

Testimony of Mr. Shawn Heflick, Herpetologist
before the House Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs

November 30, 2012

Mr. Chairman, Madam Chairwoman, members of the Subcommittees, I want to thank you for the opportunity to appear before you and to present testimony at this oversight hearing on “Constrictor Snakes and Other Invasive Species”. As a herpetologist and a resident of the State of Florida, I welcome the opportunity to testify and to answer questions on this important issue.

My name is Shawn Heflick, and my interest in this hearing and subject matter is multifaceted. I am a biologist who completed his Masters Degree on invasive species in Florida. I have also traveled the world capturing and studying pythons, anaconda and boas on 5 continents, I am the president of a conservation NGO out of the Amazon Basin, a licensed Python Agent for both the Everglades National Park and Florida Fish and Wildlife Conservation Commission, and the Host of National Geographic WILD's series, the Python Hunters, which explores the conservation issues of reptiles around the globe and educates people about their plight. In addition to my field experience and academic background as a biologist, I am a former breeder of large constrictors and considered an expert in the natural history, husbandry, breeding and behavior of these reptiles.

The question today is whether the Beni Anaconda, DeSchauensee's Anaconda, Green Anaconda, Reticulated Python and Boa Constrictor should be added to the Lacey Act list of Injurious Species and whether that listing would further the restoration of the Everglades.

My answer is simple: IT WILL NOT Why? For several reasons. First, NO anaconda or reticulated python populations exist in the US. In addition, there is a glaring lack of data for any negative impact of the existing wild Burmese Python population. The alleged severe mammal decline in south Florida (Dorcas et al. 2011) due to the Burmese Python population is, in my professional opinion, a travesty of science especially when their own data tell an entirely different story. Natural hydrological cycle (semi-drought conditions for the last decade), effects of high mercury levels, fire regimes, general water pollution, increased alligator population, increased scavenger populations, increased meso-predator populations, increased vehicle numbers, two record low winters with hard freezes, change in water regimes (man-made), natural cycles in populations...rabbits (7-10yrs), deer, etc., and a HUGE increase in feral cat populations (estimated at 10-15 MILLION in Florida), and on, and on, and on...are all unaccounted for in this study. Two of the authors openly stated that they believe the real reason for the decline in mammals is the depressed hydrological cycle within the Everglades National Park. From firsthand, boots on the ground, experience I can take you to the Everglades and show you more signs (tracks, scat, live specimen, etc.) of small mammals in one evening than they found in their entire 8 year study, which involved them ONLY surveying from their vehicles on roads. Something is grossly wrong with that disparity.

With permitting from Florida Wildlife and Conservation Commission, and collaboration from the USDA/APHIS/WS, I conducted a cold study in 2010 during the hard freeze, which included

both *Boa constrictor* and Burmese Pythons. Within just four days, 100% of the specimens in the enclosure had died due to exposure to the cold. Simply put, the outside ambient temperature had dropped below the python and boa's critical thermal minimum, which caused death. Jacobson *et al.* 2012., Environmental temperatures, physiology and behavior limit the range expansion of invasive Burmese pythons in southeastern USA also offers insight as to why the wild Burmese Python population has not expanded outside of south Florida, and is seemingly on the decline as exhibited by the massive die-offs of 2009/2010. Furthermore, from January 1, 2012 to the present, seventy one (71) Florida Wildlife Conservation Commission python agents have captured a total of only 46 pythons in the last calendar year. Population numbers are lower than ever before.

This same thermal data is applicable to the rest of these proposed tropical species, and would severely limit their ability to survive. As a matter of record, no established populations of reticulated python or anaconda species have been found in the wilds of south Florida. The competition for resources and prey items is immense, and the idea of a reptile predator in the system is not novel. South Florida has large Eastern Diamondback Rattlesnakes, Indigo snakes, and the apex predators of the system, the American alligator and American crocodile, who regularly feed upon large snakes. The Everglades is not a paradise for invading tropical pythons or boas. On the contrary, it is a harsh, sub-tropical environment that is riddled with predators, roadways, vehicles, pollutants and ever increasing pressure from human development.

This is a Florida problem, not a national one. Florida currently has a set of progressive and stringent regulations effectively dealing with these issues. These regulations have already reduced the trade in these large constrictors by 95%, leaving the majority of remaining specimens in the hands of qualified, permitted professionals and a 24/7 Amnesty Program which gives those still holding animals an avenue to surrender them.

Any discussion about these species should be coupled with a legitimate scientific study and assessment of their ability to establish and become invasive. If these species were assessed individually in a probability study, it would reveal that many of them are extraordinarily uncommon or non-existent in the pet trade such that their rarity in the US virtually negates their ability to become a problem. Species like the Bolivian Anaconda (*Eunectes beniensis*) and De Schauensee's Anaconda (*Eunectes deschauenseei*) are not represented in the United States. Last year I participated on a panel for invasive species at an academic conference for partners in reptile conservation, where I asked university biologists, state biologists, state fish and game enforcement, AZA zoo curators, reptile industry experts and Department of Interior biologists if anyone thought *Boa constrictor* were an invasive species and could possibly pose a problem for the US. Not one of these FIELD EXPERTS raised their hand...not one of these individuals who work day in and day out with these issues believe boas to be a problem. The same sentiment can be found among biologists and ecologists for Reticulated Pythons and Green Anacondas as well. These are not the invasive monsters that they are portrayed to be. The vast majority of my biology colleagues agree that feral cats and feral pigs are the worst vertebrate invasive problems facing ecosystems today. Tens of millions of these animals devastate BILLIONS of small mammals and birds each year, as well as, TENS OF THOUSANDS of acres of critical habitat every year. If we TRULY want to save our natural areas and wildlife, we MUST START working on THESE REAL ISSUES.

Again, thank you for the opportunity to appear before this joint hearing of the Subcommittees. I am happy to answer any questions you may have.