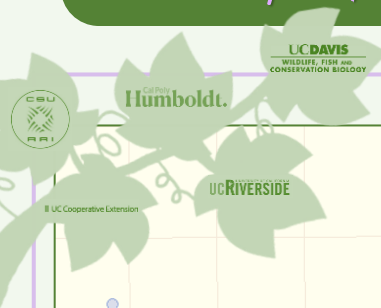
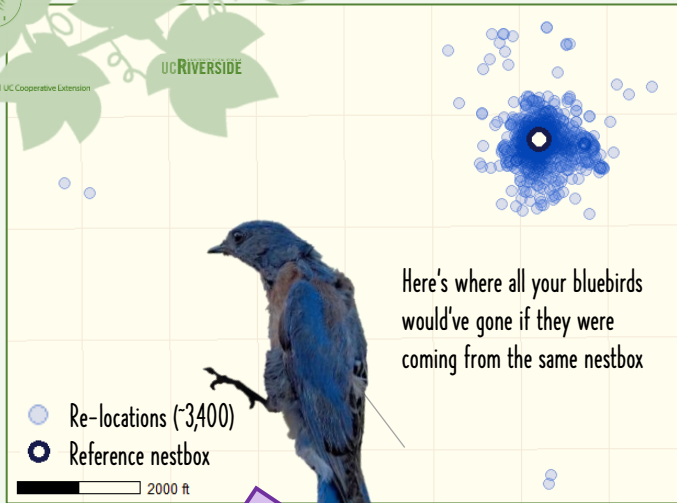


Napa vineyard nestbox monitoring: A first look at GPS tracked birds

Cody Pham, Matthew Johnson, Fatime Jomaa, Breanna Martinico, Brianne Roxborough, Sara Dart, Erin Wilson Rankin, Houston Wilson, Daniel Karp

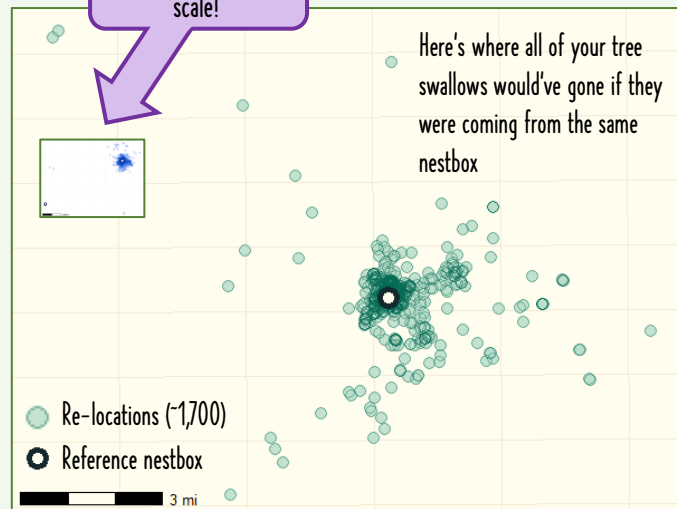


REFERENCED WESTERN BLUEBIRD LOCATIONS



- On average, bluebirds were only ~200 ft. from their box
- Bluebirds were in vineyards 86% of the time, and in natural habitats 12% of the time!

REFERENCED TREE SWALLOW LOCATIONS

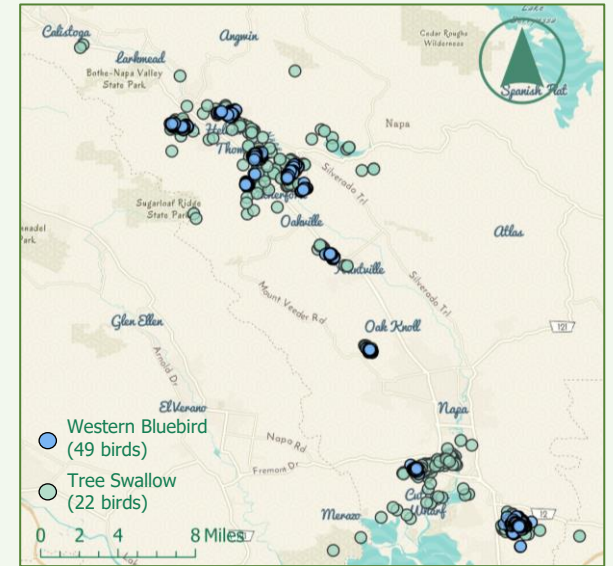


Bluebird ranges to scale!

- On average, tree swallows were ~1,700 ft. from their box
- Tree swallows spent 70% their time in vineyards, 17% in natural habitats, and 11% over water!



ALL GPS TRACKED BIRD LOCATIONS



AN INTERACTIVE MAP OF SOME OF OUR TRACKED BIRDS



THANK YOU TO OUR VINEYARD PARTNERS!

- | | | |
|---------------|-----------------|---------------------|
| Grgich Hills | Chappallet | To Kalon |
| Tres Sabores | Raymond | Inglenook |
| Hess Persson | Spring Mountain | Cain |
| Joseph Phelps | Matthiasson | Napa Valley Reserve |
| Honig | Hyde | Hall |
| Constellation | Schramsberg | |