Questions and Answers
Listing of Four Non-native Snake Species as Injurious Under the Lacey Act
January 2012

Question 1: Why is the Service moving to list these four species of snakes as injurious wildlife under the Lacey Act?

Answer: This designation under the Lacey Act is necessary to prevent the importation and interstate movement of four species of non-native constrictor snakes identified by the U.S. Geological Survey in the 2009 report, *Giant Constrictors: Biological and Management Profiles and an Establishment Risk Assessment for Large Species of Pythons, Anacondas, and the Boa Constrictor*. This action will help prevent human contribution to the spread of these snakes into wild populations beyond those already established. This action is being implemented in response to significant ecological impacts observed as a result of a self-sustaining, wild population of Burmese pythons in Florida. It will protect endemic wildlife species, including threatened and endangered species.

Question 2: When will the rule take effect?

Answer: The rule was published in the *Federal Register* on January 23, 2012 and will become effective on March 23, 2012.

Question 3: What scientific data are evaluated for an injurious wildlife listing?

Answer: The Service evaluates two sets of scientific data. First, the agency evaluates the factors that contribute to a species being considered injurious, including:

- the likelihood of release or escape;
- potential to survive, become established, and spread;
- impacts on wildlife resources and or ecosystems through hybridization and competition for food/habitats, habitat degradation/destruction, predation, and pathogen transfer;
- impact to threatened and endangered species and their habitats;
- impacts to human beings, forestry, horticulture, and agriculture; and
- wildlife or habitat damages that may occur from control measures

Second, the Service evaluates factors that reduce the likelihood of the invasive species causing harm, including the:

- ability to prevent escape and establishment;
- potential to eradicate or manage established populations;
- ability to rehabilitate disturbed ecosystems;
- ability to prevent or control the spread of pathogens or parasites; and
- any potential ecological benefits to introduction.

Question 4: Why are you only listing four species of snakes if you originally proposed to list nine species of snakes as injurious?

Answer: The four species being designated as injurious at this time (the Burmese python, northern and southern African pythons and yellow anaconda) were all judged to have a "high" overall risk potential in a scientific evaluation undertaken by the United States Geological Survey. Based on that evaluation and the other information set forth in the final rule, the Service determined that it was appropriate to proceed to designate these four species as injurious now, rather than deferring action on these species until the status of the other five species (reticulated python, DeSchauensee's anaconda, green anaconda, Beni anaconda and the boa constrictor) is resolved. The Service is continuing to consider the status of the other five species and will publish final determinations for those species when that process is completed.

Question 5: Do you know when you will reach a decision?

Answer: We do not know when such a decision will occur.

Question 6: One of the pet industry's concerns is: If the government can restrict the movement of these species, it could also do it for other species that people hold as pets. This could set a precedent. What do you say to that?

Answer: Since its enactment in 1900, the Lacey Act has authorized the federal government to prohibit the importation and transport of certain, harmful species in the United States. Both Congress and the Administration, have restricted the importation and interstate movement of species or groups of species involved in the pet trade. Specifically, Congress has amended the Lacey Act to restrict the importation and interstate movement of large cats, including tigers, lions, and cross-bred tigers and lions in the Captive Wildlife Safety Act, P.L. 108-191. The Wild Bird Conservation Act (1992) established a Federal system to limit or prohibit U.S. imports of exotic bird species through the Department of the Interior. Since 2003, it has been illegal to import all African rat species into the United States through the Centers for Disease Control and Prevention under the Public Health Service Act. In these cases, the policy stemmed from public safety and other issues associated with the commerce of these species in the pet trade. A number of other laws, including state and local laws, further restrict the possession and management of certain species that have been part of the pet trade.

This rule sets no broad policy precedent; it is consistent with similar Administration rules under the Lacey Act and Congressional amendments to the Lacey Act. It is promulgated under the statutory parameters and restrictions imposed by the Lacey Act and other statutes relevant to the federal promulgation of Administrative law, including both its scope and the policy issue it addresses.

Question 7: These snakes have been in the United States for decades. If they're so mobile and adaptable why haven't they already gone farther north?

Answer: The propensity of a species to become invasive and to damage United States environment, human health, or economic interests of United States citizens depends on a

complex number of factors, including the rate at which it can reproduce, the number of years an adult may continue to reproduce, its ability to move and disperse, whether or not the ecosystem invaded contains natural predators or disease or sufficient food, shelter, water and space to support the new species.

Federal and State fish and wildlife managers and scientists have noted that it may take an introduced population of a non-native species several decades to reach a point at which its population will suddenly and dramatically increase. For instance, the European mute swan (*Cygnus olor*) in the Chesapeake Bay took about 35 years to reach this point. A handful of birds introduced to the Chesapeake Bay in 1962 became a burgeoning population of approximately 3000 birds by 2001. Of these, more than 70 percent were juveniles ready to nest in the next year or so after achieving a population of 3000. Each adult can breed for decades and have many cygnets each year. The Service's injurious wildlife evaluation indicates these snakes have this potential, particularly the potential to expand beyond south Florida. Large constrictor snakes have demonstrated that they are highly adaptable to new environments, consuming any prey available, and they are observed to efficiently use habitats available to them in their existing U.S. locations.

Question 8: In making this determination, how much consideration did the U.S. Fish and Wildlife Service give to climate change and its potential to increase the geographic range of habitat that can support populations of these snakes?

Answer: Our final rule is based on current climate conditions.

Question 9: There have been other studies on constrictor snakes and the risk of their establishment in wild populations in the U.S. Does the 2009 USGS risk assessment on these four constrictor snakes continue to represent the best available science on this subject?

Answer: The 2009 USGS risk assessment still represents the best available science. Scientists associated with academic and other institutions are working on similar research questions, but none has reached new conclusions through comparable process or analyses to date.

Please also see the accompanying fact sheet *Global Experts Concur with Science to Predict Spread of Large Constrictor Snakes* for more information.

Question 10: To what extent are constrictor snakes threatening populations of species listed as endangered or threatened?

Answer: This listing of species as threatened or endangered under the Endangered Species Act (ESA) indicates the species is vulnerable to the loss of individuals from the population from predation or other causes of mortality, as well as to further loss of their habitat. An established, reproducing population of large constrictor snakes introduced to U.S. ecosystems represents a new predator, which may prey upon species not yet evolved to balance or overcome the predator's influence. Species listed as threatened or endangered may have multiple factors contributing to their decline, including the presence of nonnative species. Recovery plans for ESA listed species must addressed all known threats, including established populations of non-native species competing with or preying upon them. Prey found in the stomachs of Burmese pythons include federally listed Key Largo woodrats and wood storks and state-listed limpkins

and white ibis. Dove *et al*. (2011) found 25 species of birds representing nine avian orders from remains in digestive tracts of 85 Burmese pythons (*Python molurus bivittatus*) collected in Everglades National Park; this included the federally endangered wood stork and four species of State concern.

Question 11: Why not just allow each State to decide whether or not these four species of snakes or any other species should be banned?

Answer: While states may ban the possession of certain animals, such as certain snakes, within their boundaries, this rule is not a ban on the possession of these snakes. The rule specifically prohibits interstate transport and importation into the U.S. of these snakes from other countries. The application of the Lacey Act prohibitions on these snake species is necessary because public interests of U.S. citizens are, and may reasonably be assumed to be in the future, affected across state boundaries. Large constrictor snakes released into federal lands, such as National Parks or National Wildlife Refuges, not only present a threat to the living resources protected for the benefit of the public on those lands but they also present the potential for the establishment of reproducing populations, which can then become a source for the spread of these species into surrounding states.

Question 12: What prompted the reopening of the public comment period of the proposed rule to list the Indian (Burmese) python and eight other large constrictor snakes as injurious wildlife under the Lacey Act?

Answer: In response to a number of requests from stakeholders, the Service granted an additional 30 days for the public comment period on the proposed rule for a total of 90 days.

Question 13: How many public comments did the Service receive?

Answer: The Service received about 56,500 comments for the proposed rule. The public can view these comments at *http://www.regulations.gov* under Docket No. FWS-R9-FHC-2008-0015. A final determination was made after a comprehensive review of the scientific data and the information contained in comments submitted by the public and peer reviewers.

Question 14: What does an injurious wildlife listing under the Lacey Act mean to the public?

Answer:: Under the Lacey Act, a species of wildlife can be listed as injurious because it has been demonstrated to be harmful or have the potential to be harmful to either the health and welfare of humans, the interests of forestry, agriculture, or horticulture, or the welfare and survival of wildlife or the resources that wildlife depend upon. To control the introduction and spread of an injurious species, the listing of the species as "injurious" under the Lacey Act means that its importation and interstate transport are prohibited without a permit issued by the Service. This prohibition includes importation or interstate movement of live animals, their gametes, hybrids, and viable eggs. Injurious species may not be transported into or through U.S. territories or states. Permits may be granted for the importation or transportation of live specimens of injurious wildlife for scientific, medical, educational, or zoological purposes. The Lacey Act does not have provisions for the movement of personal pets. The Lacey Act does not restrict intrastate (within State) transport.

Question 15: Would someone be able to take a pet snake to another State just for a visit or to go to a veterinarian?

Answer: No, all interstate transport of these species would be prohibited.

Question 16: What is the difference between an invasive species and an injurious species?

Answer: Invasive species, as defined by Executive Order 13112 of February 3, 1999, "means an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health."

To be listed under the Lacey Act as "injurious," wildlife species must meet the standard for listing under the Lacey Act. They must be "wild," not "domesticated," and they may include mammals, wild birds, amphibians, reptiles, fish, crustaceans, and mollusks, as well as their offspring, gametes, or hybrids that are injurious to the interests of human beings, agriculture, horticulture, forestry, wildlife, or wildlife resources of the United States. Plants and organisms other than those listed above cannot be listed as injurious wildlife by the U.S. Fish and Wildlife Service, although they may be listed by the U.S. Department of Agriculture as "injurious" under a separate Lacey Act authority. Please visit the Service's web site for more information on injurious wildlife at: http://www.fws.gov/fisheries/ANS/ANSInjurious.html

Question 17: What steps related to the Lacey Act were taken to evaluate large constrictor snakes as injurious wildlife?

Answer: The completion of the risk assessment done by USGS was an important milestone in our evaluation and a requirement before additional steps could be taken. Prior to the completion of the USGS risk assessment, the Service published a Notice of Inquiry in the *Federal Register* on January 31, 2008. This Notice of Inquiry requested (from the public) biological, economic, or other data on adding large constrictor snakes to the list of injurious wildlife. We received 1,528 responses during the public comment period that closed April 30, 2008. We considered this information and other available data to analyze the economic and environmental impacts of the proposed rule under the National Environmental Policy Act, the Regulatory Flexibility Act, and Executive Orders 12866 and 13272 and published the proposed rule on March 12, 2010. After reviewing the approximately 56,500 public comments, as well as comments from 5 peer reviewers, we reviewed our initial evaluation and prepared the final rule.

Question 18: Why did the Service conduct economic analyses and apply the Regulatory Flexibility Act in this determination?

Answer : The Regulatory Flexibility Act, Executive Order 12866, and the Small Business Regulatory Enforcement Fairness Act require agencies to evaluate the potential effects of their proposed and final rules on small businesses, small organizations, and small government jurisdictions. The evaluation must discuss: 1) a description of and estimate of the number of small entities to which the rule will apply; 2) a description of the steps the agency has taken to minimize the significant economic impacts on small entities; and 3) a summary of the issues raised by the public comments in response to the initial regulatory flexibility analysis. The results of these analyses do not affect the determination.

Question 19: Did you determine if there will be economic or environmental impacts if these species are listed under the Lacey Act?

Answer: The Service's Division of Economics reviewed all of the comments related to the economic impact of the proposed rule and updated the economic analysis. The total annual decrease in economic output if all of the nine large constrictors were listed as injurious under the Lacey Act is estimated to range from $42.0 to $86.2 million. For four species, the decrease in economic output is estimated to be $10.7 to 21.8 million. These estimates assume that consumers will not increase their purchases of other species in response to the unavailability of the listed species. If consumers do switch to other species, the impact on economic output would be reduced. Economic output includes three types of effects: direct, indirect, and induced effects. The direct effects are the changes in annual retail value due to the implementation of a given alternative. Indirect effects result from changes in sales for suppliers to the directly-affected businesses, including trade and services at the retail, wholesale, and producer levels. Induced effects are associated with further shifts in spending on food, clothing, shelter, and other consumer goods and services, as a consequence of the change in workers and payroll of directly and indirectly affected businesses.

State and Federal agencies have expended millions of public dollars to address the threats posed by pythons in the Everglades If the spread of these species is not controlled, we anticipate that State and Federal agencies would need to spend even more money to address the threats posed in other areas of the United States. These costly control measures could be reduced or prevented by this listing under the Lacey Act.

Question 20: What does the Service recommend a snake owner should do if he or she has to move across state lines and must surrender his or her pet snake?

Answer: An owner of one of the relevant species of snake should contact local authorities responsible for the disposition of unwanted pets. Additional information about the safe and human surrender of unwanted exotic pets may be available through the state natural resources or fish and game agency in which the pet resides. The local office of the U.S. Fish and Wildlife Service can also provide additional information. The Service website, http://www.fws.gov, can help snake owners find their local Service office.

Question 21: Why shouldn't people release their pet constrictors into the wild? Aren't they part of nature?

Answer : Releasing large snakes into areas where they are not native causes an imbalance in the food chain, among other serious ecological problems. Species native to the United States have not evolved behaviors or other defenses to protect themselves against these large predators, because there is no native predator similar to these snakes in the United States. All of these four species of large constrictors can attain lengths greater than any of our native snakes.

A large python can even kill an adult alligator. Burmese pythons attain lengths up to 23 feet. Many of our threatened and endangered species would be further imperiled and risk extinction if these species of snakes become established.

Furthermore, releasing reptiles from captivity into the wild is illegal, unless otherwise specifically permitted by law or regulation. Thus, people who have good intentions of being kind to their snakes should seek alternatives.

Question 22: Will the pet industry lose revenue and jobs as a result of this rule?

Answer: The Service's Division of Economics reviewed all of the public comments related to the economic impact of the proposed rule that were submitted during the two public comment periods and updated the economic analysis. The total annual decrease in economic output from listing the four large constrictors as injurious under the Lacey Act is estimated to range from $10.7 to $21.8 million (assuming that consumers do not switch their purchases to other species). However, the cost of controlling wild populations of large constrictor snakes currently in the United States, through state and Federal control efforts has been about $6 million thus far. Failure to stop the spread of these snakes into additional locations would result in significantly increased public expense. This cost could be reduced in Florida -- or prevented in other jurisdictions-- by this listing under the Lacey Act. Please also see our accompanying fact sheet called *The Economic Cost of Large Constrictor Snakes* for more information.

Question 23: There seems to be disagreement among many in the scientific community as to whether these snakes can survive and breed in colder climates. Why is it necessary to have a nationwide ban when in all likelihood they couldn't establish wild populations in places like Minnesota, New York or even South Carolina?

Answer: To make this listing determination, the Service has applied the best available information. Most recently, large constrictor snakes have been documented as surviving the record cold spell in South Florida in early 2010. Based on this information, the Service considers it possible for Burmese python, the southern African python and the yellow anaconda to survive in colder climates than exist in Florida. Given the climate flexibility exhibited by the Burmese python in its native range (as analyzed through USGS' climate-matching predictions in the United States), we anticipate that a new generations of this species within the leading edge of the population's nonnative range could become increasingly adaptable to cooler climates. Please also see our accompanying fact sheet on *The Effect of Cold Weather on Large Constrictor Snakes* for more information.

It is important to note that other areas of the United States besides Florida are at risk of having some or all of four species of constrictor snakes establish populations. For example, Puerto Rico and other islands with subtropical or tropical climates are at risk of having one or more of these four constrictor snakes become established.

A regional restriction on the movement of these snake species would be prohibitively costly to enforce. The nationwide restriction of movement of these species also protects the ecosystems and living resources protected within National Parks, National Wildlife Refuges, National Forests, and other federal lands with public interests that cross state boundaries.

Question 24: How can a person obtain a permit to move an injurious species across state lines or import one into the country?

Answer: Permits may be requested by filing form 3-200-42 with the U.S. Fish and Wildlife Service, Division of Management Authority, 4401 N. Fairfax Drive, Room 212, Arlington, VA 22203. The application form may be obtained through the Service's International Affairs website (http://www.fws.gov/forms/3-200-42.pdf or http://www.fws.gov/permits), or by calling 1-800-358-2104.

Question 25: When the injurious listing of the large constrictors takes effect, can people buy these snakes at Reptile Expos?

Answer: The Service does not regulate activities within a State, only activities that result in live, listed species crossing State lines or being imported into the country. If the buyer or the seller transports a live snake across State lines, a violation of the injurious wildlife provisions of the Lacey Act would have occurred unless the Service has issued a permit authorizing the transport.

Question 26: When the injurious listing of the large constrictors takes effect, can people order a snake on the Internet?

Answer: The sale or purchase of a live snake through the Internet would not be permitted if the snake crosses a State line (including coming from or going to the District of Columbia, Puerto Rico, and the U.S. territories) or is imported.

Question 27: When the injurious listing of the large constrictors takes effect, can people hunt or shoot these snakes?

Answer: The Service manages hunting of wildlife species only on National Wildlife Refuges, and currently, the recreational hunting of virtually all reptiles, native and nonnative, on National Wildlife Refuges is prohibited. For more information, go to: http://www.fws.gov/refuges/hunting/.

State departments of natural resources or fish and game agencies have primary authority over hunting, outside federal lands, and they develop and enforce laws and restrictions for hunting wildlife within their borders. For more information about hunting nonnative snakes, contact the state agency responsible for wildlife management in the relevant state.

SPECIAL ADDENDUM: For people who own listed snakes as pets

Please note that these answers refer to the Federal rule, unless otherwise stated, and that each state or territory may have its own, more stringent regulations.

Question 28: When will the rule take effect?

Answer: The final rule will take effect on March 23, 2012. From that day forward, importation and interstate transport will not be allowed (except under permit from the U.S. Fish and Wildlife

Service) for the Burmese python, Northern African python, Southern African python, and yellow anaconda. Before March 23, these restrictions are not in effect.

Question 29: Are owners of these species grandfathered in? If so, what steps should these keepers take to be compliant (such as permits, giving up animals, or PIT tags)?

Answer: The new listing does not affect ownership of these four species of snakes. People who own these species do not need to do anything, as long as the snakes remain within the state where they currently reside, even after the rule takes effect. Hence, there is no "grandfathering" needed. There are no special steps needed to be taken to be compliant with the rule. Under this rule, there is no requirement for PIT tags or for surrendering animals.

Question 30: What are the "next steps"?

Answer: Snake owners are asking about what the next steps are so that they may be prepared for when the rule takes effect. If you own a snake as a pet, there is no need to do anything. If you anticipate needing to transport your snake across a state line for zoological, educational, medical (does not include veterinary), or scientific purposes, you should apply for a permit from the U.S. Fish and Wildlife Service as soon as possible to allow up to 60 days for processing.

Question 31: My veterinarian is in another state. May I take my listed snake to the veterinarian?

Answer: No, transporting out of state to take the animal to a veterinarian will be prohibited. The snakes will have to be treated by an in-state professional. We recommend looking for an in-state professional before the rule takes effect on March 23.

Question 32: I run a reptile rescue center and people send me sick or unwanted reptiles. Will I be able to receive the listed species from other states?

Answer: No, once the rule goes into effect, sick or unwanted pets of the four species will need to go a rescue center within their state.

Question 33: I do educational programs with Burmese pythons (or the three other species) for schools, scouts, and other groups, sometimes in another state. Will I still be able to travel to other states?

Answer: After the rule takes effect, you will need a permit for educational purposes if the program is in another state. Please see the answer to Question 24 for how to obtain a permit. We suggest that you plan ahead and apply for a permit as soon as you know you'll need it, even if it is before the rule takes effect (to allow time for the application to be processed).

Question 34: Where can I find more information on what a snake owner can do if he or she has to move across state lines and must surrender his or her pet snake?

Answer: An owner of one of the listed species of snake should contact local authorities responsible for the disposition of unwanted pets. Additional information about the safe and ethical surrender of unwanted exotic pets may be available through the state's natural resources or fish and game agency in which the pet resides. The local office of the U.S. Fish and Wildlife Service can also provide additional information; the Service website, http://www.fws.gov, can help snake owners find their local Service office. In addition, pet owners may also ask their local pet retailer or wild animal zoo for suggestions on ethical alternatives. Here are some additional websites that might be of assistance:

- Pet Industry Joint Advisory Council's Pet Pathway Toolkit: http://www.petpathwaytoolkit.com/
- Habitattitude (this national campaign is being revised to include reptiles): http://www.habitattitude.net/
- Florida Fish and Wildlife Conservation Commission's Nonnative Amnesty Day Events http://myfwc.com/wildlifehabitats/nonnatives/amnesty-day-events/