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STATEMENT OF DR. JAMES TATE, JR., SCIENCE ADVISOR U.S. DEPARTMENT OF THE INTERIOR BEFORE THE SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS OF THE COMMITTEE ON RESOURCES, CONCERNING H.R. 3479, THE BROWN TREESNAKE CONTROL AND ERADICATION ACT OF 2003

May 13, 2004

Mr. Chairman and Members of the Committee, my name is Jim Tate, and I am the Science Advisor to Secretary Gale Norton at the Department of the Interior (Department). Thank you for the opportunity to appear before you to present the Department's views on H.R. 3479, the "Brown Treesnake Control and Eradication Act of 2003."

The Department commends Congress for bringing attention to this important issue that has significant impacts on both public and private lands and land managers. Brown treesnakes are estimated to cause significant economic damage on Guam, and to injure ecological functions on thousands of acres of private and public lands. They have caused the extinction of mammals, lizards, and birds on the island and threaten numerous other wildlife species on the surrounding Pacific Islands. The high risk for establishment of brown treesnakes on Saipan, Hawaii and other islands is considered an ominous threat to ecosystem health and tourism, public health, and public infrastructure. Should this species make its way to the southern United States and Mexico, the results could be an ecological disaster and have significant impacts to infrastructure. Some estimates of potential damage from brown tree snakes to the electrical grid on Guam run into the millions of dollars.

We concur with the principles embodied in the legislation, specifically the recognition that a coordinated and comprehensive effort by the public and private sectors with requisite accountability is critical to the successful prevention, control, and management of invasive species such as the brown treesnake. The legislation authorizes what is already being done, solidifying and enhancing coordination and funding on this important matter. Over the last 14 years, the Department has provided financial, technical and logistical leadership: the achieved funding, cooperation and coordination on brown treesnake control and eradication has become a model for many other invasive species problems.

We applaud the recognition in the legislation of the National Invasive Species Council (NISC) and its role in coordinating such interdisciplinary efforts through interagency policy development and budget crosscuts on invasive species. We note that many of the goals of this bill can be met within existing authorities and funding included in the President's fiscal year (FY) 2005 budget.

Background

Currently, brown treesnake threats to wildlife, the economy, and human health are at a crisis stage. We have undertaken many measures; we need to be more effective in the face of this very real threat to our federal responsibilities. With this in mind, we must act accordingly.

The brown treesnake arrived in Guam sometime during the late 1940s. On the island, the brown treesnake has devastated bird populations, sending 10 species to extinction in the short span of 20 years. Guam's endemic birds evolved in a snake-free environment and, thus, were naive in their response to predatory tree snakes. The birds apparently lacked protective behaviors against the snake and, as such, were easy prey for these efficient, nocturnal predators. Once the invasion had taken hold, the snakes spread across the island, the population grew exponentially, and bird populations began to decline.

The Guam Rail and Guam Micronesian Kingfisher have been extirpated in the wild on Guam and the Guam Micronesian Kingfisher exists only in zoos and breeding facilities. The Marianas Fruit Dove, White-throated Ground Dove, Nightingale Reed Warbler, Rufous Fantail, Cardinal Honeyeater, and Bridled White-eye are entirely gone from Guam and the War in the Pacific National Historic Park. Micronesian Starlings and Mariana Crows are gone from the Park, though some survive elsewhere on Guam.

There was probably little that we could have done to prevent these mass extinctions. Early on, there were no known techniques to eradicate snakes. However, we now have such techniques, if they can be applied while the infesting population is still small. Thus, at the present time, our key research efforts are being directed at (1) developing methods for detecting incipient populations and (2) developing control methods while they are still small, and our key management efforts are directed at (1) preventing the introduction of brown tree snakes to other islands and (2) rapidly responding to, and destroying, individual snakes or small populations before they can become fully established.

I have every reason to believe that brown treesnakes have arrived on Saipan, but as yet we have no indication that they are reproducing. In addition to the management effort to detect any incipient colonizations, management plans are being written to generate an effective coordinated response when a reproducing colonization is detected. At this point, the primary management focus is on brown treesnake early detection and eradication. In my opinion, if we fail to prevent the establishment of brown treesnakes on Saipan, serious consideration should be given to rescue efforts for the bird species at risk.

Saipan differs from Guam in several respects. First, Saipan exports manufactured goods on a large scale. The clothing products travel every few days by air on chartered cargo planes from Saipan to Hawaii. If the brown treesnake were to become established on Saipan, this cargo air traffic would constitute a new pathway for brown treesnake infestation to reach Hawaii. Second, Saipan, which covers about 47 square miles, is significantly smaller than Guam, which is over 200 square miles. Thus the time between initial colonization and peak bird extinctions - about 35 years on Guam - would be greatly reduced, perhaps to as little as a decade or two. Because Saipan is substantially smaller than Guam, it also has fewer native wildlife species. For example, Saipan has no flightless rails. It does, however, have the flightless Micronesian Megapode. Thus the individual species at risk on Saipan are different and slightly fewer. Some of the species that were lost from Guam still occur on Saipan, though the Saipan populations may be different subspecies. Saipan is the largest remaining island habitat for eight bird species or subspecies. Most of these forms, or very closely related forms, were lost from Guam. Saipan is also the largest remaining "secure" home to two additional subspecies that are on the brink of extinction on Guam, the Mariana Common Moorhen and Island Swiftlet. The establishment of the brown treesnake on Saipan would not only repeat the disaster on Guam, but it would extend it by eliminating the largest remaining populations of several bird species or subspecies that have became endangered as a result of the brown treesnake on Guam.

Saipan has a partner island, Tinian, just a few miles away. Due to Tinian's proximity, there is regular and largely unregulated commercial and private traffic between the two islands. Were the brown treesnake to be established on Saipan, it would be necessary to secure these transportation pathways. In addition, periodically a significant amount of military traffic goes between Guam and Tinian. The Tinian Monarch, an endemic bird, would probably be lost if the snake becomes established on that island.

Finally, the Hawaiian Islands, jewels in their own right and entry point for most Americans to the wonders of the Pacific Islands, require prevention, early detection and rapid response, and ongoing control and eradication efforts. While preventative actions are being taken in this regard – for example, Hawaii's Department of Agriculture performs inspections of traffic from Guam, we can only speculate as to the consequences of established populations of brown treesnakes in the southern continental United States and Mexico. This is our opportunity to make sure that does not happen.

Protective Measures for Islands at Risk

I believe that now is the time to act. The spread of brown treesnake to Saipan is a high risk, but new techniques are coming on line that can greatly reduce the risks. A modest amount of effort now can not only prevent a conservation crisis in the Marianas, and save the federal and territorial governments funds that will otherwise have to be spent protecting or repairing Saipan's electrical systems, tourism losses, and so forth, but every action taken today to protect Saipan helps Hawaii in two ways. First, brown treesnake interdiction prevents Saipan from becoming a source island that can directly infest Hawaii; and, second, every improvement in brown treesnake management techniques that we discover during the struggle to defend Saipan is an improvement that can be applied to Hawaii.

There are several things that we can do to directly protect Hawaii and other Pacific islands from the brown treesnake. First, we should keep snakes from leaving Guam. To date, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Service's Wildlife Services has been largely successful at this task. The Department's Office of Insular Affairs is also helping. Second, the State of Hawaii and other Pacific islands can use help – which we may provide through various grants – funding their brown treesnake efforts. Third, we need to develop and refine tools that are presently focused on Saipan – USDA's Wildlife Research Center and the U.S. Geological Survey (USGS) here in the Department are doing just that, utilizing USGS, Office of Insular Affairs and Department of Defense funding. Finally, we must offer training to our partners in the Pacific for rapid response capability, and USGS has been assisting in this effort. These are all activities recommended by the existing Brown Tree Snake Control Committee and which would be strengthened under this legislation.

Within the Department, the U.S. Fish and Wildlife Service (FWS) provides roughly \$143.310, with an additional \$500,000 proposed in FY 2005, for invasive species strike team work for programs and some small grants in the \$50,000 range. USGS has a base budget for brown treesnake research of approximately \$400,000 with an additional \$300,000 proposed in the President's budget for FY 2005. The Office of Insular Affairs currently has about \$2,350,000 in base funding for brown treesnake activities, with an increase of \$379,000 for FY 2005.

With these thoughts in mind, we hope to begin work with our partners soon to develop targeted administrative initiatives to address the problem of brown treesnakes and to ensure that we are doing everything that we can to contain the spread of this destructive reptile.

Brown Treesnake Control and Eradication Act of 2003

The Department agrees with the designation in HR 3479 of the brown treesnake as an agricultural pest, which will open up additional authorities to brown treesnake control programs. The bill also calls for the drafting of quarantine protocols for brown treesnake interdiction, allowing two years after the passage of the Act to draft the protocols. We believe this provides adequate time for affected entities to participate in the drafting of the protocols, which are particularly important for continued protection of threatened and endangered species in the Pacific and the economic interests of the State of Hawaii and the Commonwealth of the Northern Marianas Islands.

We believe the existing framework, including the Brown Treesnake Control Committee, created pursuant to the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, in combination with the leadership of the National Invasive Species Council would be a more appropriate vehicle to accomplish the goals of the legislation than the Brown Tree Snake Eradication and Control Committee (Committee), established under section 7.

The NISC, which is co-chaired by the Departments of the Interior, Commerce and Agriculture, was created by Executive Order 13112. The Council provides coordination on invasive species issues, including brown treesnake, and encourages partnership efforts to prevent and control invasive species.

Use of these organizations will ensure that staff from various agencies who are closely associated with and have special expertise in this issue are working on the matter, that the NISC's special expertise in coordinating invasive species issues is being utilized, and that important policy and budgetary decisions are appropriately in the hands of the relevant agencies' decisionmakers. We are happy to work with the Committee to develop appropriate language toward this end.

Crosscut Budget for Fiscal Year 2005

The brown treesnake is one of ten specific initiatives in the FY 2005 Invasive Species Performance-Based Crosscut Budget. The Invasive Species Crosscut Budget, a performance-based budget proposal for federal agency expenditures concerning invasive species, was prepared for the first time for the FY 2004 budget. The first effort of its kind, it provided for efficient allocation of federal resources on selected interagency invasive species initiatives through enhanced interagency cooperation, shared goal statements and strategies, and common performance measures.

Building off the success of the FY 2004 Crosscut Budget, the NISC prepared a larger, more comprehensive performance-based budget for FY 2005. In crafting the brown treesnake initiative, federal brown treesnake

experts from the Department, USDA, and the Department of Defense collaboratively detailed coordinated strategies and activities on brown treesnake control, research, detection and monitoring, rapid response, restoration, and public awareness activities. Participating agencies provided performance measures and funding for each of the three brown treesnake strategies.

The FY 2005 Invasive Species Crosscut Budget, as derived from the President's FY 2005 Proposed Budget, shows federal expenditures of \$4,247,000 for the brown treesnake initiative, with the Department of the Interior contributing \$4,072,000 and USDA contributing \$513,000. The Department's funding includes a proposed increase of \$879,000. This display of funding for common strategies, with assigned performance measures, shows a coordinated budgetary and programmatic federal approach to this critical issue that will provide greater efficiencies with existing dollars.

Conclusion

Mr. Chairman, the Department appreciates the opportunity to appear before the Subcommittee to discuss this legislation and the issue of brown treesnake control and eradication. We, too, have recognized the need to work directly with our fellow federal agencies and state and local governments. As such, we applaud the legislation's recognition of partnerships as key to success across multiple jurisdictions of natural resource management.

Mr. Chairman, this concludes my prepared remarks. I am happy to answer any questions you or other Subcommittee members might have.