Chapter 3: ROW Research Into the Future

Leveraging Research at Field Stations

Place Based Monitoring

Types of Research at Local Field Stations

- **Fuel Management Treatments** – Pepperwood
- **Invasive Species** – Sonoma State University, Audubon Canyon Ranch, Pepperwood
- **Erosion** – Pepperwood, Sonoma State University, Audubon Canyon Ranch
- **Wildlife Movements** – Sonoma Land Trust, Sonoma State University, Audubon Canyon Ranch
- **Vegetation and Climate Change** – UC Berkeley, Pepperwood, Santa Rosa Junior College, Sonoma State University, CSU Monterey
- **Disease Transmission** – UC Berkeley, UC Davis, University of North Carolina

Expanding the Network

Figure 1. Locations of the Three Proposed Study Sites. Habitat at Fairfield Osborn Preserve consists mainly of oaks, bay laurel, and grasslands. Pepperwood Preserve includes a mixture of oaks, grasslands, and conifers. The habitat at El Dorado is a mixed conifer forest, located at the edge of the 2014 King Fire.

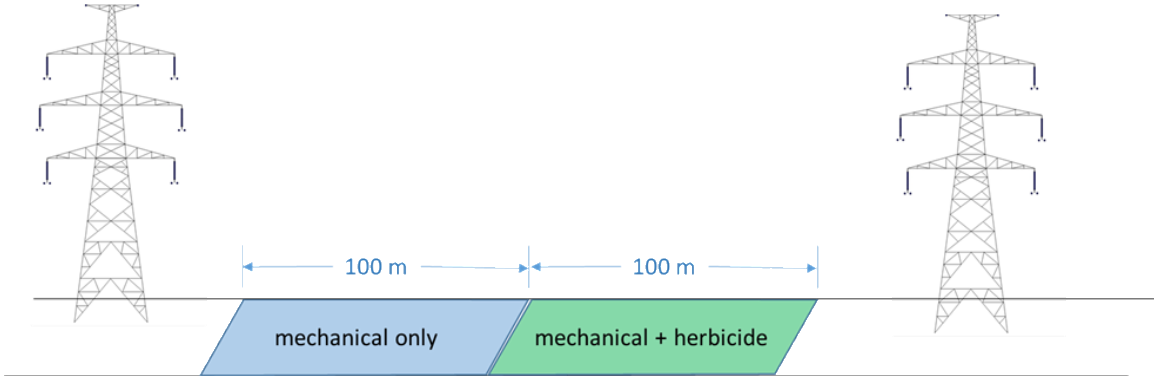

Figure 2. Schematic detailing two treatment plots in a section of ROW. The exact size of each treatment area may vary slightly depending on field conditions

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Three Network Sites and Challenges

Pepperwood

Fairfield Osborn

El Dorado National Forest

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Lessons Learned

The TreeFund Proposal is not simply a Western United States Bramble and Byrnes.

Collaboration Started As: Study of ROW Effects

Collaboration Now Includes: Investigating IVM Strategies

The Collaboration is a true partnership with the utility companies. Implications: (1) Early involvement in scoping best, (2) company expertise should guide framing questions, (3) all levels of company expertise should be available for site visits and scoping.

Western ecosystems and topographical variation are complicated. Flexibility is required.

At least one member of the site scoping team must be intimately familiar with sampling design and viewing the world through a statistical lens.

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BEWARE!

Corporate Overreaction:

Everything is safe unless there is evidence otherwise.

aka…. "if it is legal it is safe"

Public Mis-Perception:

Do nothing unless absolutely proven to be safe.

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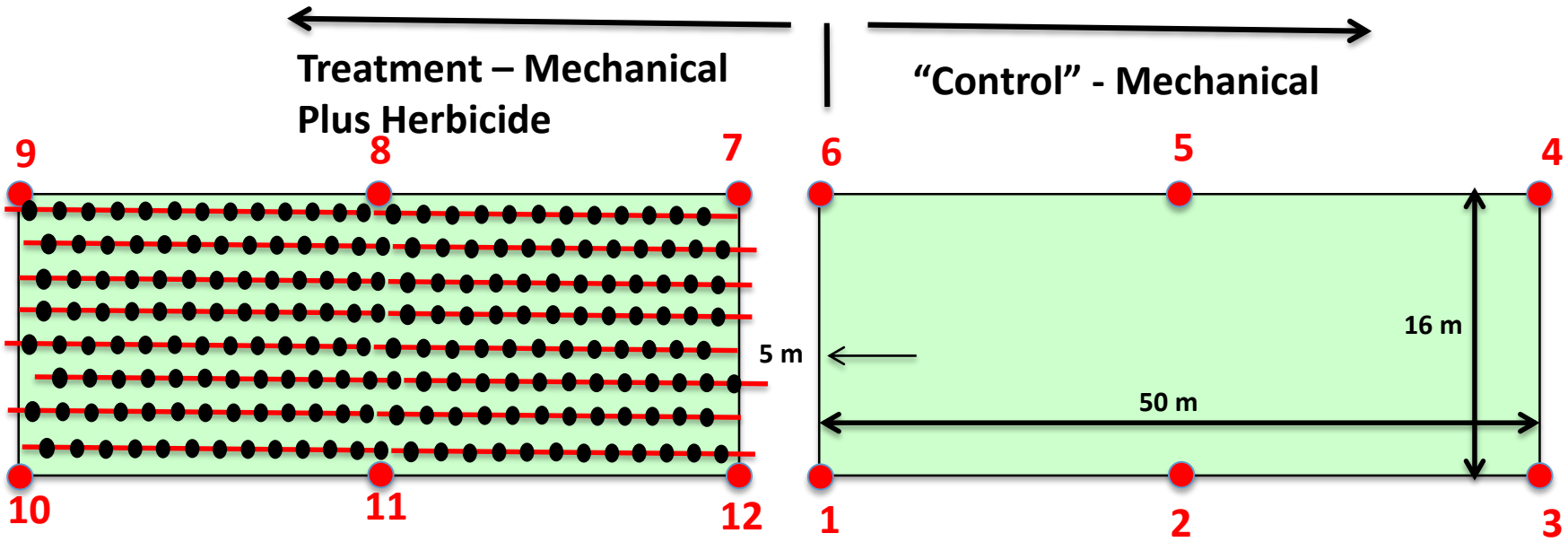
Sampling Strategies / Open Questions

"Randomized Transect Sampling"

- 200 points
- Each point can intersect multiple species
- - Random starts in each direction from origin
- "Walk-through" to capture species not sampled

"Open Question":

How to Classify Vegetation For Analysis?



Veg Mapping Origin
"Treatment" – Mechanical Plus Herbicide

Veg Mapping Origin
"Control" - Mechanical

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Vegetation Classification

Eldorado National Forest, October 2016.

Eldorado National Forest, June 2017.

ROW incompatible within 10' of towers	ROW incompatible in wire zone (can encroach on Minimum Vegetation Clearance Distance)	ROW incompatible in wire zone (when density is greater than 50% ground coverage)

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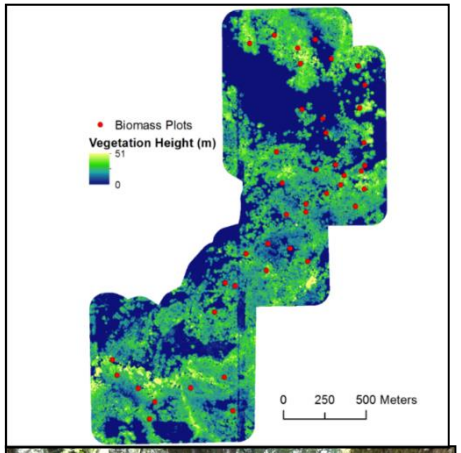
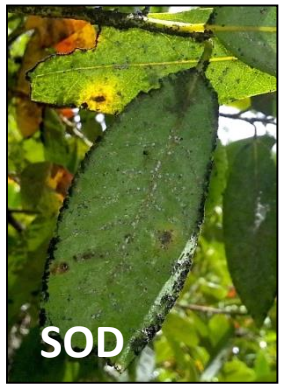
Ancillary Research





Preparing Call For More Research.

What else might be useful or interesting to see?

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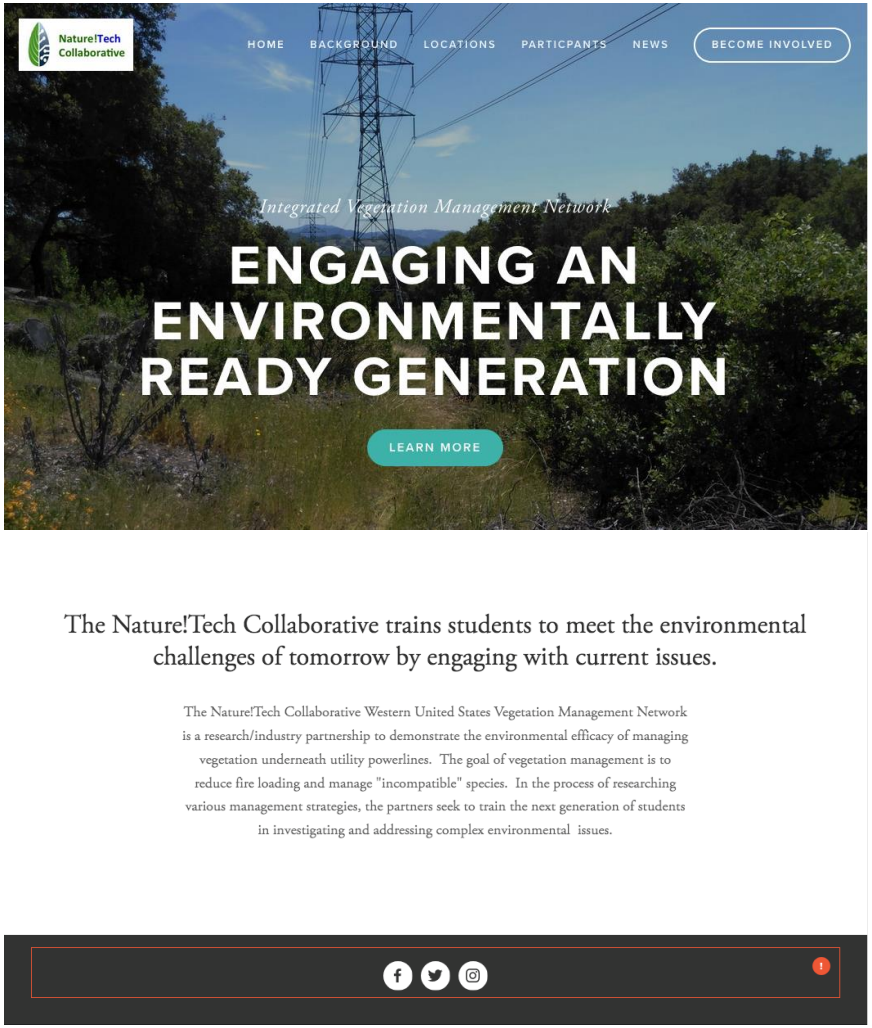
Project Webpage



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More Information?

Research and Technology Programs

ROW Research

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