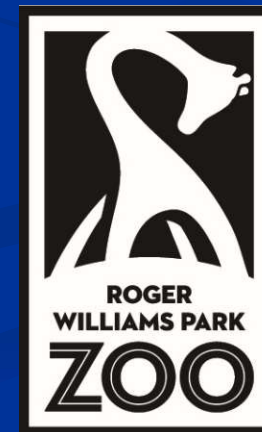


A 29 Year Effort To Reintroduce The
American Burying Beetle
(*Nicrophorus americanus*)
To Nantucket Island Massachusetts

Lou Perrotti

Director of Conservation Programs



American burying beetle

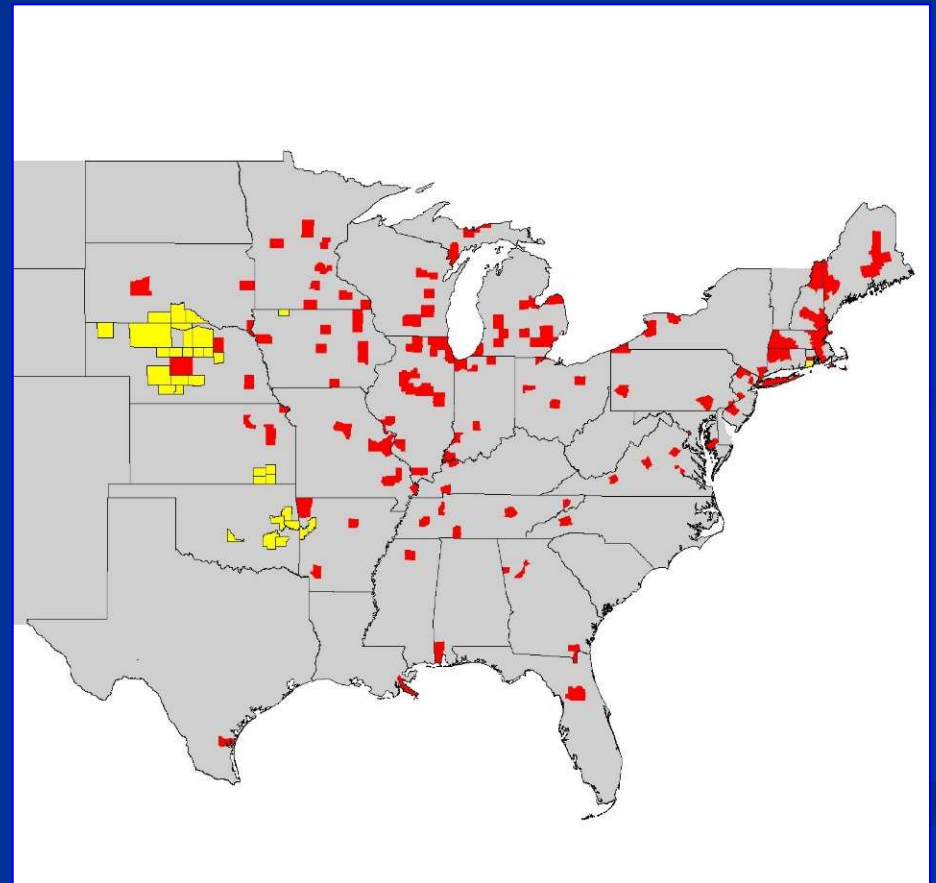
(Nicrophorus americanus)





Reasons for the ABB's Decline?

- Disappeared from 90% of its former range
- Habitat loss and Habitat fragmentation
- Species composition change
- Species loss (Passenger pigeons, Heath hens, Carolina parakeets)
- Less resource / More competition
- Pesticides
- Lite Pollution/Bug Zappers



Recovery Plan

Listed by the USFWS as Federally Endangered Species in 1989

- Monitor wild populations
- Maintain captive populations
- Initiate and continue a pilot reintroduction effort (Penikese Island, MA)
- Prioritize areas and conduct surveys for additional populations
- Conduct additional reintroductions and manage new populations



Roger Williams Park Zoo

American Burying Beetle Project History

- RWPZ received its first colony in 1994 to breed and supply beetles for a new USFWS reintroduction effort on Nantucket Is. MA.
- Since 1994 RWPZ has produced over 8000 beetles
- 2800 beetles released on Nantucket from 1995-2006
- 2006 *N.americanus* became the first insect to be given Species Survival Plan (SSP) status by the Association of Zoos and Aquariums (AZA)
- 2006-Present: Continue to annually monitor and supplement the reintroduced population









Breeding Programs Allows Zoo Staff:

- The low cost of Invertebrate husbandry and limited space needed allow zoos with small conservation budgets to participate in species conservation
- The opportunity to view behaviors not commonly seen in the wild
- To provide specimens for the collection of genetic material
- An ability to gain a physiological profile for this species
- To provide state and federal agencies the numbers of beetles needed for reintroduction efforts
- Develop Protocols and methods that can be used for reintroduction efforts for the ABB in other parts of the range and potentially useful for other species

Over 2800 ABB's Released from 1994 to 2006







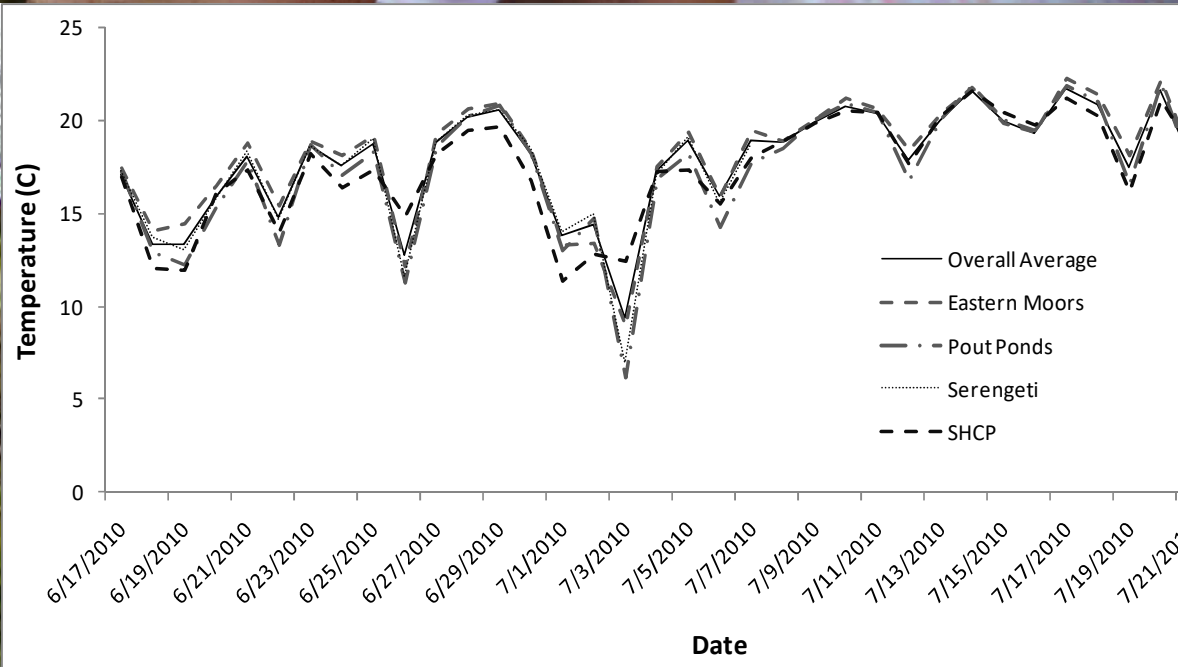
Post-release Monitoring





Current trapping grid started in 2013





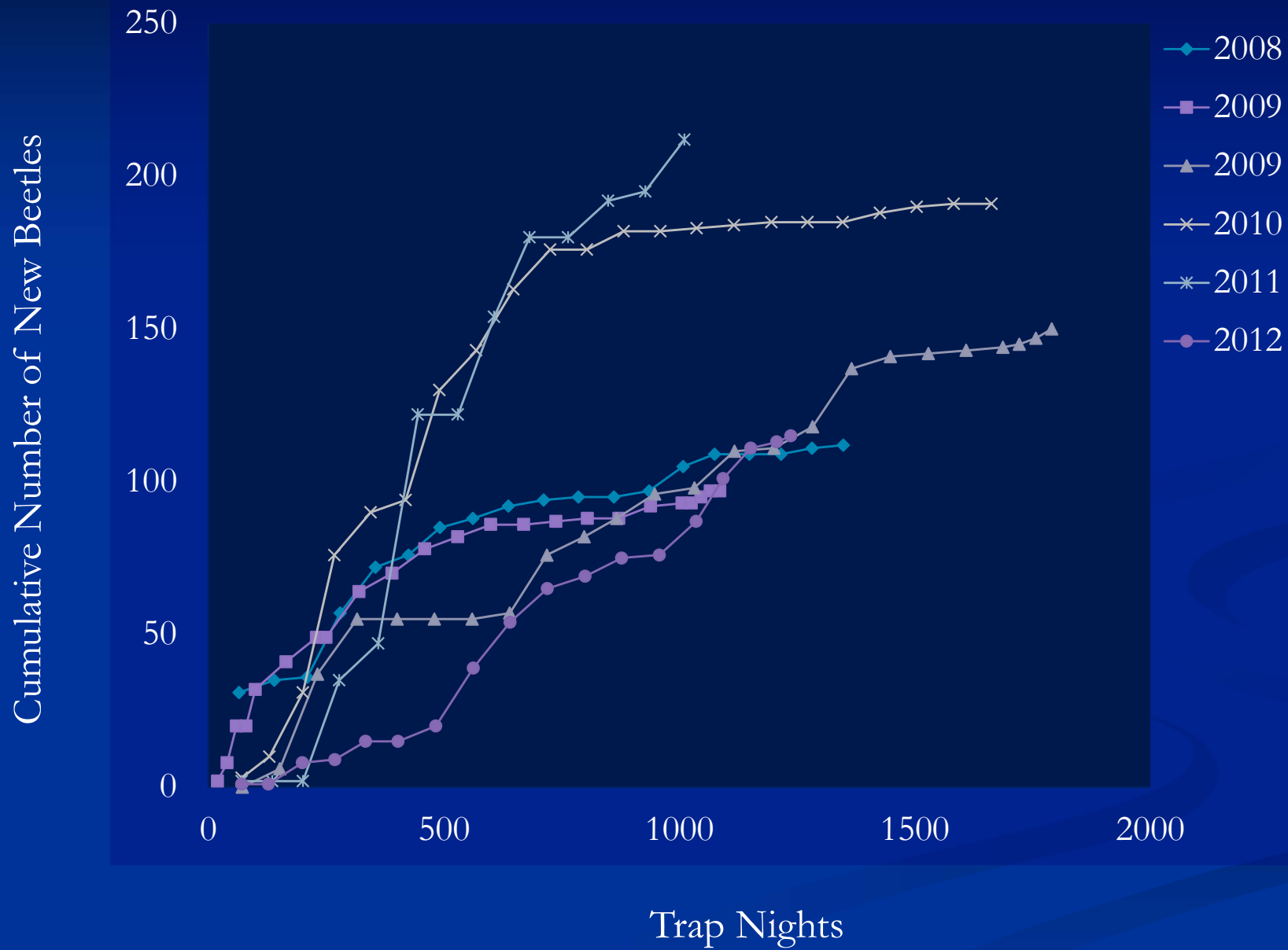




Can they survive without our help??

- Starting in 2011, we halted our efforts to provision all captured beetles and began provisioning only 25 pairs to mimic provisioning levels on Block Island.
- This was done to determine how self sustaining the population might be
- Determine if there is enough naturally available Carrion to sustain the population
- Allow better comparisons with Block Island.



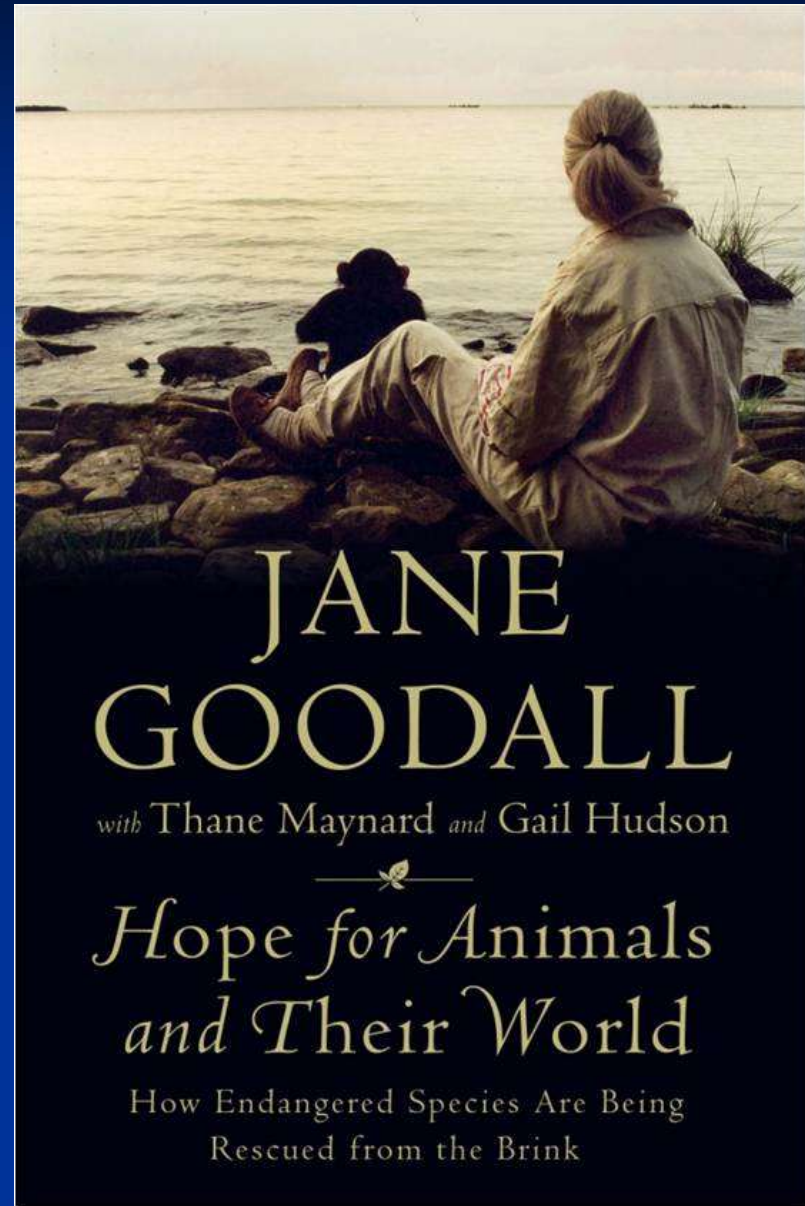


The Take Away

- We have established a healthy population of ABB on Nantucket in both numbers and distribution through our efforts
- The recovery goal is a self-sustaining population
- Reducing the carrion supplementation in 2011-2016 was a critical point in the recovery effort resulting in a 83% loss in the population
- How long will the population continue survive with little or no carrion supplement
- How much suitable carrion is available during the active season?
- At this point we will need to continue to supplement the existing population with carrion if they are to continue to survive on Nantucket

Research!





Rhode Islands New Official State Insect!



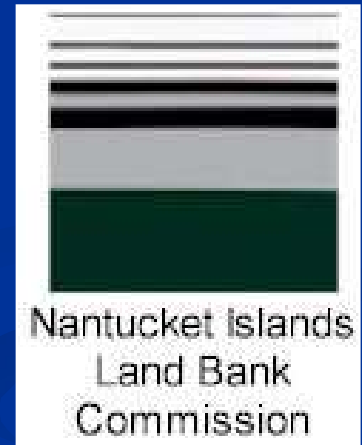
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Nantucket Conservation Foundation, Inc

Preserving the Island for everyone



THANK YOU

