

24 November 2009

U.S. Senate Committee on Environment and Public Works  
410 Dirksen Senate Office Bldg.  
Washington, DC 20510-6175

Chairwoman Boxer, Ranking Member Inhofe, Subcommittee Chairman Cardin and  
Subcommittee Ranking Member Crapo,

We write in regard to S. 373, a bill to amend title 18, United States Code, to include constrictor snakes of the species Python genera as an injurious animal. As scientists who have worked with reptiles including those cited in S. 373, we express our reservations regarding the document recently released by USGS as an “Open-Report”, titled *Giant Constrictors: Biological and Management Profiles and an Establishment Risk Assessment for Nine Large Species of Pythons, Anacondas, and the Boa Constrictor*.

Simply put, this report is not a bona-fide “scientific” paper that has gone through external peer review. Part of this report is fact-driven, described by the authors as “traditional library scholarship.” By the authors’ admissions, there are surprisingly little data available regarding the natural history of these species. In their attempt to compile as much information as possible, the authors draw from a wide variety of references, ranging from articles published in peer-reviewed professional journals to far less authoritative hobbyist sources, including popular magazines, the internet, pet industry publications, and even various media sources. While such an approach is inclusive, it tends to include information that is unsubstantiated and, in some cases, contradicts sound existing data.

As scientists whose careers are focused around publishing in peer-reviewed journals and providing expert reviews of papers submitted to these journals, we feel it is a misrepresentation to call the USGS document “scientific”. In fact, much of this report is based on an unproven risk assessment model that produces results that contradict the findings presented in a recently published scientific paper that used a more complex and superior model (see: Pyron R.A., F.T. Burbrink, and T.J. Guiher. 2008. Claims of Potential Expansion throughout the U.S. by Invasive Python Species Are Contradicted by Ecological Niche Models, PLoS One 3: e2931. doi:10.1371/journal.pone.0002931). Unfortunately, the authors of the USGS document limit their reference to this scientific work to an unsubstantiated criticism. To the contrary, this alternate model is validated by its relatively accurate prediction of the natural distribution of the species in question (something the USGS model does not even attempt). Furthermore, despite its conclusion of a limited potential distribution of Burmese pythons in the United States, the model presented by Pyron et al. accurately predicts the presence of Burmese pythons in the Everglades.

The USGS model likely provides a gross overestimate of potential habitat for these snake species. People throughout the United States keep pythons as pets, yet the only known breeding populations in the United States are in the Everglades. Such a wide distribution of potential sources of invasion, but only a localized invasive event, suggests that factors beyond those used in the USGS model are critical to limiting the suitability of habitat for pythons. The authors even state that climate is only one factor of several that affect the distribution of an animal, yet they develop a model that only uses overly simplistic climatic data (e.g., the climatic data did not take

seasonality into consideration).

We are further concerned by the pervasive bias throughout this report. There is an obvious effort to emphasize the size, fecundity and dangers posed by each species; no chance is missed to speculate on negative scenarios. The report appears designed to promote the tenuous concept that invasive giant snakes are a national threat. However, throughout the report there is a preponderance of grammatical qualifiers that serve to weaken many, if not most, statements that are made.

We fully recognize the serious concerns associated with the presence of persistent python populations in southern Florida. As top predators, these animals can and will have a dramatic impact on the community of wildlife that lives in the Everglades. Inaccurately extending this threat to a much large geographic area is not only inappropriate, but likely takes needed focus away from the real problem in the Everglades.

In conclusion, as written, this document is not suitable as the basis for legislative or regulatory policies, as its content is not based on best science practices, it has not gone through external peer-review, and it diverts attention away from the primary concern. We encourage the USFWS and USGS to submit this document to an independent body for proper and legitimate peer review. Additionally, we encourage the Committee to review this document, not as an authoritative scientific publication, but rather as a report currently drafted to support a predetermined policy.

Signed:

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CC:  
The Honorable Bill Nelson, U.S. Senator (FL)  
The Honorable Ken Salazar, Secretary, U.S. Dept of the Interior  
Director Marcia McNutt, U.S. Geological Survey  
Director Sam Hamilton, U.S. Fish & Wildlife Service