

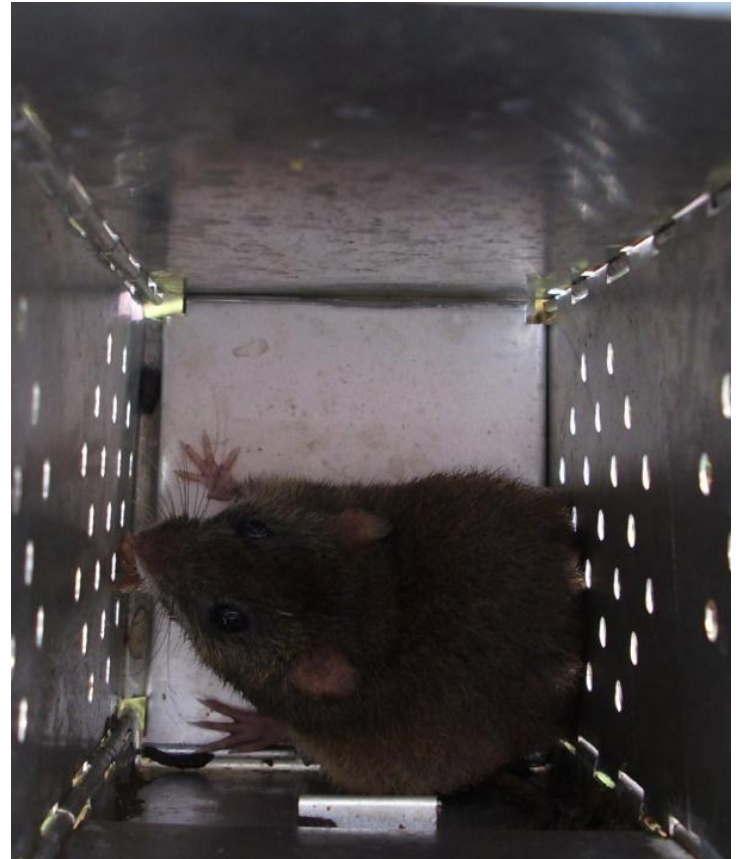
A Novel Method For Camera Trapping Small Mammals In Irregularly Flooded Marsh Environments

**Melissa A. DeSa, Christa L. Zweig, Rodney Hunt, H. Franklin Percival, and Wiley M. Kitchens
University of Florida, Florida Cooperative Fish and Wildlife Research Unit**



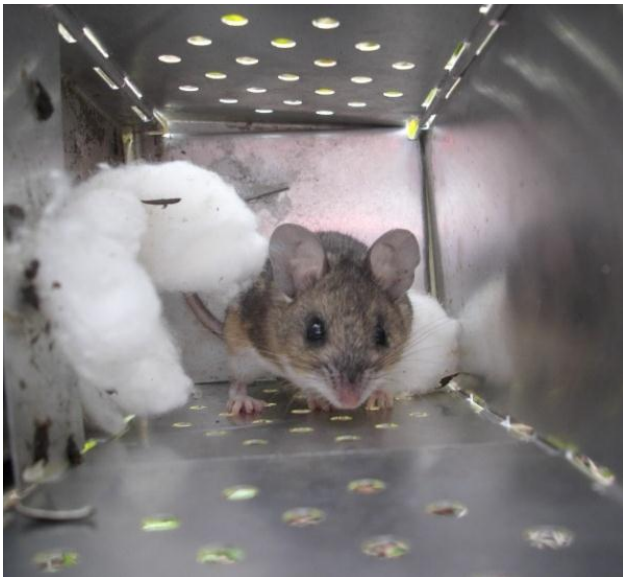
South Eastern Salt Marsh Small Mammals

- Rice rat (*Oryzomys palustris*)
- Cotton rat (*Sigmodon hispidus*)
- Cotton mouse (*Peromyscus gossypinus*)
- Golden mouse (*Ochrotomys nuttali*)
- Florida salt marsh vole (*Microtus pennsylvanicus dukecampbelli*)



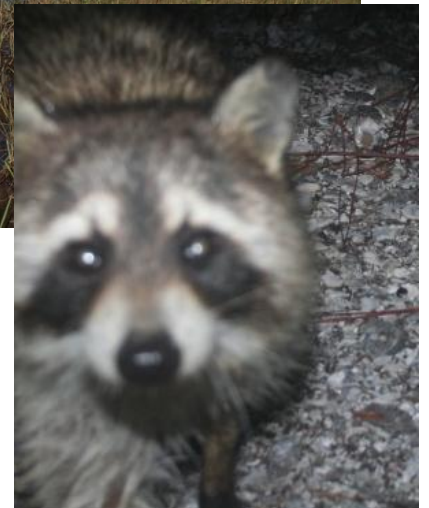
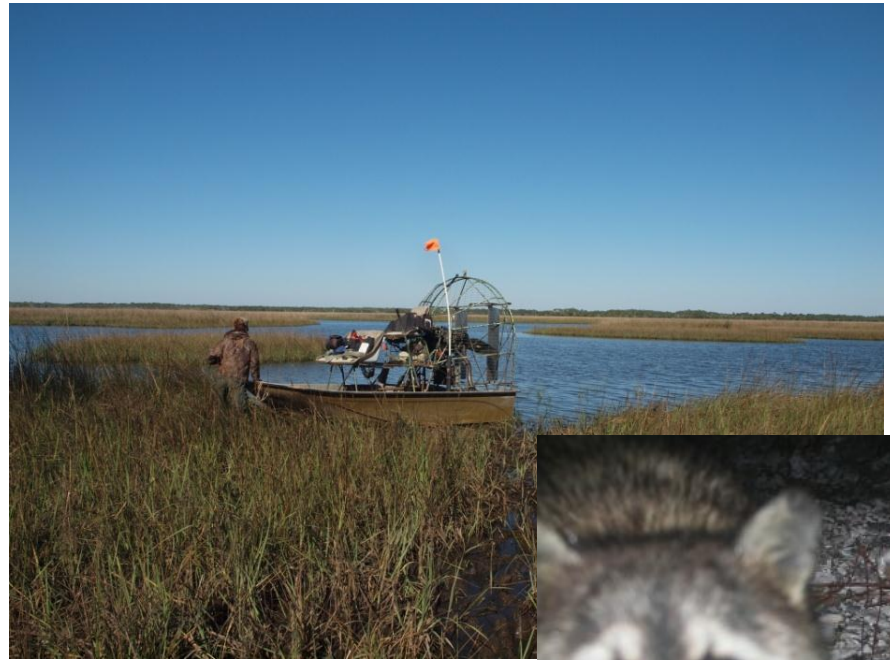
Common Small Mammal Techniques

- Live and snap traps
- Pitfall
- Tracks , scat, hair
- Cameras

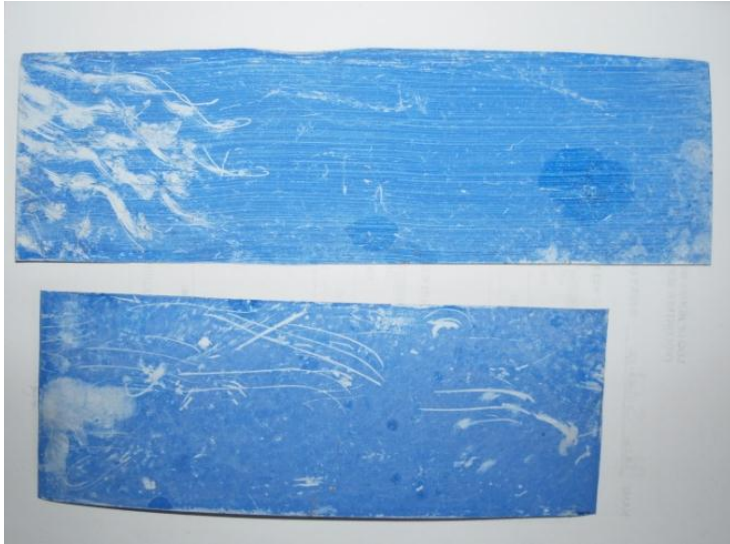


Small Mammal Surveys in Tidal Marsh

- Common techniques are challenge because of:
 - Irregular flooding
 - Remote field sites
 - Limited trapping season
 - Mortality
 - Animal disturbance



Small Mammal Surveys in Tidal Marsh



Live Trapping



Camera Traps



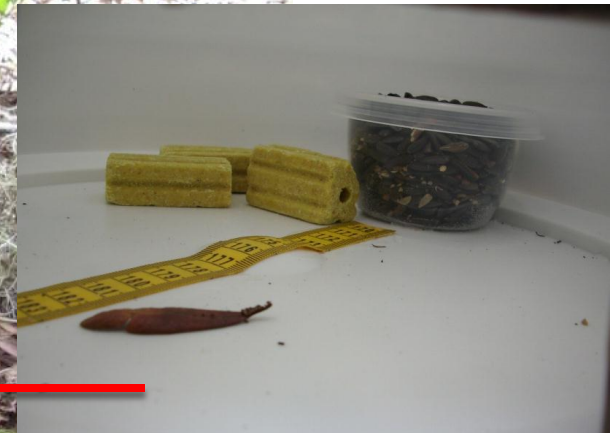
Camera Traps



Camera Traps



Bucket Traps



Bucket Traps



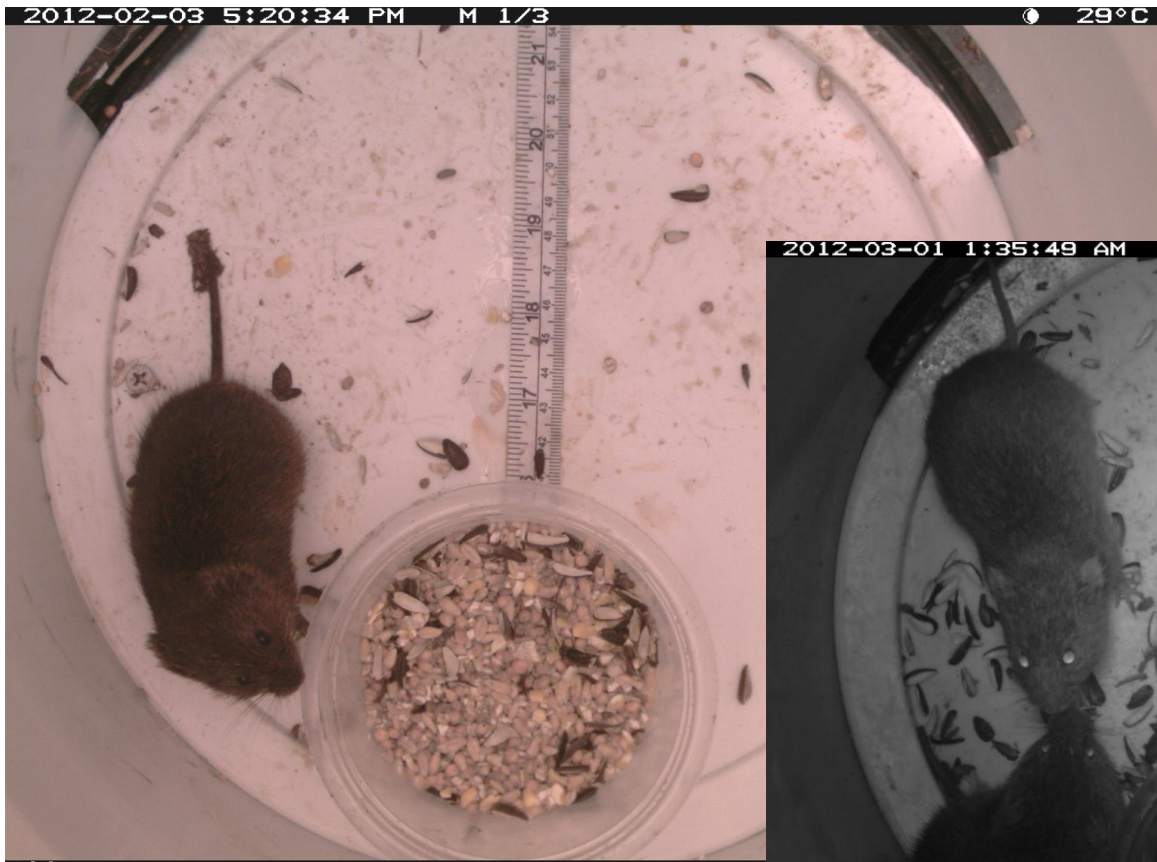
Bucket Traps



Bucket Traps



Bucket Traps



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BECONYX

Bucket Traps



Bucket Trap Cons

- Initial \$ticker \$hock
- Possible theft
- Identification skills very important
- Reviewing photos is time consuming
- Numerous photos of the same individual
- Occasional technological malfunction
- Cannot do population estimates



Bucket Trap Pros

- Allows for passive surveillance, not time dependent
- Lower labor input
- Lower costs overall
- No mortality
- Additional data stamped on photo
- Open to multiple individuals/species throughout survey
- Rugged
- Scout first, trap later



Acknowledgements

Lower Suwannee NWR Staff | USGS | John Hayes
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