. Climate extrapolations are therefore most profitably compared among species to infer the relative geographic risks associated with establishment in the United States, rather than being used as rigorous predictors of exactly where a species can establish a population. Based on climate alone, many of the species are likely to be limited to the warmest areas of the United States, including parts of Florida, extreme south Texas, Hawaii, and insular territories. For a few species, however, larger areas of the continental United States appear to exhibit suitable climatic conditions.

In addition to the recent USGS risk assessment, the Service published a Notice of Inquiry in the *Federal Register* on January 31, 2008, to solicit biological, economic, or other data related to the potential of adding large constrictor snakes to the list of injurious wildlife. During the public comment period, which closed on April 30, 2008, the Service received 1,528 responses.

The Service is using the information provided by the public and the USGS risk assessment in our ongoing evaluation of whether large constrictor snakes should be included under the Lacey Act. The Service is now completing an economic analysis of a potential Lacey Act rulemaking, which is a requirement under the Regulatory Flexibility Act and Executive Orders 12866 and 13272. The economic analysis is based on available data, and limited data is available. Impacted businesses are not large enough to have major data collections and reporting requirements. We have import data from the Service's Office of Law Enforcement and Division of Management Authority. In addition, the Pet Industry Joint Advisory Council has provided the Service data on the number of snakes bred annually. However, we are still seeking data pertaining to interstate shipments and business profiles to determine the percent of revenues impacted by a potential listing under the Lacey Act. In addition to analyzing economic costs, the economic benefits of a potential listing are still being assessed. Reducing the probability of constrictor snake establishment would reduce the probability of negative impacts on a variety of entities, such as agriculture, human health, native animal species, and migratory birds. However, estimates of the economic value of these impacts are dependent upon the availability of future projections of snake populations.

The Service is drafting documentation required under NEPA and expects to complete our internal review and determine the appropriate Lacey Act role by early 2010. Should a proposed rule be issued, the publication would be followed by a public comment period and a final decision most likely within one year thereafter. Given the importance of this issue, the Service is working diligently to thoroughly and expeditiously complete the required reviews.

Conclusion

In summary, the Department supports H.R. 2811, as reported, and recommends amending the legislation to include all nine species of large constrictor snakes that USGS evaluated in its risk assessment. We appreciate Congressman Meek and the Subcommittee bringing attention to this conservation concern.

Chairman Scott, Ranking Member Gohmert, and Members of the Subcommittee, thank you for the opportunity to testify on H.R. 2811. I would be happy to answer any questions you may have.