

**Western Riverside County
Multiple Species Habitat Conservation Plan (MSHCP)
Biological Monitoring Program**

Incidental Observations of Species of Interest in 2006



April 23, 2007

NOTE TO READER:

This report is an account of survey activities undertaken by the Biological Monitoring Program for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP was permitted in June 2004. The Biological Monitoring Program monitors the distribution and status of the 146 covered species within the Conservation Area to provide information to Permittees, land managers, the public and the Wildlife Agencies (i.e., the California Department of Fish and Game and the U.S. Fish and Wildlife Service). Monitoring Program activities are guided by the MSHCP species objectives for each covered species, the information needs identified in MSHCP Section 5.3 or elsewhere in the document, and the information needs of the Permittees.

While we have made every effort to accurately represent our data and results, it should be recognized that our database is still under development. Any reader wishing to make further use of the information or data provided in this report should contact the Monitoring Program to ensure that they have access to the best available or most current data.

The primary preparer of this report was 2006 Lead Biologist, Adam Malisch. If there are any questions about the information provided in this report, please contact the Monitoring Program Administrator. If you have questions about the MSHCP, please contact the Executive Director of the Western Riverside County Regional Conservation Authority (RCA). For further information on the MSHCP and the RCA, go to www.wrc-rca.org

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The species objectives in the Western Riverside County MSHCP require documentation of the distribution of covered species in the Conservation Area at a minimum of once every 8 years. The distribution of threat species, such as bullfrogs (*Rana catesbeiana*) and brown-headed cowbirds (*Molothrus ater*), is also important for reserve management and for monitoring ecosystem health. Additionally, the distribution of important habitat-indicator species is helpful when identifying potentially suitable habitat for rare or difficult to detect species (e.g., documenting cactus, *Opuntia sp.*, patches to focus survey efforts for cactus wren). For these reasons, covered species, threat species, and habitat-indicator species, collectively “species of interest,” are recorded by Monitoring Program staff when they are incidentally observed in the Conservation Area. Incidental observations include any time a species of interest is encountered when it is not the subject of a focused sampling methodology. Incidental observations can be made during training exercises, when traveling between sampling stations, or during focused surveys for other taxa.

The minimum data required by the Monitoring Program to document an incidental sighting are: date, observer, species name, and UTM coordinates in the NAD83 Datum. These data are typically recorded by marking a waypoint on a GPS and naming the waypoint appropriately. If additional data are warranted (e.g., number of individuals, age, behavior, substrate, surrounding vegetation, time, reference to photos taken) this information is recorded on a paper Incidental Species Sighting Form.

In 2006, Monitoring Program biologists recorded 900 incidental observations of Covered Species, 10 observations of habitat-indicators, and 4 observations of threat species (Table 1). Frequencies of species observations should not be taken as relative abundances because variable observer familiarity with species of interest and unequal time spent by biologists across the range of habitats within the Conservation Area biases the possibility of species being observed equally.

Thirty-eight bird species, 8 plants, 7 mammals, 6 reptiles or amphibians, and 2 invertebrate species were observed and recorded. Incidentally observed species included commonly observed species such as White-tailed kites (*Elanus leucurus*) and rarely encountered species such as Mountain lion (*Puma concolor*). The majority of observations were located at routinely visited areas such as the Southwestern Riverside County Multi-Species Reserve (Lake Skinner), the Davis Unit of the San Jacinto Wildlife Area, the Potrero Unit of the San Jacinto Wildlife Area, Santa Rosa Plateau, Lake Matthews/Estelle Mountain, Silverado Ranch, and Johnson Ranch. Many additional observations were also made at lesser-visited locations and along travel routes between sites.

Because of potential biases in data resulting from incidental observations, the uses for these data are limited. As stated above, varying abilities of biologists in the field to recognize species of interest, imperfect survey timing relative to particular species phenology, and lack of methods directly tailored to detect various species of interest result in a greater likelihood of observing some species rather than others. Additionally, because incidental observations are

secondary to the goals of any given survey activity, not all observations of species of interest are recorded. For example, if biologists stopped to record every San Diego black-tailed jackrabbit observed during a survey for Quino checkerspot butterfly this could impede their ability to effectively locate butterflies. Thus, lack of incidental observations of a species from an area can not be taken to indicate absence.

The best uses of these data include documenting the presence of covered species within Core Areas, as an indication of where to begin targeted surveys for specific species, or to highlight hotspots of diversity where community surveys might be appropriate. Presence data can also be used for predictive distribution modeling, but the potential biases associated with these data (e.g., tendency of locations to be near roads, clustering of points, etc.) should be explicitly taken into account.

Table 1. Species of interest incidentally observed in 2006. All data, including observation coordinates, observers, date, and any additional notes are stored at the Biological Monitoring Program office in Riverside, CA.

BIRDS

SPECIES_TYPE	COMMON_NAME	LATIN_NAME	FREQUENCY
Covered Species	Bald Eagle	<i>Haliaeetus leucocephalus</i>	3
Covered Species	Bells' sage sparrow	<i>Amphispiza belli belli</i>	8
Covered Species	Black-crowned night-heron	<i>Nycticorax nycticorax</i>	1
Covered Species	Burrowing owl	<i>Athene cunicularia hypugaea</i>	20
Covered Species	Cactus wren	<i>Campylorhynchus brunneicapillus</i>	2
Covered Species	California horned lark	<i>Eremophila alpestris actia</i>	16
Covered Species	Coastal California gnatcatcher	<i>Polioptila californica californica</i>	53
Covered Species	Cooper's hawk	<i>Accipiter cooperii</i>	17
Covered Species	Double-crested cormorant	<i>Phalacrocorax auritus</i>	11
Covered Species	Downy woodpecker	<i>Picoides pubescens</i>	5
Covered Species	Ferruginous hawk	<i>Buteo regalis</i>	8
Covered Species	Golden eagle	<i>Aquila chrysaetos</i>	7
Covered Species	Grasshopper sparrow	<i>Ammodramus savannarum</i>	53
Covered Species	Great blue heron	<i>Ardea herodias</i>	13
Covered Species	Least Bell's vireo	<i>Vireo bellii pusillus</i>	24
Covered Species	Loggerhead shrike	<i>Lanius ludovicianus</i>	22
Covered Species	MacGillivray's warbler	<i>Oporornis tolmiei</i>	1
Covered Species	Merlin	<i>Falco columbarius</i>	3
Covered Species	Mountain quail	<i>Oreortyx pictus</i>	18
Covered Species	Nashville warbler	<i>Vermivora ruficapilla</i>	5
Covered Species	Northern harrier	<i>Circus cyaneus</i>	44
Covered Species	Osprey	<i>Pandion haliaetus</i>	6
Covered Species	Peregrine falcon	<i>Falco peregrinus</i>	4
Covered Species	Prairie falcon	<i>Falco mexicanus</i>	3
Covered Species	Purple martin	<i>Progne subis</i>	2
Covered Species	S. CA rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	64
Covered Species	Sharp-shinned hawk	<i>Accipiter striatus</i>	3
Covered Species	Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	8
Covered Species	Swainson's hawk	<i>Buteo swainsoni</i>	2
Covered Species	Tricolored blackbird	<i>Agelaius tricolor</i>	5
Covered Species	Turkey vulture	<i>Cathartes aura</i>	38
Covered Species	Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	1
Covered Species	White-faced ibis	<i>Plegadis chihi</i>	2
Covered Species	White-tailed kite	<i>Elanus leucurus</i>	104
Covered Species	Wilson's warbler	<i>Wilsonia pusilla</i>	20
Covered Species	Yellow warbler	<i>Dendroica petechia brewsteri</i>	14
Covered Species	Yellow-breasted chat	<i>Icteria virens</i>	7
Threat Species	Brown-headed cowbird	<i>Molothrus ater</i>	4

Table 1 continued

MAMMALS

SPECIES_TYPE	COMMON_NAME	LATIN_NAME	FREQUENCY
Covered Species	Bobcat	<i>Lynx rufus</i>	5
Covered Species	Brush rabbit	<i>Sylvilagus bachmani</i>	3
Covered Species	Coyote	<i>Canis latrans</i>	54
Covered Species	Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	1
Covered Species	Mountain lion	<i>Puma concolor</i>	2
Covered Species	San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	44
Covered Species	Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	1

REPTILES & AMPHIBIANS

SPECIES_TYPE	COMMON_NAME	LATIN_NAME	FREQUENCY
Covered Species	Belding's orange-throated whiptail	<i>Cnemidophorus hyperythrus beldingi</i>	1
Covered Species	Coast range newt	<i>Taricha torosa torosa</i>	1
Covered Species	Coastal western whiptail	<i>Cnemidophorus tigris multiscutatus</i>	7
Covered Species	Granite spiny lizard	<i>Sceloporus orcutti</i>	15
Covered Species	Northern red-diamond rattlesnake	<i>Crotalus ruber ruber</i>	9
Covered Species	San Diego horned lizard	<i>Phrynosoma coronatum blainvillii</i>	15

INVERTEBRATES

SPECIES_TYPE	COMMON_NAME	LATIN_NAME	FREQUENCY
Covered Species	Delhi Sands flower-loving fly	<i>Rhaphiomidas terminatus abdominalis</i>	4
Covered Species	Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	59

PLANTS

SPECIES_TYPE	COMMON_NAME	LATIN_NAME	FREQUENCY
Covered Species	Beautiful hulsea	<i>Hulsea vestita ssp. callicarpa</i>	2
Covered Species	Coulter's matilija poppy	<i>Romneya coulteri</i>	1
Covered Species	Engelmann oak	<i>Quercus engelmannii</i>	46
Covered Species	Fish's milkwort	<i>Polygala cornuta var. fishiae</i>	5
Covered Species	Graceful tarplant	<i>Holocarpa virgata ssp. elongata</i>	15
Covered Species	Ocellated Humboldt lily	<i>Lilium humboldtii ssp. ocellatum</i>	1
Covered Species	Rainbow manzanita	<i>Arctostaphylos rainbowensis</i>	1
Habitat Indicator	Plantain	<i>Plantago erecta</i>	10