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Testimony on HR 511 bill introduced to add species of snakes to Lacey Act.

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Good morning and thank you for the opportunity to speak before you today. My name is Brady Barr and I am the Resident Herpetologist at the National Geographic Society.

I was compelled to speak out on this issue on a very personal basis. Over the past few years as I saw more and more erroneous and sensationalized stories in popular media concerning pythons in the southern Everglades, I became frustrated knowing the public was being grossly misinformed. I subsequently reached out to the U.S. Association of Reptile Keepers (USARK) to offer what expertise I might lend to the decision making process and to this hearing today.

I feel that there are two important points that need to be considered in reference to large exotic snakes in the Southern Everglades: 1. climatic controls, 2. biological controls. The snake species referenced in this hearing are native to tropical regions of the planet, whereas the Southern Everglades is a sub- tropical climate characterized by seasonal temperature fluctuations and more extremes. These tropical snakes do not possess the behavior and physiology to tolerate cold temperatures. Low temperatures (below 15 degrees C.) result in these snakes having problems digesting prey, acquiring prey, avoiding predation, moving, essentially surviving. Furthermore, these snakes lack the innate behavior to seek refugia at the onset of cold weather conditions, resulting in quick death or a compromised immune

system in which the snake ultimately succumbs. Climate data reveal that temperatures found in Southern Florida simply are not conducive to the long term survival of large tropical snakes. When it gets cold these snakes die.

Concerning the second point, biological controls; I offer the example of Alligators -- a top predator and keystone species in the Everglades, and one of the largest non-marine predators on the planet. However, populations in the Everglades grow more slowly, are undersized, and take longer to reach sexual maturity, than populations elsewhere. These conditions are likely due in part to a lower food base and poorer quality diet found in the Everglades. The Everglades is tough place to live, especially for large predators. The Everglades in many ways is analogous to a desert, largely because it is a bio mass poor ecosystem. In this respect, alligators have a difficult time finding large prey to consume. I conducted the most comprehensive alligator diet study to date, in Everglades National Park from 1992 - 1997. Flushing the stomachs of over 2000 alligators, and in excess of 600 adults, revealed that snakes are by far the most important prey by mass. Fifty-five percent of consumed prey mass by adult alligators is snakes, that is over half of everything alligators eat in the Everglades is snake. In a prey deficient ecosystem alligators are essentially surviving on snakes in the Everglades. It can logically be inferred that inclusion of a top prey item (snakes) into an already prey deficient system, will result in predation on the introduced exotic species by the alligators of the Everglades, making them not only a keystone species, but also a natural biological control to introduced exotic snakes.

In summary, the climatic controls (low temperatures experienced in Southern Florida) and biological controls, chiefly alligators, among numerous snake predators in the Everglades, will control any population of large exotic snakes in southern Florida, and

thereby does not warrant the inclusion of the nine snake species to the Injurious Wildlife list of the Lacey Act.