

## ENDANGERED AND SPECIAL STATUS SPECIES STUDIES AND CONSULTATIONS



Our company is a leader in the management of threatened and endangered species in California. We have been pivotal in successfully resolving complex issues associated with special-status species for government and privately sponsored projects.

Our knowledgeable staff is the key to successful consultations with regulatory agencies responsible for project permits involving special status species. Many of our staff scientists are recognized experts on listed species, intimately familiar with their lifecycles and habitat requirements. Therefore our staff can identify mitigation and management options that have a high likelihood of success.

Our work usually involves completing surveys for specific species, determining if a project may affect that species, looking for avoidance or minimization measures, then moving through the regulatory and permitting process with the appropriate federal and state agencies. Some of the species with which we work most often are the salt marsh harvest mouse, Burrowing Owl, California Clapper Rail, California red-legged frog, San Joaquin kit fox, bay checkerspot butterfly, California tiger salamander, Santa Clara Valley Dudleya, and a host of vernal pool plants and invertebrates. For example, we have conducted more than 200 surveys for the salt marsh harvest mouse, and over 1000 surveys for Burrowing Owls. We have prepared hundreds of Biological Assessments, numerous Habitat Conservation Plans, and preliminary steps in consulting through sections 7 or 10 (respectively) of the Federal Endangered Species Act.

# Endangered and Special Status Species

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## SUISUN MARSH SALT MARSH HARVEST MOUSE STUDY - *Solano County*

This study area involved thirteen sites within Suisun Bay, California. We conducted an extensive study on the current status, distribution and abundance of the salt marsh harvest mouse and developed a plan for a five-year evaluation of the effects of water diversions proposed for this area. Certain sites were selected to ascertain the effects of specific water diversion structures. We sampled vegetation and trapped for Salt Marsh Harvest Mouse at these selected sites to characterize areas subject to the change in water regimes.

*Client: U. S. Department of Water and Power Resources Service*

## 3COM BURROWING OWL RELOCATION AND MANAGEMENT PLAN - *Santa Clara County*



At least 25 Burrowing Owls occupied a parcel of land owned by the 3COM Corporation scheduled for construction during the 1997-breeding season, which was owned by 3Com Corporation in the City of San Jose, Santa Clara County, California. We worked to develop a mitigation plan for impacts to this population of Burrowing Owls. This work involved identifying all lands in and near San Jose that might comprise potential owl mitigation habitat. Each site was ranked based on a variety of habitat and other relevant factors. Final site selection was made, and an owl relocation plan and relocation site development and management plan were prepared. We successfully relocated the birds in early spring 1997, before the onset of the breeding season. Monitoring and mitigation continued until October 2000.

*Client: 3Com Corporation*

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*Successful relocation of  
California tiger  
salamander.*

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## CINNABAR HILLS GENERAL PLAN AMENDMENT EIR AND CALIFORNIA TIGER SALAMANDER MITIGATION - *Santa Clara County*

The Cinnabar Hills golf course site is a 347-acre parcel located southeast of Calero Reservoir, upon which a 27-hole golf course was proposed. We prepared the biological section of the EIR, identifying significant impacts including loss of wetlands, riparian habitat, stream channels and aestivation habitat for California Tiger Salamanders (CTS). Mitigations were developed for each of the significant impacts, and we prepared the permit applications. Over 10 acres of riparian and wetland mitigation was developed, including three ponds (2.5 acres) of breeding habitat for California Salamanders. The project received all its approvals and permits, and over 100 adult and juvenile



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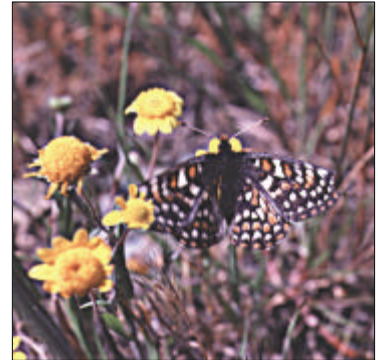
salamanders were captured from impact areas and relocated to the breeding ponds. Four years later (2000), salamanders were still breeding in the created pools, the first and most successful such relocation in Northern California. The golf course, and its other mitigation measures have been completed.

*Clients: Mindigo & Associates, Brandenburg Properties*

### CALERO LAKE ESTIATES: 1998 BAY CHECKERSPOT BUTTERFLY AND SPECIAL-STATUS PLANT SURVEYS - Santa Clara County

The Calero Lake Estates project site is an approximately 270-acre parcel located within San Jose city limits that has subdivided into twenty-four 10-acre parcels for residential development. Following our earlier reconnaissance level survey (1992), the entire site was resurveyed in the spring and summer of 1998 to determine the presence or absence of special-status plant species and Bay Checkerspot Butterfly. Six special-status plant species, including the federally endangered Santa Clara Valley dudleya, the uncommon jewelflower, the Mt. Hamilton thistle, Hall's bush mallow, large-flower linanthus, and serpentine linanthus were located on site. One adult Bay Checkerspot Butterfly and two larvae were located on site during the 1998 survey effort. The site was subsequently sold to another party.

*Client: Ashford Development*



### TEHAMA FIBER FARM SIMPSON TIMBER COMPANY, VERNAL POOL INVERTEBRATE SURVEYS - Tehama County

The Tehama Fiber Farm is a several thousand-acre Eucalyptus farm located in Tehama County, west of the Sacramento River. The farm comprises two properties that are divided into eight main plots used in crop rotation. We conducted a series of surveys on the Tehama Fiber Farm between February and April 1995 for Conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. Mima mound vernal pool complexes occurred on a portion of the farm. Many of these pools, which occurred in the unplanted areas of the farm, supported the vernal pool fairy shrimp. The results of these surveys and the analysis that we conducted on potential mitigation areas served as the foundation for the Section 7 consultation conducted with the U.S. Fish and Wildlife Service.

*Client: Pillsbury, Madison & Sutro*

## Endangered and Special Status Species

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### SANTA NELLA COMMUNITY SPECIFIC PLAN EIR, MITIGATION PLANNING, AND HCP - *Merced County*

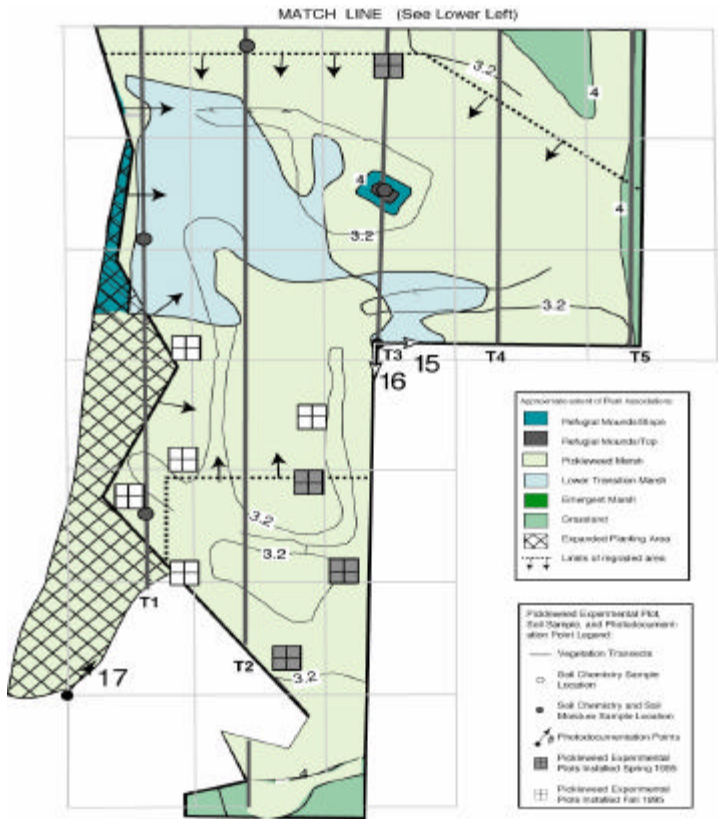


Santa Nella, an unincorporated section of Merced County, developed a Community Specific Plan (CSP) for that proposed residential, commercial, industrial and other urban uses on 2700 acres. Working for the landowners in the CSP, we conducted baseline biological surveys. We then drafted the Biological Resources Section for the revised Santa Nella CSP EIR recognizing that the critical biological issue for this area was the potential for impacts to the endangered San Joaquin kit fox. As a key element of the mitigation strategy for the CSP, we developed a kit fox Mitigation Plan that will ensure continued movement opportunity through the area at full build-out. This plan provides the basis for a HCP process currently being initiated. The EIR was certified, and the Specific Plan approved in 2001.

*Client: Kaufman & Broad*

#### OTHER REPRESENTATIVE PROJECTS:

- SANTA CLARA COUNTY SENSITIVE NATURAL RESOURCE BASE MAPS - *Santa Clara County*  
*Client: Santa Clara County, Planning Department*
- 1990 BAY ROAD, EAST PALO ALTO: T&E SPECIES SURVEYS, RESTORATION DESIGN, PERMITTING, MITIGATION PLANNING - *San Mateo County*  
*Client: Geomatrix, Inc., Jenkins, Sanders & Associates for Rhone Poulanc, Inc.*
- CONCORD NAVAL WEAPONS STATION MARSH RESTORATION AND LONG-TERM BIOLOGICAL MONITORING - *Contra Costa County*  
*Client: PRC Environmental Management Inc. for the U.S. Navy*



Aerial Photo: Concord naval Weapons Station-Marsh Restoration and Monitoring Area

