Planning for Kiwikiu Reintroduction: Habitat Restoration in Nakula NAR

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MFBRP Nakula objectives

- Increase habitat for Kiwikiu
- Experimental trials
- Large outplantings
  - “Corridors”
  - Erosion Scars
The Problem
GRASSES

1. Natural regeneration limited in grassland/savanna habitat

2. Challenges of outplanting
Experimental Trials

- Factors:
  - Natural regeneration
  - Outplanting
  - Seed scatter
  - Tree canopy
- Four treatments
Experimental Trials

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[Diagram showing control, herbicide, herbicide & biomass removal, biomass disruption]
Landscape Level Restoration

• Outplanting Corridors
• Erosion Scars
Landscape Level Restoration

- Outplanting Corridors
- Erosion Scars
Landscape Level Restoration: Outplanting Corridors

- Minimal herbicide in areas with native and regenerating vegetation
Landscape Level Restoration: Outplanting Corridors

- Survivorship is similarly high as with the experimental plots
Conclusions:

Grass suppression

- Experimental Plots
  - Natural regeneration
    - Limited to a few spp.
    - Stimulated by combination of herbicide and biomass removal
  - Outplantings
    - High survivorship
    - Treatment effects for survivorship varied by spp.
    - Possible qualitative benefits by treatment
- Grass suppressed for 18 mo
  - No added suppression with biomass removal
  - Sufficient for most spp. to get established
- Corridors
  - Grass suppression for shorter time period?
  - Minimal weed introduction
    - no Bocconia or fireweed