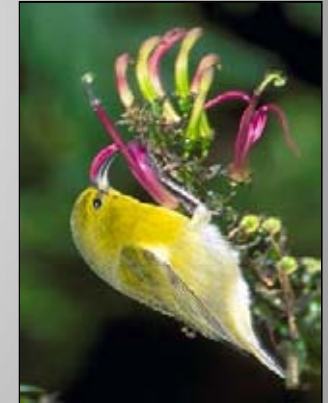


'Akikiki Nesting Behavior

Jeremy Russell

Kaua'i Forest Birds Recovery
Project





Kaua'i Forest Birds



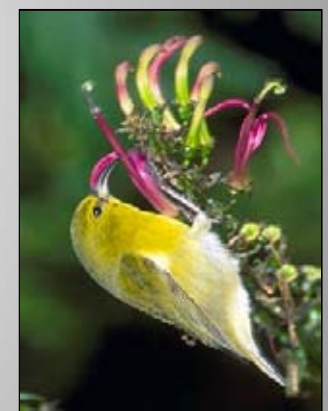


Kaua'i Forest Birds





Kaua'i Forest Birds



Kaua'i Forest Bird Recovery Project

- Monitor Puaiohi during their breeding season
- Monitoring a coordinated release of captive breed Puaiohi with the ZSSD



'Akikiki, or Kaua'i Creeper

(*Oreomystis bairdi*)

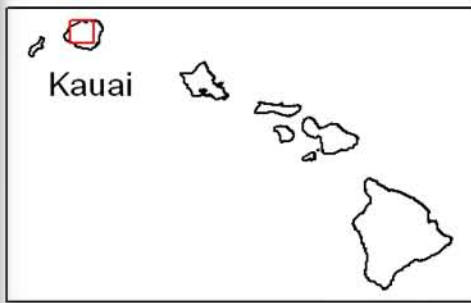


'Akikiki, or Kaua'i Creeper (*Oreomystis bairdi*)

Described in
1887



Why 'Akikiki???



2 1 0 2 Kilometers

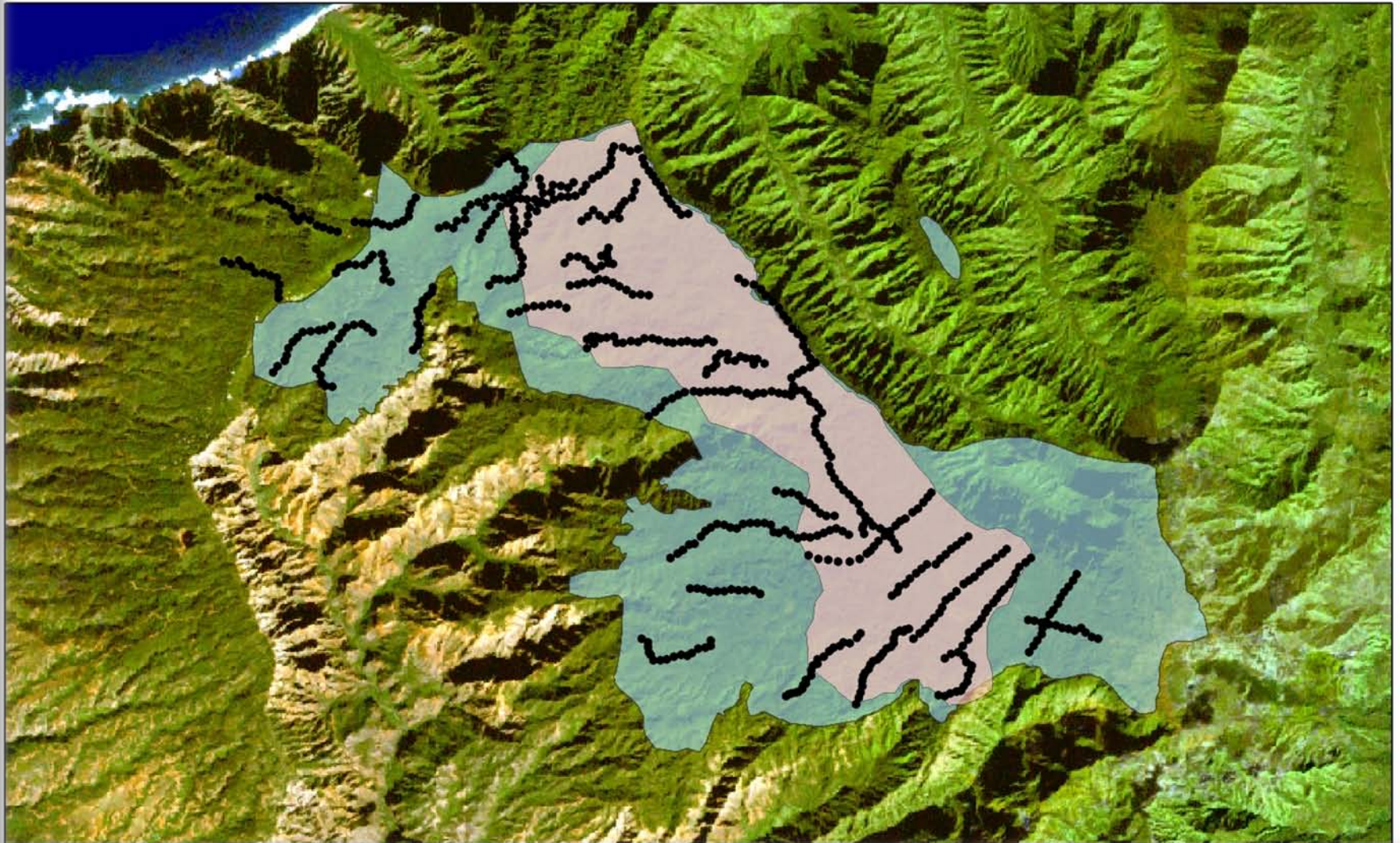


Scale: 1:100,000

• Survey Stations

• 'Akikiki Range 2000

• 'Akikiki Range 1973



'Akikiki, or Kaua'i Creeper (*Oreomystis bairdi*)

Described in
1887

Candidate
species for the
ESA since 1994



'Akikiki, or Kaua'i Creeper

(*Oreomystis bairdi*)

Described in
1887

Candidate
species for the
ESA since 1994

Petitioned for
listing in 2007



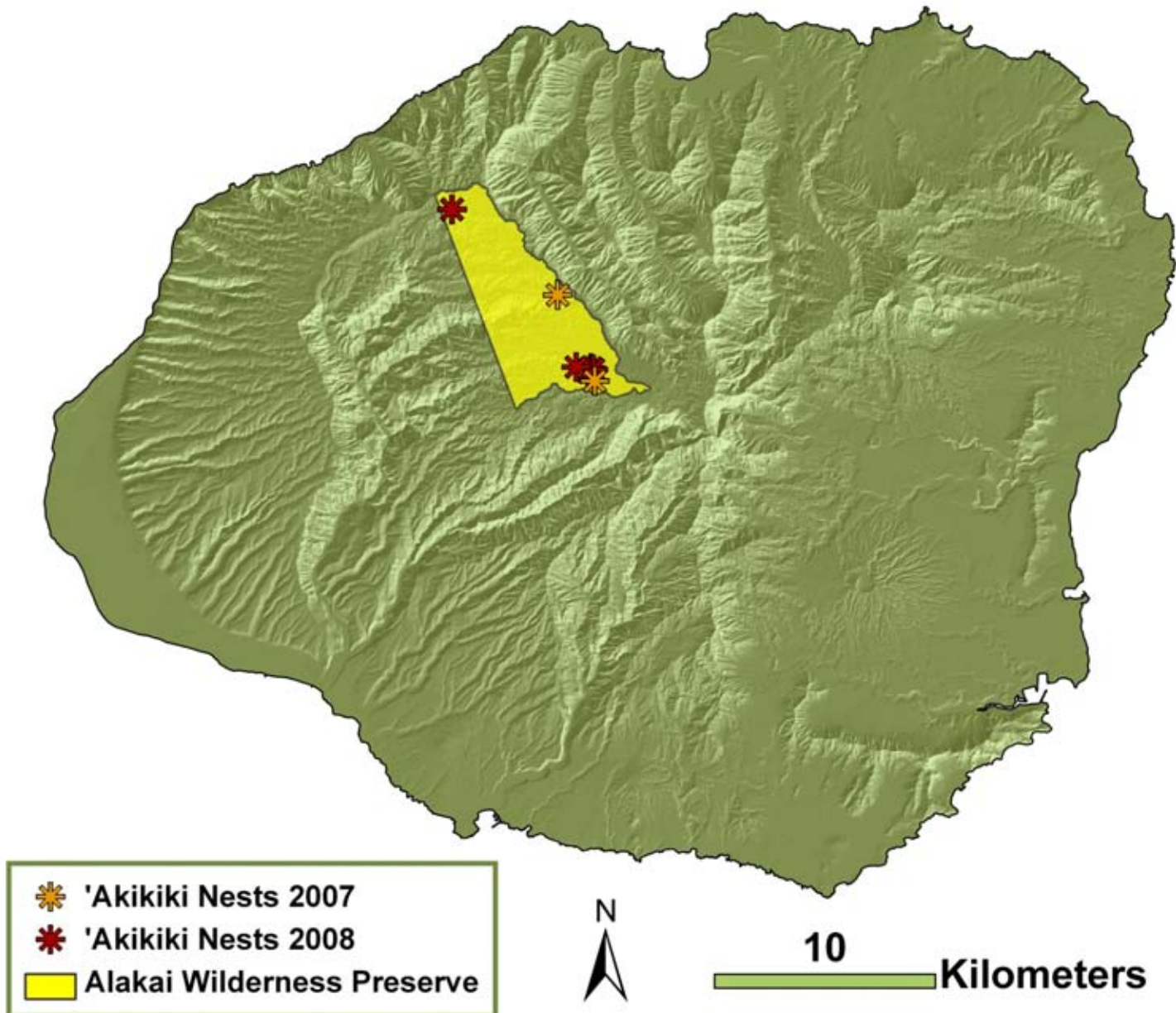
Now is the time!

Historic Nest Data

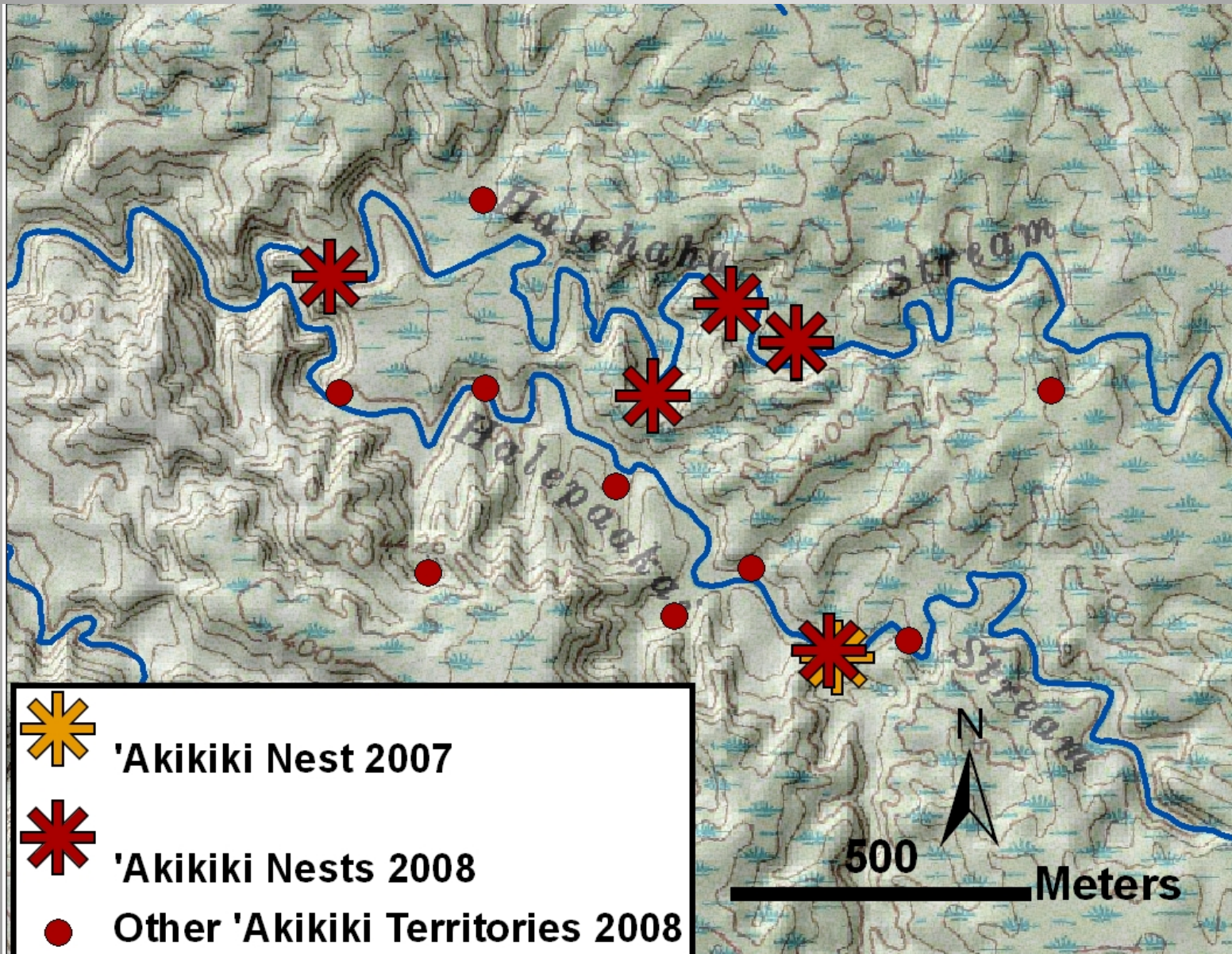
Only 9 nests reported
in 37 years



Alaka'i Plateau, Kaua'i



Study Area: southeast Alaka'i



Field Methods and Protocol

Nest observations included...

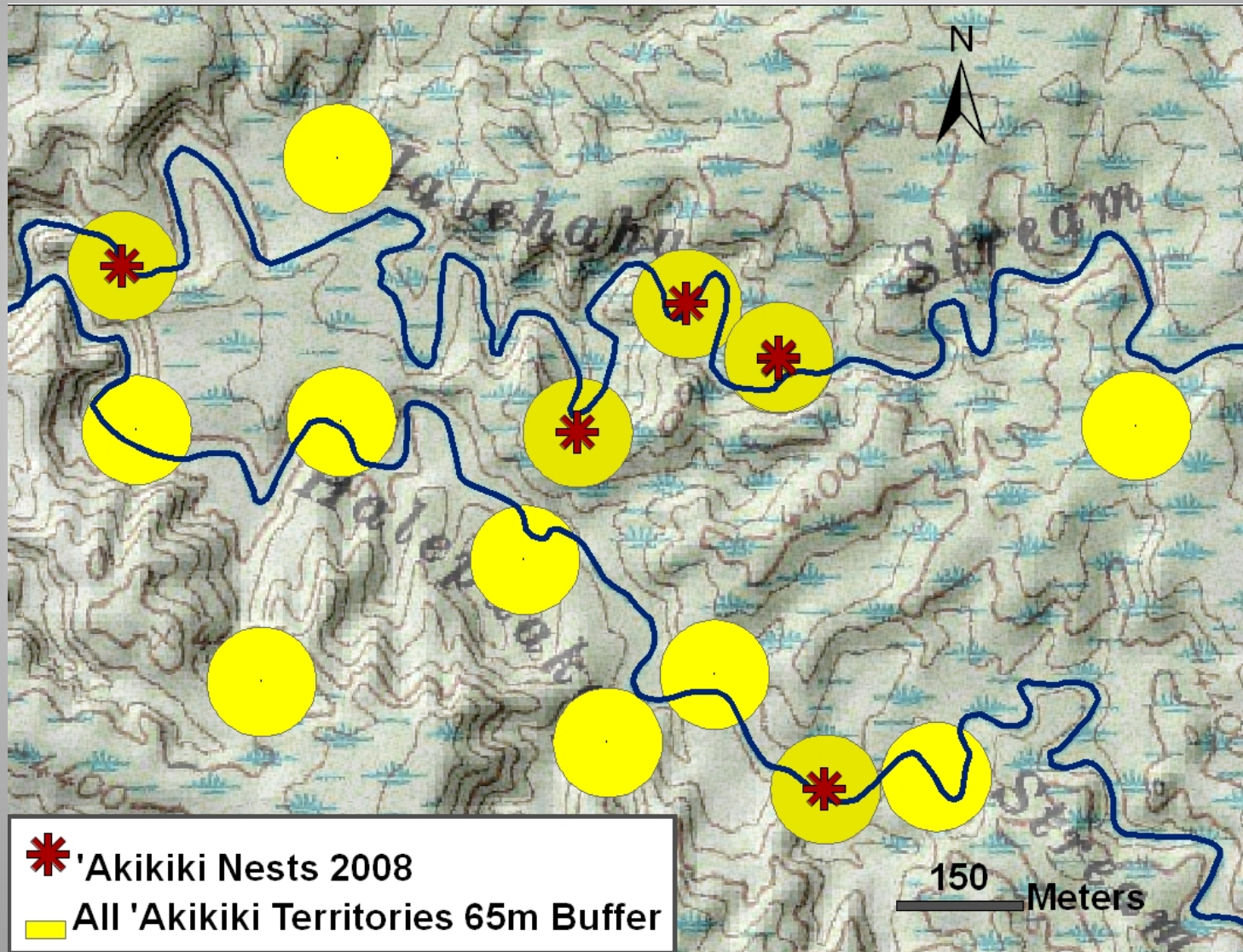
1. Recording initial activity at nest (e.g. Female brooding)
2. Change in event (e.g. Female leaving nest, female coming back to nest, etc...)
3. Feeding events (Male feeding nestling, Male feeding female, Female feeding nestlings, etc...)
3. General activity in area (other birds near nest, Akikiki in area, Akikiki song or calling heard, etc...)

Results



Territory Occupancy

At least 24 territories in 1 km²



Nest Success 2007-2008



7 of 8 nests fledged



Brood Size 2007-2008



Brood size = 2
(N = 5 nests)

Brood size unknown
(N = 3 nests)



One nest failed

Predation?

Weather?

Inexperience?



One nest failed

Predation?

Weather?

Inexperience?



→ Failed at end of incubation.

Double Brooding



N = 8

3 known double-brooding attempts

2 probably succeeded, both with brood size = 2

Adult Nesting Investment



One pair was color-banded

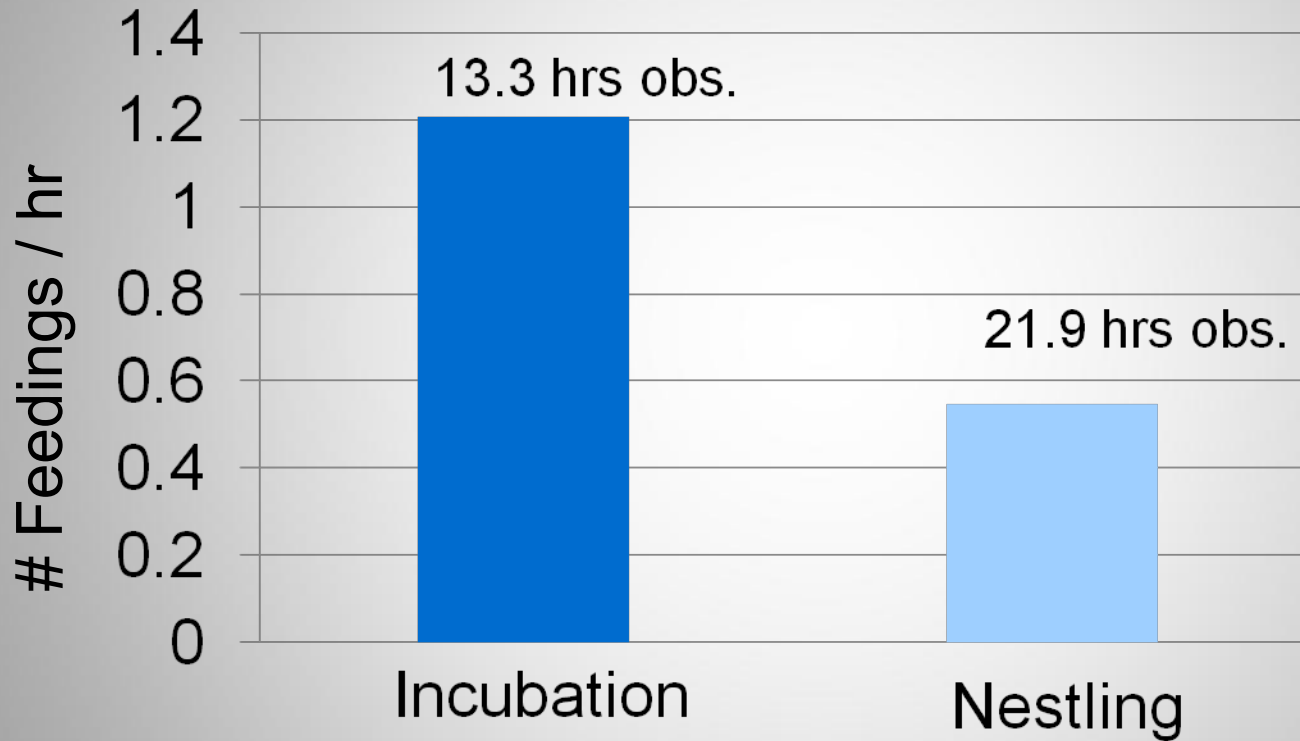


Feeding Rates

With 7 nests observed:

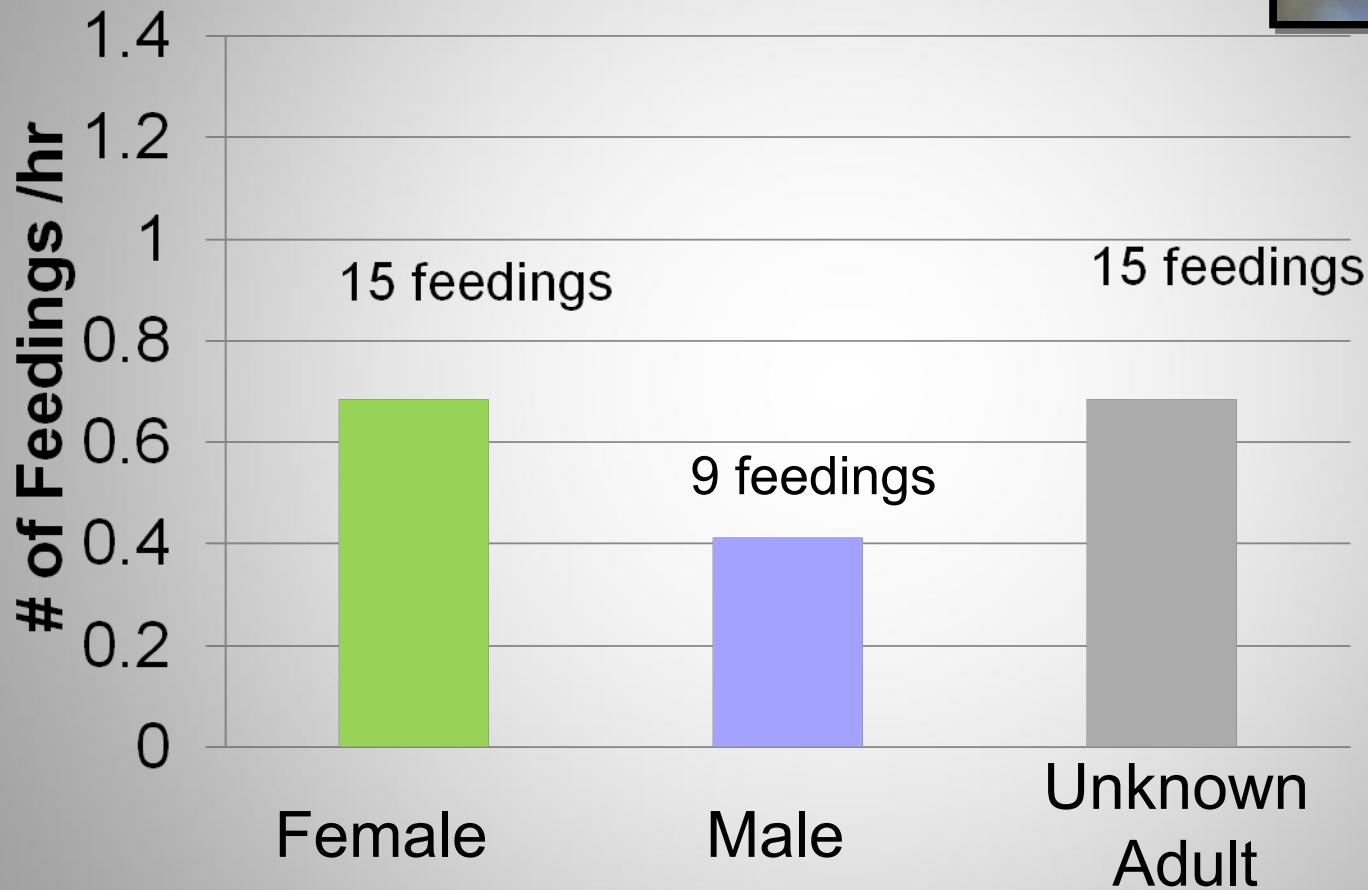
- 78 hours of nest observations
- 166 nestling feeding events
- Nestlings feeding rate averaged 2.1 times per hour

Courtship Feedings



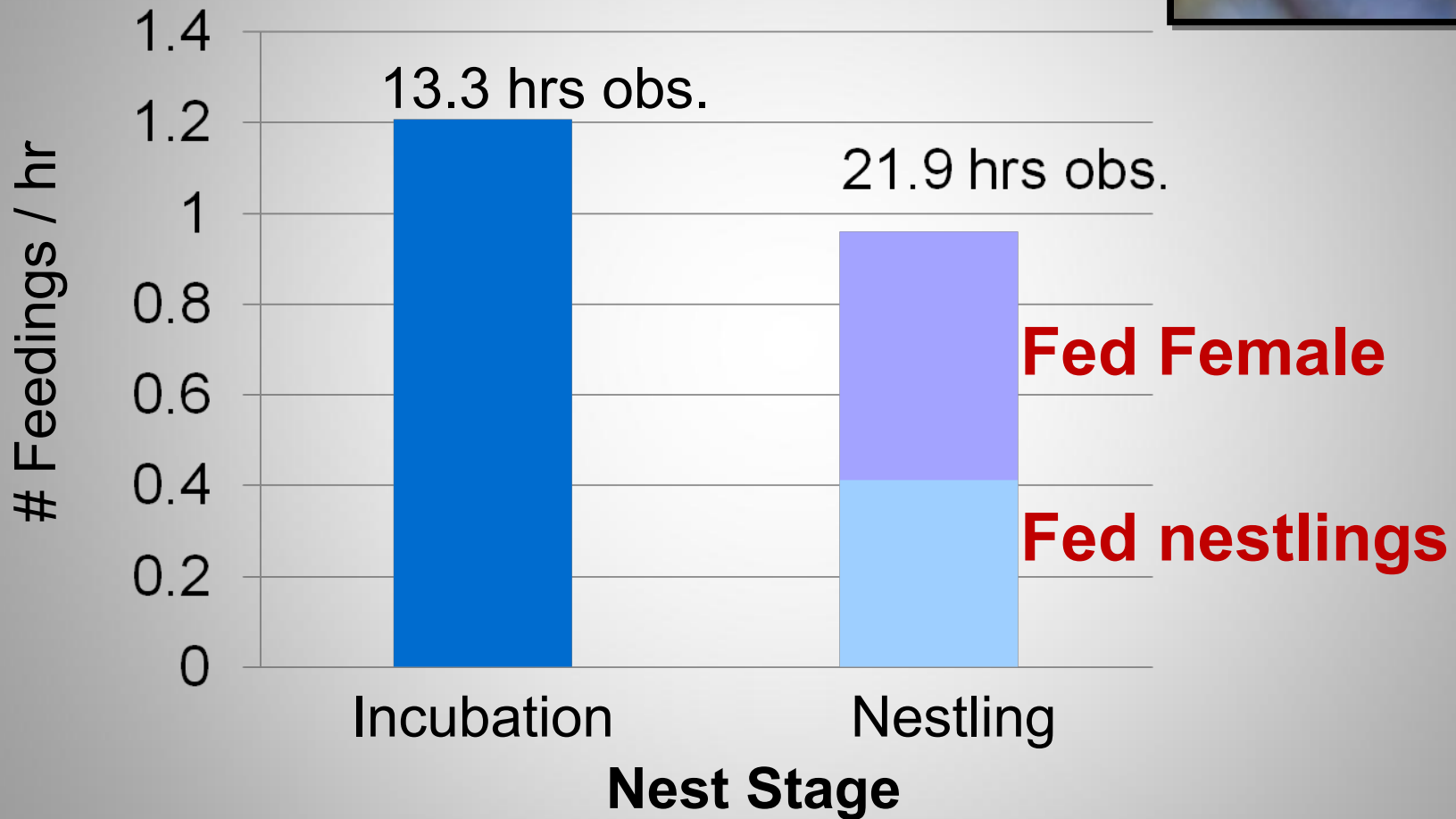
Courtship feeding is common, and occurs even during the nestling stage

Who's feeding nestlings?



Both adults participated in nestling care.

Male investment over the nesting cycle



Male's investment is roughly consistent

What did we learn?

1. At least 24 territories 1 km²
1. Nest success is HIGH in quality habitat
1. Double-brooding
(rare in other honeycreepers)
1. Male 'Akikiki are highly invested in the nesting process

What did we learn?

1. At least 24 territories 1 km²
1. Nest success is HIGH in quality habitat
1. **Double-brooding**
(rare in other honeycreepers)
1. Male 'Akikiki are highly invested in the nesting process

What can we do?

- More research
 - Territory density
 - Survivorship and life history
 - Breeding ecology



What can we do?

- More research
- Management?
 - Habitat
 - » TNC and KRCP
 - Captive breeding





Acknowledgements

KFBRP- Pauline Roberts, Lucas Behnke, Jen Anderson, Mark Wiley, Amanda Boyd, Angie Merritt, Emily Haber, Andrea Powell, and Ed Conrad. Eric VanderWerf, David Leonard, Jack Jeffrey

A vibrant sunset scene with a sky filled with horizontal bands of orange, yellow, and red clouds. The foreground is dominated by the dark silhouettes of trees and a forest canopy. The word "Mahalo!" is centered in the sky in a bold, black, sans-serif font.

Mahalo!