

# Forest Vegetation Assessment

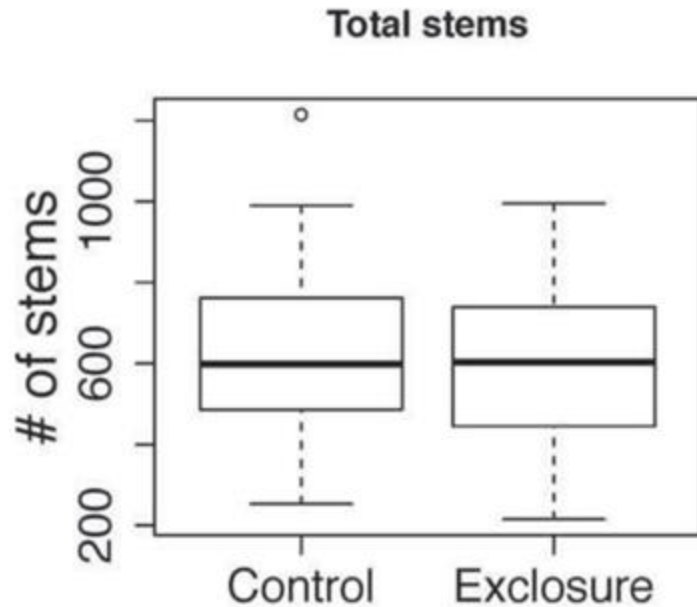
**Bald Head Woods** is a protected maritime evergreen forest – south Atlantic subtype. It has a **G2 rank** – meaning it is a **globally imperiled community** (*at high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, very severe threats, or other factors*).

not a “tinderbox” - damp, humid, thick leaves, not fire-prone



- Impacts: Development, salt spray, storms, herbivory
- No deer on island in 1964 or 1970, deer established by 1990s
- Forest plots built in 2007 (20 paired fenced & unfenced), sampled in 2011 to evaluate deer impacts (Taggart & Long)

# Deer Impacts on Maritime Forest?



- 2015: No differences in plant density or diversity in plots available to deer (controls) vs. fenced plots
- 2020: Plots re-established & sampled 2020 (J. Forrester), maintained by Conservancy
- Ready to be re-sampled 2025



Taggart & Long 2015

current impacts of deer unknown

5% of deer habitat lost to development 2015 - 2024

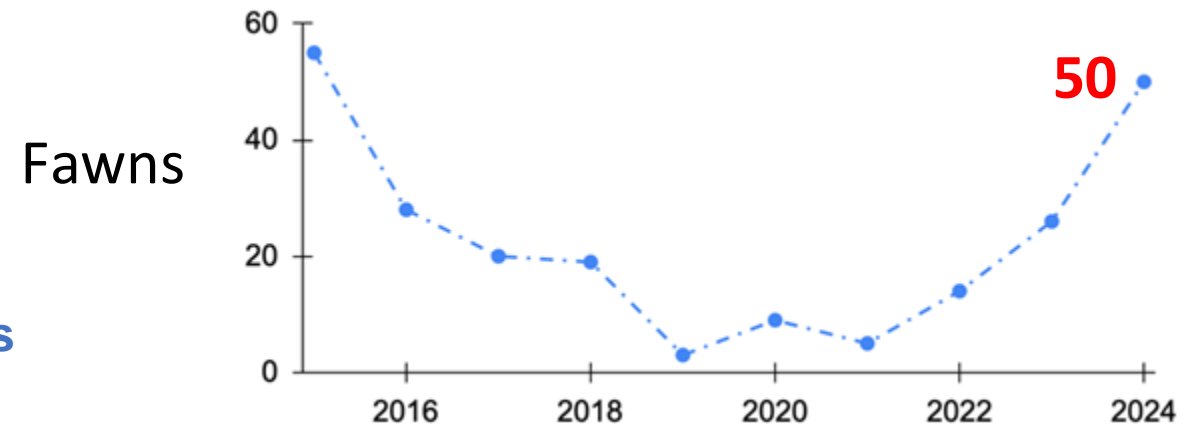
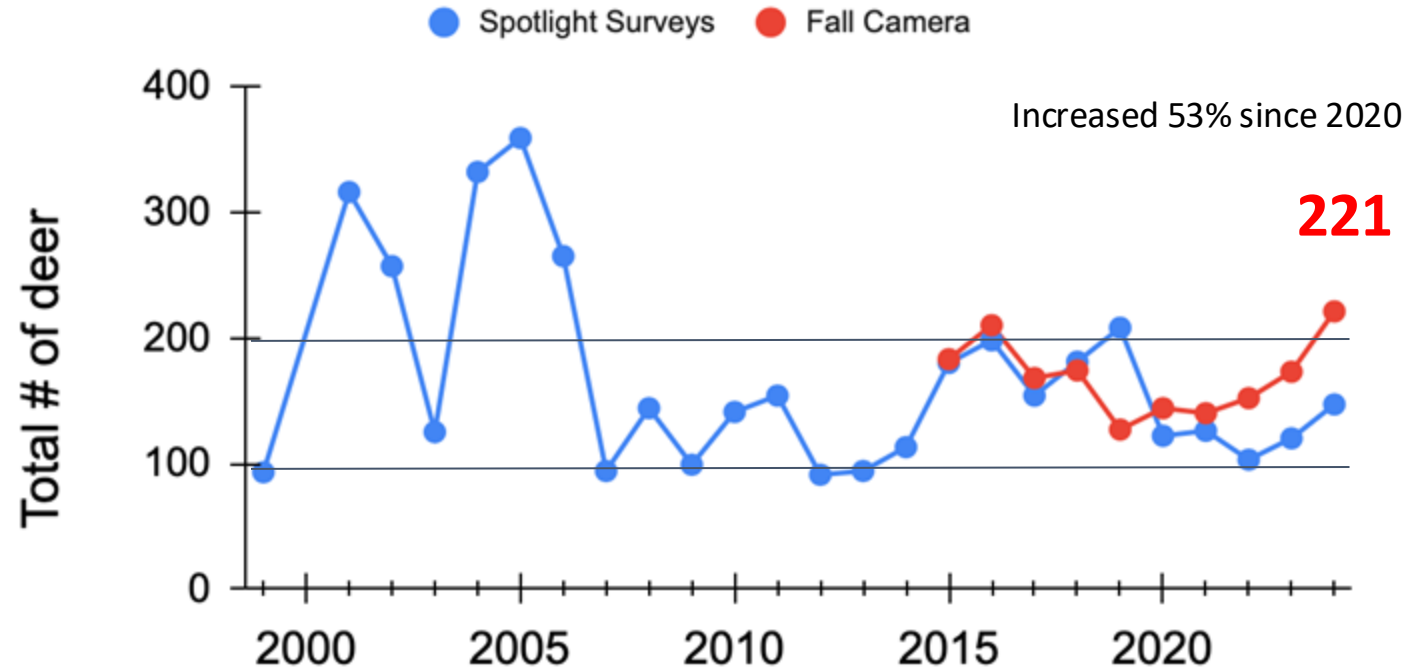
→ Evaluate deer herbivory in 2025

→ Continue maintenance of exclosures

# Deer Population Assessment



- Evaluate white-tailed deer population size
  - Summer spotlight surveys, fall camera surveys
  - Assess need for population management
  - Recommended density on barrier islands < 50 / mi<sup>2</sup>
  - 221 deer = 75 deer / mi<sup>2</sup> (Brunswick Co = 20 / mi<sup>2</sup>)
- Recommend continuing with current survey methods
- Recommend population management





# Population Management: Immunocontraception

What is Involved:

- Village decision to fund project & pursue permit
- Operational permit from WRC
- Subcontract to Conservancy
- Conservancy hires & trains seasonal team
- Capture deer (dart projector/sedative), administer Gonacon, health measurements, blood samples
- 2 doses over 2 years for full efficacy (86% success)



## Immuno Timeline

Month	Reproductive cycle	Previous model	Future model	Future logistics
January	Estrous cycles	Immuno captures	Population #	
February				Permit app
March				
April	Fawning	Spotlight survey	Spotlight survey	
May				Budget / Hiring
June				
July				
August	Rut / Estrous cycles	Camera survey	Immuno captures	Training
September				
October				
November				Camera survey
December				

# Deer Immuncontraception

## Considerations:

- Goal of project?
  - Protection of forest - evaluate impact in 2025  
→ **rare forest subtype - be conservative**
  - Social carrying capacity - nuisance, accidents
  - Herd health
  - Much higher densities than anywhere in state
- Public opinion on management methods  
→ **Deploy survey?**
- Cost
- Effectiveness: will take a while to get <200 deer without an initial cull
- Alternatives: controlled hunting, bow hunting, donate harvested meat

- **Re-start immunocontraception this winter - 2 years**
- **Survey public on management options 2026 or 2027**
- **Assess forest vegetation data in 2026**
- **Re-evaluate management methods in 2027**



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