# **Territory Selection by Puaiohi:** Influence of Food Abundance, Forest Composition and Structure Lauren Solomon, Dr. Lisa Crampton, Lucas Behnke, Barbara Heindl



#### Introduction

- The Puaiohi, *Myadestes palmeri*, is an endangered songbird endemic to the island of Kaua'i
- Current population estimated at 200-1000 individuals<sup>1</sup>
- Suitable habitat restricted to high elevation (>1000m) forest in the Alaka'i Wilderness Preserve
- During breeding season, Puaiohi are restricted to streams, where they nest on vertical cliff walls
- Puaiohi mainly frugivorous, supplementing diet with insects
- The importance of fruiting vegetation and topography features on territory selection is unknown







Figure 1. From left to right: typical Puaiohi nesting habitat; adult Puaiohi feeding nestlings; adult Puaiohi with Pukiawe shrub.

### Methods

- Fruit plots (6m x 6m square) surveyed for common fruiting species. Variables measured include individuals of fruit bearing age (FBA) and individuals bearing fruit (FBI)
- Vegetation plots (5.643m radius circular) surveyed for forest structure. Variables measured include tree dbh, percent of moss coverage on tree trunks, canopy height and ground cover
- 105 total plots: 45 in territories, 60 outside



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Conclusion

- needed in the future
- Results have implications for selecting suitable sites for future Puaiohi releases and habitat restoration with suitable plants



### Literature Cited

- . Hawaii Division of Forestry and Wildlife. Puaiohi five-year recovery work plan 2010-2015. Unpublished report.
- 2. Pejchar, L. 2011. Unpublished data 3. Roberts, P., Crampton, L., Hammond, R. 2011. A geographical evaluation of Nesting Substrate for the Puaiohi,

# Myadestes palmeri.

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Mean fruit/plot	t

332	
135	
77	
41	
37	

