

**H.R. 511, TO AMEND TITLE 18,  
UNITED STATES CODE, TO PRO-  
HIBIT THE IMPORTATION OF  
VARIOUS INJURIOUS SPECIES OF  
CONSTRUCTOR SNAKES**

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**LEGISLATIVE HEARING**

BEFORE THE

SUBCOMMITTEE ON FISHERIES, WILDLIFE,  
OCEANS AND INSULAR AFFAIRS

OF THE

COMMITTEE ON NATURAL RESOURCES  
U.S. HOUSE OF REPRESENTATIVES

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SECOND SESSION

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SNAKES.**

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**Thursday, November 29, 2012  
U.S. House of Representatives  
Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs  
Committee on Natural Resources  
Washington, D.C.**

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The Subcommittee met, pursuant to notice, at 10:30 a.m., in Room 1334, Longworth House Office Building, Hon. John Fleming [Chairman of the Subcommittee] presiding.

Present: Representatives Fleming, Southerland; Sablan, and Bordallo.

Dr. FLEMING. The Subcommittee will come to order. The Chairman notes the presence of a quorum and our guests can have a seat.

All right, good morning. Today we will hear testimony on H.R. 511, a bill introduced by the distinguished gentleman from Florida, Congressman Tom Rooney, to list nine species of constrictor snakes under the Lacey Act.

**STATEMENT OF THE HON. JOHN FLEMING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA**

Dr. FLEMING. Let me say at the outset that I compliment my colleagues from the Florida delegation for their tireless commitment to restoring the Florida Everglades. But I have concerns that H.R. 511 will end up destroying hundreds of small businesses without providing any real benefit to the Everglades.

By way of background, there are several key dates in this discussion. The first was June 23, 2006, when the South Florida Water Management District petitioned the Fish and Wildlife Service to list Burmese Pythons on the Lacey Act. The next important date was January 20, 2010, when the Secretary of the Interior proposed to administratively list nine species of constrictor snakes. Before announcing a decision, however, the State of Florida implemented a law as of July 1, 2010 prohibiting the importation and personal possession of seven species of snakes, including Burmese Pythons.

Finally, after an exhaustive analysis by the Fish and Wildlife Service and the U.S. Small Business Administration of more than 56,000 comments, the Secretary of the Interior announced on January 17th of this year that 4 of the 9 species, including the 2 species that have established populations in the Everglades would be treated as injurious wildlife. It is now a violation of Federal law to import and to move these four species in interstate commerce.

Upon making the decision, Secretary Salazar noted that it was intended to strike a balance between economic and environmental concerns. We are now being asked in H.R. 511 to go far beyond the recommendations of the South Florida Water Management District, the State of Florida, and the Fish and Wildlife Service, by listing all nine species of constrictor snakes.

It is important to remember that millions of Americans own and have legally acquired constrictor snakes. They weren't smuggled into this country. While some of these Americans are simply content to have a boa constrictor as a pet, many others have created small businesses which breed them, feed them, provide equipment for them, sell them at pet stores, promote them at trade shows, provide veterinary care for them, and other activities which contribute millions to our economy.

According to an economic analysis undertaken by the Georgetown Economic Services, the boa constrictor, which was not listed by the Fish and Wildlife Service, accounts for 70 percent of all imports, and 70 to 80 percent of all revenues generated by these 9 species. The Service estimated that the annual decrease in economic output of these snakes ranged from \$42 million to \$86.2 million.

In addition, the House Committee on Oversight held a hearing on the proposed listing of nine species and concluded in their report that, over the first 10 years, combined loss could be between \$505 million and \$1.2 billion. A witness at the hearing, Mr. David Barker of Texas, an internationally recognized authority on constrictor snakes, stated that "The misguided regulations will destroy an entire industry comprised almost exclusively of small and micro-businesses. In short, if this rule goes into effect, it will destroy my life's work and investments for no rational reason."

During the course of this hearing I hope to learn why the current Florida State law and recent Interior Department rulings seem, in some people's minds, insufficient in addressing the Everglades problem. More specifically, does H.R. 511 protect current breeders, pet store owners, and small businesses who trade these species in Louisiana, Michigan, New York, and Washington State?

[The prepared statement of Dr. Fleming follows:]

**Statement of The Honorable John Fleming, Chairman,  
Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs**

Good morning, today, we will hear testimony on H.R. 511, a bill introduced by the distinguished gentleman from Florida, Congressman Tom Rooney to list nine species of constrictor snakes under the Lacey Act.

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cluding the two species that have established populations in the Everglades—would be treated as “injurious wildlife.” It is now a violation of federal law to import and to move these four species in interstate commerce. Upon making the decision, Secretary Salazar noted that it was intended to “strike a balance” between economic and environmental concerns.

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A witness at that hearing, Mr. David Barker of Texas, an internationally recognized authority on constrictor snakes stated that “This misguided regulations will destroy an entire industry, comprised almost exclusively of small and micro businesses. In short, if this rule goes into effect, it will destroy my life’s work and investments for no rational reason”.

During the course of this hearing, I hope to learn why the current Florida state law and recent Interior Department ruling seem, in some people’s minds, insufficient in addressing the Everglades problem. More specifically, does H.R. 511 protect current breeders, pet store owners and small businesses who trade these species in Louisiana, Michigan, New York and Washington State.

I am pleased to recognize the distinguished ranking minority member for any statement he would like to make.

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Dr. FLEMING. Before recognizing the distinguished Ranking Minority Member for any statement he would like to make, I would ask unanimous consent to submit for the record: a segment of a report issued by the Committee on Oversight and Government Reform on the Fish and Wildlife Services injurious species proposed rule; a letter written by the Small Business Administration’s Office of Advocacy; an article entitled, “Environmental Temperatures, Physiology, and Behavior Limit: the Range Expansion of Invasive Burmese Pythons in Southeastern U.S.A.”; an article from the Chicago Tribune; and a petition signed by more than 150 residents of the State of Washington in opposition to H.R. 511.

[NOTE: The information submitted for the record by Dr. Fleming has been retained in the Committee’s official files.]

Dr. FLEMING. I am now pleased to recognize Congressman Sablan, the gentleman from the Northern Marianas, and you are now recognized, sir, for 5 minutes.

**STATEMENT OF THE HON. GREGORIO SABLAN, A DELEGATE  
IN CONGRESS FROM THE NORTHERN MARIANA ISLANDS**

Mr. SABLAN. Thank you very much, Mr. Chairman, and thank you for having this hearing today. And welcome to all our guests. Good morning.

In my home, in the Northern Mariana Islands, the Brown Tree Snake is considered the number one threat to native wildlife—natives excluding human beings at this time—but our Division of Fish and Wildlife had to create an entire program dedicated to pre-

venting the introduction of this snake to our islands. While this initiative requires constant monitoring and control, it is necessary to protect our natural heritage and fragile ecosystems against the spread of the Brown Tree Snake.

This invasive snake has also caused major economic and ecological damage on the Island of Guam, where it has hunted more than 75 percent of native bird and lizard species into extinction, and causes frequent power outages. Similarly, preliminary studies have linked the Burmese Python, a snake recently labeled and injurious species by the U.S. Fish and Wildlife Service, to declines in mammal populations in the Florida Everglades.

The five large constrictor snakes considered by H.R. 511 are similar to the Burmese Python. And, unlike the Brown Tree Snake, also pose a public safety threat, because of their ability to grow to lengths greater than 15 feet. Also, unlike the Brown Tree Snake, some constrictor snakes are popular pets. The trading in exotic constrictor snakes is widespread and helps support businesses that import, breed, and sell these and other reptiles.

In considering legislation like H.R. 511, we need to pay careful attention to the balance between the marginal benefit of these few snake species to private businesses, and the huge potential cost to society of established constrictor snake populations in the wild. I understand that the snakes that are the subject of H.R. 511 could survive and create breeding populations in the wild if introduced to the Commonwealth of the Northern Mariana Islands, as well as other U.S. insular areas and part of the Southern United States.

Since the major limiting factor in the survival and reproduction of these large snakes seems to be climate, it is likely that the amount of suitable habitat for them in the continental United States will expand with continued global warming. Tropical diseases like malaria and dengue fever already are gaining a foothold further and further north of the Equator. And there is no reason to assume tropical reptiles, especially adaptable predators like constrictor snakes, could not do the same.

Finally, I am most concerned about the two amendments that the Judiciary Committee added to H.R. 511. The first would require that to be guilty of a Lacey Act violation related to any injurious species, not just these snakes—an individual would have to knowingly violate the Act. This requirement would severely hamper enforcement in general, but especially with respect to injurious species like zebra mussels that may be brought into the country, in ship ballast water, or by other similar means. We have had this debate on the Lacey Act in previous hearings.

Changing the prohibition in the statute from a strict liability offense to a knowing offense would remove the incentive for shippers to take steps such as appropriately cleaning ballast water and the outside of ships to ensure they don't bring these injurious animals into the United States.

The second amendment would exempt animal exhibitors, as defined by the U.S. Department of Agriculture, from the Lacey Act with respect to these snakes, even though USDA does not regulate reptiles. As we have seen before this year, when the Majority was forced to pull its proposed rewrite of the Lacey Act from the House Floor, American citizens and businesses do not support attempts to



weaken the Lacey Act. And I hope that after learning that lesson last summer, this Committee will not support such attempts, either.

With that, I look forward to hearing from our witnesses and learning more about this issue.

[The prepared statement of Mr. Sablan follows:]

**Statement of The Honorable Gregorio Kilili Camacho Sablan, Ranking Member, Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs**

Thank you, Mr. Chairman and welcome to all our guests.

In my home, the Commonwealth of the Northern Mariana Islands, the brown tree snake is considered the number one threat to native wildlife. Our Division of Fish and Wildlife has had to create an entire program dedicated to preventing the introduction of this snake to our islands. While this initiative requires constant monitoring and control, it is necessary to protect our natural heritage and fragile ecosystems against the spread of the brown tree snake.

This invasive snake also has caused major economic and ecological damage on the island of Guam, where it has hunted more than 75 percent of native bird and lizard species into extinction, and causes frequent power outages. Similarly, preliminary studies have linked the Burmese python—a snake recently labeled an injurious species by the U.S. fish and wildlife service—to declines in mammal populations in the Florida everglades. The five large constrictor snakes considered by H.R. 511 are similar to the Burmese python, and unlike the brown tree snake, also pose a public safety threat because of their ability to grow to lengths greater than 15 feet.

Also unlike the brown tree snake, some constrictor snakes are popular pets. The trade in exotic constrictor snakes is widespread, and helps support businesses that import, breed, and sell these and other reptiles. In considering legislation like H.R. 511, we need to pay careful attention to the balance between the marginal benefit of these few snake species to private business, and the huge potential cost to society of established constrictor snake populations in the wild.

I understand that the snakes that are the subject of H.R. 511 could survive and create breeding populations in the wild if introduced to the Commonwealth of the Northern Mariana Islands, as well as other U.S. insular areas, and parts of the Southern United States. This concerns me both as a representative of my constituents, and as the Ranking Member of this subcommittee. I am sure Chairman Fleming would also like to ensure that large constrictor snakes do not invade Louisiana.

Since the major limiting factor in survival and reproduction of these large snakes seems to be climate, it is likely that the amount of suitable habitat for them in the continental United States will expand with continued global warming. Tropical diseases like malaria and Dengue (Den-GEE) fever already are gaining a foothold farther and farther north of the Equator, and there is no reason to assume tropical reptiles—especially adaptable, generalist predators like constrictor snakes—could not do the same.

Finally, I am concerned about two amendments that the Judiciary Committee added to H.R. 511. The first would require that to be guilty of a Lacey Act violation related to **ANY** injurious species—not just these snakes—an individual would have to ‘knowingly’ violate the Act. This requirement would severely hamper enforcement in general, but especially with respect to injurious species like zebra mussels that may be brought into the country in ship ballast water or by other similar means. Changing the prohibition in the statute from a strict liability offense to a knowing offense would remove the incentive for shippers to take steps, such as appropriately cleaning ballast water and the outside of ships, to ensure they don’t bring these injurious animals into the United States.

The second amendment would exempt animal ‘exhibitors’ as defined by the U.S. Department of Agriculture (USDA), from the Lacey Act with respect to these snakes, even though USDA does not regulate reptiles. As we have seen before this year when the Majority was forced to pull its proposed rewrite of the Lacey Act from the House floor, American citizens and businesses do not support attempts to weaken the Lacey Act, and I hope that after learning that lesson last summer, this committee will not support such attempts either.

With that, I look forward to hearing from our witnesses, and learning more about this issue.

Mr. SABLON. But at this time, Mr. Chairman, I ask unanimous consent to enter into the record the following materials: testimony of the Humane Society of the United States, which includes documentation of over 240 dangerous incidents involving large constrictor snakes in 45 States; and testimony from the American Bird Conservancy supporting H.R. 511 as introduced by Mr. Rooney without the proposed amendments. And without objection, Mr. Chairman?

Dr. FLEMING. Without objection.

[NOTE: The information submitted for the record by Mr. Sablan has been retained in the Committee's official files.]

Mr. SABLON. Thank you very much. And I yield back my time.

Dr. FLEMING. I thank the gentleman. I thank my friend, the Ranking Member for the Minority.

We will now hear from our witnesses. Like all witnesses, your written testimony will appear in full in the hearing record. So I ask that you keep your oral statements to 5 minutes, as outlined in our invitation letter to you, and under Committee Rule 4(a).

Our microphones are not automatic. So you will need to press the button. Also a common mistake that is made, we all make, is not being close enough to the microphone. So make sure you are close enough. Pull it to you, and you may have to shift microphones over to be heard well.

We are now ready for our panel of public witnesses, which includes Dr. Brady Barr, the star of the National Geographic television show, "Dangerous Encounters"; Mr. John Kostyack—am I saying that correctly? OK, Vice President, National Wildlife Federation; Mr. Shawn Heflick, one of the stars of the television show, "The Python Hunters"; Ms. Colette Sutherland, who is known as "The Snake Keeper" from Spanish Fork, Utah; Mr. Peter Jenkins, Executive Director, Center for Invasive Species Prevention; and Mr. Andrew Wyatt, the President, United States Association of Reptile Keepers.

Your written testimony will appear in full in the hearing record, so I ask that you keep your oral statements to 5 minutes.

Now, we work on a light and time system. So when you begin your testimony, you will be under a green light. When the light turns yellow, you have a minute left. When it turns red, if you haven't completed your statement, please go ahead and wrap up. Otherwise, I will have to interrupt your statement. Your entire statement will be made part of the record, so you can rest assured of that.

Let's see. I guess first up is Dr. Barr. You are now recognized, sir, for 5 minutes.

**STATEMENT OF BRADY BARR, PH.D., "DANGEROUS ENCOUNTERS," NATIONAL GEOGRAPHIC CHANNEL**

Dr. BARR. Thank you. I would like to thank the Chair and the Committee for listening to me today.

You know, for the past few years, myself, like many of us, saw many of the reports in the popular media, reports that I thought were pretty sensationalized, and finally decided I needed to contact USARC and offer up my expertise, because I really don't have any vested interest in this decision.

I am National Geographic's Resident Herpetologist, a position I have held for the last 15 years. And I think there are two items that need to be considered in this situation, two controls, one that has been addressed, another that I haven't seen addressed.

The first is climatic controls. These are tropical snakes that we are talking about. They are a long way from home. These snakes lack the biology and the physiology to survive low temperatures. And we are talking about temperatures that would be below 16 degrees Celsius. That is approximately 60 degrees Fahrenheit. And when these types of temperatures are experienced by these snakes, they have trouble digesting prey, they have troubling acquiring prey, they have trouble moving, avoiding predation. And the bottom line is they have trouble surviving at low temperatures. These animals are ectotherms, meaning that they cannot internally control their body temperature. They have to rely on the environment for their body temperature.

So, I think, in summary, due to the climatic controls, when it gets cold, these snakes die. And that will prevent any movement northward along the Eastern Seaboard of the U.S.

The second important control that I think that should be considered is a biological control, and I haven't seen this issue addressed. In the Everglades, or in the State of Florida, there is estimated to be over 2 million American alligators. Alligators are a keystone species in the Everglades. They are an apex predator. They are one of the largest non-marine predators on the planet.

And in saying that, alligators found in the Everglades are undersized. They grow very slowly. They reach sexual maturity later than populations elsewhere. To a large degree, it has been surmised that owes to a poorer quality diet found in the Everglades. The Everglades is a tough place to live, if you are a large predator. It is an ecosystem characterized by a dramatic dry season and wet season. There aren't a lot of prey items in the Everglades for top predators to utilize.

In the 1990s, 1992 to 1997, I undertook the most comprehensive diet study of American alligators to date, and in Everglades National Park I captured and flushed the stomachs of over 2,000 alligators and found the top prey item to be snakes. Essentially, alligators are surviving on snakes in the Everglades. Fifty-five percent of recovered food mass is snake. These animals are making an existence, almost solely, on snakes. And this is in an environment which, as I said, is not wealthy, in terms of suitable prey for large predators, such as alligators. So, I think that any inclusion of exotic snakes, the top prey item of alligators, will be utilized by that apex predator.

So, in conclusion, I feel that climatic controls and biological controls in predators on these exotic snakes—and alligators is just one example of many found in the Everglades—will prevent movement of these snakes northward, and thereby—doesn't merit inclusion in the Lacey Act of these species. Thank you.

[The prepared statement of Dr. Barr follows:]

**Statement of Brady Barr, Ph.D., Resident Herpetologist,  
National Geographic Society**

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 2,000 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.

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Dr. FLEMING. OK. Thank you, Dr. Barr. And thank you for your testimony.

And, Mr. Kostyack, you are next up, sir. You are recognized for 5 minutes.

**STATEMENT OF JOHN KOSTYACK, VICE PRESIDENT,  
NATIONAL WILDLIFE FEDERATION**

Mr. KOSTYACK. Good morning, and thank you, Chairman Fleming. Thanks for the opportunity to testify today. The National Wildlife Federation is the Nation's largest conservation, education, and advocacy organization. We have over 4 million members and supporters. We have 48 State and territorial affiliates. And we are passionate about conserving wildlife and habitat, and addressing the

chief threats to wildlife and habitat. And the science has shown that invasive species are, indeed, one of the chief threats.

We would like to thank Congressman Rooney for introducing H.R. 511. We think banning importation and interstate trade of those nine large constrictor snakes is the right thing to do. All nine were found to be injurious by the Fish and Wildlife Service. The Fish and Wildlife Service decision to take five of them off the list was actually a decision made by OMB, based upon non-scientific grounds. And USGS also has supported that finding.

We see the large constrictor snake problem as a major threat to wildlife. I would like to talk to you further about the benefits of the bill as introduced, but I would like to flag the two harmful amendments that were brought on to the bill in the House Judiciary Committee. They both essentially negate the value of the bill, as introduced, unfortunately.

The first one, which allows unregulated exhibitors of snakes to evade the Lacey Act prohibitions essentially guts the original law. And the second amendment is even more damaging, because it goes well beyond injurious snakes to all injurious species listed as injurious, and essentially creates a burden of proof that makes the law virtually impossible to enforce, and therefore eliminates its deterrent effect. And so that would be a major setback to our most important law for controlling and preventing the introduction of invasive species.

So, turning to H.R. 511, I would like to just list 3 chief benefits of the law, as introduced.

First of all, the wildlife benefits. This law really is a crucial step to protecting this Nation's rich natural heritage, and not just Florida's. We have seen the Burmese Python invading Florida. And this was brought in by the pet industry and released into the wild and now numbers somewhere between 30,000 and 100,000 snakes. And they are now so well established that many scientists are questioning whether eradication will ever happen.

More than 25 different bird species, including several endangered species, have been found in the digestive tracts of the snakes. And now this recent study has shown that the Python is eliminating vast portions of the native mammals of that region. That level of ecosystem disruption is a major threat to Everglades restoration, a project in which State and Federal taxpayers have invested billions of dollars.

The scientific community has sounded the alarm about these nine large constrictor snakes. They have shown that they could expand their range well beyond South Florida into the southern portion of the Continental U.S., as well as the Island Territories. Scientists have already observed that the python populations have rebounded from cold snaps well below 16 degree Centigrade, defying all the predictions we have heard about die-offs due to cold snaps. Louisiana, the home of Chairman Fleming, appears to have, according to these reports, a climate that is well suited for the establishment of large constrictor snakes.

Now, of course, all the projections we have seen—and, by the way, you hear lots of disputes about climate change science in the media, but the scientific community is only disagreeing to the extent of degree, and not whether there is a fact of warming. A

warming trend happening in this country is not disputed in the scientific community. A warming trend is well underway, and that will expand the range of large constrictor snakes.

I would like to talk briefly about the economic benefits. My organization is comprised of hunters and anglers, wildlife watchers. And we are deeply concerned about the tourism and recreation industry, and the impacts of the arrival of large constrictor snakes. No one knows, to this day, how badly Florida has already been hit, how many families are not willing to go into the Everglades and spend money, due to the arrival of these snakes, how many hunters have lost a prey base. The list goes on. It is something that ought to be considered by the Members of this Committee.

And, finally, human safety. We know 17 lives have already been lost due to large constrictor snakes in this country. This Lacey Act protection is essential. There is no reason for one single additional loss of life to continue when Congress has the power to reign in invasive species.

Thank you for the opportunity to testify.

[The prepared statement of Mr. Kostyack follows:]

**Statement of John Kostyack, Vice President,  
Wildlife Conservation, National Wildlife Federation**

Chairman Fleming, Ranking Member Sablan, members of the Subcommittee, thank you for the opportunity to be here today. National Wildlife Federation is a non-partisan, non-profit organization. Our mission is to inspire Americans to protect wildlife for our children's future. National Wildlife Federation is comprised of 48 state and territorial affiliates and more than 4 million members and supporters. Our members include hunters, anglers, backyard gardeners, birdwatchers and many other outdoor enthusiasts from throughout the nation.

Conserving wildlife for our children's future has been the mission of the National Wildlife Federation since our inception in 1936. Time and again, threats to wildlife have unified diverse people from across our nation to take action in the interest of conserving the nation's rich wildlife heritage. Through voluntary collaboration and effective conservation laws, the people of this nation have saved many species from extinction, restored many game and fish wildlife species, and preserved our outdoor heritage. We appreciate the opportunity to testify today on a bill that deals with the critical issue of preventing the spread of large constrictor snakes, which are already wreaking havoc on wildlife and ecosystems.

On behalf of the National Wildlife Federation, I want to thank Congressman Rooney for introducing H.R. 511, the bill to prohibit the importation and interstate transport of all nine of the large constrictor snakes initially proposed for the injurious species list by the U.S. Fish and Wildlife Service (FWS). Banning the importation of these non-native species is absolutely critical to reducing the costs to the taxpayer of controlling these constrictors, which have already risen into the millions of dollars per year. Earlier this year the FWS placed four of the nine species on the injurious wildlife species list, but dropped the five other harmful species that it and the United States Geological Survey had previously recommended for inclusion in the importation ban. We were disappointed that all nine species were not placed on the injurious list, which is why we applaud Congressman Rooney and the other cosponsors of H.R. 511 for their leadership.

H.R. 511 in its original form had strong bipartisan support in Congress as well as backing from a wide variety of conservation and humane groups. Unfortunately, NWF was dismayed to see two amendments made to H.R. 511 in a markup by the House Judiciary Committee. NWF will oppose the bill until both amendments are removed.

The first of those harmful amendments would allow thousands of unregulated exhibitors of snakes, including many roadside zoos and circuses, to import and trade the nine constrictor snakes without a Lacey Act permit. This would virtually eliminate the effectiveness of listing the snakes. The second of those amendments says that to commit a criminal violation for the importation of an injurious animal, the import must violate the law "knowingly." This change in the law would apply to all Lacey Act injurious species listings, not just the snake species in this bill. Imposing

such a high burden of proof would greatly hinder prosecution of people who illegally import or make interstate shipments of injurious species, and it would greatly reduce the deterrent effect of the law. Ignorance is not a valid excuse for violating a law and should not be the basis for avoiding Lacey Act prosecution.

Full application of the Lacey Act to these nine large constrictor snakes is warranted given the well-documented economic costs and impacts of constrictor invasions to wildlife and human communities in this country. In south Florida, three species have already invaded—the boa constrictor, the northern African rock python and Burmese python. Burmese pythons, imported from Southeast Asia as pets and then illegally released in the wild, are reproducing and thriving in the Everglades and other south Florida wetlands. Estimated at between 30,000 and 100,000 in number, this snake is considered a threat both to the restoration of the Everglades and to human safety (FWS 2012). This invasion, which is costing the taxpayers enormous sums to manage, may be irreversible. It is a textbook example of why the most cost-effective strategy for addressing invasive species is to prevent their importation.

#### **WILDLIFE IMPACTS**

Giant constrictors are top predators in the south Florida ecosystem. According to the U.S. Geological Survey (USGS), they are voracious and indiscriminate consumers of native wildlife and can grow rapidly to more than 20 feet in length and 250 lbs in weight. They are particularly threatening to bird and mammal populations. For example, more than 25 different bird species, including endangered species, have been found in the digestive tracts of pythons in the Everglades (FWS 2012). They can live in many kinds of habitats, are tolerant of urbanization, achieve high population densities and produce many offspring. They serve as potential hosts for parasites and diseases that threaten wildlife and human health.

Since the FWS listing, new science has confirmed the devastating impacts the python invasion has had on native wildlife. The findings in the 2012 study by Dorcas et al. titled ‘Severe mammal declines coincide with proliferation of invasive Burmese pythons in Everglades National Park’ were highly distressing for NWF and anyone concerned about native wildlife in South Florida. This groundbreaking study shows that these non-native snakes are top predators that appear to be eliminating vast portions of wild mammals in that region. This ecosystem disruption could easily expand beyond southern Florida, especially given the warming of the climate that is underway.

For additional evidence of the damage to native wildlife populations caused by invasive snake species, one need not look further than the U.S. territories. The brown tree snake invasion in Guam is particularly notorious: most native Guam forest bird species were virtually extinct by the time the FWS listed these species as threatened or endangered in 1984, less than 50 years after the tree snake was first introduced (USGS). We know that boa constrictors already are invading Puerto Rico and threatening that island’s native wildlife (Reed and Rodda 2009).

#### **ECONOMIC IMPACTS**

As noted above, the cost to taxpayers for controlling and eradicating large constrictor snakes is well into the millions of dollars. The FWS alone has spent more than \$6 million since 2005 developing and applying solutions to the invasions of Burmese pythons and other constrictor snakes in Florida. Pythons also jeopardize billions in federal, state and local investments in environmental restoration. By causing such a massive disruption of the Everglades ecosystem, the pythons are undoing years of federal and state investments there. Investments in endangered species recovery are likewise threatened. For example, from 1999 to 2009, Federal and State agencies spent \$1.4 million on Key Largo woodrat recovery and \$101.2 million on wood stork recovery—two endangered species that have been found in the bellies of Burmese pythons. Taxpayers are being forced to pay for the growing expense of controlling and eradicating large constrictor snakes in south Florida. Congress should at least shut the spigot that sends yet even more snakes into their communities.

The economic costs of constrictor snake invasions to our tourism and outdoor recreation economy could far exceed the cost of control measures by wildlife agencies. According to the FWS 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 91.1 million U.S. residents fished, hunted, or watched wildlife in 2011 alone. They spent over \$145 billion in the process, contributing to millions of jobs in industries and businesses that support wildlife-related recreation. Funds generated by licenses and taxes on hunting and fishing equipment pay for many conservation efforts in this country, and wildlife-related recreation is a proud American tradition. As the Burmese python devastates south Florida wildlife, the

tourism and recreation economy in that region suffers. Slowing the spread of the constrictor snake invasion by banning further importation and inter-state trade will be essential for protecting the tourism and recreation-based economies of other regions.

Florida alone hosts almost 6 million participants in wildlife-associated recreation each year. As game mammal populations decline, hunting opportunities inevitably fall. How many hunters will reduce their activity as a result of this decline? As bird species are swallowed up by increasing numbers of large constrictor snakes, how many birders will reduce travel to Florida and reduce spending on hotels, equipment, and food? Will tourists avoid taking trips to the Everglades or other areas invaded by snakes because of safety concerns? These are questions that leaders from south Texas, Louisiana, Georgia, Mississippi, Alabama, Hawaii and beyond will need to answer as they work to protect their robust recreation and tourism economies. All it would take is a few pet constrictors to grow larger than their owners can manage, be let out into the wild, and manage to breed. The reckless trade in large constrictors is not just a Florida problem—it is a national problem.

Projections of high economic losses to the pet trade as a result of a prohibition on importation and interstate trade of nine large constrictors have been discredited in economic analyses by the FWS, the Congressional Budget Office and Timm Kroeger, Ph.D., an economist with The Nature Conservancy.

H.R. 511 will not put the reptilian pet trade out of business. These nine species are just one part of the pet trade and presumably most of those who want to buy snakes will simply shift toward species that are not covered by the Lacey Act and do not disrupt our environment.

#### **THREATS TO HUMAN SAFETY**

The costs of allowing importation and inter-state trade in the nine non-native large constrictor species include loss of human life and serious injury. According to the Humane Society, seventeen people have died from large constrictor snake related incidents in the United States since 1978. Scores of adults and children have been injured during attacks by large constrictors. These snakes are clearly injurious by any reasonable measure.

#### **POTENTIAL FOR RANGE EXPANSION**

As noted earlier, the potential of large constrictor snakes to expand their existing habitat range in the lower 48 states as well as island territories is well-supported by the science. Already we are observing Burmese python populations in the Everglades rebounding from cold winters and defying predictions of their die-off. Research from the USGS and others have indicated that well-documented shifts in climate will help these cold-blooded creatures thrive farther and farther north, affecting more states and increasing their ecological damage and costs to taxpayers (Reed et al, 2009, 2012).

For example, the state of Louisiana appears to be prime habitat for future invasions by imported large constrictor snakes. USGS research indicates that even Chairman Fleming's northwest Louisiana District is a suitable climate match for giant constrictors. Prohibiting the importation and inter-state trade of all nine constrictor snakes would greatly reduce the odds of an invasion on par with the crisis in south Florida.

A recent study published in *Integrative Zoology* attempts to contradict USGS research on python climate projections, claiming that it is unlikely pythons can survive north of the Everglades. Unfortunately, the conclusions in this new study 'Environmental, physiology and behavior limit the range expansion of invasive Burmese pythons in southeastern USA' (Jacobson et al. 2012) are based on several flawed premises and no new information on python behavior or cold tolerance. In fact, the authors ignore a fundamental principle of reptilian ecology—the ability of reptiles to behaviorally regulate their body temperatures well above air temperature. Attached to this testimony are comments on the study by several of the leading researchers on this topic, elaborating on this and other basic flaws in the Jacobsen et al. methodologies.

#### **PREVENTING NON-NATIVE SPECIES INVASIONS**

The nine large constrictor snakes proposed to be listed as injurious by H.R. 511 are just some of the examples of a massive invasive species problem in the United States and across the world. The total U.S. cost attributed to invasive animals and associated animal diseases is estimated to be as much as \$35 billion per year, with one study estimating the effects and control of nonnative invasive species at about \$120 billion (Pimentel 2005). The snakes listing rule by the FWS took 6 years to finalize—far too long to effectively prevent the establishment of Burmese pythons and other species in south Florida. It illustrates that the Lacey Act injurious species



listing section—which is 112 years old—is inadequate. This current process, in which FWS acts largely in reactive fashion, is in need of an upgrade. The House and Senate have both introduced legislation that would vastly improve the current process. In the House, NWF has strongly endorsed H.R. 5864, the Invasive Fish and Wildlife Prevention Act of 2012, which has 30 bipartisan cosponsors. This bill would reform the injurious species listing process, making it faster and more effective, and bring it into the modern age. Prevention of harmful exotic species through screening and risk assessment is of great importance to limiting damages posed by invasives, particularly when protecting areas from invasive reptiles. We urge the Committee to take up H.R. 5864 or its counterpart in the next Congress and to move it forward for passage.

## CONCLUSION

National Wildlife Federation was pleased that FWS prohibited the importation and inter-state transport of the Burmese python, yellow anaconda, northern African rock python and southern African rock python. However, the job of addressing large constrictor snakes is not finished, and it is crucial that the five remaining large constrictor species targeted by FWS and USGS be listed as injurious wildlife as well.

H.R. 511, as originally introduced, finishes the job by making sure all nine species are listed: until then, the reticulated python, DeSchauenee's anaconda, green anaconda, Beni anaconda, and boa constrictor will continue to audition for reoccurring roles in the invasive species assault on America's ecosystems. Our nation's wildlife, human safety and tourism and recreation economy depend on taking action to prevent invasions of exotic animal species. NWF calls on the committee to remove the two harmful weakening amendments adopted by the Judiciary committee and pass the original H.R. 511 language.

## ATTACHMENT 1

### **Comments on Jacobson et al. "Environmental temperatures, physiology, and behavior limit the range expansion of invasive Burmese pythons in Southeastern USA"**

**November 27, 2012**

In this paper, the authors ask "Do Burmese pythons currently inhabiting the Everglades possess the ecological, physiological, and behavioral traits to survive in more temperate environments?" The only new data presented in this paper are summaries of ambient air temperatures in Florida and South Carolina. The authors interpret these temperature data as evidence that pythons cannot expand beyond South Florida. Unfortunately, their conclusions are based on several flawed premises and no new information on python behavior or cold tolerance. The study does not contradict the approaches or conclusions of previous studies (e.g., Rodda et al. 2009) and yields little new insight into factors that may limit range expansion in this invasive species.

In this paper, Jacobson et al. develop a rationale based on environmental (maximum and minimum air) temperatures from the Southeast and the limits those temperatures might pose to python survival and feeding. They conclude that pythons lack the physiological and behavioral abilities to survive in climates more temperate than southern Florida, where they are now thriving. Fundamental to their argument is that air temperature is an accurate indicator of body temperatures experienced by free-ranging snakes. Unfortunately, this is not the case. The ability of reptiles to behaviorally regulate their body temperatures well above air temperature is recognized as a fundamental element of reptilian ecology and a well-documented phenomenon that has been studied for over 60 years. Nearly all snakes, including pythons, are able to substantially warm their body temperatures above ambient temperature by basking in the sun or seeking refuge underground. In fact, our recent study in South Carolina (see Dorcas et al. 2011) demonstrated that pythons were able to achieve body temperatures  $>20^{\circ}\text{C}$ , even when maximum air temperatures were  $<15^{\circ}\text{C}$  and nightly lows dropped below freezing.

Moreover, although this study does not present any new data on python behavior or physiology, the thresholds they use for digestion and survival are not substantially different from those of most native North American snakes. For example, like pythons, most snakes require body temperatures above  $16^{\circ}\text{C}$  to digest their prey and cannot withstand freezing. Thus, based on the rationale described in this study, we would conclude that most of the continental United States is unsuitable for snakes in general. Of course, this is not the case. Dozens of snake species thrive in temperate climates by using behavior (basking, hibernation, etc.) to maintain appropriate body temperatures, and this study provides no new evidence addressing

python's abilities to thermoregulate. Jacobson et al. interpret the results of recent python deaths during exceptionally cold weather in the Everglades, Gainesville, Florida, and Aiken, South Carolina as evidence that pythons "seemingly lack the behaviors to seek refuge from, and the physiology to tolerate, cold temperatures" but fail to recognize that some pythons behaved appropriately, took refuge underground or in shelters, and survived short-term freezes in all three of these cases.

This paper was written primarily as a rebuttal to a paper by Rodda et al. (2009) that showed a suitable climate match for Burmese pythons throughout much of the southern United States. There is nothing in the Jacobson et al. paper that undermines the original approaches or conclusions of Rodda et al. (2009) and the editors of the journal were remiss by not inviting Rodda or his colleagues to review this manuscript before it was published. There are many factors, including temperature, that may limit the distribution of pythons in the United States, but the Jacobson et al. (2012) paper adds little new insight into what those limitations might be.

**Michael E. Dorcas**, Department of Biology, Davidson College

**John D. Willson**, Department of Biology, University of Arkansas

**Christina Romagosa**, Center for Forest Sustainability, School of Forestry and Wildlife Sciences, Auburn University

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**Response to questions submitted for the record by John F. Kostyack,  
National Wildlife Federation**

1. How would the USDA regulate exhibitors under this provision?
2. How does the pet trade, and specifically interstate commerce related to the pet trade, contribute to the establishment of invasive constrictor snakes?
  - a. Can you cite a specific study illustrating this?
3. How much have U.S. taxpayers spent on eradicating these invasive snakes.
4. We've seen some studies alleging that invasive constrictor snakes cannot survive outside of the Everglades. Can you provide evidence of other places that these snakes could establish breeding populations, the probability of that happening, and how this could occur (through hibernation, escape from homes, ect.)?
5. Arguments have been made that native species such as the white-tail deer are more of a threat to human safety than these invasive snakes. However, in the context of invasive species only, can you cite evidence that any other species poses as much of a threat to human safety as these snakes?
6. Imperiled species are under significant threat in the Everglades already—how are invasive constrictors contributing? How can we expect this to play out in other areas?
7. Would you say science is settled on the issues of whether snakes can establish breeding populations outside the Everglades?

**Answer #1. USDA exhibitors regulation:**

The USDA does not regulate reptiles and would not issue a license to someone who only exhibits reptiles. Someone could easily obtain a USDA license by acquiring a regulated species for exhibition, such as a dog, cat, or rabbit. However, the USDA has no standards and regulations for reptiles and would not inspect the reptiles kept by a licensed exhibitor.

**#2. Pet Trade role: Numerous sources identify the pet trade as the leading cause of non-native animal invasions.**

**a. Study on pet trade**

Florida has the world's worst invasive amphibian and reptile problem, and a new 20-year study led by a University of Florida researcher verifies the pet trade as the No. 1 cause of the species' introductions. The study finds the pet industry was most likely responsible for the introduction of 84 percent of 137 nonnative reptile and amphibian species introduced from 1863 through 2010, with about 25 percent of those traced to one animal importer. Of the nonnative reptile and amphibian species introduced, 56 have become established in Florida. No established, non-native amphibian or reptile species has been eradicated and no one has ever been prosecuted for the establishment of a non-indigenous species. See <http://news.ufl.edu/2011/09/15/invasive-species/>.

### **#3. U.S. taxpayer eradication costs.**

The U.S. Fish and Wildlife Service, in partnership with many organizations, has spent more than \$6 million since 2005 attempting to address the growing problem of Burmese pythons and other large invasive constrictor snakes in Florida.

### **#4. Survival of snakes outside Everglades.**

Burmese pythons—an invasive species in south Florida—could find comfortable climatic conditions in roughly a third of the United States according to new “climate maps” developed by the U.S. Geological Survey. Although other factors such as type of food available and suitable shelter also play a role, Burmese pythons and other giant constrictor snakes have shown themselves to be highly adaptable to new environments. The reported clutch size maximum for Burmese pythons is 107 eggs. If one pregnant snake escaped or was released into a hospitable environment, it could lead to invasive species problems in new areas. Other exotic constrictor snakes could potentially survive in portions of other U.S. states or territories. A potentially irreversible invasion of Boa constrictors was just documented in western Puerto Rico in a published article in *Biological Invasions* by Reynold et al. 2012. See: <http://link.springer.com/article/10.1007/s10530-012-0354-2>.

### **#5. Threat to human safety.**

The National Wildlife Federation does not believe that there is any need for Congress to choose between protecting children from constrictor snakes and reducing motor vehicle collisions with white-tailed deer. Although there may be more human fatalities from deer-vehicle collisions than from invasive large constrictor snakes, we view the loss of even a single human life from a preventable introduction of a constrictor snake to be unacceptable.

### **#6. Threats to wildlife and ecosystems.**

Burmese pythons are preying on endangered species, such as the Key Largo woodrat and wood stork, which have cost taxpayers more than \$102 million in recovery programs from 1999 to 2009. Many other endangered species are found in Florida and other States and territories that would be threatened by large constrictor snakes. Pythons have been reported to consume leopards in their native range, and thus even top predators, such as the endangered Florida panther, may be at risk. The potential cost of predation by a single python can be quite substantial. Academic experts and government officials estimate that a single large python whose diet consists mainly of federally endangered wood storks can cause \$6 million in damages in lost fauna per year.<sup>i</sup>

### **#7. Science on other invasions.**

Large constrictor snakes have already established breeding populations outside of the Everglades. At the Deering Estate at Cutler (Miami-Dade County, Florida), invasive *B. constrictor* were found in multiple habitats, including tropical hardwood hammocks, dirt roads/trails, landscaped areas, and pine rocklands. Large pythons have also been found at Lake Okeechobee, almost a hundred miles north of the heavy concentrations in the Everglades. And, as cited above, *B. constrictor* have recently invaded in western Puerto Rico.

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Dr. FLEMING. Thank you, Mr. Kostyack.  
Mr. Heflick, you are up, sir, for 5 minutes.

### **STATEMENT OF SHAWN K. HEFLICK, “THE PYTHON HUNTERS,” NATIONAL GEOGRAPHIC CHANNEL**

Mr. HEFLICK. Mr. Chairman, members of the Subcommittee, thank you for the opportunity to appear and speak before you.

My name is Shawn Heflick. And my interest in this hearing and subject matter is multi-faceted. I am a biologist who has completed his master’s degree on invasive species in Florida. I have traveled the world, capturing and studying pythons, anacondas, and boas on five continents. I am the president of a conservation NGO out of

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<sup>i</sup>Henry T. Smith, Dr. Arthur Sementelli, Dr. Walter E. Meshaka Jr., Ph.D., Richard M. Engeman, “Reptilian Pathogens of the Florida Everglades: The Associated Costs of Burmese Pythons,” *Endangered Species UPDATE*, Vol. 24 No. 3 2007.

the Amazon Basin, a licensed python agent for both the Everglades National Park and Florida Wildlife Commission, and the host of National Geographic Wild series, “The Python Hunters,” which explores exactly this topic.

The question today is whether several species of snakes 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: no. Why? Multiple reasons.

First, no anaconda or reticulated python populations exist in the United States, even though these animals have been here for half-a-century. In addition, there is a glaring lack of data for any negative impact of the existing wildlife—or wild Burmese Python populations. The alleged severe mammal decline in South Florida due to the Burmese Python population is, in my professional opinion, a travesty of science, especially when the data tell an entirely different story: natural hydrological cycles; effects of high mercury levels; fire regimes; general water pollution; increased alligator population; increased scavenger populations; increased mesopredator populations; increased vehicle traffic; two record-low winters with hard freezes; changes in manmade water regimes; a huge, massive increase in feral cat populations estimated at 10 to 15 million in the State of Florida, among many other potential causes totally unaccounted for in this study. Totally unaccounted for in this study.

In fact, two of the authors of this study, who I know, 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 today and show you more signs of small mammals in one day and evening than this entire study of 8 years exhibited. Something is grossly wrong with that disparity.

Snakes are temperature-sensitive. With permitting from the Florida Wildlife Commission and collaboration from the USDA APHIS, I conducted a study in 2010 during the hard freeze, which included both boa constrictors and Burmese Pythons. Within just 4 days—4 days—100 percent of all of those constrictor snakes in that outdoor enclosure had died, due from exposure. Simply put, the outside ambient temperature had dropped below the python and boa’s critical thermal minimum, which caused death. Environmental temperatures, physiology and behavior limit the range expansion of these Burmese Pythons in the Southeastern United States.

This also offers insight as to why the Burmese population has not expanded outside of South Florida in almost two decades, and is seemingly, by the numbers, on the decline since the 2009 and 2010 cold snap. Furthermore, from January 1, 2012 to the present, 71 Fish and Wildlife Commission python agents have captured a total of only 46 pythons for this entire calendar year. The population is, indeed, lower. And the numbers prove it.

The same formal data is applicable to the rest of these proposed tropical species, and would severely limit their ability to survive. The competition for resources and prey is immense. And the idea that a reptile predator in the system is not novel. The Everglades is not a paradise for invading tropical pythons or boas. On the con-

trary, it is a harsh, subtropical environment that is riddled with predators, roadways, vehicles, pollutants, and an ever-increasing pressure from human development.

Last year I participated on a panel for invasive species at an academic conference with partners in reptile conservation where I asked university biologists, state biologists, fish and game enforcement, zoo curators, reptile industry experts, Department of the Interior biologists if any one of them thought boa constrictors were invasive species and could possibly pose a problem in the United States. Not one of these field experts raised their hand. Not one of these experts, who work day in and day out with these issues on the ground, believe them 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. And crippling thousands of small businesses and family breeders will accomplish nothing to save the Everglades. Thank you for your time.

[The prepared statement of Mr. Heflick follows:]

#### **Statement of Shawn Heflick, Herpetologist**

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, DeSchaunensee'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 first-hand, 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 U.S. 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 U.S. 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.

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Dr. FLEMING. Yes. Thank you. And next, Ms. Sutherland, you are recognized now for 5 minutes.

**STATEMENT OF COLETTE SUTHERLAND,  
THE SNAKE KEEPER, INC., SPANISH FORK, UTAH**

Ms. SUTHERLAND. Mr. Chairman and members of the Subcommittee, I am Colette Sutherland and, along with my husband, Dan, own TSK, Incorporated, also known as "The Snake Keeper," a small family business with five full-time and three part-time employees. Here we maintain approximately 1,000 snakes, a rodent colony, and a reptile-related supply business.

I am also a member of the Pet Industry Joint Advisory Council's Reptile and Amphibian Committee. Thank you for inviting me to

present testimony on the H.R. 511 bill that would add 5 additional species of constrictor snakes to the Lacey Act.

I have been keeping and breeding various types of reptiles for the past 40 years. I have a zoology degree from Brigham Young University, and my written testimony references several of my publications, including providing 10 years of production data as the basis for Dr. Morrell's doctoral thesis on quantitative genetic analysis of reproductive traits in bald pythons.

With respect to H.R. 511, I have serious concerns about the approach being taken. Listing a species in the Lacey Act by legislative fiat is not, in my opinion, the best course for dealing with Federal regulation of an invasive species, especially when the invasive issue is localized, at best, in Southern Florida.

The listing process currently employed by the Fish and Wildlife Service, while possibly in need of revision, at least is founded upon science-based findings. The process is open to public comment, peer review, and potential modification via the regulatory process. The Fish and Wildlife Service has already listed four species, and deferred making a final decision with respect to five non-native constrictor species, because it did not believe that their listing was warranted. I believe that the Service is in the best position to make such findings. I am opposed to a nationwide ban of any species whose potential negative impact, at best, is limited to extremely localized areas such as South Florida.

Adding the boa constrictor would be most devastating to the reptile industry. Boas are produced by the thousands by commercial and non-commercial breeders, such as our company, throughout the United States. There is a tremendous variety of size and color, even among the normally colored specimens. Boas are one of the most commonly kept large constrictor species in the world.

In the year 2000 we added boas to our collection. Conservatively, we have invested a minimum of \$300,000 in acquiring our breeding colony. We have invested thousands in caging supplies and maintenance of our breeding operations. We sell our offspring throughout the United States, as sport animals to other countries. With just the talk of having boas added to the Lacey Act, the value of our boa collection was devastated. Snakes that I had paid \$25,000 a pair for I could barely sell for \$1,500 as a breeding adult. Their progeny, which had been selling for approximately \$7,500 each prior to the proposed listing plummeted to \$1,500 or even less, if I could find a buyer at all.

We had to make a very hard business decision, as well as a heart-breaking decision, after trying to market our adult boas to other breeders in States that would have been allowed to export them—because there is no port in my State, so I never would have been allowed to export them. It became apparent that there were no buyers. We even tried to give some of the adults away, and nobody wanted or was willing to accept them, due to the potential talk of the ban. We ended up euthanizing over 60 adult boas. We still maintain some boas, but not nearly what we once had. And we were considered a medium-sized breeder.

In assessing the financial loss we incurred, Dan and I figured out the potential production of viable progeny, had we been able to keep those breeding animals intact without augmenting the breed-

ing stock, we conservatively estimated those 60 breeders, over their natural breeding lifespan and normal birthrates, could have generated approximately \$2 million, had the market not collapsed in light of the potential ban.

I know there has been a lot of talk about it only affects a small percentage of small businesses, but I am one of those small businesses. And we have been involved in this since I have—for at least 30 years, breeding and selling these snakes. And I am not the only one. There are hundreds of us across the U.S. that do this, and we all work very hard and responsibly to make sure we are providing a good product, and that we tell the purchasers—we give them guidelines and expect them to take care of their animals and be responsible keepers.

And I don't see the need to have a nationwide ban when this is totally a localized situation in South Florida.

Thank you for allowing me the time to speak to you today.

[The prepared statement of Ms. Sutherland follows:]

**Statement of Colette Sutherland, TSK, Inc.**

Mr. Chair and members of the Subcommittee, I am Colette Sutherland and I along with my husband Dan own TSK, Inc. that was started back in 1989. Thank you for inviting me to present testimony on the H.R. 511, a bill that would add nine species of constrictor snakes to the Lacey Act.

I have been keeping and breeding various types of reptiles for the past 40 years. I have a Bachelors of Science in Zoology with a teaching option in Biology from Brigham Young University in 1985. While at the University I worked in the Herpetology department taking care of the live reptiles that were there at the time. The reptiles there included a Burmese python, common boa, Gila monster and various venomous snakes.

In 2000 we were approached by Dr. Mark Seward to make a video on breeding ball pythons. We agreed and the video and accompanying information came out in 2001. In late 2004 I was approached by TFH, a large animal care publishing company, and authored a basic book on ball python care for their "Quick and Easy" series. In late 2008 I was again approached by TFH to write another more comprehensive ball python book for their "Complete Herp Care" series which was published in 2009. In 2011 Benson Morrill, a Utah State University graduate, used data that had been collected at our facility for close to 10 years to publish his doctoral thesis—Quantitative Genetic Analysis of Reproduction Traits in Ball Pythons. In 2012 this paper was also submitted by Dr. Benson Morrill to the Journal of Animal Breeding and Genetics.

With respect to H.R. 511, I have serious concerns about the approach being taken. Listing a species under the Lacey Act by legislative fiat is not in my opinion the best course for dealing with Federal regulation of an invasive species. The listing process currently employed by the Fish and Wildlife Service while possibly in need of revision to be more expeditious at least is founded upon science-based findings. The process is open to public comment, peer review, and potential modification via the regulatory process. As you are aware the U.S. Fish and Wildlife Service earlier this year listed four species of large constrictor snakes as injurious under the Lacey Act. The Service deferred making a final decision with respect to five non-native constrictor species that the Service at that time did not believe that listing was warranted. I believe that the Service is in the best position to make such findings. I submitted comments at various stages of the Fish and Wildlife Services' evaluation of large constrictor snakes. Additionally, as a member of the Pet Industry Joint Advisory Council's (PIJAC) Reptile and Amphibian Committee, I worked closely with them in addressing various aspects of the regulatory listing process. Then as now I am opposed to a nationwide ban on any species whose potential negative impact at best is limited to extremely localized areas in south Florida.

According to Fish and Wildlife Service a species is evaluated on a variety of factors before it can be listed as injurious: "Such as the species' survival capabilities and ability to spread geographically; its impacts on habitats and ecosystems, threatened and endangered species, and human beings and resource-based industries; and resource managers' ability to control and eradicate the species. Analysis of these factors guides the Service's listing determination. Scientific data is reviewed for factors



that contribute to injuriousness and factors that reduce or remove injuriousness. In addition, other laws require that various economic analyses are conducted to determine the economic impacts of potential rulemakings". Four of the original 9 large constrictors have already been added to the Lacey Act's injurious species list. The remaining five, Beni anaconda, DeSchauensee's anaconda, Green anaconda, Reticulated python and Boa constrictor are what will be discussed here.

Using the above criteria, we will look at the potential impact that the three anaconda species may have upon the Continental United States. Hawaii is left out since it is illegal to ship any snake to Hawaii and we can certainly exclude Alaska, as it is far too cold for any boa or python to survive there unless kept under captive conditions. The Beni and DeSchauensee's anacondas at this time are not available in the pet trade nor are they currently kept in our country anywhere. Even if these 2 species did exist in the pet trade, there are no suitable climates here in the United States for them to successfully thrive according to the USGS risk assessment, let alone survive. Since there are no existing climates in the United States where they could survive that seems to preclude them from being injurious. What would be the purpose of adding them to the Lacey Act,—they don't even exist in our country neither could they survive here in the wild.

In response to a recent inquiry regarding the status of these two species, David Barker, a noted herpetologist and author emailed me the following information on November 20:

To my knowledge, there has never been a live specimen of *beniensis* in the country (and I've looked). There very few records or reports of the northern yellow anaconda, *E. deschauenseei* in captivity in this country or Europe, and I am not aware of any in captivity in the past 30 years. Both species are given no chance of surviving in this country, according to the climate match of Reed and Rodda (2009).

The green anaconda on the other hand is in the pet trade, although in very small numbers. It has never had a huge following. The very large size along with its requirement of a more specialized care has limited the number of people that can successfully raise such a species. The green anaconda could potentially live in one area of the United States and that would be south Florida, however Florida has already taken steps to prevent an introduction of this species into the Everglades. As of July 1, 2010 a Florida law was passed to deal with reptiles of concern. The green anaconda is on this list and is no longer available for personal use in the State of Florida. Private citizens that owned this snake prior to this date were grandfathered in and allowed to keep their animal until it expired as long as they followed the rules set out by the law. The snake must be micro chipped and the owners are required to follow all reporting and security procedures. Commercial dealers, exhibitors and research institutions can have them, but they must adhere to strict bio-security requirements for housing and transporting the animal. In essence the State of Florida has already effectively mitigated any potential problem posed by the green anaconda. Again looking at one of the criteria used by Fish and Wildlife Service with respect to its ability to spread geographically, green anaconda can only survive in a very small portion of southern Florida where the temperature and amount of water is consistent for their survival. Since Florida has already enacted very stringent regulations regarding the keeping of this species, again what would be the purpose of adding them to the Lacey Act? Quite simply a nationwide ban is not warranted by any scientific measure.

Next is the reticulated python. Unlike the green anaconda, the reticulated pythons are broken down into three subspecies *Python reticulatus reticulatus*, *Python reticulatus jampeanus*, and *Python reticulatus saputrai*. The smallest of these subspecies is *Python reticulatus jampeanus* with adult females attaining lengths between 6—8 feet. All of these subspecies have been bred together in captivity in an effort to produce a smaller reticulated python. Another substantial difference between the reticulated python and the green anaconda is the tremendous color variation seen in captive bred individuals, because of the number of beautiful color morphs (name given to colors and patterns that differ from the normal wild pattern and color). Like the green anaconda, the reticulated python could potentially live in south Florida as the USGS risk assessment indicates and because of this, it too is listed as a reptile of concern by the State of Florida and the same bio-security rules apply to it as do the anaconda. Once again the State of Florida has taken care of a potential problem. Since the State of Florida has effectively addressed this issue why is it necessary for the Federal Government to step in when the species in question cannot inhabit any other area of the continental United States? Once again a nationwide ban is not warranted.

Finally we come to the Boa constrictor. As with the reticulated python there are subspecies of Boa constrictor that need to be taken into consideration. Depending

upon which taxonomic source is used there can be 9 subspecies. There is a tremendous size and color variation among this group of snakes. One subspecies, *Boa constrictor occidentalis*, the Argentine boa is listed as a CITES Appendix 1 animal and cannot be imported into the United States for commercial purposes and any international trade would be limited to the zoological community. This subspecies is only kept in very limited numbers by a small group of individuals. Out of the remaining 8 subspecies, only 3 are readily available in the pet trade and one of those *Boa constrictor imperator* is widely kept and bred. According to USGS the only areas of potential habitat for *Boa constrictor imperator* in the continental United States is once again Florida and possibly southern Texas. In the instance of the Deering Estate population of *Boa constrictor*, in Miami Dade County, they have existed in this park for the past 40 years and have not expanded out of the park. This is the only established population of any *Boa constrictor* species in the continental United States and it is a surviving population, not a thriving population. This group has shown that it is not able to successfully spread beyond the borders of the park. Quite simply they do not pose a risk to the rest of the country and could be potentially eradicated from such a small geographical area. Its ability to spread has been limited, so why does this group need to be added to the Lacey Act? Again a nationwide ban is not justified.

Restoration of the Everglades is a noble objective which encompasses myriad complex issues. The word restoration is defined as bringing back to a former position or condition. The historical water drainage that formed the Everglades has been altered considerably. Due to this altering it is doubtful that the Everglades will ever truly be restored to what it once was. While one might argue that the Fish and Wildlife Services earlier listing of Burmese pythons has addressed one aspect of Everglades restoration, none of the five non-listed species being considered for addition to the Lacey Act in H.R. 511 are found in the Everglades—adding them would not add to the restoration of the Everglades. I do think that it is also important to note that many of these snakes have been in the private sector for at least 60 years or longer and I am sure that there have been escapees, and a few that have been released here and there by irresponsible owners. However nowhere else in the continental United States have these animals ever established a population, except in Florida and even at that, it was limited to only 2 species in southern Florida.

Adding the anacondas (*DeSchauensee's* and *Beni*) to the Lacey Act would not impact any breeders or dealers at all, adding the green anacondas would affect a small number of breeders and it would impact zoos and other institutions.

Adding reticulated pythons would be devastating to those that bred them across the United States. These breeders, some have spent decades, working with this species to produce smaller and beautifully colored reticulated pythons. Some of these individuals sell for \$ 25,000.00 each. While it is true this does not represent a large number of people, these breeders employ others, pay taxes and work hard to produce very desirable specimens for serious hobbyists. This activity has grown in recent years because of the reduced size of reticulated pythons and the great of amazing patterns and colors that have been produced as our understanding of genetics has improved. Today, there are very few normally colored animals produced. Thousands of people across the United States own and responsibly enjoy their reticulated pythons. With the passage of H.R. 511 these people would no longer be able to take their pet with them if they moved from one state to another. Nor could they participate in breeding programs if interstate movement was involved. I simply do not see the benefit of adding these to the Lacey Act since the species have not, nor have shown a propensity to be an invasive species in Florida, let alone other parts of the United States.

Adding the *Boa constrictor* would be even more devastating to the reptile industry. Boas are produced by the thousands by commercial and non-commercial breeders throughout the United States. There is a tremendous variety of size and color, even among the normally colored specimens. Boas are one of the most commonly kept large constrictor species in the world. We added boas to our collection back in 2000. Conservatively, we have invested a minimum of \$300,000 in acquiring our breeding colony. We have invested thousands in caging, supplies and maintenance of our breeding operations. We employ people to work with us, and sell our progeny throughout the United States as well as export animals to other countries.

With just the talk of having boas added to the Lacey Act the value of our collection plummeted. Snakes that I had paid \$25,000.00 a pair for as babies I could barely sell for \$1,500.00 each as a proven breeding animal. Their progeny which had been selling for approximately \$7,500.00 each prior to the proposed listing, plummeted to \$1,500.00 each if I could find a buyer at all. Sales stagnated. We had to make a very hard business as well as heartbreaking decision. After trying to market our adult boas to other breeders in states that would have been allowed to export

the offspring overseas it became apparent that there were no buyers. We even tried to give them away, no luck. We ended up euthanizing over 60 adult boas. We still maintain some boas, but not nearly what we once had and we were considered a medium sized operation.

In assessing the financial loss we incurred, Dan and I figured out the potential production of viable progeny had we been able to keep those breeding animals intact. Without augmenting the breeding stock, we conservatively estimated those 60 breeders over their natural breeding lifespan and normal birth rates could have generated approximately \$2,000,000 had the market not collapsed in light of the potential nationwide ban.

I do not support H.R. 511. The Fish and Wildlife Service utilizes well established and accepted guidelines that they developed over the years to help them determine if a species is injurious. Adding species to the Lacey Act through legislative fiat completely negates the roll of the Fish and Wildlife Service in determining if a species is injurious. Circumventing the regulatory process by allowing species to be designated "injurious" without going through a science based risk analyses allows very powerful special interests to be able to convince legislators that certain species are harmful when in reality they are not. This is a dangerous precedent.

In conclusion, I remain mystified as to why the Congress believes its scientific analysis should supersede that of the Federal agency they designated to conduct the requisite risk analysis of species that might warrant listing under the Lacey Act. The State of Florida has addressed the issue; it has implemented a comprehensive regulatory process to protect Florida's interests. A nationwide ban is not warranted and I urge that H.R. 511 not be supported.

Thank you for providing me an opportunity to submit my comments.

Dr. FLEMING. Thank you, Ms. Sutherland. Thank you for your testimony.

Now, Mr. Jenkins, you are recognized, sir, for 5 minutes.

**STATEMENT OF PETER T. JENKINS, EXECUTIVE DIRECTOR,  
NATIONAL ENVIRONMENTAL COALITION ON INVASIVE  
SPECIES**

Mr. JENKINS. OK, thanks very much. Thanks for the opportunity to testify today. I am testifying as a consultant working through my firm, "The Center for Invasive Species Prevention," consulting for the National Environmental Coalition on Invasive Species, or NECIS. NECIS includes the National Wildlife Federation, John's organization, the Nature Conservancy, the Wildlife Society, Great Lakes United, National Audubon, and many other groups.

Given the short notice for this hearing, my full testimony, which I have submitted, hasn't been approved as NECIS testimony. But the positions I am going to advocate are the NECIS positions.

When the Fish and Wildlife Service listed the four snake species at the beginning of this year, it basically violated the Lacey Act in that decision by excluding the five other species for reasons that had nothing to do with the Lacey Act and the statute. That is the problem that H.R. 511 can fix, if the 2 bad amendments are removed that John Kostyack referred to.

The statutory standard that the Service's listing should have followed was not to weigh the benefits versus the revenue losses of Ms. Sutherland and others from a possible Lacey Act listing. It was to decide simply whether the snakes fit the definition of an injurious species under the Act. That definition is—and I quote—"Are they injurious to human beings, to the interest of agriculture, horticulture, forestry, or to wildlife or the wildlife resources of the United States?"

It is abundantly clear that all nine of these large constrictor snakes meet that standard. Let me address the five snakes that

weren't listed. We know for a fact that the Fish and Wildlife Service—as was mentioned by Mr. Sablan—the Fish and Wildlife Service wanted to list all nine of the species. They felt it was scientifically the right decision. But they were compelled by OMB to cut the list back to the four species. Why? Because OMB apparently got persuaded by USARC's claims—that Mr. Wyatt is going to talk about, I'm sure—which are about lost revenues, which is fine, but it is against the statutory standard that I just mentioned.

Boa constrictors, which we have heard a lot about, which were excluded from listing due to OMB, have already invaded at least twice in South Florida—or at least twice in this country—and are high risk, according to the USGS. We just received confirmation last night from leading scientific experts with USGS and university scientists that there is a rapidly expanding invasion of boa constrictors now in Puerto Rico.

People have known about this invasion, but we weren't clear on how serious it was. And there should be new evidence published within the next week or two in peer-review journals that we are not just talking about a South Florida problem. It is not a localized problem. It is a problem for South Texas, Puerto Rico, any semi-tropical area in this country. The Island Territories, you name it, boa constrictors can easily and readily invade there, and they have in Puerto Rico. So let's get off that this is a localized South Florida problem.

Reticulated pythons were also excluded because of OMB pressure from that listing. The thing about reticulated pythons, we don't have evidence of invasions yet, but we know that they are known as particularly vicious animals. They are prone to unprovoked attacks. And in their native ranges, it is reported they are occasional man-eaters. Reticulated pythons in this country have killed more infants than any other snake, including an 11-month-old boy, a 20-month-old boy, and a 7-month-old girl in her crib.

The other three species OMB excluded were the anacondas. Now, is there anyone in this hearing room who really believes that we need anacondas as pets in this country?

OMB's interference was extremely unfortunate also because USARC's lost revenue claims are grossly inflated and unrealistic. Georgetown Economic Services, which you mentioned, Mr. Chairman, which did the USARC reptile study, is a subsidiary of the law firm that represents Mr. Wyatt's organization. Of course it is a biased study. Its findings were severely critiqued by outside economists, including Tim Kroger, an economist with The Nature Conservancy. According to Dr. Kroger's statement, which I would like to hand in for the record, Mr. Wyatt's study has serious flaws. Dr. Kroger identifies so many biased assumptions and errors of facts and misstatements in that study that it is too long to list here. But they are included in my written testimony.

Some other key points, if I may. At least 750 different reptile species are in the animal import trade in the U.S. If H.R. 511 passes, the reptile importers and breeders face losing up to only 5 species. That is less than 1 percent of the total of the reptile trade. There are numerous safer, non-invasive species that can substitute for those lost five, and they will. They are doing it. The pet industry is highly adaptable. The snake breeders generally do import

and breed lots of other species besides the large constrictors. So they can and will adjust their operations.

I would just like to finish on the important point that was mentioned. Of the 17 deaths that have occurred across the Nation due to these snakes that these breeders are selling in this country, these have an economic value, not to mention the incredible hardship and tragedy that these families and children who are involved in these deaths suffer.

So, USARC's approach seems to be to just ignore this and say, "Buyer Beware." Oh, everyone has got to take care of the problem on their own. But what about the children and the infants who are strangled in their cribs? How are they supposed to beware of this problem? This is real. This is a real part of the injuriousness standard. It is not just about South Florida. Thank you.

[The prepared statement of Mr. Jenkins follows:]

**Statement of Peter T. Jenkins, Executive Director,  
Center for Invasive Species Prevention**

Chairman Fleming, Ranking Member Sablan, members of the Subcommittee, thank you for the opportunity to testify on H.R. 511 and the issue of listing the nine species of large constrictor snake—boas, pythons and anacondas.

I am testifying as a consultant, working through my firm the Center for Invasive Species Prevention, consulting for the National Environmental Coalition on Invasive Species (NECIS). NECIS is a coalition of groups concerned about invasive species and Federal policy. It includes the National Wildlife Federation (NWF), The Nature Conservancy, The Wildlife Society, Great Lakes United and many other groups. Given the short notice for me being a witness, my full testimony has not been approved as NECIS testimony, but the policy positions I will advocate on H.R. 511 and on the listing of the nine snakes are the NECIS positions.

A bit on my background: I have 22 years of experience, both national and international, in invasive species as a policy analyst, attorney, advocate, lobbyist, consultant, manager, author and speaker. I have been invited to speak at conferences around the world on invasive species policy and management and testified twice before to this Sub or Full Committee on the topic—once back in 1993 and again in 2008. I have approximately 15 publications addressing multiple aspects of invasive species, including having written the chapter on the "Pet Trade" in the comprehensive *Encyclopedia of Biological Invasions*, published in 2011 by the University of California Press. My most recent paper is in *Biological Invasions*, entitled "Invasive animals and wildlife pathogens in the United States: the economic case for more risk assessments and regulation." That latter topic is really what I will focus on here: the economics and the case for more regulation of these snakes, not less.

When the Fish and Wildlife Service listed the 4 snake species at the beginning of this year, it basically violated the Lacey Act by excluding the 5 other species for non-statutory reasons. That is the problem that H.R. 511 could fix, if the two bad amendments to it are removed, as referred to by John Kostyack of NWF in his testimony. The statutory criterion the Service's listing should have followed was not to weight the benefits versus the costs of a possible Lacey Act listing, it was to make a science-based decision on whether these snakes fit the definition of an "injurious species" under that Act, i.e., whether the species are:

injurious to human beings, to the interests of agriculture, horticulture, forestry, or to wildlife or the wildlife resources of the United States.

It is abundantly clear these large constrictor snakes meet that definition. The USGS snake expert report thoroughly assessed the question of "injuriousness". The current and potential risk these massive constricting non-native snakes pose is beyond reasonable doubt, given the high likelihood that if further unregulated imports and interstate commerce occur, these snakes will continue to be released by irresponsible pet owners and will continue to be able to establish harmful breeding populations throughout significant areas in the southern portion of the nation and in our vulnerable island territories too.

The buyers of these snakes often are not aware of how big they will grow and how expensive it is to keep them properly. When the buyers realize what they have gotten themselves into with a 15 foot long, 200 lb., dangerous animal after full grown, it is not surprising that they release them in the nearest forest or swamp.

Indeed, we know for a fact that releases and escapes happen all the time—all over the country.

Boa constrictors, which were excluded from the listing rule, have already been released or escaped and invaded at least twice in this country and are “high” risk per the USGS report. Reticulated pythons, which also were excluded, were “moderate” risk invaders per the USGS; however, according to the excellent new report by the Humane Society on Constrictor Snake Incidents, they also are known as particularly “vicious,” prone to unprovoked attacks and in their native ranges are reported as “man eaters” more so than any other species of snake. Reticulated pythons have killed more infants in this country than any other species, including an 11 month old boy, a 21 month old boy and a 7 month old girl.

The other three excluded species were the anacondas. Does anyone really believe we need anacondas in this country as pets? The question answers itself. If we can’t restrict anaconda imports, what can we restrict?

We know the Fish and Wildlife Service staff and indeed all the way up the Secretary of the Interior wanted to list all 9 species, but they were compelled to cut the list back to 4 species by the Office of Management and Budget (OMB). Why? Because OMB apparently got persuaded to believe the USARK arguments about economic impacts. This was extremely unfortunate because economic impacts are not in the Lacey Act decision-making criteria the Administration was supposed to follow and because USARK’s economic analysis was shoddy and unreliable.

Georgetown Economic Services, which did the USARK “reptile regulation study,” was a subsidiary of the Washington law and lobbying firm that represented USARK in its opposition to the snakes listing rule, Kelly Drye & Warren. Economists have criticized their analysis as grossly inflated and full of biased assumptions. Its findings of high losses are contrary to analysis by the Fish and Wildlife Service, the Congressional Budget Office and Timm Kroeger, PhD., an economist with The Nature Conservancy. According to Dr. Kroeger’s statement, which I will give you a copy of, it has “serious flaws”, i.e., it:

- (1) Ignores likely substitution effects on the part of both the reptile industry and reptile owners, which leads to a likely large upward bias in the resulting estimates of negative economic impacts from the proposed rule.
- (2) Focuses only on the negative impacts on one small segment of the reptile industry (that is, breeders and importers of these nine large constrictor snakes) and snake owners that may result from the implementation of the proposed rule, while completely ignoring the positive impacts the rule would have in terms of benefits for native wildlife, including threatened and endangered species, avoided control and eradication expenditures by government agencies, and human safety. Such a one-sided analysis cannot inform sensible public policy, which should consider both the costs and benefits of a regulation.
- (3) Uses an inappropriate discount rate that by itself leads to a substantial (close to 20 percent) overstating of the projected future costs of the rule. This, together with the unreasonable expectation that no substitution effects will occur on the industry or consumer side, introduces a further upward bias in the study’s cost estimates that makes the latter even more doubtful.
- (4) Incorrectly applies the term “economic losses” when referring to what in fact are reductions in revenues for this small segment of the reptile industry. This is not merely a problem of semantics that is likely to mislead many readers of the report. Rather, economic losses—or net reductions in business assets—from reduced sales are always smaller than revenue reductions. By basing its analysis on revenues rather than losses expected to result from the proposed rule but referring to those revenue reductions as losses, the report overstates the actual losses industry may suffer as a result of the rule. This, combined with the likely dramatic overestimation of those expected revenue reductions for the reasons listed in comments (1) and (3) above, further exaggerates any negative impact the rule might have on the reptile industry.

Some other points related to USARK’s report:

- It relies extensively on unreferenced data, i.e., “fact” assertions for which no source whatsoever is identified. It relies heavily on data for which the only source is an anonymous “personal communication” with unnamed people in the reptile industry. In short, the data sources cannot be checked. It frequently relies on unexplained calculations and includes several admissions that the information used for the study was inadequate. The author was not a PhD. and it was not peer-reviewed.
- At least 750 different reptile species are in the import trade. If H.R. 511 passes, then the reptile importers and breeders face losing only up to 5 spe-

cies from being imported—less than 1%. There are numerous safer, non-invasive, non-dangerous species they can substitute for those lost 5 species, only 2 or 3 of which are actually imported now. The pet industry is highly adaptable. The USARK study ignores that.

- The importers and breeders of those 2 or 3 snakes at risk of prohibition in reality, despite all of USARK's exaggerated claims, appear at most to number one or two dozen small businesses. And those businesses generally import and breed other species too, so they aren't going to go out of business, they will just adjust their operations, as no doubt they already have.
- USARK gave no consideration of environmental benefits in the native range countries from reduced harvesting pressure, even though it is documented that some of these species are not sustainably harvested in some countries.
- Future human deaths caused by the 9 snake species are very predictable based on historical patterns and these snakes' inherent behavior. These are obviously high-impact, tragedies and costs, as the Humane Society has documented. Human deaths certainly must be considered as being far more important than speculative, biased claims of lost snake sales by USARK.
- We know at least 17 deaths have occurred across the nation according to media reports. Likely many more occurred that were not reported in the media. We also know that OMB recognizes a concept known as the Value of Statistical Life, or VSL. Currently, a "reasonable average" for the VSL is \$5.5 to \$7.5 million per life. By this admittedly cold measure, reducing the risks these snakes pose to humans, will provide a substantial economic benefit, while preventing real tragedies to our citizens and families that cannot be economically measured. USARK's approach seems to be "buyer beware"—but how could the several young children and infants strangled by these snakes beware?

Unfortunately, the analysis of the economics of listing the snakes by USARK, and by OMB and by the Fish and Wildlife Service for that matter, fail to consider the benefits in terms of lives saved and environmental damage and public lands management and control costs avoided. When all those savings are taken into account the national-level benefits of the snake listings are strong. The selfish interests of a few breeders and importers, who have successfully "externalized" the costs to date and don't pay a dime of the public land control bills for their escaped or released snakes, which are footed by the taxpayers, should not block the nation from those benefits. Passing H.R. 511 without the two bad amendments will achieve that.

The argument that this is a "Florida only" problem and that Florida law has already "taken care of it" is false. Published climate/snake range projections predict the potential range of these species as including portions of the "southern tier" States, Hawaii and the territories. Florida's new law may prohibit most of the constrictors as private pets there, but it does not prohibit breeders from operating in Florida, where many of them do operate, and selling those species into other States. Florida's interests do not match up with the national interest in this case.

#### **Further thoughts:**

The snakes listing rule, weak as it was, took 6 years to finalize, which is far too long. It illustrates that the Lacey Act injurious species listing section (18 U.S.C. 42)—which is 112 years old—is too reactive, too slow and is not cost-effective for our nation. All of the serious stakeholders involved seem to agree on that, as does the Fish and Wildlife Service itself.

NECIS has strongly endorsed a fix to this problem, H.R. 5864, the Invasive Fish and Wildlife Prevention Act of 2012, which was introduced by Mrs. Slaughter of New York and has 30 bipartisan co-sponsors. This bill would reform the listing process, making it faster and more effective, and bring it from the year 1900 when the process was first created, into the modern age. On behalf of NECIS and dozens of other endorsing groups—from sportsmen's groups to humane organizations—I urge you to take up the Invasive Fish and Wildlife Prevention Act in the next Congress and to move it to passage. This Subcommittee is the gateway to needed reforms and it has not done enough in the past to advance them.

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**Response to questions submitted for the record by Peter T. Jenkins,  
Executive Director, Center for Invasive Species Prevention**

#### **Questions from Mr. Sablan:**

1. **The benefits of constrictor snake ownership are limited to a very small portion of the population, yet the cost imposed by these animals if they become invasive will be very great. For example, the Department of the**

Interior Spent \$2.23 billion to combat invasive species in 2011 alone. Do you think that's fair? Should the American tax payer be held responsible for bearing these costs? And do you believe state and local laws are sufficient to prevent the introduction and spread of large constrictor snakes?

2. Will state laws fully protect America's natural resources from the injurious snakes listed in H.R. 511? If not, why not?
3. A study published in the journal *Biological Invasions* on November 30th provides evidence for a growing invasion of *Boa constrictor* in Puerto Rica. Does this provide evidence that H.R. 511 is necessary to protect Puerto Ricans and other Americans from the risks posed by the species listed in H.R. 511?
4. How would H.R. 5864, the Invasive Fish and Wildlife Prevention Act of 2012, which was introduced by Representative Louise Slaughter, prevent harmful species invasions like the ones we have seen in Florida and Puerto Rica?

**Answers to Questions from Mr. Sablan:**

Answer #1: Benefits etc.: No, it is not fair to externalize the costs of these pets to the public. The taxpayer should not pay for these costs, the pet industry should via a user fee and after the high-risk species have been restricted. State and local laws are inadequate as it is a nationwide issue involving international imports into more than a dozen ports and interstate commerce that no one State can regulate.

2. State laws. No, because States do not and cannot regulate commerce across their borders, except Hawaii and perhaps Alaska. The others cannot prevent animals from being imported into their State from other States.

3. Puerto Rico invasion. Yes, this invasion makes clear that if 20 years ago, the Fish and Wildlife and/or Congress had had the foresight, they could have prevented these Florida and Puerto Rico invasions, which now may be irreversible. Passing H.R. 511 without the weakening amendments can still help to prevent future similar invasions elsewhere.

4. H.R. 5864. This bill would reform the Lacey Act injurious animal listing process, making it faster and more effective, giving the agency needed tools and authorities, and bring the listing process from the year 1900 when the process was first created, into the modern age. Congress should take it up next session and pass it.

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Dr. FLEMING. Yes, I am sorry, sir, you are out of time.

Mr. JENKINS. OK. Thank you very much.

Dr. FLEMING. But thank you for your testimony. I now recognize Mr. Wyatt for 5 minutes, sir.

**STATEMENT OF ANDREW WYATT, PRESIDENT,  
UNITED STATES ASSOCIATION OF REPTILE KEEPERS**

Mr. WYATT. Thank you, Mr. Chairman, Mr. Vice Chairman. Good morning. My name is Andrew Wyatt, and I am the CEO and President of the United States Association of Reptile Keepers. We are an organization representing breeders, manufacturers, collectors, and scientists who work in the reptile industry. Many of our members are small business owners or sole proprietors.

The modern reptile industry has grown and been established as a legitimate cottage industry that pumps approximately \$1.4 billion per year into the U.S. economy. Herpetoculture refers to the ownership and breeding of captive reptiles and amphibians. It evolved from the import and trade of inexpensive pet store animals into a sophisticated, non-traditional agricultural pursuit, a pursuit that has continued to thrive, to provide jobs and to stimulate the U.S. economy, even in the face of recent economic downturns. Our members provide high-quality, captive-bred reptiles to zoos, aquariums, research facilities, educators, TV and film, and the pet industry. Some specimens sell for tens of thousands of dollars.



Pythons and boas have been here for decades in well-established captive breeding programs. Our main issue is with interstate transport and the negative impact on thousands of well-established small businesses engaged in herpetoculture. Banning the trade of these incredibly valuable animals across State lines would destroy jobs and livelihoods. This is the real job-killer that Oversight Committee Chairman Issa referred to during his hearing on the Federal Rule as an example of an overzealous, bureaucratic response that is the result of politically motivated or biased science.

H.R. 511, or prior versions of it, have been debated for about 5 years now. The Obama Administration enacted a partial rule last January that was initiated in early 2008 by the U.S. Fish and Wildlife Service. The U.S. Geological Survey science, the unsound foundation upon which this bill is based, is widely seen as weak and controversial within the scientific community.

The U.S. Fish and Wildlife Service did no cost benefit analysis. The Congressional Budget Office report on H.R. 511 never made mention of the economic impact to small business owners working in herpetoculture, despite the fact that Georgetown Economic Services, the only folks who have bothered to do any kind of economic research into this, did a comprehensive report on the reptile industry in 2011. According to GES, listing these nine constricting snakes on the injurious wildlife list of the Lacey Act would cost small businesses as much as \$104 million in the first year, and as much as \$1.2 billion over the next 10 years.

This action has been opposed by the U.S. Chamber of Commerce, the Small Business Administration, the Association of Zoos and Aquariums, the Pet Industry Joint Advisory Council, and the United States Association of Reptile Keepers.

The argument by the Administration that invasive Burmese Pythons are experiencing a continued population increase and are poised to expand their range across the southern third of the United States is not supported by evidence. A single USGS report erroneously suggests Python populations could expand from the southern tip of Florida to the San Francisco Bay. The populations of pythons actually peaked in the summer of 2009, and then crashed in the winters of 2009 and 2010. The decline in python numbers since the 2009 peak has been significant. The Florida Fish and Wildlife Commission believes 30 to 50 percent of the remaining wild Burmese Python population died in January and February of 2010.

A newly published study in integrated zoology by Dr. Elliott Jacobson, et al., is a collaboration of the University of Florida, USDA, and real python experts. It calls into question the fundamental premise of the USGS climate work that pythons can migrate out of South Florida and across the southern third of the U.S. This peer-reviewed paper published in September 2012 confirms what at least 4 other studies have also demonstrated—and I quote—“It appears unlikely that the Burmese Pythons inhabiting the Everglades will be capable of expanding or becoming established far beyond Southern Florida.”

The majority opinion indicates that, in the wake of the python population collapse, the remnant population of feral Burmese Pythons in South Florida cannot survive north of Lake Okeechobee.

Sub-tropical low temperatures, even in South Florida, are lethal to tropical pythons. They are not physiologically able to survive the cold, and cannot survive in more temperate areas of the country. Simply put, when temperatures drop, pythons die.

If there are lessons to be learned here, they are as follows: number one, science is a tool to provide insight for solving complex problems, not a justification for arbitrary and capricious government action to satisfy ideological goals; number two, government's role in private business is to protect free market competition, not to pick winners or losers based on popular preference; number three, the Lacey Act is in dire need of fundamental reform to be of any real conservation value.

In closing, H.R. 511 is a job-killing bill that preempts the rights of States to manage their own citizens and affairs by seeking to ban the importation and interstate transport of nine species of constricting snakes. It is a nanny-state legislation at its worst, and will bankrupt thousands of small businesses and cost our economy more than \$100 million per year. Thank you very much.

[The prepared statement of Mr. Wyatt follows:]

**Statement of Andrew Wyatt, CEO and President,  
United States Association of Reptile Keepers (USARK)**

Good Morning. My name is Andrew Wyatt and I am the CEO and president of the United States Association of Reptile Keepers (USARK), a membership organization representing breeders, hobbyists, collectors, and scientists who work with or in the reptile industry. Many of our members are small businesses or sole proprietors.

The modern reptile industry has grown, evolved, and has been established as a legitimate cottage industry that pumps well over one billion dollars per year into the U.S. economy. "Herpetoculture" refers to the ownership and breeding of captive reptiles and amphibians and it has grown into a \$1.4 billion industry in this country. It evolved from the import and trade of inexpensive pet store animals into a sophisticated, non-traditional agricultural pursuit, a pursuit that has continued to thrive, to provide jobs and to stimulate the U.S. economy even in the face of the recent economic downturn. Our members provide high quality, captive bred reptiles to zoos, aquariums, research facilities, educators, TV & film, and the pet industry. Some specimens sell for tens of thousands of dollars.

It has been repeatedly stated that H.R. 511 is about stopping the importation of these animals. It is not. These animals have been here for decades and they are thriving in well-established, genetically diverse, private captive breeding programs. A small percentage of these animals are imported to the U.S. Our issue is not with importation. It is with interstate transport, and the negative impact on thousands of well-established small businesses engaged in herpetoculture. Importation of these animals could stop tomorrow without any significant adverse consequence to the herpetoculture industry. On the other hand, the ability to conduct the trade of these incredibly valuable animals across state lines would be prohibited costing jobs and destroying livelihoods. This is the real "job killer" that Oversight and Investigations committee Chairman Issa referred to during his hearing on the federal rule as an example of an overzealous bureaucratic response to a problem that is at most local in nature and at worst, the result of politically motivated or biased science.

H.R. 511, or prior versions of it, have been debated for about five years now. The Obama Administration enacted a partial rule last January that was initiated in early 2008 by U.S. Fish & Wildlife Service (FWS). The U.S. Geological Survey (USGS) "science", the unsound foundation upon which this bill is based, is widely seen as weak and controversial within the scientific community. FWS did no cost benefit analysis. The Congressional Budget Office report on H.R. 511 never made mention of the economic impact to small business owners working in herpetoculture, despite the fact that Georgetown Economic Services (GES) did a comprehensive report on "The Modern U.S. Reptile Industry" in 2011. According to GES, listing these nine constricting snakes on the 'Injurious Wildlife' list of the Lacey act would cost small businesses as much as \$104 million in the first year and as much as \$1.2 billion over 10 years. This action has been opposed by the U.S. Chamber of Commerce, The Small Business Administration (SBA) Office of the Advocate, Association of

Zoos & Aquariums (AZA), Pet Industry Joint Advisory Council (PIJAC) and the United States Association of Reptile Keepers (USARK).

The argument by the Administration and FWS that invasive Burmese pythons are experiencing a continued population increase and are poised to expand their range across the southern third of the U.S., is not supported by evidence. A single (USGS) report based on fatally flawed presumptions, and that has been castigated within the scientific community, suggests python populations could expand from the southern tip of Florida, north to the Chesapeake Bay, and west to the Ohio Valley, and San Francisco Bay.

FWS alleges that feral pythons are eating endangered species and small mammal populations, while endangering our pets and children as they crawl northward. The actual scientific data indicate the opposite. There has been a dramatic reduction in the numbers of Everglades pythons, and no demonstrable connection with any decline in mammal populations. Everglades National Park spokeswoman Linda Friar said park biologists have “no hard science” demonstrating there has been a dramatic reduction in mammal populations.

The population of pythons peaked in summer 2009. This was followed quickly by a population crash in the winters of 2009 and 2010. The decline in python numbers since the summer 2009 peak have been significant. The Florida Fish & Wildlife Commission believes 30–50 percent of the remaining wild Burmese python population died in January and February 2010.

A growing body of scientific evidence contradicts USGS climate range predictions for feral Burmese pythons in the U.S. Scientists from around the world have criticized the USGS work. Barker & Barker gave the most pointed criticism stating, “. . . the scholarship behind it is poor, and constitutes either careless disregard or purposeful exaggerations . . .”

Newly published in *Integrative Zoology*, “Environmental temperatures, physiology and behavior limit the range expansion of invasive Burmese pythons in south-eastern USA,” by Jacobson et al., is a collaboration by University of Florida, USDA and real python experts. It calls into question the fundamental premise of the USGS climate work that pythons can migrate out of south Florida and across the southern third of the U.S. This peer reviewed paper published in September 2012 confirms what other studies have also demonstrated: “. . . [I]t appears unlikely that the Burmese pythons inhabiting the Everglades will be capable of expanding or becoming established far beyond southern Florida”.

There are at least four other cold weather studies from the University of Florida, USDA Wildlife Services, Savannah River Ecological Lab and Vida Preciosa International that continue to stand in stark contrast to the USGS projections. A report by U.S. Department of Agriculture researchers indicates that Everglades Burmese pythons displayed no instinct to protect themselves from fatally cold weather and most could not survive even the moderately mild conditions of mid-Florida winter.

The majority opinion indicates that, in the wake of the python population collapse, the remnant population of feral Burmese pythons in south Florida cannot survive north of Lake Okeechobee. Sub-tropical low temperatures even in south Florida are lethal to tropical pythons. They are not physiologically able to survive the cold, and cannot survive in more temperate areas of the country. Simply put, when temperatures drop, pythons die.

What remains is a small cabal of scientists drawn to the python question by the promise of federal funding [Giant Constrictor Risk Assessment Partnership (GCRAP)]. A number of NGO’s with close ties to the Administration also see an opportunity to further their ideological agenda in providing matching funds. It has become popular and acceptable to make wild exaggerations about the nature of the issue in order to attract attention from the media and politicians. Instead of addressing their problems and making corrections, GCRAP has doubled down and made even more unsupportable statements. The specter of Burmese pythons in the Everglades has played fast and sexy in the media. This, combined with a prevailing cultural fear and bias regarding snakes, has aided in the politicization of the issue. The facts won’t support a listing, so making this a political issue is the easiest way forward.

Even if it were conceded that pythons represented a real threat as an invasive species in the U.S., which they do not, the idea that the Lacey Act could control the spread of animals that have been in the U.S. for about 50 years is ludicrous. The ‘Injurious Wildlife’ list is supposed to stop these animals at our borders; denying entry and preventing proliferation across state lines. Pythons already exist in captivity in 49 of 50 states. Never before has the government considered adding animals to the ‘Injurious’ list that are so widely held by the American public. In fact, even the Department of Interior has conceded in private meetings with our industry that the Lacey Act is an “inadequate tool” to address invasive species issues. The

Lacey Act has ballooned into a “one size fits all” solution to any issue that falls within the realm of FWS authority over wildlife. The Lacey Act is overly complicated, too far reaching and ineffective. It was originally designed to stop poaching. It has grown into a “one size fits all” solution to wildlife management. It is not the answer to the south Florida python question.

If there are lessons to be learned, they are as follows: 1) Science is a tool to solve complex problems, not a justification for arbitrary and capricious government action to satisfy political or ideological goals; 2) Government’s role in private business is to protect free market competition, not to pick winners or losers based on arbitrary staff or popular preference; and 3) The Lacey Act is in dire need of fundamental reform, having become too large, complex and ineffective to be of any real conservation value.

In closing, H.R. 511 is a job killing bill that preempts the rights of states to manage their own citizens and affairs by seeking to ban the importation and interstate transport of nine species of constricting snakes. It is nanny state legislation at its worst that will bankrupt thousands of small businesses and cost our economy upwards of \$100 million per year. When the Obama Administration finalized in part the exact same measure as a new regulation last January, Chairman Darryl Issa highlighted it in an Oversight and Government Reform Committee hearing and called it a “job-killer”. The American government’s role is not to pick the winners and losers of industry; to the contrary it is the role of government to protect the free market dynamic.

Thank you for this opportunity today.

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**Response to questions submitted for the record by Mr. Wyatt**

Georgetown Economic Services, LLC  
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Washington, D.C. 20007  
Telephone: (202) 945-6660

February 21, 2013

The Honorable John Fleming, M.D.,  
Chairman  
Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs  
House Committee on Natural Resources  
U.S. House of Representatives  
Washington, DC 20515

Dear Chairman Fleming:

We submit this letter in response to questions posed by Representative Gregorio Kilili Camacho Sablan (D-MP) about our May 12, 2011 report, “The Modern U.S. Reptile Industry.” You forwarded Rep. Sablan’s questions to the United States Association of Reptile Keepers (“USARK”), and they forward them to us. USARK also requested that we address criticisms of the report made by Dr. Timm Kroeger<sup>1</sup> and Mr. Peter Jenkins.<sup>2</sup> We respectfully request that this letter and its attachments be made part of the hearing record.

**GES’s Report on the U.S. Reptile Industry**

Georgetown Economic Services, LLC (“GES”) was asked by USARK to prepare a report that outlined the size, scope, and flow of trade of the U.S. reptile industry. The report also, estimated the impact to the U.S. reptile industry of listing nine specific constrictor snakes as injurious wildlife under the Lacey Act. We undertook that assignment in June 2010 and our completed May 12, 2011 report outlined our conclusions.<sup>3</sup> We found that:

- The U.S. reptile industry encompasses a vast number of participants including pet owners, hobbyists, breeders, importers, exporters, wholesalers, pet store proprietors, pet show promoters, entertainers, veterinarians, and manufacturers of pet food and ancillary pet products.

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<sup>1</sup>See: Dr. Timm Kroeger, letter to the Office of Management and Budget, commenting on behalf of The Nature Conservancy about the U.S. Fish and Wildlife Service’s Large Constrictor Snake Proposed Rule, RIN 1018-AV68, December 2011.

<sup>2</sup>See: Testimony of Peter Jenkins on behalf of the Center for Invasive Species Prevention, before the U.S. House of Representatives, Natural Resources Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs with respect to H.R. 511, November 2012.

<sup>3</sup>A copy of the Report is attached.

- In 2009, businesses that sell, provide services for, and manufacture products for reptiles earned revenues of \$1.0 billion to \$1.4 billion.
- In 2009, 4.7 million U.S. households owned 13.6 million pet reptiles. Reptile owners are spread throughout the United States without a concentration in any one area of the country.
- Reptile businesses can be found throughout the United States, although reptile importers are more densely concentrated in Florida and California than in other states.
- The vast majority of reptile businesses are small, individual or family-run businesses.
- With regard to the listing of the nine constrictor species under the Lacey Act, the report found:
  - The industry, and snake breeders and sellers in particular, will experience significant economic losses in the short-term. We estimate that the reduction of industry revenues will run between \$76 million to \$104 million in the first year.
  - Economic loss to the industry over the first ten years following an enactment would run between \$505 million to \$1.2 billion in lost revenues, assuming historical industry sales growth rates.
  - Even assuming no growth, the economic loss over the first ten years following an enactment would run between \$372 million to \$900 million in lost revenues.

#### **Criticisms of GES's Report**

We summarize and respond to questions and criticisms of the report made by Representative Rep. Sablan, Dr. Kroeger, and Mr. Jenkins below.

The report ignores likely substitution effects on the part of the reptile industry, which leads to a likely large upward bias in the resulting estimates of negative economic impacts from the proposed rule. (Dr. Kroeger)

#### **Response:**

It was beyond the scope of the project to estimate secondary effects of the proposed listing. However, from our discussions and interviews with members of the reptile industry we found that many of the nine proposed snake species are a sideline and a passion for snake hobbyists and reptile business owners. Many of the people that breed these snakes do so because they are deeply interested reptile husbandry and they are fascinated by these creatures. Breeders typically have spent many years selectively breeding particular snake coloration patterns and body types, known in the reptile community as morphs. Even if the breeder of a now banned species wanted to develop morphs in another snake species, that development will take a number of years. In addition, the proposed ban itself has a chilling effect on breeders willingness to invest in a new morphs. Therefore, the substitution effect will be de minimus.

Losses in interstate trade in the nine species, which will be banned under a Lacey Act listing, likely would be counteracted through an increase in the intra-state production and trade of those species. (Dr. Kroeger)

#### **Response:**

As stated in our report, the majority of reptile sales are made to out-of-state consumers.

Furthermore, reptile buyers and sellers are increasingly turning to the Internet and reptile trade shows to buy and sell snakes. Therefore, not only will a listing cut sellers off from many of their customers, it will shut down an avenue of growth for these businesses.

The Internet allows businesses to reach potential customers from all over the United States, (or Canada, or the rest of the world for that matter). To draw large crowds, trade shows (even regionally oriented shows) typically depend on reptile breeders and sellers from many different states at a minimum. In the most popular shows, breeders come from across the United States. Thus, a prohibition on interstate and international sales will mean that breeders will not have access to the critical number of customers needed to justify breeding the affected constrictors.

The listing will also balkanize the snake sector of reptile industry for the listed species. Instead of marketing to customers in North America or around the globe, the listing would create separate markets in each state. It is not clear that the breeding industries of many states could survive without inter-state sales.

The notion that intra-state sales of the listed species will be greater after the listing requires that intra-state consumers of the listed species increase the purchases of the listed snakes. We do not quarrel with the proposition that the listing will decrease supply of listed snakes in, say, Illinois, since all out-of-state suppliers are,

by law, excluded from the new the new Illinois intra-state “market.” *Ceteris paribus*, the reduction in supply would result in higher prices and less unit sales (i.e., trade). However, because the Lacey Act does not discriminate between breeders and pet owners, it is also illegal for pet owner to transport a listed species across states lines. That fact will decrease demand for the listed species, especially given that a significant number of Americans move across state lines each year. *Ceteris paribus*, the reduction in demand will also result in reduced unit sales.

In short, it is unlikely that there will be increased intra-state sales to offset the loss of inter-state sales.

The report incorrectly applies the term “economic losses” when referring to what in fact are reductions in revenues for this small segment of the reptile industry. This is not merely a problem of semantics that is likely to mislead many readers of the report. (Dr. Kroeger) Response:

The report was upfront in both its methods and its conclusions. Each time the report referred to economic impact or economic loss, the report explicitly stated that the losses and impacts that it was referring to concerned revenues. To characterize the report as misleading is itself misleading. Below we give a few examples:

“The industry, and snake breeders and sellers in particular, will experience significant economic losses in the short-term. We estimate that the reduction of industry revenues will run between \$76 million to \$104 million in the first year.” (Emphasis added) *The Modern U.S. Reptile Industry*, p. ii.

“Total reptile revenues, including reptile sales as well as ancillary product sales, range from \$1.0 billion to \$1.4 billion per year. Of these revenues, the listed constrictors account for approximately \$75.6 million to \$103.5 million per year. The first-year economic impact of the proposed rule assuming the Low-Impact Scenario is \$42.8 million to \$58.7 million in terms of lost revenues.” (Emphasis added) *Id.*, p. 71.

“Since the High-Impact Scenario posits that all revenues that the constrictors generate will be lost, the first-year economic impact of the proposed rule is \$75.6 million to \$103.6 million in terms of lost business revenues.” (Emphasis added) *Id.*, p. 72.

“The present value of the lost revenues is an estimate of the lost economic value associated with the listing of nine constrictors as injurious wildlife under the Lacey Act.” (Emphasis added) *Id.*, p. 74.

The report uses an inappropriate discount rate that by itself leads to a substantial (close to 20 percent) overstating of the projected future costs of the rule. (Dr. Kroeger)

#### **Response:**

Dr. Krueger in his comments notes that we used a 3.25% discount rate. He argues that a more appropriate rate would be 7%. Dr. Krueger states:

The correct rate to use is the average rate of return that the foregone profits could have and would have achieved. The historic (sic) average rate of return in the United States—approximately 7 percent—commonly is the rate used in such analyses, and is the default discount rate that the Office of Management and Budget requires federal agencies to use in benefit-cost analyses.

Dr. Krueger cites an Office of Management and Budget document, dated September 2003 for his authority.<sup>4</sup>

We do not dispute Dr. Krueger’s suggestion that the “correct rate to use is the average rate of return that the foregone profits could have and would have achieved.” We do not agree however that a 7% discount rate reflects the “average rate of return on foregone profits” in 2010, 2011, 2012, or today. We contend that the discount rate of 3.5% used in the report is appropriate. By suggesting that 7% is an appropriate discount rate, Dr. Kroeger effectively argues that over the next ten years it is reasonable to expect a 7% rate of return on a relatively safe investment. A 7% rate may have been justified in when higher interest rates were offered—such as those offered in 2003—but is not appropriate today.

Since we provide all the information to estimate the cost of the proposed listing, anyone is free to recalculate those costs using whatever discount rate they choose.

The report’s high-end loss estimate assumes that all sales of these snakes would stop, even though your own data shows that INTRA-state commerce, which would still be legal if H.R. 511 passed, account for almost 40% of sales. Doesn’t that make the estimate misleading? (Rep. Sablan)

<sup>4</sup> See: Office of Management and Budget, 2003, Circular A-4—Regulatory Analysis, Sep. 17, 2003. [http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory\\_matters\\_pdf/a-4.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf).

**Response:**

The estimate of the impact of listing all nine snake species under the Lacey Act required a prediction as to what business decisions participants of the reptile industry would take in reaction to the listing. No one can predict the future with any accuracy. However, when asked about the actions they would take in the face of a Lacey Act listing, many of the business owners that we talked to stated that they would have to shut down. Others were certain that, without inter-state sales, they could no longer justify the costs of breeding these snakes.

Instead of endorsing one prediction of the state of the future after a Lacey Act listing, we sought to give a range of possible impacts of the listing. We defined a low-impact scenario where “. . . it is posited that some (but not all) breeders will continue to breed the listed constrictors and to make intra-state sales and (for those who can) foreign sales if the proposal were to be finalized.” Report, p. 70. We defined a high-impact scenario based on the possibility “. . . that the combination of higher per-unit costs of breeding and maintaining the listed constrictors as well as the reduced market for the banned snakes (and the concomitant lower prices) make it unprofitable to breed, keep, and sell these snakes.” Id. Including a range of possible impacts is standard procedure in economic model and is not misleading. The actual impact is likely between the low-impact scenario and high-impact scenario.

The report relies extensively on unreferenced data, i.e., “fact” assertions for which no source whatsoever is identified. It relies heavily on data for which the only source is an anonymous “personal communication” with unnamed people in the reptile industry. In short, the data sources cannot be checked. (Mr. Jenkins)

**Response:**

All assertions made in the report have citations. The report includes 193 footnotes and a five page appendix explaining the process by which financial data about the industry was collected. While some (but not all) names of business owners that we interviewed are omitted, letting interview subjects remain anonymous allowed us to gather the most comprehensive database of financial information on reptile businesses currently available.

The financial information about the industry cited in the report comes from first hand interviews and surveys with a wide range of industry participants. Many of the people that we interviewed and surveyed asked to remain anonymous. Without anonymity we would not have had such extensive industry participation. This industry perspective was crucial in allowing us to understand the size and scope of the U.S. reptile industry.

Many studies that we reviewed on the industry, including the USFWS's economic impact analysis, complain about the lack of public information about the economics and dynamics of the U.S. reptile industry. Our report provides a reference source on the industry for the public and for legislators.

In addition to interviews, we conducted an extensive review of the literature about reptile businesses, reptile hobbyists, and the economics of the reptile industry. Secondary sources cited in the report include:

- United States Fish and Wildlife Service, Law Enforcement Management Information System (“LEMIS”) data.
- 2009/2010 American Pet Products Association National Pet Owners Survey
- Reptiles Magazine
- Pet Product News
- SEC filings
- Louisiana Department of Agriculture & Forestry, Turtle Farm Records Database
- The 2007 American Veterinary Medical Association's U.S. Pet Ownership & Demographics Sourcebook
- And numerous newspaper and trade paper articles.

The author is not a Ph.D. and the report was not peer-reviewed (Mr. Jenkins)

**Response:**

This criticism stems from a misreading of the title page of our report. The report had two authors, Dr. Robert N. Fenili and Mr. Ariel H. Collis. Dr. Fenili has a Ph.D. in economics. However, the authors disagree strongly that a Ph.D. (or a M.A. or B.A.) is required to comment or to express an expert opinion in a legislative proceeding.

As to peer review, the report was written for USARK not for academic journal. However, the legislative process has allowed our work to be scrutinized by third party reviewers, as evidenced by the comments of Dr. Kroeger and Mr. Jenkins. This process is akin to peer review.

Thank you for considering our comments.

SINCERELY,

Ariel Collis  
Economist  
Georgetown Economic Services

Robert Fenili, Ph.D.  
Assistant Director for Economic Analysis  
Georgetown Economic Services

Dr. FLEMING. Yes, thank you, Mr. Wyatt. Thank you, panel, for your statements.

At this point we will begin Member questioning of the witnesses. To allow all Members to participate, and to ensure we can hear from all of our witnesses today, Members are limited to 5 minutes for their questions. However, if Members have additional questions, we can have more than one round of questioning, and usually do.

I now recognize myself for 5 minutes.

Dr. Barr, I understand you are a biologist.

Dr. BARR. That is correct.

Dr. FLEMING. Yes, go ahead and move that to you, because I have several questions for you.

You have a Ph.D. in biology.

Dr. BARR. That is correct.

Dr. FLEMING. You know, I wish I had a dollar for every—I used to say a dime, but with inflation I say a dollar now—I wish I had a dollar for every bill that we have testimony in which somebody claims that global warming is the reason why we should move forward on the legislation. The truth is there is a consensus out there right now that, regardless of what may have happened before, over the past 16 years we have had temperature stability for our globe. So, I think the worry, the threat that in the next few years we are going to have reptiles on our doorsteps here in Washington, D.C. is really a little bit overblown. I think our national debt of \$16.3 trillion is certainly much more immediate.

But my question to you is this. I heard you mention ectothermal. Snakes are ectothermal. Reptiles are. We used to say “cold blooded”, “warm blooded.” Is that pretty much the same thing? Ectothermal would be cold blooded, what we used to call cold blooded? And warm blooded would be, what, endothermal?

Dr. BARR. That is correct.

Dr. FLEMING. So that means that snakes, reptiles in general, have great difficulty regulating their body temperature, and they are very subject to fluctuations in temperatures in the environment.

Dr. BARR. That is correct.

Dr. FLEMING. So, as I understand it today, what we are saying is that if temperatures approach 60 degrees and lower, that not only does a snake have difficulty eating and moving—because as those temperatures drop, he has more difficulty surviving, digesting, and it is unlikely to survive.

Dr. BARR. That—

Dr. FLEMING. Is that correct, sir?

Dr. BARR. That is correct.

Dr. FLEMING. So, that being the case, it really seems that whatever threat may be in Florida, that there is very little worry that that threat is going to occur anywhere else. As I understand it, we are talking about the Everglades, which is 80 miles south of



Miami. So we are talking about the very southern tip of the United States.

Well, let me ask you this. Those that are supposed to be invasive species in the Everglades, how did they get there?

Dr. BARR. That is a good question. I do not know.

Dr. FLEMING. The media would have us believe that pet owners are turning their snakes loose. Perhaps someone even in Utah may load their snakes up in a van, I guess, and drive down to the Everglades to dump them. Do we have evidence of that?

Dr. BARR. No. That seems unlikely.

Dr. FLEMING. OK. So, would it be more likely that such snakes, such reptiles, would get there perhaps through more conventional ways, perhaps onboard a water vessel, or something like that, that is just simply accidental?

Dr. BARR. That is a possibility.

Dr. FLEMING. So, I certainly think that before we go after pet shops and pet owners, that we should consider those things.

Dr. Barr, what has been the impact of the Lacey Act listing of the Burmese Pythons and the three other constrictor snake species by the Obama Administration earlier this year?

Dr. BARR. Are you asking in terms of the scientific community or the television community?

Dr. FLEMING. Yes, Mr. Wyatt.

Mr. WYATT. Yes, I would be happy to elaborate on that. What has happened, not only with the four snakes that were actually listed by U.S. Fish and Wildlife Service, but de facto, the five that have been left dangling out there with a partial rule having been made, but the final disposition of the remaining five has put the industry under incredible pressure. And the animals that have actually been listed have all but lost all value, and people have been going bankrupt and forced to make hard decisions about what to do with their animals. And even with the animals that were not listed, like Ms. Sutherland said, the values of these animals dropped.

If you are a rancher in Louisiana, and you are told one day that you can no longer sell your cattle out of Louisiana, that you can only sell them within the State, then it is going to put you in a very difficult position, and you are going to have to make some hard business decisions on how to feed those animals and take care of those animals when you have now lost all value.

Dr. FLEMING. So certainly it has been a significant negative impact on small businesses during a time that we can least afford it, with our economy being the way it is.

Well, I thank you. And the Chair now yields to Mr. Sablan, the Ranking Member, for 5 minutes for questions.

Mr. SABLÁN. Yes. Thank you very much, Mr. Chairman. And if there is no objection, Ms. Bordallo has something to go to, and I will yield my 5 minutes to her, and then I will take her time.

Dr. FLEMING. OK. Thank you, sir. Ms. Bordallo.

Ms. BORDALLO. I thank Ranking Member Sablan for yielding his time, and also to you, Mr. Chairman.

I would like to underscore the importance of addressing invasive species issues early, given the experience that we have had in the Territory of Guam with the brown tree snake, although they are

not a public safety hazard. The invasion by these snakes has led to changes in our environment, destroying native bird, bat, and lizard populations, and leading to changes throughout the ecosystem.

The economic impact is also high. Every year, the Federal Government must spend millions and millions of dollars preventing the spread of snakes to other islands, as well as on programs to restore habitats and to recover species.

Now, while the presence of the brown tree snake on Guam has been devastating, there is no reason to believe that the presence of giant constrictor snakes may be far more destructive. We on Guam wish attention and oversight had been paid to invasive species before the introduction of the brown tree snake. Invasive species are a problem that should be addressed early, or else spend decades and millions of dollars on eradication programs.

Now, I have a couple of questions for Mr. Kostyack. Mr. Wyatt and Dr. Barr both assert—and this is what the Chairman was talking about—both assert that when temperatures drop, pythons die. Well, couldn't they do other things, like move or adapt or take shelter?

And also, Mr. Heflick also mentions that last year only 46 invasive Burmese Pythons were caught in Florida. Now, don't you think that there are more in number, given that they are naturally camouflaged and good at hiding, and that a female can lay over 100 eggs?

Mr. KOSTYACK. Thank you for the question, Congresswoman. We have been in daily conversation with the leading researchers on this subject, the folks who have collected all the field data. And what they tell us is that, yes, there is a die-off when you have a cold snap. But let's say the die-off results in 30 percent mortality. What happens to that remaining 70 percent? And that is the answer to your question, which is those snakes have found a way to survive, and it is generally through hibernation or basking or some other behavioral action that enables them to avoid that die-off.

And so, that is a well-known biological phenomenon. It applies to tropical snakes, it applies to other snakes. And this is how snakes survive all across the Continental U.S. They have these abilities to get underground and get safe.

And so, there is absolutely no reason to believe that these pythons are limited to Southern Florida. The USGS, the U.S. Fish and Wildlife Service, the agencies that are charged with leading our Federal Government's presence on science and wildlife science, are unanimous in saying that these species are injurious, and that their range extends beyond South Florida, their potential range.

Ms. BORDALLO. Thank you. Thank you very much. The other one is to you, Mr. Jenkins. I have just one quick question. What percent of the reptile market do these snakes represent? Is there evidence that people could find good substitutes, and that businesses would not be severely harmed?

Mr. JENKINS. Thank you, Ms. Bordallo. That is a great question and I appreciate it. And as I said in my statement, there are at least 750 different reptile species that are imported in the entire reptile trade. Now, we are talking about limiting maybe five total. But only two or three of those are actually important, commercially. There are many safer alternatives. And that is what this leg-

isolation is all about. That is what the Lacey Act is all about. It doesn't even prohibit in-state ownership. It doesn't prohibit people from owning these snakes. It just says we are going to slowly wean these species out of the system by prohibiting international imports and interstate commerce.

So, there are many alternatives. It's a very slow-acting law. It gives Ms. Sutherland and her business time to react, time to look at the alternatives. And we know, from her website, that they already breed several other snake species that are perfectly approved and not a problem. So we are talking about limiting a small portion of their business. These are adaptable businesses. They can breed other species.

Ms. BORDALLO. Thank you very much. And I want to thank the Ranking Member, Mr. Sablan, for yielding his time. Mr. Chairman, I yield back.

Dr. FLEMING. I thank the gentlelady. Mr. Southerland is now recognized for 5 minutes.

Mr. SOUTHERLAND. Thank you, Mr. Chairman. Mr. Kostyack, I am curious. You made reference to the amendments. And the second amendment that you made reference to, you had an issue with, the difficulty or the burden that the government would have to prove someone guilty, that is a fundamental disagreement that I have with your problem. In this country you are innocent until you are proven guilty.

And so, explain that. Why should it be easy for the government, which has proven not to be able to regulate itself very well, have an easier time of violating the civil rights or any rights, legal rights, of any citizen in this country? And why should that bar be lessened or lowered?

Mr. KOSTYACK. Thank you for the opportunity to elaborate, Congressman. I am an attorney. And for a good number of years I was working in the judiciary as well as in private practice. And environmental laws have different standards of proof. There is virtually no environmental law that says the only way to hold somebody accountable is to prove that they knew they were in violation of the law. That was the knowing standard that was imposed by the Judiciary Committee. If you talk to anybody who prosecutes any law, they say that essentially takes us off of the ballfield.

And now, if there was an opportunity for civil enforcement, that would have a lower burden of proof, and then put the knowing standard at the criminal side. That would be one thing. But if the only tool you have in your toolbox is enforcement of the law by proving that somebody knew they were in violation of the law, that essentially makes it virtually impossible to enforce.

Mr. SOUTHERLAND. Now, I disagree with you on that. And I am not an attorney, but God knows I have paid enough of them in my lifetime in our businesses to try to protect us from overzealous regulators. All of our congressional offices are pounded each week about how the EPA, for example, does not have the burden of proof. And they are absolutely, in my opinion, the greatest threat to free enterprise in America today.

But that is not why we are here, but I appreciate it. I mean I disagree with you in that regard.

One of the things I am interested in going over, I guess, Mr. Jenkins you represent a lot of different organizations. And in your testimony you were concerned about the 17 deaths and the families that have experienced these deaths. And you seem very sympathetic to them.

I am curious if the organizations that you represent—what kind of efforts have your groups been involved in to expand hunting season for whitetail deer? Because I know, obviously, we have hunting seasons that take place and the time varies from State to State to State. But I don't know too many hunters that wouldn't like a couple extra days.

In your organizations is there an effort to expand—and I am going somewhere with this, but I know I have 1 minute—but do you know of efforts to expand hunting season?

Mr. JENKINS. Thank you for the question. My organization only focuses on invasive species prevention. I do consulting with these other groups. So I can't speak for them on the whitetail deer and hunting season and all that sort of thing.

Mr. SOUTHERLAND. Right.

Mr. JENKINS. It is a great topic. But I am going to, if I can—

Mr. SOUTHERLAND. Well—

Mr. JENKINS [continuing]. Turn it over to Mr. Kostyack, because he knows more about it.

Mr. SOUTHERLAND. OK. Go ahead.

Mr. KOSTYACK. So if your question is do we recognize that there is, in some places, an overpopulation of whitetail deer, and additional hunting may be necessary? Is that your—

Mr. SOUTHERLAND. Well, I want you to be consistent. And I find that from so many—and I have 30 seconds, so I will just surmise where I am going here.

In the year 2000, there were 247,000 automobile accidents with whitetail deer, resulting in over 200 human deaths. I have not heard any environmental organization coming in here with the premise that you just laid before this panel today, expanding deer season. And I have never heard an environmentalist come in here and have any concern at all for the 200 families that had to bury their loved ones because of overpopulated deer herds. It is inconsistent.

Mr. KOSTYACK. Well, my organization does share that concern.

Mr. SOUTHERLAND. I am sorry?

Mr. KOSTYACK. We do share your concern about that. In fact, we have a large number of hunters within our organization who work at the State level, where the seasons are set, not at the Federal level, to make sure that the right length of season is established. And so that—

Mr. SOUTHERLAND. Well, but one could surmise that if we have 200 people dying in 1 year from accidents, that the hunting seasons aren't long enough. Are those organizations advocating for longer hunting seasons?

Mr. KOSTYACK. Often times they do, yes. I mean I would refer you to Florida Wildlife Federation, our State affiliate, who works on those issues on a daily basis, there is a lot of science that goes behind setting the seasons. And that is an important question. But it is not typically something that Congress wrestles with.

Mr. SOUTHERLAND. No, I—

Dr. FLEMING. OK, the gentleman's time is up. The Chair now recognizes Mr. Sablan for 5 minutes, sir.

Mr. SABLÁN. Thank you very much, Mr. Chairman. I like Tom Rooney, and now I know exactly why. I must say this much, that he would not have gone to the trouble of developing this bill and introducing it if he had no serious concerns about these snakes in Florida.

And, Mr. Chairman, I have a very high regard also for my Chairman here. But again, if anybody has any question about climate change, if anybody questions the scientific facts, I have a place in Micronesia, where I am from. Come over. I will show you about climate change, about rising sea levels, and the change it is making to the islands. And if you doubt the science, then I have the physical evidence. But I am going to stick to the issue here.

Mr. Kostyack—did I say that correct?

Mr. KOSTYACK. Yes.

Mr. SABLÁN. Yes, and you are the lawyer, so I have to be careful here with my questions now.

Why is it so important that we prevent non-native species from being introduced in the first place? The Lacey Act, it is an important tool to prevent biological invasions. And can you speak to why the additional amendment to this bill by the Judiciary Committee harms wildlife and the economy?

Mr. KOSTYACK. Thank you for the opportunity to elaborate on this, because, really, this hearing is going to the basic question of are we going to have a Lacey Act that has any ability to protect this country.

If we were sitting in the House Armed Services Committee, and we were debating whether or not to have a no-fly zone for terrorists, there would be no dispute whatsoever. They represent a threat, a harm to this country, and we have a right, as a country, to defend our borders and a duty to defend our borders. It is the same issue with the Lacey Act. We have scientists who go through very rigorous processes to reach the conclusion that species are injurious to this country, and put forward that decision. And, therefore, we have a duty to follow through and to protect our people, protect our wildlife, and protect our rich, national heritage.

And so, that is the best strategy we have in this country for protecting our wildlife and habitat. It is not waiting for the species to arrive, and then spending millions of dollars trying to eradicate them. We know that is extremely costly and very unlikely to succeed. Look what is going on with feral pigs, with nutria, the list goes on and on. The brown tree snake.

We have so many invasive species in this country that are causing billions of dollars of damage to our economy. The zebra mussel in the Great Lakes.

Mr. SABLÁN. Yes.

Mr. KOSTYACK. The list goes on and on. And there is no strategy for eradicating them. So if we now have an opportunity to take a look and say, "What does the next wave look like? Are we going to do something about it when it is not expensive to us, and much more likely to be effective?" And the answer is, "Absolutely, yes."

The Lacey Act is the best tool we have for controlling invasive species.

Mr. SABLAN. Right. And, if I may also say, Mr. Wyatt stated earlier that because of the cold winters of 2009 and 2010, 30 to 50 percent of the invasive Burmese Python population in South Florida died. But by your own arithmetic or math, 50 to 70 percent of these snakes, which are not supposed to be there in the first place, survive. Right?

So, Mr. Kostyack, what would happen if we had a string of warmer-than-average winters? Isn't it possible that 30 percent won't die, and 100 percent will survive, and each one would have, like Ms. Bordallo said, 50 baby snakes, I mean calculate.

Mr. WYATT. That is actually right.

Mr. SABLAN. No, I am asking him a question. Not you, Mr. Wyatt.

Mr. KOSTYACK. So, briefly, my organization considers climate change to be one of the largest threats to wildlife and people in this country. And so we are well versed in the science. And the trend line we have seen in the past 20 years is going to continue, which is increasingly winters are going to become warmer. And globally, temperatures are going to continue to increase.

And so, we can be smart, and start preparing for that change, or we could put our head in the sand.

Mr. SABLAN. Yes, yes.

Mr. KOSTYACK. If we want to prepare for that change, we have to understand that the range of species that have historically been tropical will continue to shift northward. And I would be very happy to provide—

Mr. SABLAN. And I am going to make a fool out of myself here. Here we have actually invited invasive species. And at the same time we are trying to close the border and tell everybody who is here, undocumented aliens, to leave. I am just confused here. Maybe it is because I am from the Islands and I am naive about national politics. But welcome to the pets, I mean the invasive animals, and kick out the human beings. My time is up, Mr. Chairman. I made a fool out of myself already.

Dr. FLEMING. The gentleman yields back. If the panel is up for it, we will go through another round of questions. And we appreciate your patience with us.

Let me say parenthetically, with regard to a statement that Mr. Southerland made about the laws and the burdens of the law, it is interesting. We had hearings last year, I believe it was, on what happened to Gibson Guitar, who had \$50 million worth of wood confiscated as contraband. No charges were filed. The country of origin of the wood said no laws were broken, no one ever actually claimed a law was broken. And by law there was no access to the court by Gibson. And again, in a down economy, the last thing in the world we want to be doing is harming our companies and corporations.

With respect to Florida, Mr. Heflick, what has the State of Florida done to address this? And before you answer, I want to circumscribe the fact here that, regardless of all the discussion about snakes hibernating or they can find shelter and all of this, the truth is, that even though there may be 10 or 20 percent of off-

spring that may be a little heartier, all they have to do is to travel to a slightly cooler climate, and they are going to die, too. So there may be a buffer zone there, but it is very clear these snakes, at the present time, are very much restricted to the very lowest latitude of the United States. And no one, despite all the rhetoric today, no one has produced any proof that these snakes can migrate northward and survive.

So, it is important to know what Florida is doing and has done. Yes, sir.

Mr. HEFLICK. The Florida Wildlife Commission, which is charged with that, has done a lot. And I actually worked hand in hand with them in putting out these new regulations which consist of increased security for cages. There is a special permit now required for these animals, in that you must be an approved facility, an approved breeder, to be able to work with these animals. There are transport regulations now that we have stepped up, including double-bagging and putting into an additional container that is secured, in case there is a car accident, or the like.

They have really gone, really, over and above to get a handle on this. And it has really bottlenecked the market of these snakes down to about 95 percent. You don't see the commerce in them, you don't see the trade. The value is down. So it has really hurt the market. But Florida, which is obviously ground zero and the epicenter of this, has taken great strides in increasing the regulations and controls on these species.

And you are right about the buffer zone. You are talking to somebody who has had his boots on the ground. And I apologize to the other witnesses here who are using other people's testimonies within theirs, but in 2009, 2010, that winter, we saw countless carcasses. Carcass after carcass after carcass after carcass of these Burmese Python dead in the Everglades. And the figures that they are putting out there, 30 to 50 percent, I have firsthand knowledge of those. And those were put out to be conservative.

And really, when you look at the studies, my study, 100 percent of the animals dead in 4 days. When you look at Frank Mazzotti, who is one of the individuals that does the tracking of these Burmese Pythons and some of the vast majority of the studies on them, 90 percent of his animals that were tracked during that winter, dead. And the one that did survive was because they found it before it could die, they brought it in, and then later on, subsequently, it died from secondary causes of the cold.

So, these numbers that you are throwing out about 40 percent, 30 percent, are conservative, at best.

Dr. FLEMING. Right. Well, I would love to hear more, but for sake of time let me ask you another question.

Let's say that I own a constrictor in Florida, and it is too big, I can't handle it. What can I do, as a pet owner or a pet store owner?

Mr. HEFLICK. We have a 24/7 amnesty program, where designated locations—I, myself, am one that has been certified by FWC—anybody at any time, no questions asked, can donate that animal to get it into a safe facility. And it is working. I get those—

Dr. FLEMING. All right.

Mr. HEFLICK [continuing]. And other facilities do, also.

Dr. FLEMING. And let me follow up with that. How many people, if any, do you see driving from other parts of the country, dumping their snakes in the Everglades?

Mr. HEFLICK. There has never been one record, even anecdotal, of someone being arrested, pulled over, being caught, filmed, videoed, you name it, of dumping a snake in the Everglades.

Dr. FLEMING. Well now, sir, are you sure there haven't been snakes to crawl from Utah all the way down to the Everglades? Perhaps that could happen.

Mr. HEFLICK. That is a long trip.

Dr. FLEMING. I understand. Well, thank you. And my time is out. And Mr. Southerland—I recognize you for 5 minutes.

Mr. SOUTHERLAND. Thank you, Mr. Chairman. You know, you made a point about Gibson and the hearing we had. I know over in Agriculture we had—a few years ago we had—someone died from eating a pepper. And so the FDA shut down pepper farmers down in my district, peppers that had already been harvested or they were harvesting them at the time. And they made them destroy their entire harvest.

And so, they were not allowed to file any insurance claims, and so they were just out an entire harvest, an entire year. Many of these farmers went out of business only to find out that the pepper came from Mexico. Those farmers had no recovery. Ms. Sutherland, you have a small business. I have a small business. And much of the Federal Government could care less about your business. It could care less about our business.

I appreciate Minority witnesses here today and your trust in giving the Federal Government greater latitude and greater ability to be able to put downward pressure on freedom. But if I have learned anything over the short 23 months that I have been here, it is that a government big enough to meet all of your needs is a government big enough to take everything you own. Welcome to the nightmare that one of our founding fathers quoted 240 years ago.

This appears to me, Mr. Chairman, to be a solution looking for a problem. This is ridiculous. With all the problems we have in this country, I am dumfounded. I mean, we have \$90 trillion of unfunded mandates in our entitlement programs. I don't want to diminish what you do, but we got bigger fish to fry here, OK, than to target businesses, small businesses like Ms. Sutherland's and other small businesses around this country. It is open season on business. It is open season on enterprise. It is open season on freedom. And I think we can make quick work of this. This is a solution looking for a problem.

I yield back, which is very rare, Mr. Chairman.

Dr. FLEMING. Yes. Indeed it is, Mr. Southerland, to yield back early like this. But you owe it back to us, anyway, so we will take it.

Mr. SOUTHERLAND. Add it to my account.

Dr. FLEMING. But we ask that, in the future, you be a little more passionate about the things you believe in.

Mr. SOUTHERLAND. Well, that is—



Dr. FLEMING. The Chair now recognizes the gentleman, Mr. Sablan, for 5 minutes.

Mr. SABLAN. Thank you, Mr. Chairman. The amendment, Mr. Kostyack, you are the lawyer, so I have to go to you. I am not blaming you for being a lawyer, I am just holding you accountable for being—

Mr. KOSTYACK. I am a recovering lawyer, I should say.

Mr. SABLAN. So, if someone is driving a car and causes an accident and kills someone, they can be charged with manslaughter, despite not knowingly setting out to kill that person. And so that is why we have laws, traffic laws, right? And regulations. Isn't the Lacey Act the equivalent of traffic laws, in a sense?

Mr. KOSTYACK. Yes, it right now is what is known as a strict liability statute, which is it does not require knowledge of a violation of the law. It doesn't require knowledge of the chain reaction effect that, if you sell this pet, and the pet owner might accidentally release the animal or intentionally release the animal, that it could end up causing millions of dollars of damage all across our economy and destroying our environment. That is the effect, but we don't expect people to know all those facts before we enforce the law. And we don't expect a prosecutor to have the ability to prove what is in somebody's mind, those complex facts. That is the way our laws operate.

And, let's face it, if we didn't have it that way, if we didn't have strict liability statutes, we would not have been able to enforce a large part of the laws that regulate BP and its release—massive destruction of the Gulf of Mexico with the oil spill 2 years ago.

Mr. SABLAN. Right.

Mr. KOSTYACK. Those are strict liability statutes that has enabled the Federal Government to hold BP accountable. And so, turning it around here and creating this impossible burden of proof is essentially saying, "We don't care about the Lacey Act; we don't expect it to be enforced."

Mr. SABLAN. Ms. Sutherland, good morning. Please, I don't want to interfere in how you run your business. We all need to earn a living. And I commend you for your business, unlike some of us who are in Congress. I will leave it there.

But let me just give one example. I was at home and I found out that Twinkies are going to stop being sold, Twinkies. I mean the last time I had Twinkies was when I was in basic training and they actually told me to stop eating the stuff, because I was overweight.

[Laughter.]

Mr. SABLAN. But that doesn't mean that store owners now are going to go broke because Twinkies are being stopped, right? I mean we are talking here about nine species. I mean actually, now, it is only five. You can adapt to change, I mean other businesses can adapt to change. That is what businesses do, right? Otherwise, there is no reason for anyone to be in business. You are not telling me that the only things you sell are these five species, actually. Are you?

Ms. SUTHERLAND. No, I am not saying that. We do have an ancillary business. We breed rodents.

Mr. SABLAN. Yes.

Ms. SUTHERLAND. I supply one of the largest breeders of boas in my State with rodents for his boas. That amounts to approximately \$52,000 a year. And that helps pay for my employees that work in the rodent room.

And so, yes, it is true that businesses do learn to adapt. However, there are other circumstances other than, "Well, you can just change a snake." No. I have to change out all the caging, and then I have to find a buyer for that caging. And there are limits.

One of the things that goes along with this that hasn't been raised is boa constrictors and reticulated pythons are owned by—I mean boas more than the pythons—are owned by thousands of private citizens across the United States. If they are added to the Lacey Act, they will unknowingly break the Lacey Act by moving from one State to another, because the general public does not follow all the minute rules and regulations that are enacted every year.

Mr. SABLON. I have to reclaim; my time is out. Thank you. I really appreciate your response.

Mr. Jenkins, you see, where I come from we advertise on TV and in the paper, "If you see a snake, kill it. Then report it." So kill it first and ask questions later.

But, Mr. Jenkins, many of the witnesses have talked about this being only a problem in South Florida. However, insular areas like where I am from, the Territories, my home area, we are both warm enough to support these snakes and are particularly vulnerable to invasive species. Some of these snakes have already been found in the wild in Puerto Rico. Can you address the potential threat of these snakes to U.S. Territories?

Mr. JENKINS. Absolutely. And it just seems as if a lot of the discussion from Mr. Heflick, Dr. Barr, some of the discussion has been this idea that the snakes are going to crawl northward in Florida and invade the rest of the country.

Well, that is not how it is going to happen. We know—and there is an excellent report from the Humane Society that is in the record—that there are hundreds and hundreds of reports of releases around the country where these owners have the snakes, they let them go or they escape—we don't know exactly how the snakes get out—but it is in the media. We know there are hundreds of cases in 45 States and the Island Territories around the country. So snakes aren't going to crawl to South Texas or to the Territories.

Mr. SABLON. And I agree——

Mr. JENKINS. They are going to get released there.

Mr. SABLON. And just because Mr. Heflick has never heard of a case, doesn't mean that it doesn't exist. Just because he hasn't seen anyone——

Mr. JENKINS. It is documented.

Mr. SABLON [continuing]. Run a red light doesn't mean that somebody hasn't done it today is all I am saying.

Thank you very much, Mr. Chairman. My time is up.

Dr. FLEMING. The gentleman yields his time back. Well, let's see. We would like to maybe ask a few more questions. So thank you, again, for your patience. I now yield myself 5 minutes.

Mr. Heflick, now, there has been a lot of discussion about a lot of people killed, injured. We heard children constricted in their cribs and all of this as a result of constrictors that may have been brought into this country. With regard to constrictors in the wild, which is really what we are talking about here in the Everglades, how many humans have been killed, as a result of that?

Mr. HEFLICK. In the approximate two decades that the Burmese Pythons have been in the wilds of South Florida, the cumulative numbers of humans killed, attacked, is zero.

Dr. FLEMING. OK. Would it surprise you to know that there are over 200,000 Americans who were taken to the emergency room each year as a result of injuries, and even death, from dogs?

Mr. HEFLICK. It wouldn't surprise me. And there are also additionally 30,000 that require plastic surgery. Most of those are in the age range between 4 years and 9 years of age.

Dr. FLEMING. So if you were to compare constrictors versus dogs, which would you consider to be more injurious?

Mr. HEFLICK. I have worked with both. And I have sustained major injuries from Man's Best Friend and minor scrapes and scratches from the wild pythons that I have encountered around the world.

Dr. FLEMING. Right. So let me see if I can summarize a little information here. We understand that these imported constrictors, they are ectothermal, which means that they cannot survive in cold weather. As far as we know, they are completely encapsulated into the Everglades. Regardless of where they may have been released, they only survive in the Everglades.

Florida has, apparently, a very robust system, not only of preventing them getting into the wild, but certainly an amnesty program that I think is very fair, that you can give them up without any concern about repercussions. And so, Florida is handling a Florida problem that only exists in Florida. Do you see any problem with that, sir?

Mr. HEFLICK. No, I think that this is very much so a State issue. And Florida, which happens to be the epicenter for this, is handling it. They have gone above and beyond. And, ultimately, this talk about constrictors and invasives invading the rest of the country, whether released, escaped accidentally, or taking their time to slither north, is, in my biological opinion, absurd.

Dr. FLEMING. So you see no reason to pass a Federal law that would apply to 50 States and Territories for a problem that is not only limited just to Florida, but to a very small area of Florida?

Mr. HEFLICK. That is correct.

Dr. FLEMING. OK. Thank you for that. Shifting topics a little bit, we heard—I think it was—Mr. Jenkins testify that boa constrictors are an invasive species to Puerto Rico. But our information is that they are native to Puerto Rico, certain species are, and they are listed on the endangered species list. Mr. Wyatt, do you have any information on this?

Mr. WYATT. There are insular boas that are native to Puerto Rico. They are different from a boa constrictor, which we are talking about here. And so, because it is so far south, I do believe that they would probably be able to survive in Puerto Rico, if they were introduced there and established themselves. But I would guess

that Puerto Rico and other insular Territories of the United States, as well as any State, can pass laws to restrict those animals in that State where they may be a threat.

Dr. FLEMING. So Puerto Rico could do the same thing Florida has done.

Mr. WYATT. Absolutely.

Dr. FLEMING. OK. And just in the small amount of time I have left, just a general comment, and that is the framers of the Constitution created our government in which the powers and the rights of the Federal Government would be circumscribed, would be limited, and that all other powers would go to the States.

And again, I see this as a very, very limited geographical problem within a State that is very capable of handling the problem. And I think it simply goes against the traditions, much less the laws and the Constitution of the United States, to create such an overreach in law that really affects only a small part of this Nation.

And with that, I yield back and I recognize the gentleman from Florida for any questions he has.

Mr. SOUTHERLAND. Thank you, Mr. Chairman. You know, one of the things that seems—in trying to solve, I guess, perceived problems, so often times the Federal Government just creates bigger problems. It is really amazing to me, coming from a business background. And yet, we continue to appropriate more money for the incompetence of creating more problems.

I am just curious. One of the unintended consequences—and it is just common sense, I am a common sense kind of guy, it has served me well—is that if this bill becomes law, you are going to have individuals in a transit society that we live in now—my goodness, people are transferred, you have military bases, I mean we move a lot.

And so, it seems to me that you would be further exasperating the problem of people saying, “OK, I have now been relocated and transferred, and I have this snake.” So because it has very little value, you can’t sell it—Ms. Sutherland can’t afford to buy it because she is fighting for her very life, I mean it is worthless, as far as a marketable value, so that we are just going to dump it. It seems to me that is an unintended consequence of this bill. And now we have further exasperated the problem by increasing our numbers of snakes that—and I am just curious, Mr. Heflick.

Am I right? I mean you seem like a common sense kind of guy. I would love to spend a Saturday with you. Is that a fair—

Mr. HEFLICK. Yes. I dual-majored in common sense, too, so that is why. But you are exactly right. And the addition of the Burmese Python, which has already happened, has done exactly that. It has trapped all of the existing Burmese Pythons in the one State where they present a problem, in South Florida.

So, you are exactly right. By making this a Lacey Act listing, you trap all of these animals in those States. You decrease their marketable value. You actually make them have a negative value, because you still have to feed them, you have to maintain them, you have to take care of them—man hours. You know, as a business owner, how that works.

Mr. SOUTHERLAND. Yes.

Mr. HEFLICK. So, that is exactly what it has done. And through personal comments with biologists in the State of Florida that work for the State of Florida on this project, they feel the same way. And it has overreached, and it is causing problems in the States that they are better suited to handle themselves, if left alone. So you are exactly correct.

Mr. SOUTHERLAND. Dr. Barr?

Dr. BARR. Yes, I would agree with that. It is perpetuating the problem, not solving it. I think Hawaii, which is a subtropical area, has some of the most stringent, exotic animal laws in existence. And that is how they have chosen to deal with their problem. And I think that it is working.

Mr. SOUTHERLAND. Mr. Wyatt? And you are—

Mr. WYATT. Yes, sir. Back to your point of unintended consequences, there are other unintended consequences, aside from that. And you brought up the military and transient society.

This is the first time ever that the government has sought to list animals so widely held by the American public. And like Ms. Sutherland said, not everybody out there is aware of what is going on with all this stuff. We pay close attention because we have business interests here. But your average owner—take for instance—say someone who is deployed to Afghanistan. He comes back from his deployment, he is stationed in California. And they get transferred to North Carolina, OK? He and his wife pack up and they have a pet boa constrictor and they cross all these State lines to get over to North Carolina. He has just unknowingly become a Lacey Act felon numerous times over, subject to thousands of dollars in fines and prison time. And this is a situation that could be repeated over and over and over again.

And it is just—it is unconscionable that such an action would be taken, and put all these private citizens at risk because they had a boa constrictor as a pet.

Mr. SOUTHERLAND. You know, I find it must be difficult for a situation like you just described, for a soldier to—it seems like it would be kind of anti-soldier—that you have a soldier now that has a flag on his arm and he is going to serve, and now he is in violation of the law because of the knowingly part of this bill.

So, look. You have hit it on the head. So I yield back my time, Mr. Chairman.

Dr. FLEMING. OK, very good. I thank the gentleman and panel. We may have some additional questions, but we will submit those in writing and certainly will ask the Subcommittee members to do that. The hearing record will be open for 10 days to receive these responses that you may provide to those questions.

In addition, I also want to submit for the record a statement from the American Bird Conservancy, an economic study from the Georgetown Economic Services, a number of emails I have received in opposition to H.R. 511, and 3 scientific studies which have conclusively demonstrated that these constrictor snakes cannot—let me repeat, cannot—survive outside of South Florida.

Without objection, so ordered.

[NOTE: The information submitted for the record by Dr. Fleming has been retained in the Committee's official files.]

Dr. FLEMING. I want to thank Members and staff for their contributions to this hearing. Before adjourning I would like to wish a happy birthday to one of our committee staff, Ms. Bonnie Bruce. And you are welcome to volunteer your age——

[Laughter.]

Dr. FLEMING [continuing]. Oh, without objection—who has served with us with distinction for the past 18 years. And we thank you for your service, Bonnie.

If there is no further business, without objection, the Subcommittee stands adjourned.

[Whereupon, at 12:06 p.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

[The prepared statement of Mr. Pierluisi follows:]

**Statement of The Honorable Pedro R. Pierluisi, the Resident Commissioner in Congress from Puerto Rico**

Good morning. Thank you Mr. Chairman and Ranking Member Sablan for convening this hearing. As a member of the Judiciary Committee, I am familiar with this legislation as the Committee voted in February to favorably report it to the full House. As a cosponsor, I hope that this Committee will now follow suit, so that the biodiversity and natural ecosystems in South Florida; my district, Puerto Rico; and the other areas of the United States that are vulnerable to invasion by constrictor snakes are adequately protected.

This bill would add nine species of giant constrictor snakes to the list of animals currently prohibited from importation and interstate shipment in the United States, including Puerto Rico. Of these nine species, five have already appeared in the wild in Puerto Rico.

The Puerto Rico Department of Natural and Environmental Resources reports that Burmese pythons, reticulated pythons, African rock pythons, yellow anacondas, and boa constrictors have been collected in municipalities throughout Puerto Rico, and that boa constrictors have even begun to breed on the Island. While the U.S. Fish and Wildlife Service has already prohibited the importation and interstate movement of three of these five species through the rule making process, the remaining two species are not prohibited by either rule or statute.

Why is this important? There are eight endangered bird species and eight endangered reptile species native to Puerto Rico, including the Puerto Rican parrot and coquí frog, that are directly threatened by the presence in Puerto Rico of large constrictor snakes. The federal government and the government of Puerto Rico are partners in recovering endangered Puerto Rican parrots in El Yunque National Forest and the Río Abajo Forest, and have spent close to \$20 million over the past decade on this partnership. These snakes pose a direct threat to this investment.

As a tropical island, Puerto Rico is particularly susceptible to biological invasions, especially by highly adaptive generalist predators like constrictor snakes, which pose a threat to the environment, economy, and public safety. We have already witnessed the consequences of inaction at the federal level in Florida, and we must take affirmative steps to mitigate the risks there and in other vulnerable areas.

Therefore, I look forward to hearing from our witnesses today about how this bill would protect Puerto Rico in particular, and apart from the bill about what other actions government can take at the federal, state and local levels to prevent large constrictor snakes from becoming established in the wild in Puerto Rico and other vulnerable jurisdictions.

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[The prepared statement of Mr. Rooney follows:]

**Statement of The Honorable Thomas J. Rooney, a Representative in Congress from the State of Florida**

Chairman Fleming, Ranking Member Sablan, and members of the Subcommittee, thank you for your consideration of H.R. 511, my bill to prohibit further importation and inter-state transport of nine constrictor snakes widely considered to be invasive species. This legislation would amend the list of injurious species under the Lacey Act to include the Indian python, reticulated python, Northern African python,

Southern African python, boa constrictor, green anaconda, yellow anaconda, DeSchaunsee's anaconda, and the Beni Anaconda.

The negative consequences of non-native, invasive species are far reaching to say the least. As a Florida native, I have seen firsthand the damages invasive plants and animals cause. Exotic, invasive species have taken an aggressive hold in South Florida, and continue to spread at an alarming rate. The most recent and arguably dangerous example of a non-native predator establishing a thriving, breeding population is the Burmese Python found in the Florida Everglades.

A combination of climate and geographical factors distinguish the Everglades as the only subtropical wilderness that exists in the United States. This area is home to a truly unique variety of wildlife, many of which are considered threatened or endangered. Unfortunately, this ecosystem is also uniquely hospitable to foreign invaders like the Burmese Python. These snakes thrive on the subtropical climate and abundant food resources so readily available in this region. In 2001, there were roughly 200 Burmese Pythons observed in the Everglades. It is now estimated that there are over 100,000 pythons who call the Everglades home.

Burmese pythons are native to Southeast Asia. I am not a scientist, but if I could make an educated guess I would say that they did not migrate here of their own free will. According to a fact sheet published by the National Park Service, Burmese pythons were likely released into the Everglades by pet owners. These snakes can grow more than 5 feet in their first year of life, a size requiring substantial quantities of live mice and even rabbits to maintain. When full grown, they can reach 20 feet in length and weigh over 200 pounds. It's no wonder well-intentioned pet owners can't take care of them.

Many individuals fail to recognize these snakes for what they really are: wild animals. Experienced reptile handlers and average individuals alike have been attacked by constrictor snakes. Even worse, the number of people who have been seriously injured in these attacks is startling. Florida made national news three years ago when a 2-year-old girl was tragically killed by a Burmese python. The snake escaped from an enclosure in the home and strangled the innocent child in her sleep. Constrictor snakes are dangerous predators, not domesticated pets.

The threat invasive, exotic snakes pose to human safety is obviously paramount. However, it is also worth noting the ecologic and economic damages associated with this species. The State of Florida, in conjunction with the federal government, has spent billions of tax dollars on the restoration the Everglades. A March 2010 research paper reported that 25 different bird species, including the endangered wood stork, had been found in the digestive tracts of pythons in Everglades National Park. It seems entirely counterintuitive to allocate federal dollars for the protection of imperiled species while still allowing injurious species to prey on these endangered animals.

The economic damages associated with nonnative invasive species amount to an estimated \$120 billion per year in the United States. That cost is shared by tax payers nationwide. The South Florida Water Management District, State of Florida, the U.S. Fish and Wildlife Service and the Everglades National Park have already dedicated valuable time and resources towards eradicating the Burmese python. If additional invasive snakes are allowed to establish themselves, our environment and our citizens will be harmed, and tax payers will foot the bill.

The threat of further introduction and establishment of nonnative species only increases the longer we wait to address this problem. By listing these nine species of pythons and boas we can begin to tackle the problem from its source. While H.R. 511 is not the silver bullet to ending the problem in South Florida, it is a vital step towards reaching that goal. We must stop the further introduction of these snakes, while we continue working to eradicate them from the Everglades.

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[A letter submitted for the record by Timm Kroeger, Ph.D., Senior Environmental Economist, The Nature Conservancy, follows:]

The Nature Conservancy

December 12, 2011

Mr. Cass Sunstein, Administrator  
Office of Information and Regulatory Affairs  
Office of Management and Budget, Executive Office of the President  
Eisenhower Executive Office Building  
1650 Pennsylvania Ave, NW, Room 262  
Washington, DC 20503

Re: U.S. Fish and Wildlife Service Large Constrictor Snake Proposed Rule, RIN 1018-AV68

Dear Mr. Sunstein:

I am writing on behalf of The Nature Conservancy to provide comments on the U.S. Fish and Wildlife Service Large Constrictor Snake Proposed Rule, RIN 1018-AV68 and, specifically, on the economic analysis of that rule provided by the U.S. Association of Reptile Keepers.

In this letter we point out several serious flaws in the economic analysis of the proposed listing of nine constrictor species as injurious wildlife,<sup>1</sup> commissioned by the U.S. Association of Reptile Keepers (USARK).<sup>2</sup> Specifically, the USARK-commissioned study:

- (1) Ignores likely substitution effects on the part of both the reptile industry and reptile owners, which leads to a likely large upward bias in the resulting estimates of negative economic impacts from the proposed rule.
- (2) Focuses only on the negative impacts on one small segment of the reptile industry (that is, breeders and importers of these nine large constrictor snakes) and snake owners that may result from the implementation of the proposed rule, while completely ignoring the positive impacts the rule would have in terms of benefits for native wildlife, including threatened and endangered species, avoided control and eradication expenditures by government agencies, and human safety. Such a one-sided analysis cannot inform sensible public policy, which should consider both the costs and benefits of a regulation.
- (3) Uses an inappropriate discount rate that by itself leads to a substantial (close to 20 percent) overstating of the projected future costs of the rule. This, together with the unreasonable expectation that no substitution effects will occur on the industry or consumer side, introduces a further upward bias in the study's cost estimates that makes the latter even more doubtful.
- (4) Incorrectly applies the term "economic losses" when referring to what in fact are reductions in revenues for this small segment of the reptile industry. This is not merely a problem of semantics that is likely to mislead many readers of the report. Rather, economic losses—or net reductions in business assets—from reduced sales are always smaller than revenue reductions. By basing its analysis on revenues rather than losses expected to result from the proposed rule but referring to those revenue reductions as losses, the report overstates the actual losses industry may suffer as a result of the rule. This, combined with the likely dramatic overestimation of those expected revenue reductions for the reasons listed in comments (1) and (3) above, further exaggerates any negative impact the rule might have on the reptile industry.

In what follows, we discuss some of these issues in more detail.

*Estimates of lost sales are based on the assumption that there would be no substitution effects.*

In fact, however, two types of substitution effects are likely to occur. First, on the demand side, a portion of potential purchasers of the large constrictors affected by the proposed rule can be expected to switch to other reptiles not affected by the ban. Any such substitution will reduce the size of the economic impact (i.e., lost sales or revenues for breeders and the pet supplies industry) associated with the listing of selected large constrictors as injurious wildlife. This substitution effect is likely to become more important over time as consumers adjust their habits. This means that any initial losses in economic benefits from the restrictions based on the targeted species, to the extent that such losses occur at all, will be decreasing over time. The report completely ignores this substitution effect.

Second, in states except those that are banning the breeding of the affected nine snake species (of which only six are actually traded in the United States, as the USARK report points out), losses in interstate trade in the species likely would be counteracted through an increase in the intra-state production and trade of those species. This substitution effect on the supply side likely would fill the supply shortage that would result from reduced interstate trade in those species. This substi-

<sup>1</sup> Fish and Wildlife Service. 2010. *Injurious Wildlife Species: Listing the Boa Constrictor, Four Python Species, and Four Anaconda Species as Injurious Reptiles*. Federal Register: July 1, 2010 (Volume 75, Number 126, pp. 38069–38070).

<sup>2</sup> Collis, A.H., and R.N. Fenili. 2011. *The Modern U.S. Reptile Industry*. Report for USARK by Georgetown Economic Services. 74 pp. Online at: [www.whitehouse.gov/omb/1018\\_meeting\\_04182011](http://www.whitehouse.gov/omb/1018_meeting_04182011) (last accessed December, 2 2011).



tution would counteract any losses in consumer or producer surplus that might result from the rule's effect on interstate commerce in those species.

The combined effect of these two substitution effects could offset a large portion of the reductions in interstate trade in the affected species that might result from the proposed rule. The USARK-commissioned study, being a steady-state analysis, completely ignores these substitution effects and thus is likely to dramatically overestimate the reduction in sales that might result from the proposed rule. Substitution effects are likely to be of increasing importance over time as consumers adjust to the new regulations. This will reduce the impact on annual sales of the affected species that the proposed regulation may have. Thus, the USARK-commissioned study is likely to overestimate future revenue losses even more than it does losses in the first year after the rule goes into effect.

*Use of an inappropriate discount rate inflates expected future costs*

The report uses the prime bank loan rate as the discount rate applied to projected foregone future revenues from the nine large constrictor species that would be affected by the proposed legislation. However, the prime loan rate is a reference interest rate used by banks. It is not the appropriate rate to use for discounting future earnings. The correct rate to use is the average rate of return that the foregone profits *could have and would have* achieved. The historic average rate of return in the United States—approximately 7 percent—commonly is the rate used in such analyses, and is the default discount rate that the Office of Management and Budget requires federal agencies to use in benefit-cost analyses.<sup>3</sup> Using that rate instead of the 3.25% rate used in the report alone reduces projected lost revenues as a result of the proposed rule by 17%.

*The report is one-sided because it ignores the economic benefits of the proposed rule*

The USARK-funded study provides an (highly upward-biased) estimate of the market activity-related cost (i.e., lost revenues) that it expects to result from the proposed rule. Such an estimate is meaningless from an economic perspective without an estimate of the benefits the rule would bring about. These benefits consist of avoided control and eradication costs and avoided damages that would result from the proposed rule.

Furthermore, from an economic, cost-benefit perspective, the preferable, more comprehensive measure of the economic effect of the rule would focus on the net welfare effect from the rule, as measured in the form of changes in consumer and producer surplus. Such an analysis also would require the consideration of how much the proposed rule could be expected to reduce population losses and extinction risks for threatened and endangered species, as avoided population losses and extinction events carry real economic value.<sup>4</sup> Evidence in the Florida Everglades indicates that accidentally or intentionally released large constrictors and other invasive reptiles negatively affect several T&E species. Such negative impacts carry an economic cost.

*Incorrect and misleading use of terminology*

The authors frequently use the term “economic losses” when in fact they are referring to reductions in sales. The use of the term “economic loss” in this sense is incorrect, as the actual economic loss associated with any reduced sales is only the foregone producer surplus (gross revenues minus production costs), not the foregone revenue (i.e., gross sales value). Like any production, the production of large constrictors requires inputs and carries associated costs. If production ceases, so do the associated expenditures on inputs. Thus, the terminology used in the study is misleading as it exaggerates the actual size of the losses in the industry that may result from the proposed rule.

Thank you for considering our comments.

Respectfully,

Timm Kroeger, Ph.D.  
Senior Environmental Economist  
Sustainability Science  
Central Science

<sup>3</sup> Office of Management and Budget, 2003, Circular A-4—Regulatory Analysis, Sep. 17, 2003. [http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory\\_matters\\_pdf/a-4.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf).

<sup>4</sup> For the U.S. alone, more than two dozen studies estimate the economic value of avoided losses in T&E species populations. For an overview, see Richardson, L. and J. Loomis, 2009, “The total economic value of threatened, endangered and rare species: An updated meta-analysis”, *Ecological Economics* 68:1535–1548.

**Statement submitted for the record by the  
U.S. Fish and Wildlife Service**

The U.S. Fish and Wildlife Service (Service) appreciates this opportunity to submit a statement for the record on H.R. 511, a bill to prohibit the importation of several species of constrictor snakes. In general, the bill amends the injurious wildlife provisions of the Lacey Act at 18 U.S.C. 42(a) to add nine species of non-native, constrictor snakes to the list of “injurious wildlife” regulated under this title. With this designation, the importation and interstate transport of these snake species would be prohibited without a permit from the Department of the Interior. H.R. 511 was introduced on January 26, 2012, and referred to the House Judiciary Committee, which reported it with an amendment on February 28, 2012. The Service supports the bill as introduced, but cannot support the bill as amended by the House Judiciary Committee.

**Background**

The Lacey Act is among the nation’s oldest and most effective conservation laws. It has proven to be a powerful tool for the conservation of sustainable, native wildlife populations from overharvest and from threats posed by invasive species. Along with a core of other key statutes, like the Plant Protection Act, the injurious wildlife prohibitions in title 18 of the United States Code protect domestic interests against the spread of invasive species, including foreign invasive species known to occupy habitats in the United States that are similar to those in which they live in their home ranges and that could outcompete or prey upon native fish and wildlife, cause damages to our economic interests, or cause or carry disease.

In 2008, the Service published a notice of inquiry in the Federal Register, soliciting available biological, economic, and other information and data on the Python, Boa and *Eunectes* genera of constrictor snakes for possible addition to the list of “injurious wildlife.” This notice of inquiry was prompted by a petition from the South Florida Water Management District to the Service requesting the addition of Burmese pythons to this list.

Subsequently, the U.S. Geological Survey (USGS) published a peer-reviewed report, *Giant constrictors: Biological and management profiles and an establishment risk assessment for nine large species of Pythons, Anacondas, and the Boa Constrictor*, which identified the nine constrictor snake species included in H.R. 511 as posing a risk of becoming established in the United States. In 2010, the Service published a proposed rule to list all nine species. In 2011, USGS published a clarification on the modeling used for the 2009 report. Finally, in January 2012 the Service published a final rule to list four of the nine species, including *Python molurus* (which includes Burmese python *Python molurus bivittatus* and Indian python *Python molurus molurus*), Northern African python *Python sebae*, Southern African python *Python natalensis*, and yellow anaconda *Eunectes notaeus* on the list of injurious reptiles.

The immediate listing of these four species was found to be warranted because all determined to have a “high risk” for establishment in the wild and for causing damaging impacts to wildlife resources. The final rule became effective on March 23, 2012. The Service continues review of the remaining five species of constrictor snakes that were included in the 2010 proposed rule but that have not been listed to date.

**H.R. 511 Judiciary Committee Amendment**

In its amendment to H.R. 511, the House Judiciary Committee retained language in the original bill text adding all nine species to the list of “injurious wildlife” in 18 U.S.C. 42(a), but changed the text of the underlying statute in a way that would considerably alter the liability standard for violations of certain prohibited acts in this statute that are Class B misdemeanor offenses. The amendment also exempts from the prohibitions in 18 U.S.C. 42(a) the importation and interstate transport of all nine species of large constrictor snakes by state fish and wildlife agencies or “exhibitors,” as defined in section 80.1 of title 50, Code of Federal Regulations.

Under the current statute, prosecution of violations occurs through a “strict liability” standard, meaning it may be based on evidence of the violation without establishing proof of the violator’s intent or prior knowledge about the law or the presence of the injurious species in a given imported or transported shipment. The amendment changes this standard to an intent-based standard with respect to the importation of all injurious animals and plants, meaning prosecution must be based, in part, on proof of what the violator knew when he committed the prohibited act. Given the nature of shipments or other human-directed movement of fish and wildlife into the U.S. and across state borders, H.R. 511, if adopted by Congress in its current form, would require a heightened standard of proof before prosecution could

occur, significantly weakening our ability to use this statute to prevent or inhibit the spread of such species and the harm they cause.

For example, the statute applies to a wide variety of animals such as mollusks, mussels, and crustacea that may be brought into the United States in ballast water or on the outside of ships. As explained further below, the introduction of these injurious animals has caused enormous economic and environmental harm in this country. While ship owners and operators are warned through posted signs and notices of their responsibility to appropriately dispose of ballast water and clean their ships to prevent the spread of injurious species, under the statute as amended U.S. prosecutors would be required to prove that they knowingly imported these injurious animals into U.S. waters in order to prosecute them for violations of this statute, an almost insurmountable burden of proof under the circumstances. Thus, changing the prohibition in the statute from a strict liability offense to a knowing offense would remove the incentive for shippers to take appropriate steps to ensure that they do not introduce injurious animals into the United States.

Furthermore, wildlife shipments can contain more than one species, and they may include individuals representing species listed as “injurious wildlife” among other, more benign species. Injurious species may also be transported into the United States or across state lines as “hitchhikers.” Also, this statute’s prohibitions against importation and transport of “injurious wildlife” involve, in many cases, specific species, but shipments may be labeled at a higher level of taxonomy. Species in these groups may look much alike. Importers may work with foreign partners who have no accountability to domestic law. Importers may or may not fully understand the content of their shipments in such cases. Such a shipment may include injurious species with or without the knowledge of the importer, who may or may not know such prohibitions exist. Under current law, Service enforcement agents may stop and detain suspected shipments, and when appropriate, pursue prosecution for the party who is accountable to U.S. law, with the goal of preventing the damage that these species cause. The mere prospect of prosecution on the basis of the presence or absence of the prohibited species in transport encourages knowledge of and compliance with the law. The risk of spread of injurious species into the United States is, therefore, reduced by the diligence of the importer or transporter that is subject to the law.

The economic and environmental damage injurious wildlife and other foreign, invasive species can cause to United States interests when those species spread into supportive habitats is well-known. Species listed as “injurious wildlife” in many cases have already proven to be harmful, incurring considerable costs to reverse or control the damages they cause and to control their numbers in the wild. These costs are ultimately borne by our nation’s businesses, consumers, and taxpayers when these species impact commercially valuable fisheries, water and power utility infrastructure, environmental quality and environmental restoration efforts, agricultural interests, and human health, among other things.

While precise estimates of annual costs are difficult to establish, the most widely referenced paper on this issue (Pimental et al. 2000) reports the cost of invasive species, which would include injurious wildlife, at \$120 billion per year.<sup>1</sup> In 2011 alone, the National Invasive Species Council estimates that Federal agencies spent over \$2 billion on activities focused on preventing, minimizing, or reversing the damages caused by invasive species, with more than half of that amount dedicated to prevention, rapid response, and control of such species and their impacts.<sup>2</sup> The risk of increasing these costs to our Nation’s interests with new introductions or human-facilitated spread is high, even when just a few individuals from species on this list are released or accidentally escape captivity. The risk of escape or release of these species is particularly high during transport, and many of the species in the “injurious wildlife” list can reproduce and spread rapidly under suitable conditions.

The transport of zebra mussels (*Dreissena polymorpha*) on recreational or commercial boats across state lines or our international borders often occurs without knowledge of the transporter about the law prohibiting this or the presence of the mussels. In fact, the introduction of zebra mussels into the United States was through ballast water discharge of ships sailing from Europe into the Great Lakes. This unknowing and unintentional introduction has cost the United States billions of dollars in damages and in control efforts. The threat continues to move west. Invasive, fresh water mussels, including zebra mussels, transported across state lines threaten the hydroelectric infrastructure in western states. These mussels are

<sup>1</sup>Pimental, D., L. Lach, R. Zuniga, and D. Morrison. 2000. “Environmental and Economic Costs of Nonindigenous Species in the United States.” *Bioscience*, 50(1): 53–56.

<sup>2</sup>National Invasive Species Council. November 1, 2012. Invasive Species Interagency Crosscut Budget.

poised to invade the Columbia River, and the cost to hydroelectric infrastructure alone could be between \$250 to \$300 million annually.<sup>3</sup>

Under the “strict liability” standard of current law, the Service’s Office of Law Enforcement and the Department of Justice take into consideration mitigating and aggravating circumstances when deciding whether to file formal charges, issue a violation notice, or simply seize a shipment. There is a significant amount of discretion applied on a case-by-case basis, maximizing the protective purposes of the statute without unduly hindering commerce or otherwise lawful activities of U.S. citizens. The cost of this prevention tool is a small fraction of the cost to control or reverse the damage of these species when they are able to establish wild populations in the United States.

The exemption provided in the amendment for the importation and interstate transport of the relevant species of large, constrictor snakes, from a practical point of view, would challenge the enforcement of the prohibition in such a way as to significantly reduce or eliminate its effectiveness in preventing the introduction or spread of these species in wild habitats in the United States.

The Service cannot support H.R. 511 as amended by the House Judiciary Committee. The Service believes that the current “strict liability” standard for prosecution is necessary to achieve the protective purposes of this statute to manage the risk posed to U.S. interests by “injurious wildlife” species. We welcome the opportunity to work with the Committee to address any concerns about the current text or enforcement of this statute.

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[The information listed below has been retained in the Committee’s official files.]

- Barker, David G., Article “Will They Come in out of the Cold? Observations of Large Constrictors in Cool and Cold Conditions”
- Collis, Ariel H. and Robert N. Fenili, Commentary Article, “Constrictors, Injurious Wildlife Listings, and the Reptile Industry”
- Committee on Oversight and Government Reform staff report, “Broken Government: How the Administrative State has Broken President Obama’s Promise of Regulatory Reform”
- Dorcas, Michael et al., Article in Integrative Zoology 2012, “Can invasive Burmese pythons inhabit temperate regions of the southeastern United States?”
- Jacobson, Elliott R., et al., Article “Environmental temperatures, physiology and behavior limit the range expansion of invasive Burmese pythons in southeastern USA”
- Liston, Barbara, Article in Chicago Tribune, “Are Pythons overrunning the Everglades? Some experts now say no”
- Mazzotti, Frank J., et al., Article “Cold-induced mortality of invasive Burmese pythons in south Florida”
- Schroder, Darin, Vice President of Conservation and Advocacy, American Bird Conservancy, Statement for the record
- United States Association of Reptile Keepers, Petition from 150 residents from State of Washington
- Walthall, Susan M., Acting Chief Counsel, Office of Advocacy, U.S. Small Business Administration, Statement for the record




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<sup>3</sup>IEAB. 2010. Economic Risk Associated with the Potential Establishment of Zebra and Quagga Mussels in the Columbia River Basin. NW Council, Independent Economic Analysis Board, Task Number 159, Document IEAB 2010-1, July 14, 2010. Available: <http://www.nwcouncil.org/library/ieab/ieab2010-1.pdf> (Accessed Nov. 23, 2012).