Resource Assessment Project Status Summary

Title of Project

Burrowing Owl Mitigation Effectiveness Project

Status Ongoing

Start Date (m/d/yyyy) 6/1/2002

Finish Date (m/d/yyyy) 5/30/2005

Project Description

The goal of the project is to determine survivorship in a group of burrowing owls (*Athene cunicularia*) subjected to standard mitigation measures contained in DFG's "Staff Report for Mitigating Impacts to the Burrowing Owl". The survival rates of study owls will be compared with those reported in the literature. A secondary objective of the study is the documentation of the pattern of dispersal for fledging young.

Biogeographic Region(s)

Headquarters
Statewide
North Coast
Modoc
Sierra Cascade Ranges
Sierra Foothills
Central Valley
Central Coast
South Coast
Desert

Click here to view biogeographic map
(CTRL or SHIFT for multiple selections)

Accomplishments

- 36 burrowing owls were captured and fitted them with 4.5 gram radio transmitters (24 during 2002 and 12 during 2003) The owls were captured at four different construction sites in Sacramento County (figure 1).

- The owls were radio tracked and/or visually monitored from the time they were captured, through construction, passive relocation, and dispersal (July-December 2002 & 2003).

- Monitoring provided information about mortality and, to a limited degree, dispersal.

Species (Class or Family)

Birds

Click here to select a flora family

Findings/Observations/Issues

-Six study owls were recorded as "missing" meaning that we could not relocate them and therefore their status could not be determined. All 6 missing owls were juveniles, if these owls are assumed to be dead, then survivorship would drop substantially. However, missing owls may also be alive and have dispersed/ migrated. Therefore, we calculated the range of survivorship possible for those cases. If missing animals are omitted, the survival rate for study owls was 0.47 over the 6 month period July to December (0.38 for juveniles, 0.55 for adults). Rosenberg (2001) observed annual survival rates of 0.62 for females, 0.65 for males (n = 242) in an agricultural area near El Centro in the Imperial Valley of California. Rosier (2001) studying a group of 17 burrowing owls in the grassland habitat of the Carrizo Plain National Monument calculated the survival rate to be 0.61. Johnson (1997) calculated survivorship in a group of 112 burrowing owls living on the UC Davis campus. The "worst case"

Reference(s) (Click to view)

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Project Contacts and Collaborators

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