

APPENDIX K
BIOLOGICAL RESOURCES

Appendix K1
Federal Endangered and Threatened Species in Antioch North

Sacramento Fish & Wildlife Office – Accessed February 26, 2008

Federal Endangered and Threatened Species
that Occur in or may be Affected by Projects in the
ANTIOCH NORTH (481D)
U.S.G.S. 7 1/2 Minute Quad

Database Last Updated: January 31, 2008

Document Number: 080226083440

Species of Concern - The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. See www.fws.gov/sacramento/es/spp_concern.htm for more information and links to these sensitive species lists.

Red-Legged Frog Critical Habitat - The Service has designated final critical habitat for the California red-legged frog. The designation became final on May 15, 2006. See our [map index](#).

Listed Species

Invertebrates

Apodemia mormo langei
Lange's metalmark butterfly (E)
Branchinecta lynchi
vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)
Elaphrus viridis
delta green ground beetle (T)
Lepidurus packardii
vernal pool tadpole shrimp (E)

Fish

Acipenser medirostris
green sturgeon (T) (NMFS)
Hypomesus transpacificus
Critical habitat, delta smelt (X)
delta smelt (T)
Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)
Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)

Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Rana aurora draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas
giant garter snake (T)

Birds

Rallus longirostris obsoletus
California clapper rail (E)

Mammals

Reithrodontomys raviventris
salt marsh harvest mouse (E)
Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Cordylanthus mollis ssp. mollis
soft bird's-beak (E)
Erysimum capitatum ssp. angustatum
Contra Costa wallflower (E)
Critical Habitat, Contra Costa wallflower (X)
Lasthenia conjugens
Contra Costa goldfields (E)
Neostapfia colusana
Colusa grass (T)
Oenothera deltoides ssp. howellii
Antioch Dunes evening-primrose (E)
Critical habitat, Antioch Dunes evening-primrose (X)

Key:

- (E) *Endangered* - Listed (in the Federal Register) as being in danger of extinction.
- (T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* - Officially proposed (in the Federal Register) for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Marine Fisheries Service](#). Consult with them directly about these species.
- *Critical Habitat* - Area essential to the conservation of a species.
- (PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
- (C) *Candidate* - Candidate to become a proposed species.
- (X) *Critical Habitat* designated for this species

Appendix K2
CNPS Special-Status Species in Antioch North

CNPS Special-Status Species in Antioch North and the surrounding 8 USGS 7.5 Quadrangles.

CNPS Inventory of Rare and Endangered Plants

Status: Plant Press Manager window with 50 items - Fri, Mar. 28, 2008 08:59 c



- During each visit, we provide you with an empty "Plant Press" for collecting items of interest.
- Several report formats are available. Use the CSV or XML options to download raw data.

Reformat list as: Standard List - with Plant Press controls

DELETE unchecked items check all

open	save	scientific	common	family	CNPS
	<input checked="" type="checkbox"/>	<u>Amsinckia grandiflora</u> 	large-flowered fiddleneck	Boraginaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Anomobryum julaceum</u>	slender silver- moss	Bryaceae	List 2.2
	<input checked="" type="checkbox"/>	<u>Arctostaphylos auriculata</u>	Mt. Diablo manzanita	Ericaceae	List 1B.3
	<input checked="" type="checkbox"/>	<u>Arctostaphylos manzanita ssp. laevigata</u> 	Contra Costa manzanita	Ericaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Astragalus tener</u> var. <u>tener</u>	alkali milk-vetch	Fabaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Atriplex cordulata</u>	heartscale	Chenopodiaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Atriplex depressa</u>	brittlescale	Chenopodiaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Atriplex joaquiniana</u>	San Joaquin spearscale	Chenopodiaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Blepharizonia plumosa</u> 	big tarplant	Asteraceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>California macrophylla</u> 	round-leaved filaree	Geraniaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Calochortus pulchellus</u> 	Mt. Diablo fairy- lantern	Liliaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Calystegia atriplicifolia ssp. buttensis</u>	Butte County morning-glory	Convolvulaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Campanula exigua</u>	chaparral harebell	Campanulaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Centromadia parryi ssp. parryi</u>	pappose tarplant	Asteraceae	List 1B.2

open	save	scientific	common	family	CNPS
	<input checked="" type="checkbox"/>	<u>Cirsium hydrophilum</u> var. <u>hydrophilum</u> 	Suisun thistle	Asteraceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Cordylanthus mollis</u> ssp. <u>hispidus</u>	hispid bird's-beak	Scrophulariaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Cordylanthus mollis</u> ssp. <u>mollis</u> 	soft bird's-beak	Scrophulariaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Cordylanthus nidularius</u> 	Mt. Diablo bird's-beak	Scrophulariaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Cryptantha hooveri</u> 	Hoover's cryptantha	Boraginaceae	List 1A
	<input checked="" type="checkbox"/>	<u>Delphinium californicum</u> ssp. <u>interius</u> 	Hospital Canyon larkspur	Ranunculaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Didymodon norrisii</u>	Norris' beard-moss	Pottiaceae	List 2.2
	<input checked="" type="checkbox"/>	<u>Downingia pusilla</u> 	dwarf downingia	Campanulaceae	List 2.2
	<input checked="" type="checkbox"/>	<u>Eriastrum brandegeae</u> 	Brandegee's eriastrum	Polemoniaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Eriogonum truncatum</u> 	Mt. Diablo buckwheat	Polygonaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Erysimum capitatum</u> ssp. <u>angustatum</u> 	Contra Costa wallflower	Brassicaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Eschscholzia rhombipetala</u> 	diamond-petaled California poppy	Papaveraceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Fritillaria liliacea</u> 	fragrant fritillary	Liliaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Helianthella castanea</u> 	Diablo helianthella	Asteraceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Hesperolinon breweri</u> 	Brewer's western flax	Linaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Hibiscus lasiocarpus</u> 	woolly rose-mallow	Malvaceae	List 2.2
	<input checked="" type="checkbox"/>	<u>Isocoma arguta</u> 	Carquinez goldenbush	Asteraceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Juglans hindsii</u> 	Northern California black walnut	Juglandaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Lasthenia conjugens</u> 	Contra Costa goldfields	Asteraceae	List 1B.1

open	save	scientific	common	family	CNPS
	<input checked="" type="checkbox"/>	<u>Lathyrus jepsonii</u> var. <u>jepsonii</u> 	Delta tule pea	Fabaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Legenere limosa</u> 	legenere	Campanulaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Lessingia hololeuca</u> 	woolly-headed lessingia	Asteraceae	List 3
	<input checked="" type="checkbox"/>	<u>Lilaeopsis masonii</u> 	Mason's lilaeopsis	Apiaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Limosella subulata</u>	Delta mudwort	Scrophulariaceae	List 2.1
	<input checked="" type="checkbox"/>	<u>Madia radiata</u> 	showy madia	Asteraceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Malacothamnus hallii</u> 	Hall's bush-mallow	Malvaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Neostapfia colusana</u> 	Colusa grass	Poaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Oenothera deltoides</u> ssp. <u>howellii</u> 	Antioch Dunes evening-primrose	Onagraceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Phacelia phacelioides</u> 	Mt. Diablo phacelia	Hydrophyllaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Plagiobothrys hystriculus</u> 	bearded popcorn-flower	Boraginaceae	List 1B.1
	<input checked="" type="checkbox"/>	<u>Potamogeton zosteriformis</u>	eel-grass pondweed	Potamogetonaceae	List 2.2
	<input checked="" type="checkbox"/>	<u>Sanicula saxatilis</u> 	rock sanicle	Apiaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Senecio aphanactis</u> 	chaparral ragwort	Asteraceae	List 2.2
	<input checked="" type="checkbox"/>	<u>Streptanthus albidus</u> ssp. <u>peramoenus</u> 	most beautiful jewel-flower	Brassicaceae	List 1B.2
	<input checked="" type="checkbox"/>	<u>Streptanthus hispidus</u> 	Mt. Diablo jewel-flower	Brassicaceae	List 1B.3
	<input checked="" type="checkbox"/>	<u>Symphotrichum lentum</u>	Suisun Marsh aster	Asteraceae	List 1B.2
DELETE unchecked items		check all			

**Appendix K3
CNDDDB Occurrences within 10 Miles**

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Actinemys marmorata	western pond turtle	144	Antioch North	19980717	HABITAT CONSISTS OF A PERMANENT POND VEGETATED BY CATTAILS AND BULRUSHES.
Actinemys marmorata	western pond turtle	145	Antioch North	19981014	HABITAT CONSISTS OF A PERMANENT BRACKISH MARSH POND, VEGETATED BY CATTAILS AND BULRUSHES. SURROUNDED BY DOW WETLAND PRESERVE AND INDUSTRY.
Actinemys marmorata	western pond turtle	245	Antioch North	200103XX	HABITAT CONSISTS OF A DIKED UPLAND AREA AND IRRIGATION DITCHES ; VEGETATED BY TULE, PICKLEWEED, AND ANNUAL GRASSES. SITE IS SURROUNDED BY AGRICULTURE AND GRAZING LIVESTOCK.
Actinemys marmorata	western pond turtle	108	Antioch South	19820317	OPEN POND, GRASSLAND.
Actinemys marmorata	western pond turtle	109	Antioch South	19800515	CREEK, RIPARIAN.
Actinemys marmorata	western pond turtle	131	Brentwood	19930308	HABITAT CONSISTS OF A RESERVOIR AND GRASSLAND.
Actinemys marmorata	western pond turtle	282	Brentwood	20040915	HABITAT CONSISTS OF AN ISOLATED INTERIOR DUNE, VEGETATED BY NON-NATIVE ANNUAL GRASSES; SURROUNDED BY AGRICULTURAL FIELDS. TURTLE NESTS LOCATED ON LEVEL GROUND WITH NO OVERSTORY.
Actinemys marmorata	western pond turtle	135	Jersey Island	19900531	FRESHWATER MARSH; IRRIGATED PASTURE.
Actinemys marmorata	western pond turtle	173	Jersey Island	20001019	SOME FRESHWATER MARSH; PRIMARILY AGRICULTURE AND GRAZING.
Actinemys marmorata	western pond turtle	239	Jersey Island	20000802	HABITAT CONSISTS OF THE SAN JOAQUIN DELTA.
Actinemys marmorata	western pond turtle	279	Jersey Island	20030828	HABITAT CONSISTS OF A HEAVILY-CHANNELIZED/RIP-RAPPED SECTION OF MARSH CREEK. SURROUNDING AREA IS AG FIELDS.
Actinemys marmorata	western pond turtle	308	Jersey Island	20050415	HABITAT CONSISTS OF A MAN-MADE CANAL.
Actinemys marmorata	western pond turtle	158	Woodward Island	20000809	HABITAT CONSISTS OF RELATIVELY BARE LEVEES CONTAINING SOME SPARSE VEGETATION.
Actinemys marmorata	western pond turtle	248	Woodward Island	20020827	HABITAT CONSISTS OF A LARGE, EXCAVATED IRRIGATION CANAL; BASKING AREAS INCLUDE SANDY BANKS, WOODY DEBRIS, AND VEGETATION (SCIRPUS) MATS. VEGETATION ALONG THE CANAL INCLUDES RUBUS DISCOLOR, SCIRPUS ACUTUS, AND PHRAGMITES AUSTRALIS.
Actinemys marmorata	western pond turtle	309	Woodward Island	20041012	HABITAT CONSISTS OF A CANAL CHOKED WITH WATER HYACINTH. RESIDENTIAL AREA TO THE NORTH & SOUTH, SANDMOUND BLVD & RESIDENTIAL TO THE EAST. OPEN AREA TO THE WEST SLATED FOR DEVELOPMENT.
Agelaius tricolor	tricolored blackbird	267	Brentwood	19890511	NESTING SUBSTRATE CONSISTS OF CATTAILS; SURROUNDING FORAGING HABITAT CONSISTS OF ANNUAL GRASSLAND.
Ambystoma californiense	California tiger salamand	535	Antioch North	198302XX	
Ambystoma californiense	California tiger salamand	100	Antioch South	19891126	
Ambystoma californiense	California tiger salamand	101	Antioch South	19891125	RURAL GRAZED PASTURELAND. INTRODUCED GRASSES.
Ambystoma californiense	California tiger salamand	173	Antioch South	19820214	HABITAT CONSISTS OF FARM POND IN ANNUAL GRASSLAND.
Ambystoma californiense	California tiger salamand	174	Antioch South	19820214	HABITAT CONSISTS OF A FARM POND IN ANNUAL GRASSLAND.
Ambystoma californiense	California tiger salamand	170	Antioch South	19820523	HABITAT CONSISTS OF FARM POND IN ANNUAL GRASSLAND.
Ambystoma californiense	California tiger salamand	171	Antioch South	19820214	HABITAT CONSISTS OF FARM POND IN ANNUAL GRASSLAND.
Ambystoma californiense	California tiger salamand	172	Antioch South	19820214	HABITAT CONSISTS OF FARM POND IN ANNUAL GRASSLAND.
Ambystoma californiense	California tiger salamand	302	Antioch South	19940513	HABITAT CONSISTS OF AN 80-FT X 60-FT X 3-FT DEEP SEASONAL STOCK POND IN NON-NATIVE GRASSLAND; 10% SUBMERGENT VEGETATION, NO EMERGENT VEGETATION.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
Ambystoma californiense	California tiger salamand	301	Antioch South	19940513	HABITAT CONSISTS OF A 125-FT X 40-FT X 3-FT SEASONAL POND CREATED BY A BERMED DRAINAGE IN NON-NATIVE GRASSLAND; NO EMERGENT VEGETATION.
Ambystoma californiense	California tiger salamand	329	Antioch South	2006XXXX	HABITAT CONSISTS OF A STOCK POND SURROUNDED BY ANNUAL GRASSLAND. STOCK POND WATER WAS TEA-COLORED DURING THE SPRING 2006 SURVEY.
Ambystoma californiense	California tiger salamand	592	Antioch South	19710116	
Ambystoma californiense	California tiger salamand	434	Antioch South	19980402	HABITAT CONSISTS OF A STOCK POND SURROUNDED BY ROLLING HILLS OF GRAZED GRASSLAND.
Ambystoma californiense	California tiger salamand	435	Antioch South	19980322	HABITAT CONSISTS OF VERNAL POOLS AND ARTIFICIAL PONDS (STOCK PONDS); SURROUNDED BY OPEN GRASSLANDS. OTHER RARE TAXA FOUND AT THIS SITE: CALIF RED-LEGGED FROGS AND WESTERN POND TURTLES.
Ambystoma californiense	California tiger salamand	467	Antioch South	19930910	NON NATIVE GRASSLAND
Ambystoma californiense	California tiger salamand	468	Antioch South	20030528	GRAZED VALLEY SINK SCRUB & NON NATIVE GRASSLAND. THIS SITE IS PART OF NEWLY ACQUIRED STATE PARK LAND & IS NOW PROTECTED FROM THE RAMPANT DEVELOPMENT IN THIS AREA.
Ambystoma californiense	California tiger salamand	479	Antioch South	19980622	HABITAT CONSISTS OF A RESERVOIR.
Ambystoma californiense	California tiger salamand	480	Antioch South	19980622	HABITAT CONSISTS OF A STOCK POND.
Ambystoma californiense	California tiger salamand	481	Antioch South	19980622	HABITAT CONSISTS OF A STOCK POND.
Ambystoma californiense	California tiger salamand	482	Antioch South	19980622	HABITAT CONSISTS OF A SERIES OF STOCK PONDS AND A BACKHOE PIT, ALTHOUGH THE PIT IS NOT SUITABLE FOR BREEDING.
Ambystoma californiense	California tiger salamand	486	Antioch South	19990429	HABITAT CONSISTS OF TWO BERMED DRAINAGE PONDS IN NON-NATIVE GRASSLAND; SURROUNDED BY OAK WOODLAND.
Ambystoma californiense	California tiger salamand	677	Antioch South	2006XXXX	HABITAT CONSISTS OF A STOCK POND (225' IN DIAMETER). DURING 2006 SAMPLING, WATER WAS TEA-COLORED.
Ambystoma californiense	California tiger salamand	678	Antioch South	2006XXXX	HABITAT CONSISTS OF STOCK PONDS AND SEASONAL WETLANDS.
Ambystoma californiense	California tiger salamand	679	Antioch South	19980402	HABITAT CONSISTS OF A STOCK POND.
Ambystoma californiense	California tiger salamand	814	Antioch South	20030212	HABITAT CONSISTS OF 2 SMALL DRAINAGES FLOWING THROUGH GRAZED NON-NATIVE GRASSLAND; EASTERMOST DRAINAGE CONTAINS FAILED STOCKPOND, WHICH PROBABLY PROVIDED SUITABLE BREEDING HABITAT IN PAST. UPLAND HABITAT OF SCATTERED BURROWS & WOODY DEBRIS
Ambystoma californiense	California tiger salamand	854	Antioch South	20050515	HABITAT CONSISTS OF A LARGE SEASONAL POND/WETLAND THAT DRIES BY LATE JUNE.
Ambystoma californiense	California tiger salamand	855	Antioch South	20060119	HABITAT CONSISTS OF A STOCK POND SURROUNDED BY GRASSLAND. SITE IS CURRENTLY USED FOR DRYLAND HAY AND OAT FARMING.
Ambystoma californiense	California tiger salamand	856	Antioch South	200201XX	HABITAT CONSISTS OF A POND.
Ambystoma californiense	California tiger salamand	857	Antioch South	20030528	10 M X 10 M STOCKPOND IN GRAZED NON-NATIVE GRASSLAND. RECENTLY ACQUIRED PARK LAND. PARK HAS A LONG-TERM GRAZING LEASE. IF GRAZING IS REMOVED FROM THE SITE DPR WILL PROBABLY NOT MAINTAIN THE ARTIFICIAL STOCKPOND.
Ambystoma californiense	California tiger salamand	903	Antioch South	20060612	HABITAT CONSISTS OF A SMALL POND SURROUNDED BY GRAZED OAK WOODLAND AND NON-NATIVE GRASSLAND.
Ambystoma californiense	California tiger salamand	35	Brentwood	19930910	NON-NATIVE GRASSLAND AND WOODLAND SURROUND POND
Ambystoma californiense	California tiger salamand	149	Brentwood	19930910	STOCK POND WITH SURROUNDING GRASSLAND AND WOODLAND. VALLEY SINK SCRUB IDENTIFIED IN THE AREA.
Ambystoma californiense	California tiger salamand	457	Brentwood	19930910	AREA INDICATED AS VALLEY SINK SCRUB AND NON-NATIVE GRASSLAND.
Ambystoma californiense	California tiger salamand	458	Brentwood	19930910	NON NATIVE GRASSLAND AND VALLEY SINK SCRUB

CNDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Ambystoma californiense	California tiger salamand	459	Brentwood	20030327	NON NATIVE GRASSLAND
Ambystoma californiense	California tiger salamand	460	Brentwood	20030327	GRAZED, NON NATIVE GRASSLAND
Ambystoma californiense	California tiger salamand	461	Brentwood	20050412	HABITAT CONSISTS OF A STOCK POND AND INTERMITTENT DRAINAGE, SURROUNDED BY NON NATIVE GRASSLAND AND SEVERAL MATURE BLUE OAKS. SITE FORMERLY USED TO GRAZE CATTLE.
Ambystoma californiense	California tiger salamand	462	Brentwood	19930910	PRIMARILY NON NATIVE GRASSLAND, WITH VALLEY SINK SCRUB AND SOME BLUE OAK WOODLAND
Ambystoma californiense	California tiger salamand	464	Brentwood	19930910	PRIMARILY NON NATIVE GRASSLAND INTERSPERSED WITH SOME VALLEY SINK SCRUB.
Ambystoma californiense	California tiger salamand	463	Brentwood	20030528	GRAZED VALLEY SINK SCRUB AND NON NATIVE GRASSLAND. PARKLAND HAS A LONG-TERM GRAZING LEASE. IF GRAZING IS REMOVED FROM THE SITE DPR WILL PROBABLY NOT MAINTAIN THE ARTIFICIAL STOCKPOND.
Ambystoma californiense	California tiger salamand	465	Brentwood	19930910	NON NATIVE GRASSLAND
Ambystoma californiense	California tiger salamand	466	Brentwood	19930910	NON NATIVE GRASSLAND
Ambystoma californiense	California tiger salamand	591	Brentwood	20030327	SURROUNDING AREA IS GRAZED NON-NATIVE ANNUAL GRASSLANDS WITH SEVERAL MATURE BLUE OAKS, 4 STOCK PONDS & SEVERAL SEASONAL WETLANDS & INTERMITTENT DRAINAGES.
Ambystoma californiense	California tiger salamand	881	Brentwood	20030327	SURROUNDING AREA IS GRAZED NON-NATIVE ANNUAL GRASSLANDS WITH SEVERAL MATURE BLUE OAKS, 4 STOCK PONDS & SEVERAL SEASONAL WETLANDS & INTERMITTENT DRAINAGES.
Ambystoma californiense	California tiger salamand	882	Brentwood	20030327	SURROUNDING AREA IS GRAZED NON-NATIVE ANNUAL GRASSLANDS WITH SEVERAL MATURE BLUE OAKS, 4 STOCK PONDS & SEVERAL SEASONAL WETLANDS & INTERMITTENT DRAINAGES.
Ambystoma californiense	California tiger salamand	30	Byron Hot Springs	20000220	HABITAT CONSISTS OF FARM/STOCK PONDS, GRAZED NON-NATIVE GRASSLANDS, VERNAL POOLS, LOW GRADIENT STREAM, AND ROADSIDE. LOS VAQUEROS RESERVOIR HAS INUNDATED PART OF THIS OCCURRENCE.
Ambystoma californiense	California tiger salamand	382	Clayton	19950515	ARTIFICIAL WETLAND CREATED AS MITIGATION FOR IMPACTS TO A SEEP. DOMINANT PLANTS: ZANNICHELLA PALUSTRIS, POLYPOGON MONSPLIENSIS, AND LOLIUM MULTIFLORUM
Ambystoma californiense	California tiger salamand	383	Clayton	19950808	CATTLE POND HEAVILY DEGRADED. DOMINANT PLANTS: POLYPOGON MONSPELIENSIS, RORIPPA NATUSTIUM-AQUATICUM, RANUNCULUS SCLERATUS, COTULA AUSTRALIS, ZANNICHELLA PALUSTRIS.
Ambystoma californiense	California tiger salamand	398	Clayton	19950228	HABITAT CONSISTS OF A STOCK POND IN GRAZED ANNUAL GRASSLAND; OAK WOODLAND IN DRAINAGE ABOVE POND.
Ambystoma californiense	California tiger salamand	487	Clayton	19990525	HABITAT CONSISTS OF A BERMED DRAINAGE POND IN NON-NATIVE GRASSLAND; SURROUNDED BY OAK WOODLAND.
Ambystoma californiense	California tiger salamand	700	Clayton	20000319	HABITAT CONSISTS OF A STOCK POND IN A HILLY AREA COVERED BY GRASSLANDS, SCATTERED OAKS, AND CHAPARRAL. SURROUNDED BY GRAZING LANDS.
Ambystoma californiense	California tiger salamand	701	Clayton	20000319	HABITAT CONSISTS OF A STOCK POND IN A GRAZED HILLY AREA COVERED WITH SCATTERED OAKS, GRASSLANDS, AND CHAPARRAL.
Ambystoma californiense	California tiger salamand	703	Clayton	20000319	HABITAT CONSISTS OF A STOCK POND IN A GRAZED HILLY AREA COVERED WITH SCATTERED OAKS, GRASSLANDS, AND CHAPARRAL.
Ambystoma californiense	California tiger salamand	704	Clayton	20000319	HABITAT CONSISTS OF A STOCK POND IN A GRAZED HILLY AREA COVERED WITH SCATTERED OAKS, GRASSLANDS, AND CHAPARRAL.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Amsinckia grandiflora	large-flowered fiddleneck	3	Antioch South	19960423	ANNUAL GRASSLAND. DOMINATED BY AVENA FATUA AND BROMUS DIANDRUS. OTHER ASSOCIATES INCLUDE NASSELLA PULCHRA AND DICHELOSTEMMA. NEARBY WOODY ASSOCIATES INCLUDE QUERCUS WISLIZENII, Q. DOUGLASII, AESCULUS CALIFORNICA, AND LUPINUS ALBIFRONS.
Amsinckia grandiflora	large-flowered fiddleneck	2	Antioch South	188705XX	
Amsinckia grandiflora	large-flowered fiddleneck	9	Clayton	1997XXXX	ANNUAL GRASSLAND. ASSOCIATED WITH NON-NATIVE GRASSES, NASSELLA PULCHRA, NATIVE FORBS INCLUDING CHLOROGALUM POMERIDANUM.
Andrena blennospermatis	A vernal pool andrenid be	2	Antioch South	19XXXXXX	THIS SPECIES COLLECTS POLLEN ONLY FROM FLOWERS OF BLENNOSPERMA, AND HAS BEEN RECORDED FROM B. NANUM AND B. BAKERI.
Anniella pulchra pulchra	silvery legless lizard	17	Antioch South	20040401	HABITAT CONSISTS OF SANDY SOILS ADJACENT TO LARGE, SANDSTONE ROCK OUTCROPS; SURROUNDED BY GRAZED GRASSLAND AND ROLLING HILLS OF OAK WOODLAND.
Anniella pulchra pulchra	silvery legless lizard	21	Brentwood	20050330	HABITAT CONSISTS OF INTERIOR DUNES CHARACTERIZED BY SANDY SOILS; VEGETATION OFTEN INCLUDES NON-NATIVE GRASSES, CROTON CALIFORNICUS, OENOTHERA DELTOIDES COGNATA, ERIOGONUM GRACILE VAR GRACILE, AND LESSINGIA GLANDULIFERA VAR GLANDULIFERA.
Anniella pulchra pulchra	silvery legless lizard	41	Brentwood	20050425	HABITAT CONSISTS OF INTERIOR DUNES, CHARACTERIZED BY SANDY SOILS ("SAND MOUNDS"). VEGETATION IS DOMINATED BY CROTON CALIFORNICUS, OENOTHERA DELTOIDES COGNATA, ERIOGONUM GRACILE VAR. GRACILE, AND LESSINGIA GLANDULIFERA VAR. GLANDULIFERA.
Anniella pulchra pulchra	silvery legless lizard	12	Jersey Island	20040426	HABITAT CONSISTS OF DISTURBED INLAND DUNE HABITAT, WHICH IS BEING ENCROACHED UPON BY NON-NATIVE GRASSLAND. ANTIOCH DUNES EVENING PRIMROSE IS ALSO FOUND IN THE VICINITY. AREA BURNED IN 1999.
Anomobryum julaceum	slender silver moss	7	Clayton	XXXXXXXX	
Anthicus antiochensis	Antioch Dunes anthicid b	1	Antioch North	1953XXX	STABILIZED RIVERINE SAND DUNES.
Anthicus Sacramento	Sacramento anthicid bee	2	Rio Vista	197909XX	SAND IS DREDGE SPOIL.
Archoplites interruptus	Sacramento perch	3	Antioch North	198XXXXX	
Arctostaphylos auriculata	Mt. Diablo manzanita	10	Antioch North	19850726	
Arctostaphylos auriculata	Mt. Diablo manzanita	9	Antioch South	19950304	CHAPARRAL WITH ARCTOSTAPHYLOS SPP, ADENOSTOMA FASCICULATUM, PINUS COULTERI, P. SABINIANA, QUERCUS SPP, ERIODICTYON CALIFORNICUM, ERIOGONUM LATIFOLIUM, ET AL.
Arctostaphylos auriculata	Mt. Diablo manzanita	17	Antioch South	19900408	CHAPARRAL WITH ADENOSTOMA FASCICULATUM, SALVIA MELLIFERA, MIMULUS AURANTIACUS, AND HELIANTHELLA CASTANEA. ON N-FACING SANDSTONE SLOPES OF 20-30%.
Arctostaphylos auriculata	Mt. Diablo manzanita	18	Antioch South	19900415	PINE-CHAPARRAL WITH ARCTOSTAPHYLOS MANZANITA, PINUS SABINIANA, ERIODICTYON CALIFORNICUM, SALVIA MELLIFERA, ARTEMISIA CALIFORNICA, HETEROMELES ARBUTIFOLIA, AND ERIOGONUM LATIFOLIUM. ON SANDSTONE E AND NE-SLOPES.
Arctostaphylos auriculata	Mt. Diablo manzanita	19	Antioch South	19890317	MOSTLY IN CHAPARRAL AND PINE/CHAPARRAL WITH ARCTOSTAPHYLOS MANZANITA, PINUS SABINIANA, P. COULTERI, ADENOSTOMA FASCICULATUM, ERIOGONUM LATIFOLIUM, ARTEMISIA CALIFORNICA, SALVIA MELLIFERA, ET AL. MIDDLE COLONY ON BARE MINE TAILINGS.
Arctostaphylos auriculata	Mt. Diablo manzanita	20	Antioch South	1998XXXX	

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Arctostaphylos auriculata	Mt. Diablo manzanita	7	Clayton	19910505	CHAPARRAL WITH ADENOSTOMA FASCICULATUM, SALVIA MELLIFERA, HETEROMELES ARBUTIFOLIA, QUERCUS AGRIFOLIA, AND ZIGADENUS FREMONTII. S-FACING SANDSTONE WITH 10-30% SLOPE.
Arctostaphylos auriculata	Mt. Diablo manzanita	8	Clayton	19910505	COAST LIVE OAK WOODLAND AND CHAMISE CHAPARRAL WITH ARCTOSTAPHYLOS MANZANITA, HETEROMELES ARBUTIFOLIA, MIMULUS AURANTIACUS, ANNUAL GRASSES, ET AL.
Arctostaphylos manzanita ssp.	Contra Costa manzanita	8	Clayton	19910505	CHAMISE CHAPARRAL WITH ADENOSTOMA FASCICULATUM, HETEROMELES ARBUTIFOLIA, QUERCUS AGRIFOLIA, Q. WISLIZENII, MIMULUS AURANTIACUS, ARCTOSTAPHYLOS AURICULATA, AND A. MANZANITA SSP. MANZANITA. SANDY SOIL.
Ardea herodias	great blue heron	78	Jersey Island	19920509	
Asio flammeus	short-eared owl	12	Denverton	1987XXXX	HABITAT IS COASTAL MARSH AND FLAT GRASSLAND.
Astragalus tener var. tener	alkali milk-vetch	49	Antioch North	20020411	ALKALINE VERNAL POOL WITH LEPIDIUM LATIPES, PSILOCARPUS OREGANUS, MYOSURUS MINIMUS, M. SESSILIS, PLAGIOBOTHRYIS, PLANTAGO, AND LASTHENIA CALIFORNICA.
Athene cucularia	burrowing owl	367	Antioch North	19991208	HABITAT CONSISTS OF AN ARTIFICIAL BURROW: A CORRUGATED PIPE EXTENDING UNDER MONTEZUMA ROAD. SURROUNDED BY GRAIN FIELDS AND FARMS.
Athene cucularia	burrowing owl	368	Antioch North	20000520	BURROW SITE SURROUNDED BY RUDERAL WEEDS AND GRASSES AND A GRAIN FARM.
Athene cucularia	burrowing owl	431	Antioch North	200003XX	HABITAT CONSISTS OF DIKED, FORMER TIDAL MARSH, CONVERTED TO AGRICULTURE EARLY IN THE 20TH CENTURY; DOMINATED BY EXOTIC ANNUAL GRASSES. TULE-LINED PONDS, RIPARIAN CORRIDORS, AND PICKLEWEED PATCHES ARE ALSO FOUND ACROSS THIS FRAGMENTED SITE.
Athene cucularia	burrowing owl	947	Antioch North	20051120	HABITAT CONSISTS OF OPEN GRASSLAND, WHICH IS MOSTLY LEVEL, WITH LOW-LYING SHRUBS COVERING MOST OF THE PROPERTY. SOILS ARE SANDY, AND VEGETATION CONSISTS OF RUDERAL PLANTS (WILD OAT, FIELD MUSTARD, RUSSIAN THISTLE, ETC).
Athene cucularia	burrowing owl	495	Antioch South	20020618	HABITAT CONSISTS OF NON-NATIVE GRASSLAND WITH FLAT, ROLLING TOPOGRAPHY CONTAINING ROCK OUTCROPS ON UPPER SLOPE RIDGES; VEGETATION DOMINATED BY BROMUS DIANDRUS, AVENA FATUA, AND CENTAUREA SOLTITALIS.
Athene cucularia	burrowing owl	623	Antioch South	20030415	HABITAT CONSISTS OF GENTLE HILLS COVERED BY NON-NATIVE GRASSLAND; SURROUNDED BY RESIDENTIAL, LIGHT COMMERCIAL, AND GRAZED OPEN SPACE. MULTIPLE BURROWS.
Athene cucularia	burrowing owl	631	Antioch South	20030530	HABITAT CONSISTS OF GENTLE, SOUTH-FACING SLOPES ABOVE (NORTH OF) THE CREEK DRAINING HORSE VALLEY; SITE OVERLOOKS BROAD, ALKALINE SEASONAL WETLANDS, CLOSE TO STOCKPONDS.
Athene cucularia	burrowing owl	633	Antioch South	20030929	HABITAT CONSISTS OF ANNUAL GRASSLAND, WITH PATCHES OF COYOTE BUSH AND SEVERAL EUCALYPTUS; CONTAINS STEEP SLOPES WITH SANDY SUBSTRATES AND AREAS OF FILL.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Athene cucularia	burrowing owl	752	Antioch South	20050607	HABITAT CONSISTS OF NON-NATIVE GRASSLAND DOMINATED BY LOLIUM MULTIFLORUM, AVENA FATUA, AND BROMUS DIANDRUS, WITH SCATTERED BUT DENSE PATCHES OF BRASSICA SP, VICIA SP, AND CENTAUREA SOLSTITIALIS. CA GROUND SQUIRRELS OCCUR THROUGHOUT THE SITE.
Athene cucularia	burrowing owl	857	Antioch South	20060501	HABITAT CONSISTS OF FALLOW AGRICULTURAL FIELD THAT IS LARGE, LEVEL, OPEN PARCEL OF GRASSLAND; VEGETATION IS LOW AND GROUND SQUIRRELS OCCUR THROUGHOUT THE SITE. SITE IS DISKED FOR WEED CONTROL, BUT SITE HAD NOT BEEN DISKED FOR SEVERAL MONTHS.
Athene cucularia	burrowing owl	980	Antioch South	20070409	HABITAT CONSISTS OF A FALLOW FIELD LOCATED BETWEEN TWO RETAIL LOTS. SITE CONTAINS A GROUND SQUIRREL BURROW COMPLEX. DEBRIS HAD BEEN PLACED IN SOME BURROWS AS IF TO ENTRAP THE OCCUPANTS.
Athene cucularia	burrowing owl	371	Birds Landing	200002XX	HABITAT CONSISTS OF A MAMMAL BURROW IN THE ROADCUT OF EMIGH ROAD; BURROW FACES NORTH, ON THE SOUTH SIDE OF THE ROAD, ABOUT 6-7 FEET UP THE ROAD CUT. SURROUNDING LAND USE IS GRAIN CROPS.
Athene cucularia	burrowing owl	372	Birds Landing	20000124	HABITAT CONSISTS OF A MAMMAL BURROWS IN THE ROAD CUT OF ANDERSON ROAD. SURROUND LAND IS PASTURE AND GRAIN FARMS.
Athene cucularia	burrowing owl	374	Birds Landing	20000520	HABITAT CONSISTS OF A NUMBER OF BURROWS IN THE ROADCUT ON THE PASS OF MONTEZUMA HILLS ROAD.
Athene cucularia	burrowing owl	244	Brentwood	20031025	HABITAT CONSISTS OF NON-NATIVE GRASSLAND/RUDERAL, DOMINATED BY WEEDY VEGETATION, WHICH IS ROUTINELY DISKED, LITTERED WITH HUMAN REFUSE AND CONCRETE, AND HEAVILY GRAZED.
Athene cucularia	burrowing owl	338	Brentwood	19991109	HABITAT CONSISTS OF FOOTHILL ANNUAL GRASSLAND, DOMINATED BY AVENA SP, BROMUS DIANDRUS, BROMUS HORDEACEUS, YELLOW STAR THISTLE, AND TUMBLEWEED. SURROUNDED BY GRAZED GRASSLAND TO THE NORTH AND WEST; HOUSING TO THE EAST AND SOUTH.
Athene cucularia	burrowing owl	427	Brentwood	20010630	HABITAT CONSISTS OF GRAZED ANNUAL GRASSLAND, DOMINATED BY ITALIAN RYEGRASS, DISKED ORCHARD, AND VARIABLE ASPECTS AND SLOPES.
Athene cucularia	burrowing owl	451	Brentwood	200407XX	BURROW SITE IS LOCATED WITHIN A GROUND SQUIRREL COLONY, ADJACENT TO AN ELEMENTARY SCHOOL AND RESIDENTIAL HOUSING. BURROW SITE IS WITHIN HEAVY SOIL, AND THE GRASS AREA SURROUNDING THE BURROW HAS BEEN MOWED DOWN.
Athene cucularia	burrowing owl	562	Brentwood	19940922	HABITAT CONSISTS OF SANDY SOILS VEGETATED BY RUSSIAN THISTLE; FIELD WAS DISKED, WITH GRAPES EAST OF THE SITE.
Athene cucularia	burrowing owl	651	Brentwood	20031021	HABITAT SURROUNDING BURROW CONSISTS OF HEAVILY-GRAZED GRASSLAND DOMINATED BY NON-NATIVE GRASSES AND YELLOW STAR THISTLE. SWHA LIKELY NEST NEARBY, AS THEY WERE SEEN MULTIPLE TIMES DURING 2003.
Athene cucularia	burrowing owl	668	Brentwood	20040215	HABITAT CONSISTS OF INTERIOR DUNES; PORTIONS OF THE AREA HAVE BEEN DISKED AND/OR LEFT FALLOW AT TIMES.
Athene cucularia	burrowing owl	707	Brentwood	20040716	HABITAT CONSISTS OF AN UNVEGETATED RAILROAD LEVEE, ADJACENT TO AN ORCHARD AND DISKED AGRICULTURAL LAND.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Athene cucularia	burrowing owl	708	Brentwood	20040716	HABITAT CONSISTS OF DISKED AGRICULTURAL LAND; SURROUNDED BY AGRICULTURAL LAND AND HOUSING.
Athene cucularia	burrowing owl	723	Brentwood	20040302	HABITAT CONSISTS OF RUDERAL/NON-NATIVE GRASSLAND; SITE IS HEAVILY DISTURBED DUE TO ONGOING SITE MAINTENANCE (APPEARS TO BE MOWED/SCRAPED ANNUALLY).
Athene cucularia	burrowing owl	728	Brentwood	20050526	HABITAT CONSISTS OF A FIELD THAT HAS BEEN ACTIVELY FARMED FOR YEARS; NO SLOPE, JUST SEVERAL MOUNDS OF DIRT OCCUPIED BY GROUND SQUIRRELS & BUOW. LOW GROWING VEGETATION INCLUDES ANNUAL NON-NATIVE GRASSES, AGRICULTURAL ROW CROPS, & ORCHARD.
Athene cucularia	burrowing owl	729	Brentwood	20041213	HABITAT CONSISTS OF A FLAT, DISKED FIELD VEGETATED BY NON-NATIVE WEEDS; SOME SMALL AREAS NOT DISKED, AND GROUND SQUIRRELS AND BUOW OCCUPY THESE AREAS.
Athene cucularia	burrowing owl	746	Brentwood	20050906	HABITAT CONSISTS OF MOSTLY RUDERAL, NON-NATIVE GRASSES AND HERBS SURROUNDING THE BURROW SITE; THE NATAL BURROW WAS A PIECE OF CONCRETE, AND THE ALTERNATE BURROWS WERE GROUND SQUIRREL BURROWS.
Athene cucularia	burrowing owl	759	Brentwood	20050526	HABITAT CONSISTS OF GROUND SQUIRREL BURROWS LOCATED IN BARE SOIL & LOW GROWING VEGETATION. SURROUNDING AREA INCLUDES ANNUAL NON-NATIVE GRASSES, AGRICULTURAL ROW CROPS, ORCHARD & BARE SOIL. CURR/SURR LAND USE:AG, FALLOW AG FIELD, DEVELOPMENT
Athene cucularia	burrowing owl	760	Brentwood	20050526	HABITAT CONSISTS OF GROUND SQUIRREL BURROWS LOCATED IN BARE SOIL & LOW GROWING VEGETATION. SURROUNDING AREA IS ANNUAL NON-NATIVE GRASSES, ROW CROPS, ORCHARD & BARE SOIL. SURROUND AREA IS AG, FALLOW FIELDS, & DEVELOPMENT.
Athene cucularia	burrowing owl	765	Brentwood	20050407	HABITAT SURROUNDING BURROWS CONSISTS OF NON-NATIVE GRASSLAND, DOMINATED BY ANNUAL GRASSES AND INVASIVE WEEDS; DURING SPRING, THE VEGETATION AT THIS SITE ATTAINED HEIGHTS OF ~5'. MINIMAL SMALL MAMMAL ACTIVITY DUE TO CONTROL EFFORTS IN 2004.
Athene cucularia	burrowing owl	774	Brentwood	20050223	ABANDONED GRAPE VINEYARDS, SHORT GRASS GROUND COVER.
Athene cucularia	burrowing owl	792	Brentwood	20060428	HABITAT CONSISTS OF A SMALL, OPEN GRASSLAND, ENCOMPASSING ~7 ACRES; VEGETATED BY RUDERAL PLANTS, INCLUDING WILD OAT, FIELD MUSTARD, MINER'S LETTUCE, FIDDLENECK, AND YELLOW STAR-THISTLE. SOILS: GRAVELLY LOAM. SITE IS MOSTLY LEVEL.
Athene cucularia	burrowing owl	840	Brentwood	20060810	
Athene cucularia	burrowing owl	881	Brentwood	20060705	HABITAT SURROUNDING BURROW CONSISTS OF GRAZED NON-NATIVE GRASSLAND DOMINATED BY BROMUS DIANDRUS, AVENA FATUA, AND HYDROPHYTES INCLUDING CYNODON DACTYLON AND LOTUS CORNICULATUS. SITE CONTAINED MANY GROUND SQUIRRELS AND THEIR BURROWS.
Athene cucularia	burrowing owl	945	Brentwood	20060330	HABITAT CONSISTS OF A FALLOW AGRICULTURAL FIELD, COMPRISING ~12 ACRES; SPARSELY VEGETATED BY RUDERAL PLANTS, AND CONTAINED SEVERAL GROUND SQUIRRELS. SITE IS LEVEL AND HAD BEEN DISCED TWICE (30 JAN AND 28 MAR 2006) PRIOR TO THE OWL SURVEY.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Athene cucularia	burrowing owl	981	Brentwood	20070409	HABITAT CONSISTS OF A NON-NATIVE GRASSLANDS WITH A STRONG GROUND SQUIRREL POPULATION. SITE CONSISTS OF 6 BURROWS ON A WEST-FACING SLOPE AND 8 BURROWS ON AN EAST-FACING SLOPE USED BY OWLS.
Athene cucularia	burrowing owl	982	Brentwood	20070518	HABITAT CONSISTS OF A FALLOW FIELD THAT WAS DISCED IN MAR 2007; MANY GROUND SQUIRRELS STILL PRESENT. A RESIDENTIAL DEVELOPMENT IS FOUND TO THE EAST, RETAIL SPACE TO THE SOUTH, HIGHWAY 4 TO THE WEST, AND A DISCED FIELD TO THE NORTH.
Athene cucularia	burrowing owl	1000	Brentwood	20040525	HABITAT SURROUNDING BURROW CONSISTS OF A FALLOW FIELD WITH GROUND SQUIRREL BURROWS.
Athene cucularia	burrowing owl	1001	Brentwood	20040525	HABITAT SURROUNDING BURROW CONSISTS OF A DISKED FIELD WITH SPARSE, RUDERAL VEGETATION AND SCATTERED GROUND SQUIRREL BURROWS.
Athene cucularia	burrowing owl	432	Honker Bay	200003XX	HABITAT CONSISTS OF DIKED, FORMER TIDAL MARSH, CONVERTED TO AGRICULTURE EARLY IN THE 20TH CENTURY; DOMINATED BY EXOTIC ANNUAL GRASSES. TULE-LINED PONDS, RIPARIAN CORRIDORS, AND PICKLEWEED PATCHES ARE ALSO FOUND ACROSS THIS FRAGMENTED SITE.
Athene cucularia	burrowing owl	486	Jersey Island	19890122	HABITAT CONSISTS OF ANNUAL GRASSLAND COMPRISED OF NON-NATIVE SPECIES.
Athene cucularia	burrowing owl	761	Jersey Island	20040921	HABITAT CONSISTS OF SAND MOUNDS WITH SPARSE VEGETATION. GOOD WETLAND AND ANNUAL GRASSLAND HABITAT AT SITE. THERE IS ALSO AN ABUNDANCE OF GROUND SQUIRRELS AT THIS SITE.
Athene cucularia	burrowing owl	995	Jersey Island	20060316	HABITAT SURROUNDING BURROW CONSISTS OF NON-NATIVE GRASSLAND THAT IS GRAZED BY CATTLE AND HORSES; SHORT VEGETATION AND ABUNDANT GROUND SQUIRREL BURROWS.
Atriplex depressa	brittlescale	68	Antioch South	XXXXXXX	
Atriplex joaquiniana	San Joaquin spearscale	36	Antioch North	19910706	COASTAL PRAIRIE, ALKALINE-SALINE FLAT, TRAMPLED PASTURE. ASSOCIATED WITH PLAGIOBOTHRYIS STIPITATUS, CRESSA TRUXILLENIS, FRANKENIA GRANDIFLORA, SIDA HEDERACEA, AND HORDEUM GENICULATUM. LEPIDIUM LATIPES (VAR. HECKARDII?) ALSO OCCURS HERE.
Atriplex joaquiniana	San Joaquin spearscale	16	Antioch South	19890404	CLAY FLAT; ALKALI GRASSLAND WITH LASTHENIA, EVAX CAULESCENS, HORDEUM DEPRESSUM, ETC.
Atriplex joaquiniana	San Joaquin spearscale	15	Antioch South	19890404	ANNUAL GRASSLAND ADJACENT TO ALKALI SEEP/MARSH. WITH HORDEUM SPP., BROMUS DIANDRUS, AVENA BARBATA.
Atriplex joaquiniana	San Joaquin spearscale	45	Antioch South	1993XXXX	SE COLONY IS ASSOCIATED WITH ATRIPLEX CORONATA VAR. CORONATA.
Atriplex joaquiniana	San Joaquin spearscale	85	Antioch South	20050601	NON-NATIVE GRASSLAND, GRAZED PASTURE. ASSOCIATED WITH BROMUS HORDEACEUS, LOLIUM MULTIFLORUM, HORDEUM MURINUM LEPORINUM, AND TRIFOLIUM HIRTUM.
Atriplex joaquiniana	San Joaquin spearscale	44	Brentwood	1993XXXX	
Atriplex joaquiniana	San Joaquin spearscale	43	Brentwood	20070514	ALKALI MEADOW WITH DISTICHLIS SPICATA, HEMIZONIA PUNGENS, FRANKENIA SALINA, & ATRIPLEX CORONATA CORONATA. ALSO ASSOCIATED WITH ALLENROLFIA OCCIDENTALIS, HOLOCARPHA OBCONICA, LOLIUM MULTIFLORUM, & HORDEUM MARINUM GUSSONEANUM.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
Atriplex joaquiniana	San Joaquin spearscale	93	Brentwood	20030627	ALKALI MEADOW/GRASSLAND ON OPEN FLAT. HEAVILY TRAMPLED BY CATTLE. OTHER RARE SPECIES: ATRIPLEX CORONATA VAR. CORONATA AND HESPEREVAX CAULESCENS
Atriplex joaquiniana	San Joaquin spearscale	22	Rio Vista	18910916	
Blepharizonia plumosa	big tarplant	58	Antioch North	188709XX	
Blepharizonia plumosa	big tarplant	1	Antioch North	19160828	OLD OAT FIELD WITH LACTUCA SERRIOLA, EREMOCARPUS SETIGERUS, AND EPILOBIUM PANICULATUM.
Blepharizonia plumosa	big tarplant	30	Antioch South	20061006	NON-NATIVE ANNUAL GRASSLAND DOMINATED BY HOLOCARPHA VIRGATA. ASSOCIATED WITH EREMOCARPUS, CENTAUREA SOLSTITIALIS, GRINDELIA CAMPORUM, AVENA FATUA, BROMUS HORDEACEUS, AND LOLIUM MULTIFLORUM. ON MOSTLY MODERATE SLOPES OF ALL ASPECTS.
Blepharizonia plumosa	big tarplant	31	Antioch South	20061006	NON-NATIVE ANNUAL GRASSLAND DOMINATED BY HOLOCARPHA VIRGATA. ASSOCIATED WITH EREMOCARPUS, CENTAUREA SOLSTITIALIS, GRINDELIA CAMPORUM, AVENA FATUA, BROMUS HORDEACEUS, AND LOLIUM MULTIFLORUM. ON MOSTLY MODERATE SLOPES OF ALL ASPECTS.
Blepharizonia plumosa	big tarplant	32	Antioch South	19980925	NON-NATIVE ANNUAL GRASSLAND DOMINATED BY HOLOCARPHA VIRGATA. ASSOCIATED WITH EREMOCARPUS, CENTAUREA SOLSTITIALIS, GRINDELIA CAMPORUM, AVENA FATUA, BROMUS HORDEACEUS, & LOLIUM MULTIFLORUM. ON VALLEY FLOOR AND MODERATE SLOPES OF ALL ASPECTS.
Blepharizonia plumosa	big tarplant	33	Antioch South	20061006	NON-NATIVE ANNUAL GRASSLAND DOMINATED BY HOLOCARPHA VIRGATA. ASSOCIATED WITH EREMOCARPUS, CENTAUREA SOLSTITIALIS, GRINDELIA CAMPORUM, AVENA FATUA, BROMUS HORDEACEUS, AND LOLIUM MULTIFLORUM. ON MOSTLY MODERATE SLOPES OF ALL ASPECTS.
Blepharizonia plumosa	big tarplant	34	Antioch South	20061006	NON-NATIVE ANNUAL GRASSLAND DOMINATED BY HOLOCARPHA VIRGATA. ASSOCIATED WITH EREMOCARPUS, CENTAUREA SOLSTITIALIS, GRINDELIA CAMPORUM, AVENA FATUA, BROMUS HORDEACEUS, AND LOLIUM MULTIFLORUM. ON MOSTLY MODERATE SLOPES OF ALL ASPECTS.
Blepharizonia plumosa	big tarplant	35	Antioch South	19980925	NON-NATIVE ANNUAL GRASSLAND DOMINATED BY HOLOCARPHA VIRGATA. ASSOCIATED WITH EREMOCARPUS, CENTAUREA SOLSTITIALIS, GRINDELIA CAMPORUM, AVENA FATUA, BROMUS HORDEACEUS, LOLIUM MULTIFLORUM. ON MODERATE SLOPES OF ALL ASPECTS.
Blepharizonia plumosa	big tarplant	36	Antioch South	19980925	NON-NATIVE ANNUAL GRASSLAND DOMINATED BY HOLOCARPHA VIRGATA. ASSOCIATED WITH EREMOCARPUS, CENTAUREA SOLSTITIALIS, GRINDELIA CAMPORUM, AVENA FATUA, BROMUS HORDEACEUS, LOLIUM MULTIFLORUM. ON MODERATE SLOPES OF ALL ASPECTS.
Blepharizonia plumosa	big tarplant	39	Antioch South	20011007	N-FACING SLOPE, IN DEEPLY CRACKED SOIL. WITH LOLIUM MULTIFLORUM, EPILOBIUM BRACHYCARPUM, LAGOPHYLLA RAMOSISSIMUM, GRINDELIA CAMPORUM.
Blepharizonia plumosa	big tarplant	56	Antioch South	2000XXXX	
Blepharizonia plumosa	big tarplant	57	Antioch South	19371028	
Blepharizonia plumosa	big tarplant	10	Brentwood	19940915	GRASSY HILLSIDE WITH SPARSE COVER OF ANNUAL GRASSES ON NORTH-FACING SLOPE WITH CLAYEY SOIL. ASSOCIATED WITH HOLOCARPHA VIRGATA AND LACTUCA SERRIOLA.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Blepharizonia plumosa	big tarplant	11	Brentwood	19940915	ANNUAL GRASSLAND WITH SPARSE GRASS COVER ON NNE-FACING SLOPES WITH CLAY SOILS.
Blepharizonia plumosa	big tarplant	8	Brentwood	19940915	ANNUAL GRASSLAND ON CLAY SOIL NEXT TO INTERMITTENT STREAM. ABOVE ZONE OF GRINDELIA CAMPORUM.
Blepharizonia plumosa	big tarplant	9	Brentwood	19940915	GRASSY HILLSIDE WITH SPARSE COVER ON CLAY SOIL. ASSOCIATED WITH LACTUCA SERRIOLA, CENTAUREA SOLSTITIALIS, AND HOLOCARPHA VIRGATA. PLANTS ON NNE-FACING SLOPE; MID-SLOPE ONLY.
Blepharizonia plumosa	big tarplant	54	Byron Hot Springs	19940810	NORTH AND NORTHEAST FACING SLOPES IN NON-NATIVE GRASSLAND.
Blepharizonia plumosa	big tarplant	44	Clayton	19940911	OPEN OAK WOODLAND INCLUDING CANYON LIVE OAK, BLUE OAK, AND BUCKEYE. HEAVILY GRAZED ANNUAL GRASSLAND ON CLAY SOIL BASE OF SOUTH-FACING SLOPE.
Blepharizonia plumosa	big tarplant	2	Honker Bay	19370831	
Branchinecta lynchi	vernal pool fairy shrimp	212	Antioch North	19990310	NON-VEGETATED DEPRESSION IN DIRT ROAD ALONG TRACKS - PARTIALLY SCRAPED BY BULLDOZER. ROUTINE VEHICLE TRAFFIC THROUGH AREA AND HERBICIDE USE ALONG RAILROAD TRACKS.
Branchinecta lynchi	vernal pool fairy shrimp	215	Antioch South	19970131	SEVERAL OF THE POOLS ARE IN WHAT IS DESIGNATED AS NORTHERN CLAYPAN VERNAL POOL, THE REMAINDER ARE SEASONAL WETLANDS IN VALLEY SINK SCRUB.
Branchinecta lynchi	vernal pool fairy shrimp	352	Antioch South	20030306	HABITAT CONSISTS OF A SMALL (8 X 12'), CLAYPAN VERNAL POOL IN A SWALE AT THE BASE OF A WEST-FACING SLOPE. LEPIDURUS PACKARDI ALSO FOUND AT THE SITE.
Branchinecta lynchi	vernal pool fairy shrimp	353	Antioch South	20030306	HABITAT CONSISTS OF A NORTHERN CLAYPAN VERNAL POOL, LATER IN SEASON DOMINATED BY PLAGIOBOTHRYUS BRACTEATUS, PLAGIOBOTHRYUS STIPITATUS VAR. MICRANTHUS, AND/OR PLAGIOBOTHRYUS STIPITATUS VAR. STIPITATUS.
Branchinecta lynchi	vernal pool fairy shrimp	354	Antioch South	20030306	HABITAT CONSISTS OF A NORTHERN CLAYPAN VERNAL POOL, LATER IN SEASON DOMINATED BY PLAGIOBOTHRYUS BRACTEATUS, PLAGIOBOTHRYUS STIPITATUS VAR. MICRANTHUS, AND/OR PLAGIOBOTHRYUS STIPITATUS VAR. STIPITATUS.
Branchinecta lynchi	vernal pool fairy shrimp	216	Brentwood	19970109	NON-NATIVE GRASSLAND WITH SEASONALLY PONDED WETLANDS
Branchinecta lynchi	vernal pool fairy shrimp	217	Brentwood	19930304	NON-NATIVE GRASSLANDS
Branchinecta lynchi	vernal pool fairy shrimp	224	Brentwood	19970109	GRASSLAND WITH SEASONALLY PONDED WETLANDS.
Buteo swainsoni	Swainson's hawk	1654	Bouldin Island	20030430	NEST TREE WAS A WILLOW, WHICH HANGS OVER THE WATER; SURROUNDED BY RIPARIAN IN ALL DIRECTIONS. MASON'S LILEAOPSIS WAS OBSERVED IN THE COVE JUST WEST OF THE NEST.
Buteo swainsoni	Swainson's hawk	1312	Brentwood	20060428	NEST TREE IS A EUCALYPTUS; SURROUNDING HABITAT CONSISTS OF AGRICULTURAL FIELDS (WHEAT, ROW CROPS, ORCHARDS). DOMINANT ROW TREES ALONG CYPRESS ROAD ARE EUCALYPTUS GLOBULUS AND ROBINIA PSEUDOACACIA.
Buteo swainsoni	Swainson's hawk	1600	Brentwood	2005XXXX	NEST TREE WAS A WALNUT WITHIN A ROW OF PLANTED WALNUT TREES ALONG THE NORTH EDGE OF THE ROAD; AGRICULTURAL FIELDS FOUND TO THE NORTH AND A HORSE FARM TO THE SOUTH.
Buteo swainsoni	Swainson's hawk	1681	Brentwood	20070419	NEST TREE IS A LARGE VALLEY OAK; SURROUNDING HABITAT CONSISTS OF RANGELAND/ANNUAL GRASSLAND WEST OF A NARROW RIPARIAN CORRIDOR ALONG SAND CREEK.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Buteo swainsoni	Swainson's hawk	1684	Brentwood	20070418	NEST TREE WAS A QUERCUS LOBATA (55' TALL, NEST HEIGHT=50'), SURROUNDED BY RIPARIAN DOMINATED BY QUERCUS LOBATA, POPULUS FREMONTII, AND JUGLANS CALIFORNICA; UPLAND DOMINATED BY OAKS WITH A GRASSLAND UNDERSTORY.
Buteo swainsoni	Swainson's hawk	1685	Brentwood	20070419	NEST TREE WAS A POPULUS FREMONTII (65' TALL, NEST HEIGHT=61'), SURROUNDED BY RIPARIAN DOMINATED BY QUERCUS LOBATA, POPULUS FREMONTII, SALIX SPP, AND JUGLANS CALIFORNICA; UPLAND DOMINATED BY OAKS WITH A GRASSLAND UNDERSTORY.
Buteo swainsoni	Swainson's hawk	1712	Brentwood	20060420	NEST TREE IS A EUCALYPTUS; IMMEDIATELY SURROUNDED BY FLAT AGRICULTURAL LAND CONTAINING CULTIVATED CROPS AND WEEDY, NON-NATIVES. LAND SURROUNDING AG FIELDS CONSISTS OF RESIDENTIAL TO THE SOUTH AND EAST, RURAL RESIDENTIAL TO NORTH AND WEST.
Buteo swainsoni	Swainson's hawk	1713	Brentwood	20060419	NEST TREE IS A EUCALYPTUS; SURROUNDED BY A DEFUNCT AGRICULTURAL FIELD OF NON-NATIVE GRASSES AND WEEDY SPECIES.
Buteo swainsoni	Swainson's hawk	1714	Brentwood	20060427	NEST TREE IS A EUCALYPTUS; SURROUNDED BY EUCALYPTUS AND PINE TREES ADJACENT TO AGRICULTURAL LAND (MOSTLY CULTIVATED), WITH SOME NON-NATIVE VEGETATION NEARBY.
Buteo swainsoni	Swainson's hawk	1674	Jersey Island	20030425	NEST TREE WAS A 25' EXOTIC TREE; SURROUNDED BY RIPARIAN TO THE NE, AND ROW CROPS TO THE NW, SW, AND SE.
California macrophylla	round-leaved filaree	56	Antioch North	18890418	
California macrophylla	round-leaved filaree	47	Antioch South	20040413	HEAVY CLAY ON WSW-FACING SLOPE.
California macrophylla	round-leaved filaree	49	Antioch South	1994XXXX	
California macrophylla	round-leaved filaree	57	Antioch South	19290425	IN CULTIVATED FIELDS.
California macrophylla	round-leaved filaree	48	Antioch South	20050505	GRASSLAND HABITAT CONVERTED TO WHEAT PRODUCTION. ALSO ASSOCIATED WITH MALVELLA LEPROSA, CENTAUREA SOLSTITIALIS, ERODIUM BRACHYCARPUM, AND MEDICAGO POLYMORPHA.
California macrophylla	round-leaved filaree	95	Antioch South	20040328	
California macrophylla	round-leaved filaree	96	Antioch South	20050406	NON-NATIVE GRASSLAND AND GRAZED PASTURE. RINCON CLAY LOAM WITH 0-2% SLOPES. ASSOCIATED WITH GERANIUM DISSECTUM, MEDICAGO POLYMORPHA, BROMUS HORDEACEUS, HYPOCHAERIS GLABRA, TRIFOLIUM HIRTUM, AND ACHYRACHAENA MOLLIS.
California macrophylla	round-leaved filaree	46	Brentwood	19290315	PLANT LOCATED IN FIELD.
California macrophylla	round-leaved filaree	50	Clayton	18620510	
Calochortus pulchellus	Mt. Diablo fairy-lantern	9	Clayton	19930508	GROWING IN QUERCUS WISLIZENII AND Q. DOUGLASII WOODLAND.
Calystegia atriplicifolia ssp. butte	Butte County morning-gl	1	Clayton	19360509	
Carex comosa	bristly sedge	4	Bouldin Island	19880830	ON STEEP CUT BANK ABOVE TULE WITH ECHINOCLOA CRUS-GALI, LYCOPUS AMERICANUS, AND BIDENS FRONDOSA IN A NON-TIDAL MARSH.
Coastal and Valley Freshwater	Coastal and Valley Fresh	51	Bouldin Island	1986XXXX	SMALL ISLANDS, OLD LEVEE BERMS & DREDGER CUTS SUPPORTING DENSE STANDS OF SCIRPUS, TYPHA, PHRAGMITES. SOME ALSO HAVE ALDER & WILLOW.
Coastal Brackish Marsh	Coastal Brackish Marsh	12	Antioch North	197706XX	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
Coastal Brackish Marsh	Coastal Brackish Marsh	13	Antioch North	197706XX	FORMERLY DIKED. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
Coastal Brackish Marsh	Coastal Brackish Marsh	11	Honker Bay	197706XX	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
Coastal Brackish Marsh	Coastal Brackish Marsh	10	Honker Bay	197706XX	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
Coastal Brackish Marsh	Coastal Brackish Marsh	9	Honker Bay	197706XX	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
Coelus gracilis	San Joaquin dune beetle	5	Antioch North	1976XXXX	

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
<i>Cordylanthus mollis</i> ssp. <i>mollis</i>	soft bird's-beak	18	Jersey Island	19931006	
<i>Cryptantha hooveri</i>	Hoover's cryptantha	4	Antioch North	1908XXXX	
<i>Downingia pusilla</i>	dwarf downingia	51	Antioch North	19930419	VERNAL POOLS IN WEEDY GRASSLAND. ASSOCIATED WITH <i>ERYNGIUM ARISTULATUM</i> , <i>PSILOCARPHUS BREVISSIMUS</i> , AND <i>TILLEA AQUATICA</i> . SITE IS NEARLY FLAT.
<i>Downingia pusilla</i>	dwarf downingia	52	Antioch North	19930419	VERNAL POOLS IN INTRODUCED GRASSLAND ASSOCIATED WITH <i>ERYNGIUM ARISTULATUM</i> , <i>PSILOCARPHUS BREVISSIMUS</i> , AND <i>TILLEA AQUATICA</i> . SITE IS NEARLY FLAT.
<i>Efferia antiochi</i>	Antioch efferian robberfly	1	Antioch North	1981XXXX	
<i>Elanus leucurus</i>	white-tailed kite	17	Antioch North	1985XXXX	HABITAT CONSISTS OF RIPARIAN/GRASSLAND; GRASSLAND AREA SURROUNDING NEST IS CUT FOR HAY.
<i>Elanus leucurus</i>	white-tailed kite	76	Brentwood	20040129	HABITAT CONSISTS OF INTERIOR DUNES; TREES IN THE VICINITY HAVE BEEN FELLED, SAVE THOSE WITHIN 200' OF THE NEST TREE.
<i>Elanus leucurus</i>	white-tailed kite	87	Brentwood	20050311	NEST TREE IS A PINE ON THE EDGE OF AN OLD ORCHARD; SURROUNDED BY NON-NATIVE GRASSLAND.
<i>Elanus leucurus</i>	white-tailed kite	113	Brentwood	20060428	NEST TREE IS A EUCALYPTUS WITHIN A ROW OF TREES; SURROUNDED BY AGRICULTURAL FIELDS AND RURAL RESIDENTIAL.
<i>Eriogonum truncatum</i>	Mt. Diablo buckwheat	4	Antioch North	1886XXXX	
<i>Eriogonum truncatum</i>	Mt. Diablo buckwheat	3	Antioch South	19340408	
<i>Erysimum capitatum</i> var. <i>angus</i>	Contra Costa wallflower	1	Antioch North	20010407	IN DUNES OF FINE SAND AND CLAY. ASSOCIATED WITH <i>CROTON CALIFORNICUS</i> , <i>LUPINUS ALBIFRONS</i> AND <i>LOTUS SCOPARIUS</i> .
<i>Erysimum capitatum</i> var. <i>angus</i>	Contra Costa wallflower	2	Antioch North	20010414	ON STABILIZED INTERIOR DUNES OF SAND AND CLAY. MOSTLY ON STEEP NORTH-FACING AND EAST-FACING SLOPES AT EAST END OF SITE. ASSOCIATED WITH <i>LUPINUS ALBIFRONS</i> , <i>BROMUS DIANDRUS</i> , <i>AVENA</i> , <i>SALSOLA PESTIFERA</i> , <i>LOTUS SCOPARIUS</i> , AND <i>GILIA CAPITATA</i> .
<i>Erysimum capitatum</i> var. <i>angus</i>	Contra Costa wallflower	3	Antioch North	19941023	NORTH FACING SLOPE OF SAND BANK TOP, INTRODUCED GRASSES & HERBS. <i>ESCHSCHOLZIA CALIFORNICA</i> , <i>AVENA</i> , <i>VICIA</i> , <i>ARTEMISIA DOUGLASII</i> , <i>ELYMUS TRITICOIDES</i> .
<i>Eschscholzia rhombipetala</i>	diamond-petaled Californ	3	Antioch North	188904XX	
<i>Eucerceris ruficeps</i>	redheaded sphecid wasp	1	Antioch North	19790622	
<i>Fritillaria liliacea</i>	fragrant fritillary	41	Antioch North	19930313	VALLEY GRASSLAND/CISMONTANE INTRODUCED GRASSLAND ON GRADUAL WEST SLOPES ABOVE THE WETLAND (DIKED MARSH). ASSOCIATES INCLUDE <i>HORDEUM</i> , <i>ERODIUM</i> , <i>TRIPHYSARIA ERIANTHA</i> , AND <i>LOMATIUM UTRICULATUM</i> . SOME GOOD STANDS OF <i>NASSELLA PULCHRA</i> .
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellow	105	Antioch North	20040524	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF <i>SALICORNIA VIRGINICA</i> , <i>SCIRPUS</i> SPP., <i>TYPHA</i> SPP., AND <i>PHRAGMITES AUSTRALIS</i> .
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellow	106	Antioch North	20040524	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF <i>SALICORNIA VIRGINICA</i> , <i>SCIRPUS</i> SPP., <i>TYPHA</i> SPP., AND <i>PHRAGMITES AUSTRALIS</i> .
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellow	107	Antioch North	20040525	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF <i>SALICORNIA VIRGINICA</i> , <i>SCIRPUS</i> SPP., <i>TYPHA</i> SPP., AND <i>PHRAGMITES AUSTRALIS</i> .
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellow	108	Antioch North	20040525	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF <i>SALICORNIA VIRGINICA</i> , <i>SCIRPUS</i> SPP., <i>TYPHA</i> SPP., AND <i>PHRAGMITES AUSTRALIS</i> .

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Helianthella castanea	Diablo helianthella	15	Antioch South	19950304	CHAPARRAL-FOOTHILL PINE WOODLAND. ASSOCIATED W/ PINUS SABINIANA, ARCTOSTAPHYLOS MANZANITA, QUERCUS WISLIZENII, SALVIA MELLIFERA, MIMULUS AURANTIACUS, DODECATHEON, PTELEA CREMULATA, ERIODICTYON CALIFORNICA, TOXICODENDRON, ET AL.
Helianthella castanea	Diablo helianthella	25	Antioch South	19900408	CHAPARRAL WITH ADENOSTOMA FASCICULATUM, SALVIA MELLIFERA, AND MIMULUS AURANTIACUS.
Helianthella castanea	Diablo helianthella	70	Antioch South	199809XX	CHAPARRAL AND OPEN BLUE OAK WOODLAND.
Helianthella castanea	Diablo helianthella	71	Antioch South	199809XX	CHAPARRAL AND OPEN BLUE OAK WOODLAND.
Helianthella castanea	Diablo helianthella	81	Antioch South	1998XXXX	
Helianthella castanea	Diablo helianthella	5	Clayton	19910505	USUALLY AT EDGE BETWEEN WOODLAND/RIPARIAN AND CHAPARRAL. ASSOCIATED WITH QUERCUS SPP., PTELEA CREMULATA, ANNUAL GRASSES, WYETHIA GLABRA, W. HELENOIDES, NEMOPHILIA HETEROPHYLLA, CALOCHORTUS PULCHELLUS, GALIUM APARINE, MELICA TORREYANA, ETC.
Helianthella castanea	Diablo helianthella	29	Clayton	19910505	CHAPARRAL ON SANDSTONE. WITH ADENOSTOMA FASCICULATUM, SALVIA MELLIFERA, QUERCUS AGRIFOLIA, PTELEA CREMULATA, HOLODISCUS DISCOLOR, BROMUS MADRATENSIS, B. DIANDRUS, ZIGADENUS FREMONTII, CALOCHORTUS PULCHELLUS, AND ERIOPHYLLUM LANATUM.
Hesperolinon breweri	Brewer's western flax	9	Antioch North	188506XX	
Hesperolinon breweri	Brewer's western flax	7	Antioch South	19730531	
Hibiscus lasiocarpus	woolly rose-mallow	85	Bouldin Island	19870817	ON EDGE OF ISLAND.
Hibiscus lasiocarpus	woolly rose-mallow	87	Bouldin Island	19850818	AT TWO LOCATIONS ON SMALL ISLANDS OR BERMS ASSOCIATED WITH TULE, GRASSES, AND BRAMBLES (IN DRIER LOCATIONS).
Hibiscus lasiocarpus	woolly rose-mallow	60	Bouldin Island	19890812	ON RIVER BANK OF TIDAL MARSH JUST ABOVE THE HIGH WATER LEVEL. GROWING ON PEAT ISLAND WITH TYPHA AND SCIRPUS.
Hibiscus lasiocarpus	woolly rose-mallow	98	Bouldin Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	102	Bouldin Island	19920724	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	100	Bouldin Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	125	Bouldin Island	19940920	
Hibiscus lasiocarpus	woolly rose-mallow	86	Jersey Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	105	Jersey Island	19920617	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	106	Jersey Island	1990XXXX	
Hibiscus lasiocarpus	woolly rose-mallow	104	Jersey Island	19920617	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	36	Rio Vista	19740715	
Hibiscus lasiocarpus	woolly rose-mallow	93	Woodward Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	95	Woodward Island	19920609	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Hibiscus lasiocarpus	woolly rose-mallow	130	Woodward Island	20000809	ALONG ROCKY LEVEE. NOT HEAVILY VEGETATED, WITH A FEW SCATTERED WILLOWS.
Hygrotus curvipes	curved-foot hygrotus divir	1	Brentwood	XXXXXXX	
Hypomesus transpacificus	Delta smelt	4	Antioch North	20040213	HABITAT CONSISTS OF A SMALL CHANNEL IN A RESTORED WETLAND (PREVIOUS SALT PONDS).
Hypomesus transpacificus	Delta smelt	7	Jersey Island	20001205	COLLECTED ON DAYS WHEN WIND AND WATER WERE CALM AND WATER TEMPERATURE WAS NEAR 10 C.
Idiostatus middlekauffi	Middlekauff's shieldback	1	Antioch North	1965XXXX	
Isocoma arguta	Carquinez goldenbush	7	Birds Landing	19330917	
Juglans hindsii	Northern California black	3	Rio Vista	200210XX	ON HIGH SPOTS ALONG THE BANK.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
Lanius ludovicianus	loggerhead shrike	3	Brentwood	20030319	HABITAT SURROUNDING THE NEST TREE CONSIST OF HIGHLY-DISTURBED, SANDY SOILS DOMINATED BY RUDERAL VEGETATION, INCLUDING WILD RADISH, MILK THISTLE, ROUGH PIGWEED, & SUNFLOWER; ORNAMENTAL TREES WITHIN THE AREA INCLUDE OLIVE, OLEANDER, & ELM.
Lasiurus blossevillii	western red bat	66	Antioch North	19980624	
Lasiurus blossevillii	western red bat	64	Jersey Island	19990924	EXOTIC, COTTONWOOD/SYCAMORE. CONSISTS PRIMARILY OF YOUNG TREES AND/OR SPARSE RIPARIAN STRIP THAT IS 1 TREE WIDE.
Lasiurus cinereus	hoary bat	206	Jersey Island	19990924	EXOTIC, COTTONWOOD/SYCAMORE. CONSISTS PRIMARILY OF YOUNG TREES AND/OR SPARSE RIPARIAN STRIP THAT IS 1 TREE WIDE.
Lasthenia conjugens	Contra Costa goldfields	8	Antioch North	1921XXXX	DESCRIBED VARIOUSLY AS "PLAIN NEAR TOWN," "ALONG RIVER," AND "MOIST AREAS."
Laterallus jamaicensis coturnicu	California black rail	136	Antioch North	20060619	HABITAT CONSISTS OF A NEARLY PURE STAND OF SCHOENOPLECTUS AMERICANUS (55% COVER) TIDAL MARSH, TYPHA ANGUSTIFOLIA (5%), SCHOENOPLECTUS ACUTUS VAR. OCCIDENTALIS (1%), AND DISTICHLIS SPICATA (1%).
Laterallus jamaicensis coturnicu	California black rail	124	Bouldin Island	19930413	
Laterallus jamaicensis coturnicu	California black rail	34	Honker Bay	198810XX	HABITAT IS MARSH CONSISTING OF SCIRPUS, JUNCUS, DISTICHLIS, AND TYPHA.
Laterallus jamaicensis coturnicu	California black rail	112	Honker Bay	19980402	HABITAT CONSISTS OF TIDAL SALT MARSH, DOMINATED BY TYPHA LATIFOLIA AND SCIRPUS ACUTUS, INDICATING A STRONG FRESHWATER INFLUENCE. HIGH MARSH AREAS HAVE SCATTERED PICKLEWEED, WITH A DOMINANT COVER OF JUNCUS MEXICANA.
Laterallus jamaicensis coturnicu	California black rail	109	Jersey Island	198111XX	HABITAT PRIMARILY SALICORNIA; BRACKISH MARSH; UPPER MARSH WITH LITTLE TIDAL INFLUENCE (IF ANY); SOILS FAIRLY DRY (EVEN IN MID-NOVEMBER)
Lathyrus jepsonii var. jepsonii	Delta tule pea	1	Antioch North	1992XXXX	GROWING WITH THE FOLLOWING ASSOCIATES: TYPHA SP., ASTER LENTUS, ROSA CALIFORNICA, JUNCUS, AND BACCHARIS DOUGLASII.
Lathyrus jepsonii var. jepsonii	Delta tule pea	21	Antioch North	19941005	IN COBBLES ON SLOPING EDGE OF LEVEE. ROCKS ARE PERIODICALLY INUNDATED BY WATER. ASSOCIATED WITH ASTER CHILENSIS VAR. LENTUS.
Lathyrus jepsonii var. jepsonii	Delta tule pea	32	Antioch North	19900629	GROWING NEAR SHORE IN ASSOCIATION WITH RUBUS AND POLYGONUM HYDROPIPEROIDES. LILAEOPSIS MASONII OCCURS ALONG THE SHORE.
Lathyrus jepsonii var. jepsonii	Delta tule pea	20	Antioch North	19850424	AREA IS TRANSITIONAL BETWEEN FRESHWATER MARSHES OF THE DELTA AND SALT MARSHES OF SAN PABLO BAY. ASTER LENTUS, LILAEOPSIS MASONII, AND SALT MARSH HARVEST MOUSE OCCUR NEARBY.
Lathyrus jepsonii var. jepsonii	Delta tule pea	33	Antioch North	19900726	GROWING IN THE LITTORAL ZONE WITH ERYNGIUM, SCIRPUS, JUNCUS, AGROSTIS, ARUNDO, SALIX, ELEOCHARIS, LYTHRUM, HELENIUM, AND RUMEX. LILAEOPSIS MASONII GROWING ALONG THE SHORE AND ASTER LENTUS IS ON HIGHER GROUND HERE.
Lathyrus jepsonii var. jepsonii	Delta tule pea	31	Antioch North	19900726	VERY DENSE NEAR-SHORE VEGETATION. ASSOCIATES INCLUDE ALNUS, SALIX, TYPHA, HELENIUM, GRINDELIA, PLANTAGO, POTENTILLA, RUMEX, LYTHRUM, PASPALUM, TRIFOLIUM, AND ROSA. LILAEOPSIS MASONII AND ASTER LENTUS GROWING DOWN BY THE WATERS EDGE.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Lathyrus jepsonii var. jepsonii	Delta tule pea	2	Antioch North	19940827	CLIMBING IN DENSE VEGETATION: MOSTLY RUBUS PROCERA WITH SCIRPUS ACUTUS, LEPIDIUM LATIFOLIUM AND RUMEX SP.
Lathyrus jepsonii var. jepsonii	Delta tule pea	64	Antioch North	19940827	
Lathyrus jepsonii var. jepsonii	Delta tule pea	65	Antioch North	19941027	
Lathyrus jepsonii var. jepsonii	Delta tule pea	66	Antioch North	19941027	
Lathyrus jepsonii var. jepsonii	Delta tule pea	67	Antioch North	20010804	RUBUS PROCERUS DOMINANT WITH JUNCUS BALTICUS.
Lathyrus jepsonii var. jepsonii	Delta tule pea	10	Honker Bay	197810XX	
Lathyrus jepsonii var. jepsonii	Delta tule pea	36	Honker Bay	19900820	GROWING AMONG AND OVER CHRYSOPSIS, BIDENS, AND LEPIDIUM LATIFOLIUM. LILAEOPSIS MASONII AND ASTER LENTUS ARE ALSO FOUND ALONG THIS BREAKWATER.
Lathyrus jepsonii var. jepsonii	Delta tule pea	47	Honker Bay	19910603	GROWING IN ESTUARINE SALT MARSH ALONG THE BANK OF LEVEE. ASSOCIATED WITH PHRAGMITES, DISTICHLIS SPICATA, SCIRPUS ACUTUS, RUMEX CRISPUS, AND JUNCUS. LILAEOPSIS MASONII, A STATE LISTED RARE PLANT, GROWS ALONG THE WATER'S EDGE.
Lathyrus jepsonii var. jepsonii	Delta tule pea	34	Honker Bay	1992XXXX	COASTAL SALT MARSH/TIDAL ESTUARY. ASSOCIATED WITH SCIRPUS ACUTUS, ROSA CALIFORNICA, AND LEPIDIUM LATIFOLIUM. LILAEOPSIS MASONII IS ALSO FOUND HERE.
Lathyrus jepsonii var. jepsonii	Delta tule pea	68	Honker Bay	1992XXXX	
Lathyrus jepsonii var. jepsonii	Delta tule pea	70	Honker Bay	1992XXXX	
Lathyrus jepsonii var. jepsonii	Delta tule pea	71	Honker Bay	1992XXXX	
Lathyrus jepsonii var. jepsonii	Delta tule pea	72	Honker Bay	1992XXXX	
Lathyrus jepsonii var. jepsonii	Delta tule pea	135	Honker Bay	20040525	BRACKISH MARSH HABITAT DOMINATED BY TYPHA AND SCIRPUS. AREA EXPERIENCES TIDAL INFLUENCES.
Lathyrus jepsonii var. jepsonii	Delta tule pea	63	Jersey Island	19970604	GROWING MIXED WITH LONICERA, SCIRPUS. THE RARE LILAEOPSIS MASONII AND LIMOSELLA SUBULATA ALSO OCCUR HERE.
Lathyrus jepsonii var. jepsonii	Delta tule pea	133	Jersey Island	19900811	MUDDY LEVEE MARGIN BORDERING MARSH.
Lathyrus jepsonii var. jepsonii	Delta tule pea	11	Rio Vista	19231004	
Lepidurus packardi	vernal pool tadpole shrim	161	Antioch North	20000324	HABITAT CONSISTS OF A HUGE VERNAL POOL (~4 FEET DEEP); SURROUNDING AGRICULTURAL FIELD PRIMARILY USED FOR GRAZING LIVESTOCK, RIMMED WITH ANNUAL EXOTIC GRASSES.
Lepidurus packardi	vernal pool tadpole shrim	177	Antioch South	20030306	HABITAT CONSISTS OF A SMALL (8 X 12'), CLAYPAN VERNAL POOL IN A SWALE AT THE BASE OF A WEST-FACING SLOPE. BRANCHINECTA LYNCHI ALSO FOUND AT THE SITE.
Lilaeopsis masonii	Mason's lilaeopsis	31	Antioch North	19950616	GROWING NEAR RIP-RAP ON DELTA MUD SUBSTRATE IN ASSOCIATION WITH SCIRPUS CERNUUS, S. CALIFORNICUS, SAMOLUS PARVOLA, JUNCUS BALTICUS, PLANTAGO LANCEOLATA, POTENTILLA PACIFICUS, LEPIDIUM LATIFOLIA, HELENIUM BIGLOVEII, AND AGROSTIS EXARATA.
Lilaeopsis masonii	Mason's lilaeopsis	16	Antioch North	19900817	GROWING ALONG BANK ON CLAY/PEAT SUBSTRATE IN ASSOCIATION WITH HYDROCOTYLE VERTICILLATA, TRIGLOCHIN STRIATA, RUMEX CRISPIS, SCIRPUS CALIFORNICA, SCIRPUS CERNUUS, JUNCUS BALTICUS, AND PHRAGMITES COMMUNIS.
Lilaeopsis masonii	Mason's lilaeopsis	14	Antioch North	19780817	ASSOCIATED WITH TRIGLOCHIN AND HYDROCOTYLE.
Lilaeopsis masonii	Mason's lilaeopsis	12	Antioch North	19780817	ON MUDDY SHORES FORMING LOW TURF WITH TRIGLOCHIN STRIATA AND HYDROCOTYLE VERTICILLATA VAR TRIRADIATA.
Lilaeopsis masonii	Mason's lilaeopsis	13	Antioch North	19900627	GROWING ON WET CLAYEY BANKS IN ASSOCIATION WITH TRIGLOCHIN STRIATA, LILAEA SCILLOIDES, SCIRPUS, AND HYDROCOTYLE.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Lilaeopsis masonii	Mason's lilaeopsis	19	Antioch North	19900728	GROWING IN RIPRAP IN ASSOCIATION WITH ASTER LENTUS, PHRAGMITES COMMUNIS, MELILOTUS ALBA, SCIRPUS CALIFORNICUS, DISTICHLIS SPICATA, AND JUNCUS SP.. A SMALL PATCH IS GROWING ON A PILING AT THE WEST END OF THE PICNIC AREA.
Lilaeopsis masonii	Mason's lilaeopsis	90	Antioch North	19981014	GROWING ALONG THE SHORE IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH. THE RARE ASTER LENTUS IS ALSO FOUND AT THE SITE OF THE W-COLONY.
Lilaeopsis masonii	Mason's lilaeopsis	15	Antioch North	19920616	GROWING ON MUDDY SHORES, INTERTIDAL BANKS, AND AMONG RIP-RAP IN ASSOCIATION WITH TRIGLOCHIN STRIATA, HYDROCOTYLE VERTICILLATA, ATRIPLEX PATULA, PLANTAGO LANCEOLATA, CONVULVULUS ARVENSE, SCIRPUS CALIFORNICUS, S. ACUTUS, AND S. CERNUUS.
Lilaeopsis masonii	Mason's lilaeopsis	64	Antioch North	20010526	IN TIDAL MARSH GROWING AT EDGE OF WATER ON BANK AND ON LOGS THAT ARE TIDALLY SUBMERGED DAILY. ASSOCIATES INCLUDE HYDROCOTYLE SP., BIDENS LAEVIS, TRIGLOCHIN STRIATA, SCIRPUS SP., AND HELENIUM BIGELOVII.
Lilaeopsis masonii	Mason's lilaeopsis	63	Antioch North	19881025	POPULATION IS GROWING ON A SATURATED SUBSTRATE. IT IS UNKNOWN WHETHER OR NOT THE SITE IS REGULARLY INUNDATED.
Lilaeopsis masonii	Mason's lilaeopsis	1	Antioch North	20010414	ASSOCIATED WITH HYDROCOTYLE AND MOSSES ON THE FRAME OF A BEACHED BARGE AND ON ABANDONED WOOD PILINGS. ASSOCIATED WITH DESCHAMPSIA CAESPITOSA, SCIRPUS CERNUUS CALIFORNICUS, JUNCUS BALTICUS, CORTADERA SELLOANA, AND POLYGONUM.
Lilaeopsis masonii	Mason's lilaeopsis	175	Antioch North	19960724	ASSOCIATED WITH LIMOSELLA SUBULATA, HELENIUM BIGELOVII, MIMULUS GUTTATUS, PLUCHEA ODORATA, POLYPOGON PERSICARIA, AND SCIRPUS AMERICANUS.
Lilaeopsis masonii	Mason's lilaeopsis	116	Antioch North	19940604	GROWING BELOW RIP-RAP AND THE WATERSIDE TOE OF THE LEVEE, BETWEEN THE TULE BERM AND THE LEVEE. OFTEN ASSOCIATED WITH LIMOSELLA SUBULATA AND ASTER LENTUS.
Lilaeopsis masonii	Mason's lilaeopsis	147	Antioch North	19920616	
Lilaeopsis masonii	Mason's lilaeopsis	160	Antioch North	20010526	ALONG SHORELINE.
Lilaeopsis masonii	Mason's lilaeopsis	162	Antioch North	20050725	OPEN SANDY SOILS AND PEAT CLUMPS AT THE TIDE LINE. FOUND WITH HYDROCOTYLE, PLANTAGO ELONGATA, JUNCUS BALTICUS, PHRAGMITES AUSTRALIS, AND SCHOENOPECTUS ACUTUS.
Lilaeopsis masonii	Mason's lilaeopsis	2	Antioch North	19950808	GROWING ON MUDFLATS ALONG EDGE OF RIVER IN ASSOCIATION WITH SCIRPUS, LYCOPUS, HYDROCOTYLE, LIMOSELLA SUBULATA, JUNCUS, ELEOCHARIS, AGROSTIS, HELENIUM, LYTHRUM, RUMEX, ERYNGIUM, SALIX, TYPHA, PLANTAGO, PASPALUM, SETARIA, AND EQUISTEUM.
Lilaeopsis masonii	Mason's lilaeopsis	21	Antioch North	19950922	AT THE WATERS EDGE IN MOIST AREAS WITH FIRM SUBSTRATUM INCLUDING PILINGS AND PEAT HUMMOCKS. ASSOCIATED VEGETATION INCLUDES TULES AND RUSHES. ANOTHER RARE PLANT: LATHYRUS JEPSONII JEPSONII ALSO OCCURS HERE; BUT IT EXISTS THROUGHOUT ISLAND.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Lilaeopsis masonii	Mason's lilaeopsis	24	Antioch North	19900818	IN WAVE-WASHED ZONE ON LOWER SLOPE IN OPEN SATURATED BEACH SAND. ASSOCIATED WITH HYDROCOTYLE VERTICILLATA, PHRAGMITES COMMUNIS, LEPIDIUM LATIFOLIA, SENECIO HYDROPHYLLUS, SCIRPUS CALIFORNICUS, ERYNGIUM ARTICULATUM, AND AGROSTIS SP.
Lilaeopsis masonii	Mason's lilaeopsis	52	Bouldin Island	19901207	GROWING ON MUD FLATS OF TIDAL MARSH. EASTERNMOST CLUMP OF PLANTS GROWING ON DEAD WILLOW STUMP.
Lilaeopsis masonii	Mason's lilaeopsis	87	Bouldin Island	19920616	GROWING ALONG THE SHORE IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	86	Bouldin Island	19920616	GROWING ALONG THE SOUTHERN SHORE IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	167	Bouldin Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	169	Bouldin Island	19890812	MUD FLATS OF TIDAL MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	170	Bouldin Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	171	Bouldin Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	81	Honker Bay	19920819	GROWING ON CLAY SUBSTRATE WITH DISTICHLIS SPICATA, JUNCUS BUFONIUS, SCIRPUS SP., JUNCUS BALTICUS, ATRIPLEX PATULA VAR. HASTATA, POTENTILLA SP., AND MOSS.
Lilaeopsis masonii	Mason's lilaeopsis	150	Honker Bay	19920616	
Lilaeopsis masonii	Mason's lilaeopsis	182	Honker Bay	19920615	
Lilaeopsis masonii	Mason's lilaeopsis	181	Honker Bay	19920615	
Lilaeopsis masonii	Mason's lilaeopsis	180	Honker Bay	19920615	
Lilaeopsis masonii	Mason's lilaeopsis	185	Honker Bay	1992XXXX	ESTUARINE, SALT MARSH/BANK OF LEVEE, INTERTIDAL. DOMINANTS: SCIRPUS ACUTUS, PHRAGMITES COMMUNIS, JUNCUS LESUEURII. ALSO ASSOCIATED: SOLDIAGO OCCIDENTALIS, LATHYRUS JEPSONII JEPSONII, DESCHAMPSIA CESPITOSA.
Lilaeopsis masonii	Mason's lilaeopsis	8	Jersey Island	19900728	GROWING ALONG RIP-RAP IN SILTY SUBSTRATE IN ASSOCIATION WITH SENECIO, SCIRPUS CALIFORNICUS, RUMEX CONGLOMERATA, AND AGROSTIS SP.
Lilaeopsis masonii	Mason's lilaeopsis	6	Jersey Island	19900712	GROWING ON SUBSTRATE OF MOSTLY SILT AND CLAY IN ASSOCIATION WITH PHRAGMITES COMMUNIS, HYDROCOTYLE VERTICILLATA, PLANTAGO SP., MIMULUS GUTTATUS, SCIRPUS CALIFORNICUS, SCIRPUS CERNUUS, AND ASTER LENTUS.
Lilaeopsis masonii	Mason's lilaeopsis	38	Jersey Island	19940604	TULE MARSH WITH ELEOCHARIS SP., JUNCUS SP., SCIRPUS SP., ASTER LENTUS, AND LIMOSELLA SUBULATA.
Lilaeopsis masonii	Mason's lilaeopsis	37	Jersey Island	198905XX	FRESHWATER MARSH ASSOCIATED WITH JUNCUS EFFUSUS VAR. PACIFICUS, SCIRPUS ACUTUS, CYPERUS ERAGROSTIS, MIMULUS GUTTATUS, HELENIUM BIGELOVII, POLYGONUM SP., VERBENA BONARIENSIS, SALIX HINDSIANA, HYDROCOTYLE VERTICILLATA, AND ALNUS RHOMBIFOLIA.
Lilaeopsis masonii	Mason's lilaeopsis	22	Jersey Island	19970604	MUDFLATS AND TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH..
Lilaeopsis masonii	Mason's lilaeopsis	54	Jersey Island	19880623	GROWING AT WATERS EDGE ON STABILIZED CLAYS AND SILTS IN ASSOCIATION WITH SCIRPUS CALIFORNICUS, HYDROCOTYLE VERTICILLATA TRIRADIATA, LIMOSELLA SUBULATA, ASTER LENTUS, VERBENA BONARIENSIS, AND JUNCUS PHAROECEHALUS PANICULATUS.
Lilaeopsis masonii	Mason's lilaeopsis	55	Jersey Island	19880616	GROWING WITH SCIRPUS.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Lilaeopsis masonii	Mason's lilaeopsis	58	Jersey Island	19900711	GROWING ON CLAY-SILT DEPOSITS IN RIP-RAP IN ASSOCIATION WITH SCIRPUS, BIDENS, DESCHAMPSIA CAESPITOSA HOLCIFORMIS, HYDROCOTYLE, AND ASTER LENTUS.
Lilaeopsis masonii	Mason's lilaeopsis	56	Jersey Island	19880615	GROWING IN ASSOCIATION WITH SCIRPUS SP. AND HYDROCOTYLE SP.
Lilaeopsis masonii	Mason's lilaeopsis	57	Jersey Island	19880615	GROWING WITH SCIRPUS SP., AND HYDROCOTYLE SP.
Lilaeopsis masonii	Mason's lilaeopsis	9	Jersey Island	19900725	GROWING IN SILT POCKETS AMONG RIP-RAP IN ASSOCIATION WITH SCIRPUS CALIFORNICUS, JUNCUS SP., AGROSTIS SP., AND POLYGONUM HYDROPIPEROIDES.
Lilaeopsis masonii	Mason's lilaeopsis	60	Jersey Island	19911001	GROWING ON MARGIN OF LEVEE IN TIDAL ZONE ON A NARROW SANDY BENCH IN ASSOCIATION WITH HYDROCOTYLE VERTICELLATA.
Lilaeopsis masonii	Mason's lilaeopsis	59	Jersey Island	19870406	GROWING ON SANDY/MUDDY TIDAL SHELF ALONG RIP-RAPPED SHORELINE.
Lilaeopsis masonii	Mason's lilaeopsis	92	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	93	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	94	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	95	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	97	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	98	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	99	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	100	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	91	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	142	Jersey Island	19961008	ASTER LENTUS AND LIMOSELLA SUBULATA ALSO HERE.
Lilaeopsis masonii	Mason's lilaeopsis	146	Jersey Island	20000802	GROWING ALONG ISLAND ON MUD BANK AND IN SEMI-AQUATIC AREAS NEAR THE WATER'S EDGE. FORMS SOD MATS ON WAVE CUT BENCHES ALONG THE CHANNEL BANKS AND OCCASIONALLY ON ROTTING TREE TRUNKS.
Lilaeopsis masonii	Mason's lilaeopsis	173	Jersey Island	19920616	TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	174	Jersey Island	19890812	MUD FLATS OF TIDAL MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	39	Rio Vista	19900808	ON SAND AND CLAY WITH HIGH ORGANIC MATTER CONTENT.
Lilaeopsis masonii	Mason's lilaeopsis	23	Rio Vista	19900726	SAND AND SILT WITH SIGNIFICANT ORGANIC MATTER CONTENT. ASSOCIATED WITH SCIRPUS ACUTUS, CYPERUS ERAGOSTIS, POLYGONUM, RUMEX, AND VERBENA BONARIENSIS.
Lilaeopsis masonii	Mason's lilaeopsis	77	Woodward Island	19920609	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	108	Woodward Island	19920609	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	107	Woodward Island	19920609	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Lilaeopsis masonii	Mason's lilaeopsis	103	Woodward Island	19920616	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
Limosella subulata	Delta mudwort	2	Antioch North	19800809	SHORELINE IN ZONE OF TIDAL ACTION. FORMING A LOW TURF WITH HYDOCOTYLE VERTICILLATA VAR. TRIRADIATA. ASSOCIATED WITH LILAEOPSIS MASONII, SCIRPUS, AND LYCOPUS.
Limosella subulata	Delta mudwort	30	Antioch North	19960724	ASSOCIATED WITH SCIRPUS CERNUUS, S. ACUTUS, S. AMERICANUS, TRIGLOCHIN STRIATA, LILAEOPSIS MASONII, HELENIUM BIGELOVII, MIMULUS GUTTATUS, & POLYPOGON PERSICARIA.
Limosella subulata	Delta mudwort	31	Antioch North	19940604	GROWING BELOW RIP-RAP AND THE WATERSIDE TOE OF THE LEVEE, BETWEEN THE TULE BERM AND THE LEVEE. ASSOCIATED WITH LILAEOPSIS MASONII AND ASTER LENTUS.
Limosella subulata	Delta mudwort	39	Antioch North	19980717	MUDFLAT WITH TIDAL INFLUENCE. SOME SCIRPUS, AND TYPHA PRESENT. DUCK FORAGE AREA.
Limosella subulata	Delta mudwort	40	Antioch North	20010526	
Limosella subulata	Delta mudwort	41	Antioch North	20010414	TIDAL AREA. IN LARGE PATCH OF LILAEOPSIS MASONII WITH SOME SCIRPUS CERNUUS AND TRIGLOCHIN SPP.
Limosella subulata	Delta mudwort	5	Bouldin Island	1990XXXX	MUD FLATS OF TIDAL MARSH.
Limosella subulata	Delta mudwort	13	Bouldin Island	19920616	GROWING ALONG THE SHORE IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	12	Bouldin Island	19920616	GROWING ON SHORE IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	11	Bouldin Island	19920616	GROWING ALONG THE SHORE IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	9	Honker Bay	19910510	ESTUARINE-SALT MARSH; INTERTIDAL BANK. SCIRPUS ACUTUS, DESCHAMPSIA CESPITOSA BERINGENSIS, HELENIUM BIGELOVII DOMINANTS OTHER SP. INCLUDE LILAEOPSIS MASONII, SCIRPUS KOLIOLLEPIS AND HYDOCOTYLE VERTICILLATA.
Limosella subulata	Delta mudwort	3	Jersey Island	19550714	ON MARGIN OF RIVER IN MOIST SAND AND MUD WITH LILAEOPSIS MASONII, HYDOCOTYLE, HELENIUM, ARUNDINARIA, SCIRPUS, AND SALIX.
Limosella subulata	Delta mudwort	8	Jersey Island	1989XXXX	MUDDY BANKS AND TULE MARSH WITH LILAEOPSIS MASONII, ELEOCHARIS SP., SCIRPUS ACUTUS, HYDOCOTYLE VERTICILLATA, ETC.
Limosella subulata	Delta mudwort	15	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	16	Jersey Island	19926171	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	17	Jersey Island	19920617	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	19	Jersey Island	19920617	GROWING ALONG THE SHORE OF TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	20	Jersey Island	19920617	GROWING ON THE SHORE IN TIDALLY INFLUENCED COASTAL AND FRESHWATER MARSH.
Limosella subulata	Delta mudwort	14	Jersey Island	19920724	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Limosella subulata	Delta mudwort	24	Jersey Island	19961008	ASTER LENTUS AND LILAEOPSIS MASONII ALSO HERE.
Limosella subulata	Delta mudwort	32	Jersey Island	19970604	GROWING MIXED WITH THE RARE LILAEOPSIS MASONII.
Limosella subulata	Delta mudwort	21	Rio Vista	19900726	GROWING IN ASSOCIATION WITH ASTER LENTUS, LILAEOPSIS MASONII, MIMULUS GUTTATUS, SCIRPUS, PHRAGMITES, POLYGONUM, JUNCUS, CYPERUS, PLANTAGO, CYNODON, HELENIUM, PASPALUM, ARUNDO, SALIX, DISTICHLIS, VERBENA, AND EQUISETUM.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
Linderiella occidentalis	California linderiella	168	Antioch North	19990310	NON-VEGETATED DEPRESSION IN DIRT ROAD ALONG TRACKS - PARTIALLY SCRAPPED BY BULLDOZER. ROUTINE VEHICLE TRAFFIC THROUGH AREA AND HERBICIDE USE ALONG RAILROAD TRACKS.
Linderiella occidentalis	California linderiella	234	Antioch South	1997XXXX	
Linderiella occidentalis	California linderiella	235	Antioch South	1997XXXX	
Lytta molesta	molestan blister beetle	4	Brentwood	19450425	
Lytta molesta	molestan blister beetle	3	Brentwood	19XXXXXX	
Madia radiata	showy madia	27	Antioch North	19380409	GROWING ON EDGE OF A CULTIVATED GRAIN FIELD IN ADOBE SOIL.
Madia radiata	showy madia	25	Antioch South	19410412	
Madia radiata	showy madia	26	Antioch South	19380325	
Masticophis lateralis euryxanthu	Alameda whipsnake	87	Antioch South	20050429	HABITAT SURROUNDING THE PARK ROADWAY CONSISTS OF GRASSLAND WITH SOME TREES.
Masticophis lateralis euryxanthu	Alameda whipsnake	86	Clayton	20060923	HABITAT CONSISTS OF OAK WOODLAND, WITHIN LARGER GRASSLAND.
Melospiza melodia maxillaris	Suisun song sparrow	19	Antioch North	19980717	HABITAT CONSISTS OF A PERMANENT POND VEGETATED BY CATTAILS AND BULRUSHES. PAMPAS GRASS AT FENCELINE.
Melospiza melodia maxillaris	Suisun song sparrow	28	Antioch North	20040524	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS. CURRENT/SURROUNDING LAND USE: WILDLIFE MANAGEMENT AREA, INDUSTRIAL, AGRICULTURE.
Melospiza melodia maxillaris	Suisun song sparrow	29	Antioch North	20040524	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS. CURRENT/SURROUNDING LAND USE: WILDLIFE MANAGEMENT AREA, INDUSTRIAL, AGRICULTURE.
Melospiza melodia maxillaris	Suisun song sparrow	26	Antioch North	20040525	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS. CURRENT/SURROUNDING LAND USE: WILDLIFE MANAGEMENT AREA, INDUSTRIAL, AGRICULTURE.
Melospiza melodia maxillaris	Suisun song sparrow	27	Antioch North	20040525	HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS. CURRENT/SURROUNDING LAND USE: WILDLIFE MANAGEMENT AREA, INDUSTRIAL, AGRICULTURE.
Melospiza melodia maxillaris	Suisun song sparrow	13	Honker Bay	1986XXXX	
Melospiza melodia maxillaris	Suisun song sparrow	39	Honker Bay	19240224	
Melospiza melodia maxillaris	Suisun song sparrow	38	Honker Bay	19460922	
Metapogon hurdi	Hurd's metapogon robber	1	Antioch North	19750527	
Myrmosula pacifica	Antioch multilid wasp	1	Antioch North	1952XXXX	
Oenothera deltooides ssp. howel	Antioch Dunes evening-p	7	Antioch North	1979XXXX	IN SAND DUNES.
Oenothera deltooides ssp. howel	Antioch Dunes evening-p	1	Antioch North	20010407	GROWING ON STABILIZED DUNES ON LOOSE SAND. ASSOCIATED WITH ERYSIMUM CAPITATUM VAR ANGUSTATUM. CENTAUREA SOLSTITIALIS INVASIVE IN SOME AREAS.
Oenothera deltooides ssp. howel	Antioch Dunes evening-p	4	Antioch North	20010414	GROWING ON STABILIZED INTERIOR DUNE ALONG RIVER BLUFFS AND IN LOOSE SAND. ASSOCIATED WITH GUTIERREZIA SP. ERYSIMUM CAPITATUM ANGUSTATUM, ERIOGONUM NUDUM AURICULATUM.
Oenothera deltooides ssp. howel	Antioch Dunes evening-p	3	Antioch North	19780718	
Oenothera deltooides ssp. howel	Antioch Dunes evening-p	10	Antioch North	19920601	DISTURBED STABILIZED DUNES. SANDY SUBSTRATE WITH ROW OF EUCALYPTUS TREES. LOTS OF RUDEAL SPECIES ALSO PRESENT.
Oenothera deltooides ssp. howel	Antioch Dunes evening-p	8	Honker Bay	1984XXXX	IN SAND DUNES. ASSOCIATED WITH PHYLLA, RUBUS, CYNODON DACTYLON, AND ENCROACHING WETLAND PERENNIALS (I.E. JUNCUS).

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
<i>Oenothera deltooides</i> ssp. <i>howellii</i>	Antioch Dunes evening-p	5	Jersey Island	19880519	GROWING ON SAND BERM DOMINATED BY WEEDY NON-NATIVE PERENNIAL GRASSES.
<i>Oenothera deltooides</i> ssp. <i>howellii</i>	Antioch Dunes evening-p	6	Jersey Island	19880519	APPEARS TO BE REMNANT OF NATIVE DUNE HABITAT. ON GRASSY BLUFF IN SANDY SOIL OF STABILIZED DUNE. ASSOCIATED WITH LUPINUS ARBOREUS, LOTUS SCOPARIUS, SALIX, SAMBUCUS MEXICANA, ESCHSCHOLZIA CALIFORNICA, AND BRASSICA NIGRA.
<i>Oenothera deltooides</i> ssp. <i>howellii</i>	Antioch Dunes evening-p	9	Jersey Island	19991215	INLAND DUNE HABITAT; VERY WEEDY.
<i>Perdita scitula antiochensis</i>	Antioch andrenid bee	1	Antioch North	1977XXXX	MUSEUM SPECIMENS TAKEN ON ERIOGONUM, GUTIERREZIA CALIFORNICA, LESSINGIA GLANDULIFERA, AND HETEROTHECA GRANDIFLORA.
<i>Perdita scitula antiochensis</i>	Antioch andrenid bee	2	Brentwood	19381023	
<i>Perognathus inornatus inornatus</i>	San Joaquin pocket mouse	73	Antioch South	19920802	ANNUAL INTRODUCED GRASSLAND, SEASONALLY GRAZED. OAK, HILLY TERRAIN, NO GROUND SQUIRRELS.
<i>Perognathus inornatus inornatus</i>	San Joaquin pocket mouse	75	Antioch South	19900412	GRAZED GRASSLAND AND FOOTHILL OAK WOODLAND.
<i>Perognathus inornatus inornatus</i>	San Joaquin pocket mouse	129	Brentwood	20050323	HABITAT CONSISTS OF NON-NATIVE ANNUAL GRASSLAND WITH SCATTERED MATURE OAKS.
<i>Perognathus inornatus inornatus</i>	San Joaquin pocket mouse	49	Clayton	19920812	ANNUAL INTRODUCED GRASSLAND. SEASONALLY GRAZED. OAK & EUCALYPTUS. NO GROUND SQUIRRELS.
<i>Phalacrocorax auritus</i>	double-crested cormoran	28	Antioch North	1988XXXX	NESTS FOUND ON UTILITY TOWERS ON OR NEAR SHERMAN ISLAND.
<i>Philanthus nasalis</i>	Antioch specid wasp	1	Antioch North	1959XXXX	SPECIES WAS KNOWN ONLY FROM THIS LOCATION UNTIL EARLY 1990'S. REPEATED EFFORTS TO FIND SPECIES AT THIS LOCATION SINCE 1959 HAVE FAILED.
<i>Potamogeton zosteriformis</i>	eel-grass pondweed	7	Bouldin Island	19490707	
<i>Rana aurora draytonii</i>	California red-legged frog	32	Antioch South	19900716	
<i>Rana aurora draytonii</i>	California red-legged frog	134	Antioch South	19820214	HABITAT CONSISTS OF GRAZED NON-NATIVE GRASSLAND.
<i>Rana aurora draytonii</i>	California red-legged frog	135	Antioch South	19820118	HABITAT CONSISTS OF GRAZED, NON-NATIVE GRASSLAND.
<i>Rana aurora draytonii</i>	California red-legged frog	193	Antioch South	19940513	HABITAT CONSISTS OF A STOCK POND.
<i>Rana aurora draytonii</i>	California red-legged frog	934	Antioch South	2006XXXX	HABITAT CONSISTS OF A STOCK POND ADJACENT TO A GOLF COURSE.
<i>Rana aurora draytonii</i>	California red-legged frog	252	Antioch South	20030326	HABITAT CONSISTS OF VERNAL POOLS AND ARTIFICIAL PONDS (STOCK PONDS); SURROUNDED BY OPEN GRASSLANDS. OTHER RARE TAXA FOUND AT THIS SITE: CALIF TIGER SALAMANDERS AND WESTERN POND TURTLES.
<i>Rana aurora draytonii</i>	California red-legged frog	286	Antioch South	19980622	HABITAT CONSISTS OF LARGE, DEEP POOLS ALONG AN INTERMITTENT DRAINAGE; SURROUNDED PRIMARILY BY HEAVILY-GRAZED, NON-NATIVE GRASSLAND.
<i>Rana aurora draytonii</i>	California red-legged frog	371	Antioch South	19990429	HABITAT CONSISTS OF TWO BERMED DRAINAGE PONDS IN NON-NATIVE GRASSLAND; SURROUNDED BY OAK WOODLAND.
<i>Rana aurora draytonii</i>	California red-legged frog	470	Antioch South	20011024	HABITAT CONSISTS OF A SPRING, LOCATED IN A CAVE, ON A SOUTH-FACING SLOPE; SURROUNDED BY NON-NATIVE GRASSLAND, OAK WOODLAND, AND CHAPARRAL.
<i>Rana aurora draytonii</i>	California red-legged frog	531	Antioch South	20020715	SHALLOW, PERENNIAL STREAM, WHICH PROVIDES CRLF'S WITH A SITE FOR AESTIVATION, BUT NOT NECESSARILY FOR BREEDING. WILLOW/WALNUT RIPARIAN CORRIDOR & HOUSING TO NORTH, GRAZING & INACTIVE LANDFILL TO SOUTH, GRASSLANDS TO EAST & WEST.
<i>Rana aurora draytonii</i>	California red-legged frog	612	Antioch South	200201XX	HABITAT CONSISTS OF NON-NATIVE GRASSLAND CONTAINING NUMEROUS STOCK PONDS.
<i>Rana aurora draytonii</i>	California red-legged frog	903	Antioch South	20060612	HABITAT CONSISTS OF A LARGE POND LOCATED ON LOW-DENSITY RANCH PROPERTY; SITE IS ACTIVELY GRAZED BY LIVESTOCK.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Rana aurora draytonii	California red-legged frog	933	Antioch South	20050513	HABITAT CONSISTS OF PERENNIAL SAND CREEK AND AN UNNAMED TRIBUTARY. DEEP PLUNGE POOLS PRESENT ALONG CREEK; BANKS SUPPORT WETLAND VEGETATION THAT PROVIDES GOOD COVER. SITE IS SURROUNDED BY GRAZED, ANNUAL GRASSLAND.
Rana aurora draytonii	California red-legged frog	194	Clayton	19940516	HABITAT CONSISTS OF A STOCK POND.
Rana aurora draytonii	California red-legged frog	164	Clayton	19950808	HABITAT CONSISTS OF A HEAVILY DEGRADED CATTLE POND. DOMINANT PLANTS INCLUDE POLYPOGON MONSPELIENSIS, RORIPPA NATURTIIUM-AQUATICUM, RANUNCULUS SCERATUS, AND ZANNICHELLA PALUSTRIS.
Rana aurora draytonii	California red-legged frog	566	Clayton	20000319	HABITAT CONSISTS OF A STOCK POND/MARSHY AREA IN GRAZED ANNUAL GRASSLAND; OAK WOODLAND IN DRAINAGE ABOVE POND.
Rana aurora draytonii	California red-legged frog	219	Clayton	19950107	HABITAT CONSISTS OF SPRING-FED STOCK PONDS AND ASSOCIATED DRAINAGES SURROUNDED BY ANNUAL GRASSLAND. WESTERN TOAD AND PACIFIC CHORUS FROG ALSO OBSERVED.
Rana aurora draytonii	California red-legged frog	536	Clayton	20020719	HABITAT CONSISTS OF A PLUNGE POOL AT THE BOTTOM OF A STEEP, ROCKY BANK; OPEN WATER 80%, WITH VEGETATION THAT INCLUDES ZANNICHELLA PALUSTRIS, SCIRPUS AMERICANUS, AND POLYPOGON MINSPELIENSIS. SURROUNDING AREA IS GRAZED.
Rana aurora draytonii	California red-legged frog	255	Honker Bay	20000418	HABITAT CONSISTS OF 6 LARGE, BASIN-LIKE, CREATED PERENNIAL WETLANDS; CREATED IN 1992 AS MITIGATION FOR IMPACTS TO SEEPS/SPRINGS UPSTREAM.
Rana aurora draytonii	California red-legged frog	546	Tassajara	19820301	HABITAT CONSISTS OF GRASSLAND, RIPARIAN AND CREEK. AREA USED FOR GRAZING CATTLE.
Reithrodontomys raviventris	salt-marsh harvest mouse	66	Antioch North	19850327	
Reithrodontomys raviventris	salt-marsh harvest mouse	136	Antioch North	200005XX	DIKED, SPARSE, SALINE PICKLEWEED GRAZED BY CATTLE.
Reithrodontomys raviventris	salt-marsh harvest mouse	172	Antioch North	20040610	HABITAT CONSISTS OF BRACKISH TO FRESHWATER MARSH; DOMINATED BY ANNUAL GRASSES AND ALKALI HEATH.
Reithrodontomys raviventris	salt-marsh harvest mouse	173	Antioch North	20040625	HABITAT CONSISTS OF BRACKISH; DOMINATED BY CATTAILS AND TULE. A NARROW BORDER OF ALKALI HEATH ABUTS THE ADJACENT WHEAT FIELDS, AND ALL SMHM WERE CAPTURED IN THE ALKALI HEATH. ALMOST NO PICKLEWEED PRESENT.
Reithrodontomys raviventris	salt-marsh harvest mouse	120	Honker Bay	19950911	PICKLEWEED, SOME BARE GROUND. DISPOSAL SITE. AREA TRAPPED IS A REVEGETATED DREDGE SPOILS SITE.
Reithrodontomys raviventris	salt-marsh harvest mouse	137	Honker Bay	200407XX	HABITAT CONSISTS OF A MANAGED WETLAND, DOMINATED BY PICKLEWEED, INTERSPERSED WITH ANNUAL GRASSES AND BARE GROUND.
Reithrodontomys raviventris	salt-marsh harvest mouse	162	Honker Bay	20021111	HABITAT CONSISTS OF A NARROW (150 YARDS) STRIP OF ROBUST PICKLEWEED ALONG GRIZZLY ISLAND ROAD.
Reithrodontomys raviventris	salt-marsh harvest mouse	169	Honker Bay	200005XX	REMNANT PICKLEWEED PATCH IN A DIKED MARSH.
Reithrodontomys raviventris	salt-marsh harvest mouse	174	Honker Bay	20040605	HABITAT CONSISTS OF DIKED SALTMARSH WITH A MUTED TIDAL INFLUENCE; DOMINATED BY PICKLEWEED, WITH SOME INTRUSION OF EXOTIC ANNUALS.
Riparia riparia	bank swallow	201	Jersey Island	20000601	
Scutellaria galericulata	marsh skullcap	2	Bouldin Island	19490720	PRISTINE TIDAL SWAMP AND MARSH.
Scutellaria lateriflora	side-flowering skullcap	2	Bouldin Island	18920906	
Senecio aphanactis	chaparral ragwort	14	Clayton	19330329	

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITDATE	ECOLOGY COMMENTS
<i>Sphecodogastra antiochensis</i>	Antioch Dunes halcetid be	1	Antioch North	198206XX	2 GENERATIONS PER YEAR; FLIGHT RECORDS ARE MARCH-AUGUST FOR FEMALES, MAY-OCTOBER FOR MALES (96% OF MALES TAKEN IN JUNE). POPULATION ASSUMED TO HAVE INCREASED WITH PLANTING OF HOST PLANT (FOR POLLEN), OENOTHERA DELTOIDES HOWELLI.
Stabilized Interior Dunes	Stabilized Interior Dunes	1	Antioch North	19820501	ASSOC SPP: ERIOGONUM LATIFOLIUM AURICULATUM & RARE OENOTHERA DELTOIDES HOWELLII & ERYSIMUM CAPITATUM ANGUSTATUM.
<i>Sternula antillarum browni</i>	California least tern	71	Honker Bay	19880707	FARTHEST INLAND NESTING SITE IN CALIFORNIA.
<i>Sternula antillarum browni</i>	California least tern	81	Honker Bay	20060708	COLONY WAS LOCATED IN AN AREA WHERE SHELLS WERE THICKLY-SPREAD ON TOP OF SAND.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	5	Antioch North	19910908	RIPARIAN SALT MARSH, BANK OF LEVEE/SALIX LASIOLEPIS, OENANTHE SARMENTOSA, SCIRPUS ACUTUS PARTIALLY SHADED OR OPEN SUN. THE RARE PLANTS LATHYRUS JEPSONII SSP. JEPSONII AND LILAEOPSIS MASONII ALSO MENTIONED AS ASSOCIATES IN NORTHERN POLYGON.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	48	Antioch North	19900818	GROWING NEAR THE SHORE IN ASSOCIATION WITH SALIX, CALYSTEGIA SEPIUM, AND GRINDELIA HUMILIS. LILAEOPSIS MASONII IS GROWING ALONG THE SHORE WITH PHRAGMITES, SCIRPUS, TYPHA, AND JUNCUS.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	6	Antioch North	19900726	TIDAL ZONE NEAR RIVER. ASSOCIATED WITH LILAEOPSIS MASONII, ERYNGIUM ARTICULATUM, SCIRPUS CALIFORNICUS, JUNCUS SPP., AGROSTIS LONGILIGULA, ARUNDO DONAX, SALIX CF. LAEVIGATA, ELEOCHARIS, LYTHRUM CALIFORNICUM, LATHYRUS JEPSONII, ETC.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	20	Antioch North	19900817	ASSOCIATED NEAR-SHORE VEGETATION INCLUDES LYTHRUM CALIFORNICUM, ARTEMISIA DOUGLASIANA, RUBUS PROCERUS, STACHYS ALBENS, POLYGONUM HYPERPEPEROIDES, ERYNGIUM ARTICULATUM, ROSA CALIFORNICA. ALSO ASSOCIATED WITH LILAEOPSIS MASONII.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	47	Antioch North	19900628	GROWING IN RIP-RAP IN ASSOCIATION WITH LILAEOPSIS MASONII, PHRAGMITES COMMUNIS, MELILOTUS ALBUS, SCIRPUS, DISTICHLIS SPICATA, AND JUNCUS SP.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	30	Antioch North	20000501	LOCATED AT WATER'S EDGE WITH PHRAGMITES SP. ALONG RIP-RAPPED LEVEE.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	31	Antioch North	20010804	COASTAL BRACKISH MARSH ALONG RIP-RAPPED SHORELINE.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	41	Antioch North	19910908	RIPARIAN SALT MARSH (?) ON BANK OF LEVEE; ASSOCIATES INCLUDE SALIX LASIOLEPIS, OENANTHE SARMENTOSA AND SCIRPUS ACUTUS IN PARTIAL SHADE TO FULL SUN.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	8	Antioch North	20010804	NEAR WATER'S EDGE WITH SCIRPUS, QUERCUS AGRIFOLIA(?), CORTADERIA, PLANTAGO, LYTHRUM, AND PASPALUM. OENOTHERA DELTOIDES HOWELLII AND ERYSIMUM CAPITATUM ANGUSTATUM OCCUR NEARBY ON THE DUNES.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	16	Antioch North	19940827	BRACKISH MARSH; WITH SCIRPUS OLNEYI, SOLIDAGO OCCIDENTALIS, SCIRPUS ACUTUS, LILAEOPSIS MASONII, HYDROCOTYLE VERTICILLATA, PASPALUM DISTICHYUM, SALIX, CALYSTEGIA, MELILOTUS, ERYNGIUM, TYPHA, LEPIDIUM, RUMEX, DISTICHLIS, AND RUBUS. CLAY/MUD.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Symphytotrichum lentum	Suisun Marsh aster	21	Antioch North	19900627	ABUNDANT ALONG BANK. ASSOCIATED WITH RUBUS, SALIX, HELENIUM, SCIRPUS, TYPHA, MIMULUS, VERBENA, JUNCUS, POLYPOGON, PASPALUM, CYPERUS, PHRAGMITES, POLYGONUM, ERYNGIUM, RUMEX, LYTHRUM, ROSA, AND AGROSTIS. LILAEOPSIS MASONII OCCURS NEARBY.
Symphytotrichum lentum	Suisun Marsh aster	52	Antioch North	19920601	FRESHWATER/BRACKISH WATER MARSH. ASSOCIATED WITH SCIRPUS ACUTUS, TYPHA, FOENICULUM VULGARE, ROSA CALIFORNICA, RUBUS, AND PHRAGMITES.
Symphytotrichum lentum	Suisun Marsh aster	15	Antioch North	19980916	GROWING IN RIP-RAP. ASSOCIATED WITH LATHYRUS JEPSONII VAR. JEPSONII.
Symphytotrichum lentum	Suisun Marsh aster	54	Antioch North	19940604	GROWING BELOW RIP-RAP AND THE WATERSIDE TOE OF THE LEVEE, BETWEEN THE TULE BERM AND THE LEVEE. ASSOCIATED WITH LILAEOPSIS MASONII AND LIMOSELLA SUBULATA.
Symphytotrichum lentum	Suisun Marsh aster	72	Antioch North	199310XX	BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Symphytotrichum lentum	Suisun Marsh aster	122	Antioch North	20010726	IN SCRUB SHRUB COMMUNITY LOCATED ON WATERSIDE OF LEVEE SLOPE BORDERING THE SACRAMENTO RIVER.
Symphytotrichum lentum	Suisun Marsh aster	123	Antioch North	20010726	IN SCRUB COMMUNITY LOCATED ON WATERSIDE OF LEVEE SLOPE BORDERING THE SACRAMENTO RIVER.
Symphytotrichum lentum	Suisun Marsh aster	150	Antioch North	19900627	GROWING ON CLAY/ORGANIC SUBSTRATE IN THE LITTORAL ZONE WITH SCIRPUS CALIFORNICUS, ROSA CALIFORNICA, PHRAGMITES COMMUNIS VAR. BERLANDIERI, CEPHALANTHUS OCCIDENTALIS, AND PASPALUM DILATATUM. ALSO ASSOCIATED WITH THE RARE LILAEOPSIS MASONII.
Symphytotrichum lentum	Suisun Marsh aster	23	Bouldin Island	19900916	
Symphytotrichum lentum	Suisun Marsh aster	25	Bouldin Island	19890812	SUBSTRATE IS FILL SOIL OVER HYDRIC SOIL; ASSOCIATES ARE ALIEN LANDSCAPE SPECIES.
Symphytotrichum lentum	Suisun Marsh aster	26	Bouldin Island	20030805	
Symphytotrichum lentum	Suisun Marsh aster	24	Bouldin Island	19890812	ON RIVER BANK IN TIDAL MARSH AT APPROXIMATELY MID-TIDE LEVEL AND ON SUBMERGED PILINGS.
Symphytotrichum lentum	Suisun Marsh aster	3	Honker Bay	19910818	ASSOCIATED WITH SCIRPUS CALIFORNICUS, LEPIDIUM LATIFOLIUM, RUBUS PROCERUS, LATHYRUS JEPSONII SSP. JEPSONII, TULE, AND TYPHA SP.
Symphytotrichum lentum	Suisun Marsh aster	40	Honker Bay	19910908	RIPARIAN SALT MARSH (?) ALONG BANK OF LEVEE; ASSOCIATES INCLUDE SALIX LASIOLEPIS, OENANTHE SARMENTOSA, AND SCIRPUS ACUTUS IN PARTIAL SHADE OR FULL SUN.
Symphytotrichum lentum	Suisun Marsh aster	73	Honker Bay	199310XX	BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Symphytotrichum lentum	Suisun Marsh aster	74	Honker Bay	199310XX	BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Symphytotrichum lentum	Suisun Marsh aster	75	Honker Bay	199310XX	BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Symphytotrichum lentum	Suisun Marsh aster	76	Honker Bay	19980916	BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Symphytotrichum lentum	Suisun Marsh aster	77	Honker Bay	199310XX	BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Symphytotrichum lentum	Suisun Marsh aster	1	Jersey Island	19900712	GROWING AT WATER'S EDGE AMONG LILAEOPSIS MASONII, PHRAGMITES, HYDROCOTYLE, PLANTAGO, MIMULUS, AND SCIRPUS AT WATER'S EDGE.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Symphotrichum lentum	Suisun Marsh aster	32	Jersey Island	19940604	ASSOCIATED WITH TWO OTHER SENSITIVE PLANTS, LILAEOPSIS MASONII AND LIMOSELLA SUBULATA.
Symphotrichum lentum	Suisun Marsh aster	33	Jersey Island	19880706	GROWING AT WATER'S EDGE WITH HYDROCOTYLE VERTICELLATA, LILAEOPSIS MASONII, LIMOSELLA SUBULATA, JUNCUS PHAEOCEPHALUS PANICULATA, LYTHRUM CALIFORNICUM, ERYNGIUM ARTICULATUM, AND VERBENA SP.
Symphotrichum lentum	Suisun Marsh aster	34	Jersey Island	19900811	SITUATED NEAR HIGH WATER LINE ABOVE SCIRPUS; ASSOCIATES INCLUDE SCIRPUS, HYDROCOTYLE, RUBUS, SALIX, AND, IN LOCAL AREAS, LILAEOPSIS.
Symphotrichum lentum	Suisun Marsh aster	37	Jersey Island	19890812	ON RIVER BANK OF TIDAL MARSH AT APPROXIMATELY MID-WATER LEVEL.
Symphotrichum lentum	Suisun Marsh aster	45	Jersey Island	19920724	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Symphotrichum lentum	Suisun Marsh aster	44	Jersey Island	19920724	GROWING IN TIDALLY INFLUENCED COASTAL AND VALLEY FRESHWATER MARSH.
Symphotrichum lentum	Suisun Marsh aster	36	Jersey Island	19890812	ON RIVER BANK OF TIDAL MARSH AT APPROXIMATELY MID-WATER LEVEL.
Symphotrichum lentum	Suisun Marsh aster	51	Jersey Island	20000802	LILAEOPSIS MASONII AND LIMOSELLA SUBULATA ALSO HERE (AT TIP OF TWITCHELL ISLAND).
Symphotrichum lentum	Suisun Marsh aster	35	Jersey Island	20001019	ON RIVER BANK OF TIDAL MARSH AT APPROXIMATELY MID-WATER LEVEL, ALONG LEVEE BASE, AND ON SUBMERGED PILINGS.
Symphotrichum lentum	Suisun Marsh aster	121	Jersey Island	19980923	NEAR THE BASE OF A LEVEE IN DISTURBED AREAS SUBJECT TO PERPETUAL TIDAL AND RECREATIONAL WAVE FORCES.
Symphotrichum lentum	Suisun Marsh aster	148	Jersey Island	1998XXXX	
Symphotrichum lentum	Suisun Marsh aster	50	Rio Vista	19900726	GROWING AMONG LITTORAL VEGETATION IN ASSOCIATION WITH LILAEOPSIS MASONII, LIMOSELLA SUBULATA, MIMULUS, SCIRPUS, JUNCUS, CYPERUS, POLYGONUM, PLANTAGO, CYNODON, HELENIUM, PASPALUM. NEAR SHORE ASSOCIATES INCLUDE ARUNDO, SALIX, AND RUBUS.
Taxidea taxus	American badger	185	Antioch South	20020820	HABITAT CONSISTS OF NON-NATIVE GRASSLAND, DOMINATED BY AVENA BARBATA, LOLIUM MULTIFLORUM, AND BROMUS HORDACEOUS. NUMEROUS CALIFORNIA GROUND SQUIRREL BURROWS FOUND IN THE AREA.
Taxidea taxus	American badger	398	Antioch South	20070321	THE PROPERTY IS BOUND BY OPEN SPACE, HILLS, A FARM ACCESS ROAD, AND A DRAINAGE CHANNEL TO THE EAST; OPEN SPACE, HILLS, AND POWER LINES TO THE SOUTH; OPEN SPACE, HILLS, AND POWER LINES TO THE WEST; AND SAND CREEK, OPEN SPACE, AND RES. NORTH.
Taxidea taxus	American badger	399	Antioch South	20060418	AREAS SURROUNDING DEER VALLEY RD CONSIST OF NON-NATIVE ANNUAL GRASSLAND THAT IS GENERALLY HEAVILY GRAZED AND/OR DISCED. DOMINANT PLANT SPECIES INCLUDE WILD OAT, BROME GRASSES, WILD BARLEY AND YELLOW STAR THISTLE WITH SOME SCATTERED OAKS.
Thamnophis gigas	giant garter snake	47	Jersey Island	1987XXXX	
Thamnophis gigas	giant garter snake	150	Jersey Island	19980824	VEGETATION IS RUDERAL HERBACEOUS, ALONG A SAND BAR, WITH LOTS OF WATER HYACINTH, SOME SCIRPUS, BLACKBERRY, AND A FEW YOUNG COTTONWOODS; SOME CONCRETE RIPRAP.
Thamnophis gigas	giant garter snake	170	Jersey Island	20030923	SURROUNDING HABITAT CONSISTS OF AGRICULTURE AND ASSOCIATED IRRIGATION DITCHES, WITH SOME FIELDS STILL PARTIALLY FLOODED; TWO BLOW-OUT PONDS ON THE OPPOSITE SIDE OF THE ISLAND.

CNDDDB Occurrences within 10 Miles

SCIENTIFIC NAME	COMMON NAME	#	QUADRANGLE	SITEDATE	ECOLOGY COMMENTS
Tropidocarpum capparideum	caper-fruited tropidocarp	10	Clayton	18960229	
Vulpes macrotis mutica	San Joaquin kit fox	21	Antioch South	19950622	HABITAT CONSISTS OF NON-NATIVE ANNUAL GRASSLAND, CONTAINING A SMALL (CLASS II) DRAINAGE.
Vulpes macrotis mutica	San Joaquin kit fox	22	Antioch South	19911111	HABITAT CONSISTS OF GRAZED ANNUAL GRASSLAND.
Vulpes macrotis mutica	San Joaquin kit fox	554	Antioch South	19920816	GRAZED ANNUAL GRASSLAND. SEASONAL DRAINAGE. HILLY AREA WITH FEW FLAT VALLEYS. NO GROUND SQUIRRELS BUT HEALTHY MOUSE AND JACK RABBIT POPULATION.
Vulpes macrotis mutica	San Joaquin kit fox	555	Antioch South	19920807	GRAZED ANNUAL GRASSLAND. SEASONAL DRAINAGE WITH OAK AND EUCALYPTUS, HILLY AREA WITH FEW FLAT VALLEYS. NO GROUND SQUIRRELS BUT HEALTHY MOUSE & JACK RABBIT POPULATION.
Vulpes macrotis mutica	San Joaquin kit fox	574	Antioch South	1989XXXX	
Vulpes macrotis mutica	San Joaquin kit fox	936	Antioch South	197507XX	
Vulpes macrotis mutica	San Joaquin kit fox	573	Brentwood	1978XXXX	
Vulpes macrotis mutica	San Joaquin kit fox	569	Brentwood	197507XX	