

Evaluating Two Trap-and-Release Methods for Bobwhites

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Introduction

Why do we trap

- Capture and tag study individuals
- Collect data such as trap info for survival or population estimation

Assumptions:

- We have little-to-no impact on individuals sampled
- Sample tagged is representative of the population we are studying





Two Release Techniques

- 🐦 Trap and release at trap site
- 🐦 Trap, transport and hold overnight ... workup and release in AM

***This is different from “hard” versus “soft” release*





The Cost – Benefit

Trap and release at night

Pros:

- Minimize handling time and birds back in the wild immediately
- Less time consuming
- Guaranteed release back at the correct site

Cons:

- Data collection and data integrity may suffer (esp w/ rotating interns) – poor working light
- Alone and vulnerable at night

Hold overnight

Pros:

- Higher data quality/integrity → good working light
- Less vulnerable to predation upon release (AM vs PM)

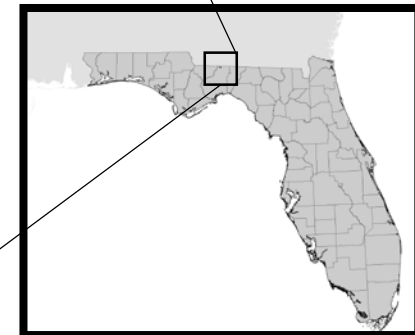
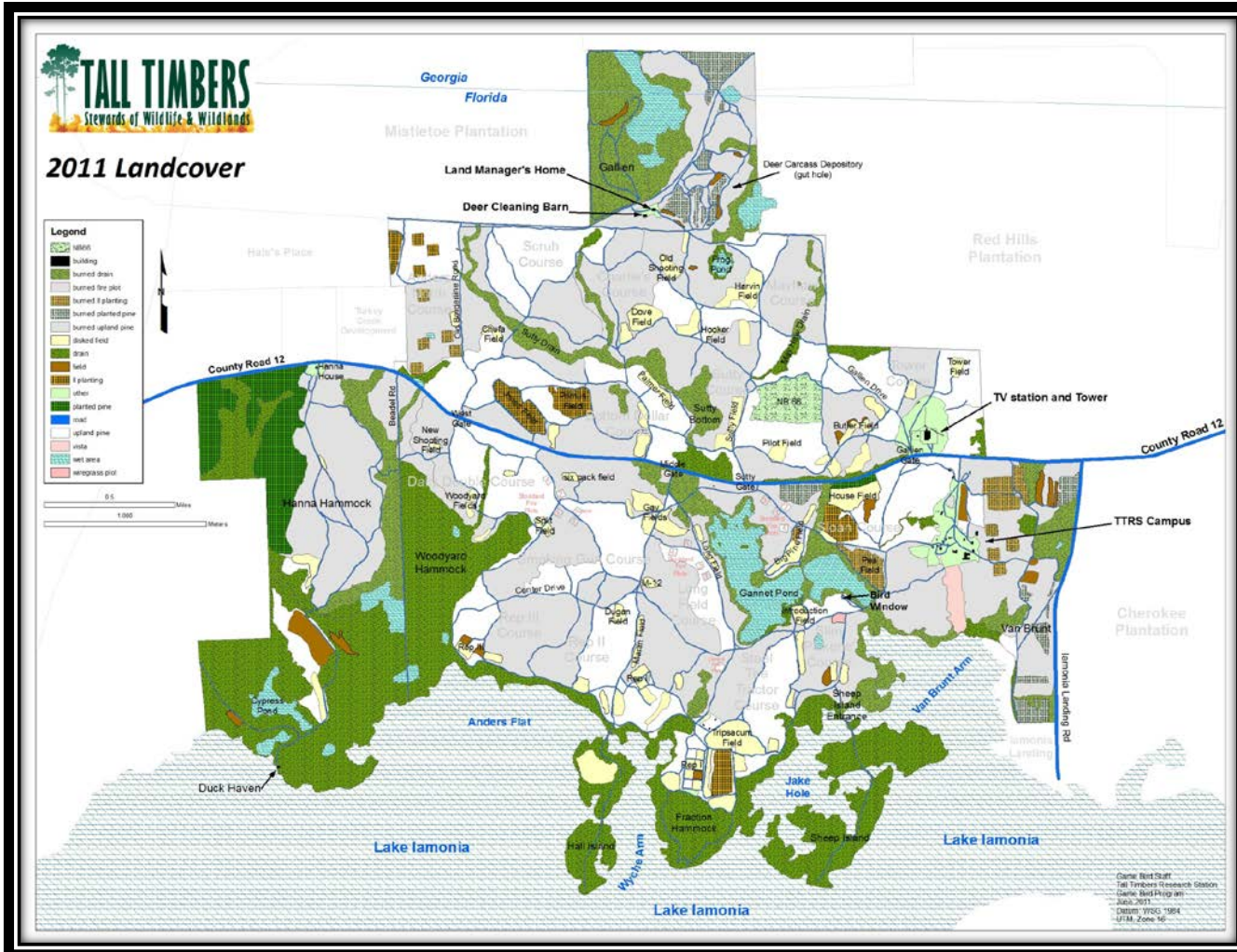
Cons:

- Increased handling time and frequency → increased stress?
- Hard on birds (head condition)
- Risk not releasing back at original capture site





Study Area





Methods & Analysis

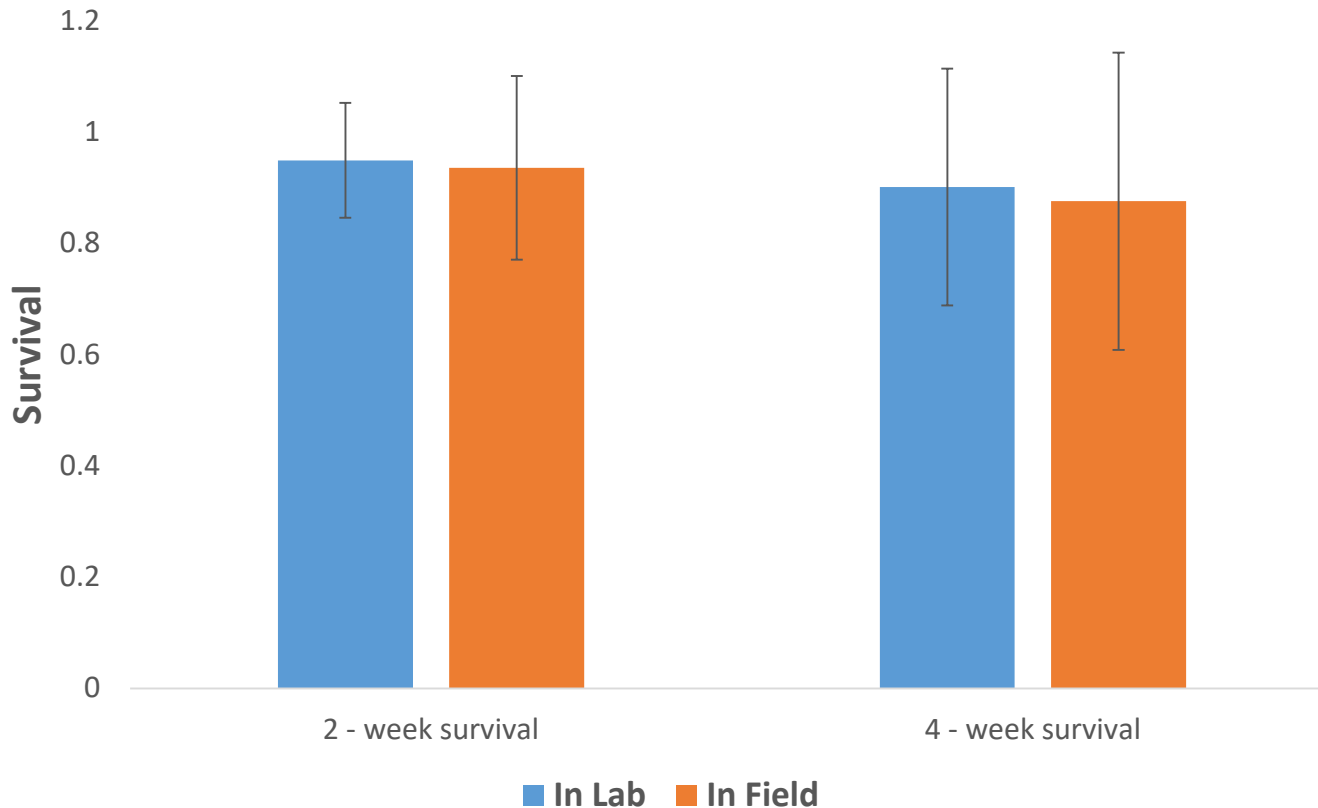
- 🐦 Confusion-style funnel traps baited with milo and/or cracked corn
- 🐦 Radio-tagged 5-6 birds in ≥ 5 coveys per quadrat on Tall Timbers during fall, winter or spring of 2014 – 2017.
- 🐦 All remaining birds/coveys were brought back to the lab for workup
- 🐦 Birds checked within 24 hrs
- 🐦 Birds checked ≥ 2 times/week
- 🐦 Burnham's model (MARK)





Results

- Radio-tagged 841 birds ($n_{field} = 356$, $n_{lab} = 485$, $n_{control} = 1,268$)
- Cold weather (beta = -0.049, CI: -0.066, 0.004)



Summary

- 🐦 No difference between release methods
- 🐦 Choose method that best suits your study and personnel
- 🐦 Training is important...
- 🐦 Goal is to reduce handling time and reduce stress in order have a “good, representative” sample





Questions???