Excerpts from 2005 Brown Treesnake Technical Committee Meeting: The Status and Future of the Brown Treesnake Interdiction Program

Prepared April 2005 by Christy Martin and Priscilla Billig, Coordinating Group on Alien Pest Species for information purposes only—this draft has not been edited or approved by meeting participants.

History

- Brown treesnakes (BTS) were accidentally introduced to Guam sometime between the end of WWII and 1952, probably as stowaway in ship cargo originating from the South Pacific
- Within 20 years they decimated Guam's native bird, bat, and lizard fauna. In the absence of preferred prey, the snakes now prey on introduced rats and lizards, which allow the snakes to maintain abnormally high population densities, about 55 snakes per hectare.
- BTS cause thousands of power outages each year; consume domestic birds and pets; and cause emotional and physical harm with their venomous bites, particularly to small children.

Guam Interdiction Program-USDA-Wildlife Services

Dan Vice/Mike Pitzler

- Trapping program around all ports of exit (air & sea). Traps catch 3000-4000 snakes/year.
- Trapping around power transfer stations catch about 1000 snakes/year—there has been only 1 snakerelated power outage since this part of the program began. Paid for by the Guam Power Authority.
- Physical searches of fences along all ports of exit. 1500-2000 snakes per year.
- Canine inspections of containers and crafts find 4-6 snakes/year.
- Problem to Address: They have no legal authority to demand access for searches nor are shippers required to alert WS when they are shipping goods. Granting access to cargo, vessels etc. is strictly voluntary and there are no penalties for not cooperating.
- Problem to Address: Military and hurricane relief traffic has risen on Guam with no corresponding rise in funding to cover the extra work load.
- Problem to Address: Funding is all soft money. Need dedicated funding.

Chemical Control-USDA-APHIS- National Wildlife Research Center

Rick Bruggers

- NWRC has been working on chemical control methods to help control BTS on Guam.
- EPA approved (March 2003) several chemical tools:
 -Acetaminophen as an oral toxicant
 -Cinnamon oil, clove oil and menthol in vapor form as repellants—chase snakes out of cargo.
- Not yet approved by EPA but discovered to be effective are Pyrethrins as dermal toxicant (i.e. Raid insecticide spray)

CNMI-See Attached summary

Hawaii Department of Agriculture

- There have been 8 BTS interceptions in Hawaii since 1991—none have been found in the 9 years that USDA-Wildlife Services has been conducting their program.
- Problem to address: The increase in movement of military and hurricane recovery equipment (Hawaii-Guam-Hawaii) increase the chances of moving snakes; the type of equipment moved are not searchable by dogs, i.e. power company bucket trucks.
- Problem to Address: HDOA currently has one dog team working due to loss of staff primarily to better paying Federal canine handler positions.

REVIEW OF BROWN TREE SNAKE PROBLEMS AND CONTROL PROGRAMS *Michael Fall, U.S. Dept. of Agriculture, Animal Plant Health Inspection Service, Wildlife Services, National Wildlife Research Center, Fort Collins, Colorado*

"While policy decisions must be made at the appropriate administrative levels and progress is needed on new technologies and control strategies, the BTS program is a 'success story ready to happen."—Michael Fall

Required

- Proactive & sustainable approach
- Long-term & holistic vision

Themes to convey to managers

- Cooperation and support from military
- Stronger leadership
- Better defined ownership & agency policies
- Elevate issues organizationally
- Multi-agency cooperation/ private industry involvement

Planning

- Interagency approach
- Update and define objectives & priorities (longterm interdiction, control, eradication)
- Transition into integrated action plan
- Identify essential tasks

Funding

- Military participation not adequate
- OIA impressive support
- BTS short-term grants
- Need sustainable funding
- Make BTS part of operating in risk area

Research

- Have high quality research being conducted
- Need sustainability & balance
- Need to establish necessary funding
- Emphasize control, eradication, emergency methods, strategies
- Population dynamics, surveillance & detection, bait attractants & delivery systems

Interdiction

- Actions exist
- Legal bases need formalization
- Stabilize & expand
- Improve interdiction
- Preparation & planning

Control & Eradication

- Technologies available
- Inadequate delivery systems
- Diverse private lands to overcome
- Infrastructure & planning needed at ports, airports

Hilton Hawaiian Village, Honolulu, Hawaii, April 6-8, 2005

• Recognize economic benefits

Regional topics

- Expand rapid response program
- Emphasize outreach, awareness programs

Restoration

- Restore bird population
- Focus on prevention
- Define restoration goals
- More biological information needed
- BTS & habitat loss; pests

Management & accountability

- More formalized coordination
- Emphasize project management
- Interagency cooperation
- Progress review

Conclusion

- BTS program is a successful model with just a few pieces out of place
- Future success requires leadership, cooperation, coordinated political support at federal level
- More biological research needed

WILDLIFE SERVICES, GUAM PROGRAM UPDATE

Dan Vice, U. S. Department of Agriculture, Animal Plant Health Inspection Service, Wildlife Services, Guam

Objectives

- Prevent spread of BTS from Guam through commercial and military export cargo
- Protect island resources (native wildlife, health & safety, electrical utilities)

Problems

- Funding shortfall—FY 2005
- Funding shortfall expected—FY 2006
- Between October 2004-February 2005: 127,000 lbs. of household goods departed Guam w/o canine inspection; 91 aircraft departed w/o canine inspection
- Communication w/POCs in recipient locations re missed cargo inspections
- Privatization of this service not considered a viable option

THE NATIONAL WILDLIFE RESEARCH CENTER—AN AGENCY OVERVIEW OF BTS RESEARCH

Kathleen Fagerstone, U.S. Department of Agriculture, Animal Health Inspection Service, Wildlife Services, National Wildlife Research Center (NWRC)

NWRC Conducts Research (tools, methods, strategies for controlling & confining)

- Chemical control methods
- Incorporation into integrated program
- Dispersal prevention

Integrated pest management approach

• Control tools: fumigants, repellents, toxicants, reproductive inhibitors

Hilton Hawaiian Village, Honolulu, Hawaii, April 6-8, 2005

- Eradication
- Protection of endangered species & other wildlife
- Public health
- Reduction at power stations
- Reduced risk of transportation by military
- Development of integrated management strategies

DoD UPDATE

Pete Egan, Department of Defense, Armed Forces Pest Management Board

Mission

• Sustainable environment

Plan

• New approaches will be addressed for more stable funding

Problem

• No political support at administrative level

U.S. Air Force UPDATE

Scott Whitaker, U.S. Air Force, Andersen Air Force Base

Introduction to later presentation: New efforts being addressed.

U.S. NAVY UPDATE Robert Wescom, U.S. Navy, COMNAVMAR

Guam plan signed, coordinated with USDA, for tsunami efforts; restricted access to military lands.

NATIONAL INVASIVE SPECIES COUNCIL UPDATE

Phil Andreozzi, National Invasive Species Council, Department of the Interior, Office of the Secretary (OS/SIO/NISC, Washington, D.C.)

Overall goal

• Prevention

Participation

- 35-40 federal agencies
- 24 federal laws on invasive species
- Approximately 300 programs

Plans

- Revision of management plan: core document clarification, streamlining
- International trade agreements
- 5-year review
- Definitions review
- Legal & regulatory analyses
- Review of NEPA guidelines
- Economic analysis of Tamarisk

Public Outreach

- Stakeholder announcements
- National Geographic article, March 2005
- Enhancing website
- Discovery Channel ("Strange Days on Planet Earth")

OFFICE OF INSULAR AFFAIRS UPDATE *Tiffany Taylor, Office of Insular Affairs, Department of Interior, Honolulu*

BTS activities—FY 2005

- \$2,808,828 Total
- Hawaii: \$250,000

DIVISION OF AQUATIC AND WILDLIFE RESOURCES: PROGRAM UPDATE *Diane Vice, Guam Department of Agriculture, Division of Aquatic and Wildlife Resources, Guam*

Recovery

- Guam rails
- Mariana crows
- Micronesian Kingfisher
- Island Swiftlets
- Marianas fruit bat

DOA OVERVIEW *Neil Reimer, Hawaii Department of Agriculture*

Program

- Public outreach component
- Canine inspection
- Quarantine
- Rapid response
- Airport worker training to be resurrected after six-year hiatus (exception: Kahului)

CNMI BTS PROGRAM: AN OVERVIEW FOR 2004

Nathaniel Hawley, CNMI, Department of Land and Natural Resources, Division of Fish and Wildlife, Saipan

Program

- Strong education/public awareness efforts
- Avian survey and outreach
- Environmental assessment
- Forming new relationships
- Captive breeding & translocation of birds

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