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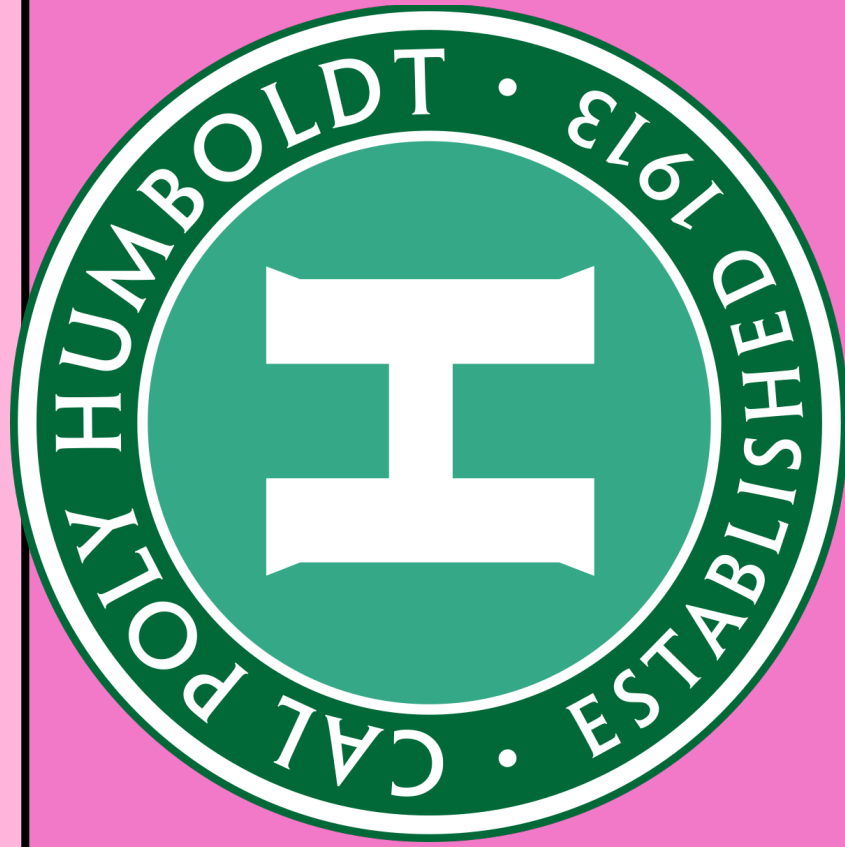
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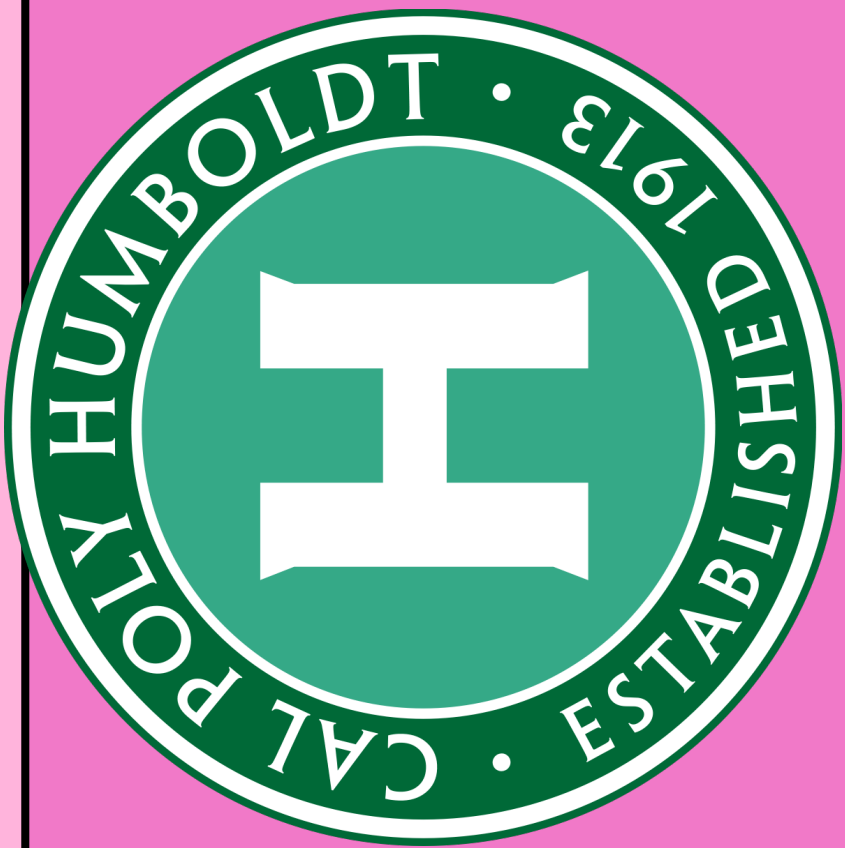
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# Hummingbird Flower Use at the Humboldt Botanical Garden

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Introduction

- Hummingbirds accessible to variety of flora that vary in coloration
- Flower color potential explanation for selection
- Residential species, Anna’s Hummingbird
- Migratory species, Allen’s and Rufous Hummingbird
- Ecologically important pollinators

Study Objective

- Explore if hummingbirds' preference particular flower color(s)
- Determine if hummingbirds’ select for certain garden patches

Methods

- Feeding pattern data
- Fisher’s exact test

Independent Variable



Dependent Variable



Color	Use	Available
Red	13	19.12
Orange	1	6.2
Yellow	1	24
Blue	0	3.8
Indigo	0	9
Violet	3	13.8
Pink	352	48.22
White	423	42.32

Results

- 793 total feeding observations
- Pink/white flowers used the most, blue/indigo the least
- Green flowers unavailable
- Yellow used very little, high availability index
- Statistically significant

Discussion

- Hypotheses supported
- Active selection among pink and white flowers
  - All other colors that were available had little/no use
- Studies suggest attraction for red, avoidance of yellow
  - Vision ability with wavelengths of pink/white
- Focus on highly selected flora species for management