# Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

# Winter Banding Results from the Lower Colorado River 2002-2007



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#### Background

- 5,940 acres of cottonwood-willow, and 1,320 acres of honey mesquite
- Banding began during the winter of 2002-03 at two sites.
- Protocol was changed based on early results
- 2005-06 was the last year of banding at the Pratt site and the first year at the Havasu site.

#### Methodology

- 2003 to spring 2004 band for a week each month, 3 months.
- 2004 to present band 2 days each month for 6 months.
- 12 nets, each 12 meters in length are operated at each site.
- Banding begins half hour after sunrise and is conducted for 6 hours.
- Area searches conducted.

# **Banding Locations** NV Havasu NWR Site AZ CA Cibola NWR Site **Pratt Agricultural Site**

### Main Species Captured

- 3 species were commonly captured at all sites
- Several other species were commonly captured at the Cibola site, mainly in areas dominated by mesquite and dense Johnson grass.

### Orange-crowned Warbler



### Yellow-rumped Warbler



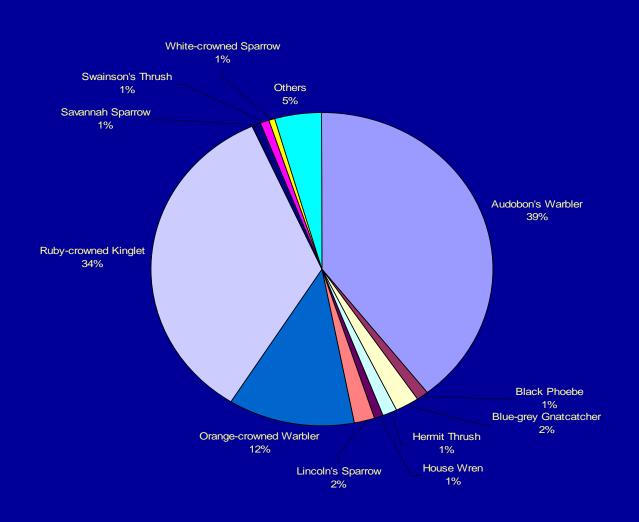
### Ruby-crowned Kinglet



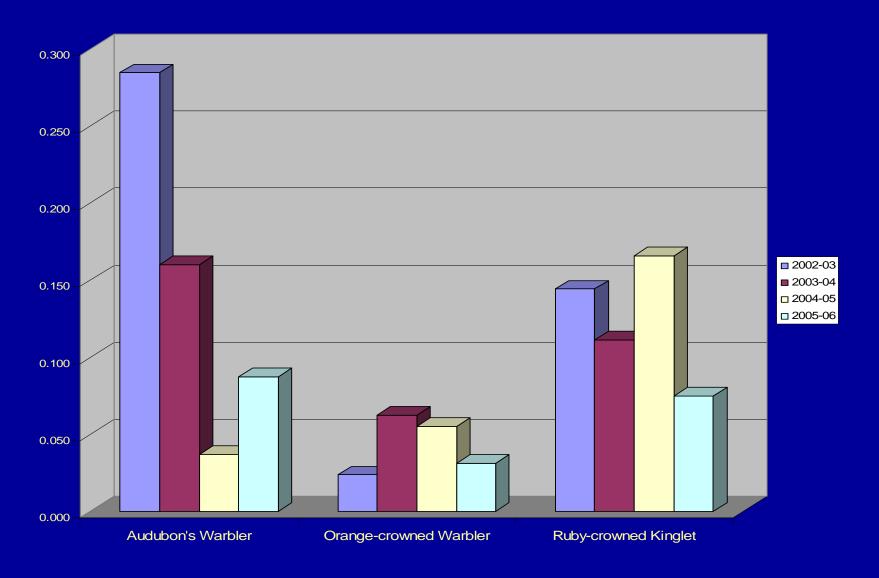
#### Pratt Agricultural Banding Site



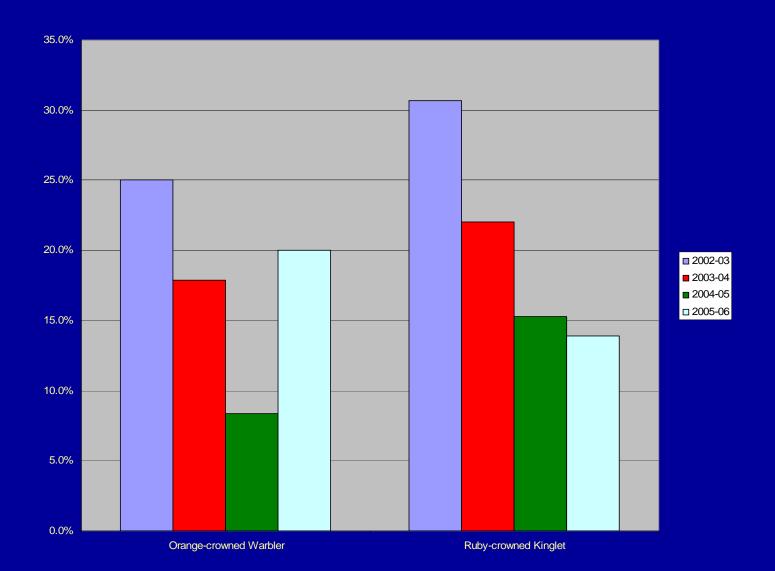
# Relative captures at the Pratt Agricultural Site Fall 2002- Spring 2006



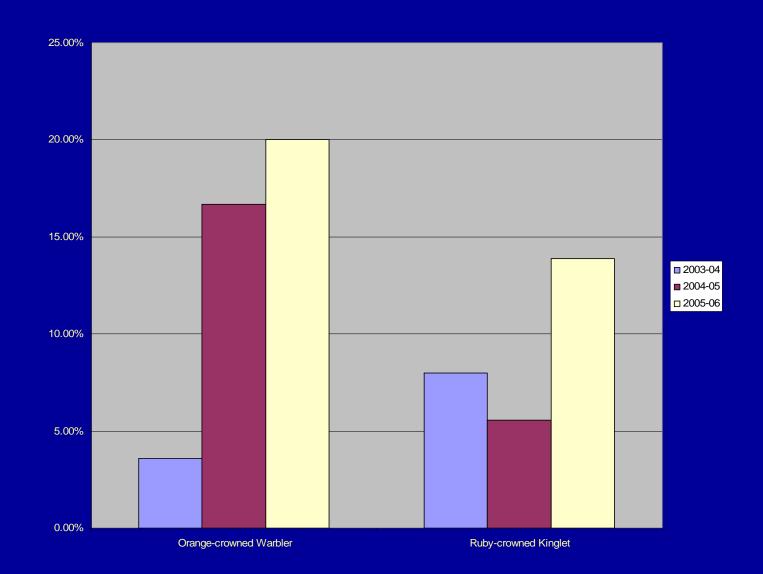
# Yearly Captures (Birds per Net Hour) Pratt Ag Site



# Winter Site Persistence at the Pratt Site



#### **Annual Return Pratt Site**



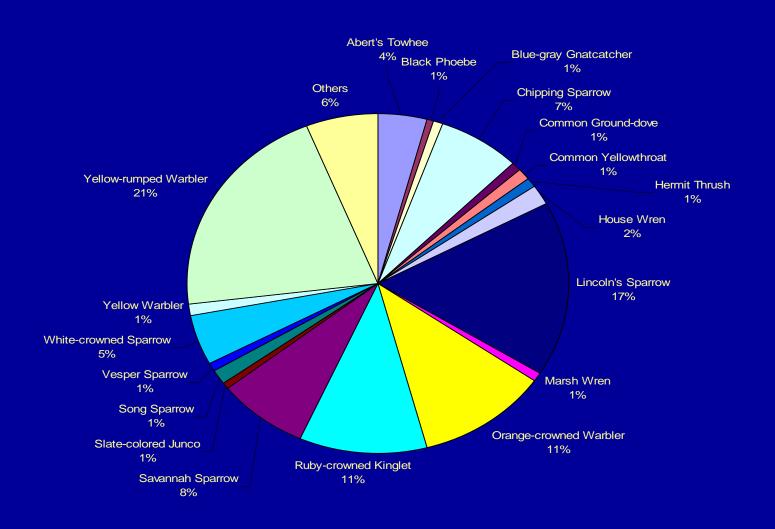
#### Pratt site fact sheet

- Total N1 value (4 years) = 5.30
- Total of 33 different species captured
- Per year, the species richness was between 13-17

### Cibola Nature Trail Banding Site



### Relative captures percentages for the Cibola site 2002-07



### Lincoln's Sparrow



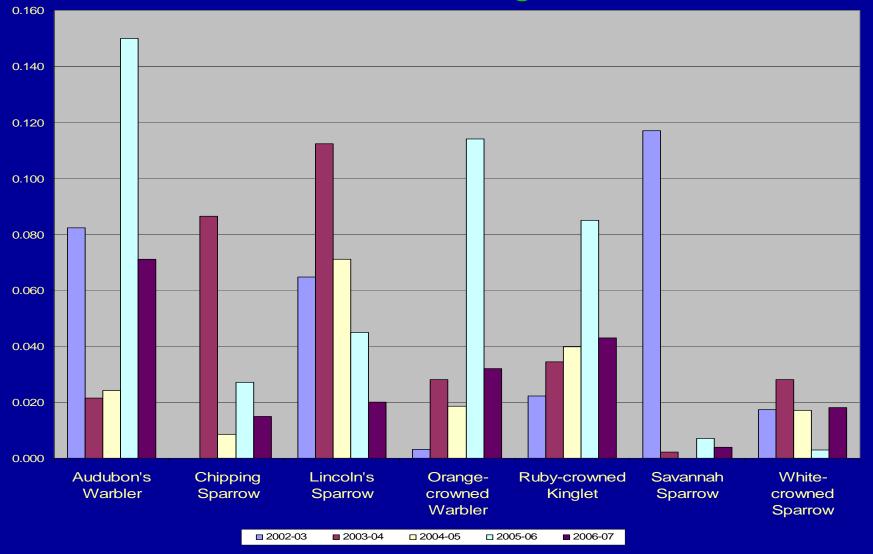
### Chipping Sparrow



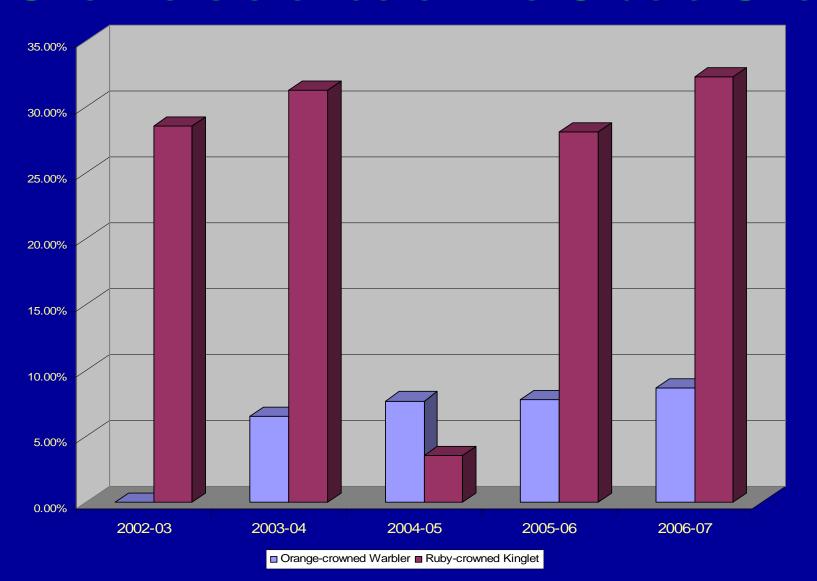
### Savannah Sparrow



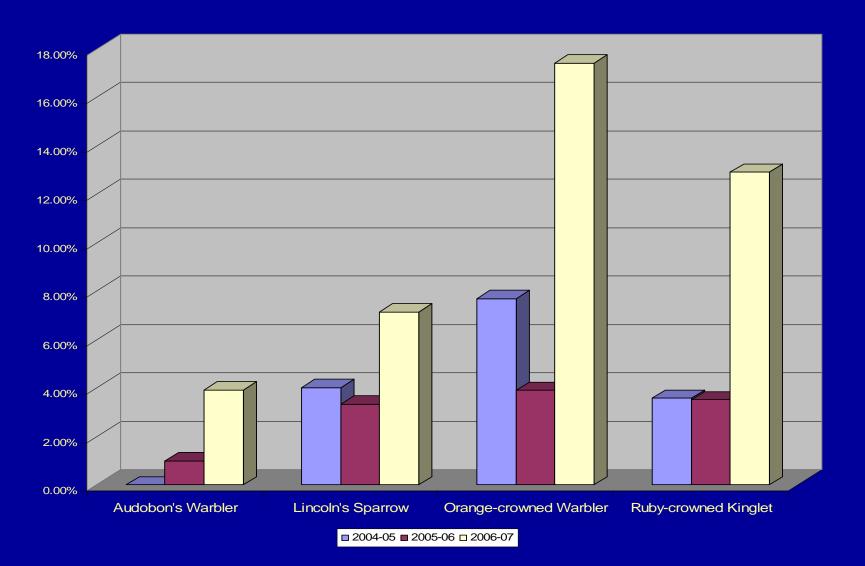
# Yearly, per net hour capture rates at the Cibola Banding site



#### Site Persistence at the Cibola Site



#### Annual Return at the Cibola Site



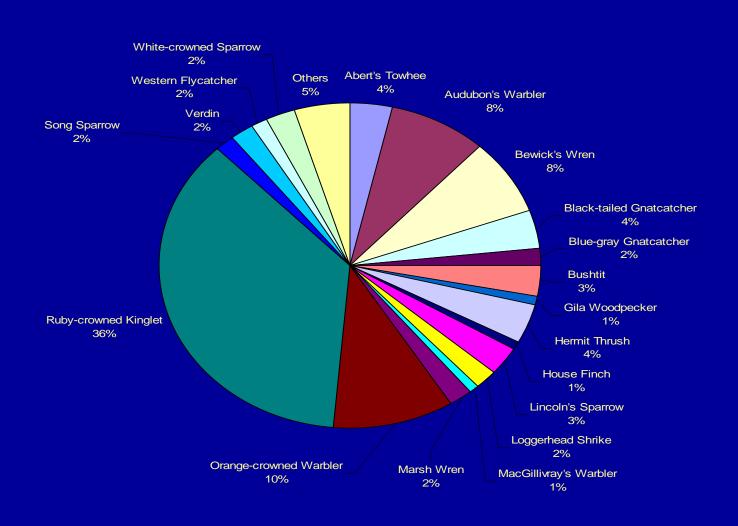
#### Cibola Site Fact Sheet

- For all five years N1 = 13.92
- 48 different species captured
- Per year, the species richness was between 21-28

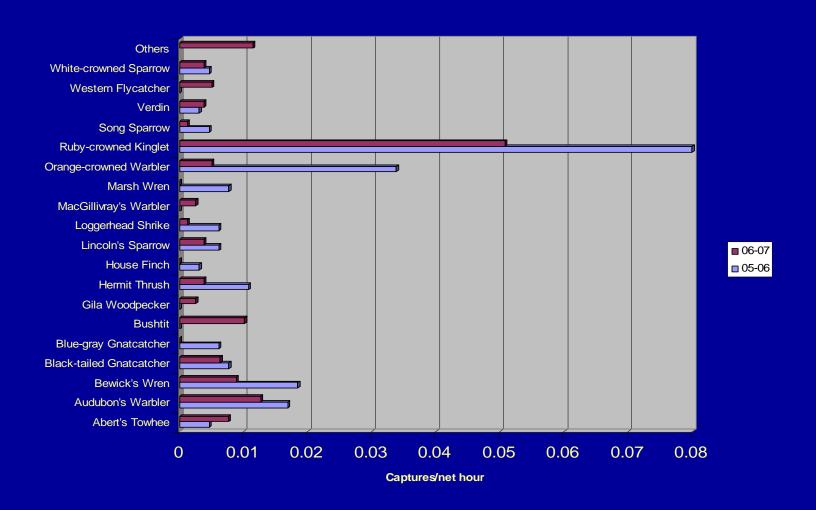
### Havasu NWR Site



# Relative captures for the Havasu NWR site fall 2005- spring 2007



### Capture rate for the Havasu NWR site Fall 2005- Spring 2007



#### Conclusions

- No significant difference in species diversity between years at one site or between sites in the same year.
- Species diversity (N1) was significantly higher at Cibola than at Pratt (P = .001) over the four years that banding was conducted at both sites.
- Diversity always highest at the Cibola site.
- The Mesquite habitat with the grassy understory provided habitat for sparrows.
- For some species winter use varied greatly.
- For RCKI and OCWA use was consistent at the sites
- AUWA utilized sites but almost no recaptures