

**APPENDIX C
CALIFORNIA NATURAL DIVERSITY
DATABASE RECORDS**

Anniella pulchra pulchra

silvery legless lizard

Element Code: ARACC01012

Status	NDDB Element Ranks	Other Lists
Federal: None	Global: G3G4T3T4Q	CDFG Status: SC
State: None	State: S3	

Habitat Associations

General: SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION.
Micro: SOIL MOISTURE IS ESSENTIAL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

Occurrence No. 12	Map Index: 42260	EO Index: 42260	Dates Last Seen	
Occ Rank: Good			Element: 2004-04-26	
Origin: Natural/Native occurrence			Site: 2004-04-26	
Presence: Presumed Extant				
Trend: Unknown			Record Last Updated: 2009-02-24	

Quad Summary: Jersey Island (3812116/480C)
County Summary: Contra Costa

Lat/Long: 38.00342° / -121.72742°	Township: 02N
UTM: Zone-10 N4206958 E611726	Range: 02E
Area: 12.7 acres	Section: 23
Elevation: 10 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: NW
Symbol Type: POLYGON	

Location: EAST BAY REGIONAL PARK LEGLESS LIZARD PRESERVE, EAST OF THE JUNCTION OF HWY 4 AND BIG BREAK ROAD, NORTH OF OAKLEY.
Location Detail: SITE IS LOCATED ALONG THE NORTH SIDE OF THE RAILROAD TRACKS. EBRPD LAND HAS BECOME DENSELY VEGETATED BY NON-NATIVE GRASSLAND SINCE 1982.
Ecological: 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.
Threat: THREATS INCLUDE SMALL SIZE OF SITE, ISOLATION OF HABITAT, FERAL CATS, AND ENCROACHMENT OF NON-NATIVE GRASSLAND.
General: MVZ: 12433; MAR 1930, 233384; APR 1987, 228815-16; 19 APR 1998. GOOD #S, SPRING 1982. CAS 178522; 3 MAR 1982. NO ANIMALS OBS IN 1995-97. 2 AD OBS, 15 MAR 1998. 2 AD/1 JUV OBS, 3 APR 2000. 1 ADULT FOUND DEAD AT BASE OF DUNES, 26 APR 2004.
Owner/Manager: EBRPD, PVT-SANTA FE RR

Occurrence No. 21	Map Index: 54714	EO Index: 54714	Dates Last Seen	
Occ Rank: None			Element: 2004-07-26	
Origin: Natural/Native occurrence			Site: 2005-03-30	
Presence: Possibly Extirpated				
Trend: Unknown			Record Last Updated: 2006-10-23	

Quad Summary: Brentwood (3712186/463B)
County Summary: Contra Costa

Lat/Long: 37.98778° / -121.68692°	Township: 02N
UTM: Zone-10 N4205273 E615306	Range: 03E
Area: 9.2 acres	Section: 30
Elevation: 25 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: SW
Symbol Type: POLYGON	

Location: 0.2 MILE SOUTH OF CYPRESS ROAD, 1.5 MILES SE OF OAKLEY
Location Detail: DUNES ARE ISOLATED BY AGRICULTURAL ACTIVITIES; OFTEN REFERRED TO LOCALLY AS "SAND MOUNDS." LEAF LITTER FROM A FALLEN LIVE OAK AND SHEET METAL THAT IS STREWN ABOUT THE SITE APPEARS TO PROVIDE COVER. NO HABITAT LEFT AFTER GRADING.
Ecological: 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.
Threat: THREATENED BY PROPOSED DEVELOPMENT.
General: 28 JAN 2004, 1 ADULT FOUND UNDER A SHEET OF CORRUGATED METAL. 1 ADULT OBSERVED, 29 JAN 2004. 5 ADULTS OBSERVED, 28 JUN; 3 ADULTS OBSERVED, 26 JUL 2004. SITE GRADED SOMETIME PRIOR TO 30 MAR 2005; PRESUMED EXTIRPATED.
Owner/Manager: PVT-CONCO

Anniella pulchra pulchra

silvery legless lizard

Element Code: ARACC01012

Status

Federal: None
 State: None

NDDB Element Ranks

Global: G3G4T3T4Q
 State: S3

Other Lists

CDFG Status: SC

Habitat Associations

General: SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION.

Micro: SOIL MOISTURE IS ESSENTIAL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

Occurrence No. 41 **Map Index:** 66802 **EO Index:** 6958 **Dates Last Seen**
Occ Rank: Good **Element:** 2005-04-25
Origin: Natural/Native occurrence **Site:** 2005-04-25
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2006-10-23

Quad Summary: Brentwood (3712186/463B)
County Summary: Contra Costa

Lat/Long: 37.98646° / -121.68805° **Township:** 02N
UTM: Zone-10 N4205125 E615209 **Range:** 03E
Area: 10.0 acres **Mapping Precision:** SPECIFIC **Section:** 30 **Qtr:** SW
Elevation: 27 ft **Symbol Type:** POLYGON **Meridian:** M

Location: 0.3 MILE SOUTH OF CYPRESS ROAD, 1.5 MILES SE OF OAKLEY.
Location Detail: RAILROAD TRACKS RUN ALONG THESE DUNES FROM NW TO SE; DUNES ARE OTHERWISE ISOLATED BY AGRICULTURAL FIELDS, RESIDENTIAL DEVELOPMENT, RAILROAD TRACKS, AND A "JUNK YARD." SCRAP METAL AND OTHER DEBRIS PROVIDE "COVER" FOR LEGLESS LIZARDS ON-SITE.
Ecological: 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.
Threat: THREATENED BY RESIDENTIAL DEVELOPMENT TO THE NORTH AND THE POTENTIAL FOR RESIDENTIAL DEVELOPMENT ON-SITE IN THE FUTURE.
General: 1 ADULT OBSERVED ON 17 MAR; 4 ADULTS OBSERVED ON 25 APR 2005.
Owner/Manager: PVT, BNSF RAILROAD

Occurrence No. 56 **Map Index:** 73625 **EO Index:** 74610 **Dates Last Seen**
Occ Rank: Unknown **Element:** 1975-06-18
Origin: Natural/Native occurrence **Site:** 1975-06-18
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2009-02-24

Quad Summary: Antioch North (3812117/481D)
County Summary: Contra Costa

Lat/Long: 38.01421° / -121.76729° **Township:** 02N
UTM: Zone-10 N4208109 E608209 **Range:** 02E
Radius: 2/5 mile **Mapping Precision:** NON-SPECIFIC **Section:** 16 **Qtr:** XX
Elevation: 80 ft **Symbol Type:** POINT **Meridian:** M

Location: WEST OF THE ANTIOCH BRIDGE (HWY 160), SOUTH SHORE OF THE SAN JOAQUIN RIVER, EAST ANTIOCH.
Location Detail: MAPPED ACCORDING TO LOCATION GIVEN NOT COORDINATES. 3 LOCALITIES NAMED, "WILBUR RD., 2 MI E OF ANTIOCH", "1 MI E ANTIOCH, ALONG SACRAMENTO RIVER" & "1 MI E ANTIOCH".
General: MVZ # 33860, COLLECTED 15 SEP 1940, MVZ #71919-23, COLLECTED 30 APR 1961, MVZ #117600, NO DATE GIVEN, & MVZ # 128950, COLLECTED 18 JAN 1975.
Owner/Manager: PVT

Occurrence No. 57 **Map Index:** 10572 **EO Index:** 74612 **Dates Last Seen**
Occ Rank: Unknown **Element:** 1966-08-31
Origin: Natural/Native occurrence **Site:** 1966-08-31
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2009-02-26

Quad Summary: Antioch North (3812117/481D), Antioch South (3712187/464A)
County Summary: Contra Costa

Lat/Long: 38.00282° / -121.80300° **Township:** 02N
UTM: Zone-10 N4206803 E605091 **Range:** 02E
Radius: 1 mile **Mapping Precision:** NON-SPECIFIC **Section:** 19 **Qtr:** XX
Elevation: 50 ft **Symbol Type:** POINT **Meridian:** M

Location: ANTIOCH.
Location Detail: NO OTHER LOCATION INFORMATION GIVEN. MAPPED ACCORDING TO NAMED LOCATION (ANTIOCH) & NOT THE COORDINATES GIVEN BY MVZ WHICH ARE TO THE SW WITH A MAX ERROR DISTANCE OF 2.03 MILES.
General: MVZ # 33790 COLLECTED 11 FEB1940; MVZ # 94788-89 COLLECTED 21 MAR 1969, & MVZ # 128949 COLLECTED 3 APR 1971.
Owner/Manager: UNKNOWN

Anniella pulchra pulchra

silvery legless lizard

Element Code: ARACC01012

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G3G4T3T4Q

CDFG Status: SC

State: None

State: S3

Habitat Associations

General: SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION.

Micro: SOIL MOISTURE IS ESSENTIAL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

Occurrence No. 69

Map Index: 36917

EO Index: 74654

Dates Last Seen

Occ Rank: Unknown

Element: 1966-08-31

Origin: Natural/Native occurrence

Site: 1966-08-31

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2009-02-24

Quad Summary: Antioch North (3812117/481D)

County Summary: Contra Costa

Lat/Long: 38.01420° / -121.78892°

UTM: Zone-10 N4208082 E606311

Area: 180.4 acres

Elevation: 25 ft

Township: 02N

Range: 02E

Section: 18

Meridian: M

Mapping Precision: SPECIFIC

Symbol Type: POLYGON

Qtr: XX

Location: ANTIOCH DUNES.

Location Detail: MAPPED ACCORDING TO LOCATION GIVEN NOT COORDINATES GIVEN BY MVZ.

General: MVZ #79086 - 79092 COLLECTED 21 FEB 1965 BY RICHARD SAGE. MVZ #81294 COLLECTED 31 AUG 1966 BY JAMES LYNCH.

Owner/Manager: USFWS-ANTIOCH DUNES NWR, PVT

Apodemia mormo langei

Lange's metalmark butterfly

Element Code: IILEPH7012

Status

NDDB Element Ranks

Other Lists

Federal: Endangered

Global: G5T1

CDFG Status:

State: None

State: S1

Habitat Associations

General: INHABITS STABILIZED DUNES ALONG THE SAN JOAQUIN RIVER. ENDEMIC TO ANTIOCH DUNES, CONTRA COSTA COUNTY.

Micro: PRIMARY HOST PLANT IS ERIOGONUM NUDUM VAR AURICULATUM; FEEDS ON NECTAR OF OTHER WILDFLOWERS, AS WELL AS HOST PLANT.

Occurrence No. 1

Map Index: 72474

EO Index: 12922

Dates Last Seen

* SENSITIVE *

Occ Rank: Unknown

Element: 2008-08-29

Origin: Natural/Native occurrence

Site: 2008-08-29

Presence: Presumed Extant

Trend: Decreasing

Record Last Updated: 2008-09-02

Quad Summary: Antioch North (3812117/481D)

County Summary: Contra Costa

* SENSITIVE *

Lat/Long:

Township:

UTM:

Range:

Radius:

Mapping Precision:

Section:

Qtr:

Elevation:

Symbol Type:

Meridian:

Location: *SENSITIVE* Location information suppressed.

Location Detail: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information:
 (916) 324-3812.

Ecological: LARVAL FOODPLANT IS ERIOGONUM NUDUM AURICULATUM & MUST BE > 5 YRS OLD TO BE USED. SITE BEING RESTORED BY WEED REMOVAL & PLANTING BUCKWHEAT. 1993: 2.5 AC OF DUNES CREATED FROM 7,000 CUBIC YDS OF TRUCKED IN SAND. 2008: RESTORATION CONTINUES.

Threat: BURNING, DISKING, SAND MINING, POACHING

Owner/Manager:

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: None **Global:** G5 **CDFG Status:**
 State: Threatened **State:** S2

Habitat Associations

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1312 **Map Index:** 55799 **EO Index:** 55815 **Dates Last Seen** _____
Occ Rank: Fair **Element:** 2006-04-28
Origin: Natural/Native occurrence **Site:** 2006-04-28
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2007-11-26

Quad Summary: Brentwood (3712186/463B)
County Summary: Contra Costa

Lat/Long: 37.98891° / -121.68134° **Township:** 02N
UTM: Zone-10 N4205405 E615794 **Range:** 03E
Area: 9.0 acres **Mapping Precision:** SPECIFIC **Section:** 30 **Qtr:** SE
Elevation: 10 ft **Symbol Type:** POLYGON **Meridian:** M

Location: EAST SIDE OF MACHADO LANE, ~600' SOUTH OF EAST CYPRESS ROAD, 1.5 MILES ESE OF OAKLEY.
Location Detail: NEST TREE LOCATED BEHIND THE RESIDENCE AT 821 MACHADO LANE; 2004 NEST LOCATED AT THE 90% HEIGHT OF A 150' EUCALYPTUS.
Ecological: 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.
General: 2 ADULTS OBSERVED (NO NEST SEEN) ON 23 & 26 JUL 2002 ~0.4 MILE WEST OF THE 2004 NEST SITE. ON 11 MAY 2004, FEMALE OBSERVED ON NEST; MALE OBSERVED FORAGING AND PERCHING IN TREES ALONG CYPRESS ROAD. PAIR OBSERVED NEST-BUILDING ON 28 APR 2006.

Owner/Manager: PVT

Occurrence No. 1600 **Map Index:** 63617 **EO Index:** 63712 **Dates Last Seen** _____
Occ Rank: None **Element:** 2005-06-29
Origin: Natural/Native occurrence **Site:** 2005-XX-XX
Presence: Extirpated
Trend: Decreasing **Record Last Updated:** 2006-01-09

Quad Summary: Brentwood (3712186/463B)
County Summary: Contra Costa

Lat/Long: 37.99088° / -121.66929° **Township:** 02N
UTM: Zone-10 N4205639 E616849 **Range:** 03E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 29 **Qtr:** NW
Elevation: 10 ft **Symbol Type:** POINT **Meridian:** M

Location: NORTH EDGE OF EAST CYPRESS LAKES ROAD, JUST WEST OF KNIGHTSEN AVENUE, 2 MILES EAST OF OAKLEY
Location Detail: 2005 NEST WAS LOCATED DIRECTLY OVER THE CENTER OF THE WESTBOUND TRAFFIC LANE OF EAST CYPRESS LAKES ROAD.
Ecological: 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.
Threat: THREATENED BY NEST TREE REMOVAL; 2005 NEST TREE WAS REMOVED TO ACCOMMODATE PIPELINE INSTALLATION.
General: 2 ADULTS AND 2 JUVENILES OBSERVED AT THE NEST ON 29 JUN 2005; NEST TREE LATER WAS REMOVED.

Owner/Manager: PVT

Occurrence No. 1654 **Map Index:** 65611 **EO Index:** 65690 **Dates Last Seen** _____
Occ Rank: Unknown **Element:** 2003-04-30
Origin: Natural/Native occurrence **Site:** 2003-04-30
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2006-08-03

Quad Summary: Bouldin Island (3812115/480D)
County Summary: Contra Costa

Lat/Long: 38.06006° / -121.62085° **Township:** 03N
UTM: Zone-10 N4213377 E620988 **Range:** 03E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 35 **Qtr:** SW
Elevation: 1 ft **Symbol Type:** POINT **Meridian:** M

Location: FALSE RIVER, BETWEEN WEBB TRACT AND FRANKS TRACT, ~10 MILES NE OF ANTIOCH.
Location Detail: NEST WAS LOCATED IN THE NORTHERN BRANCH, 3/4 OF THE WAY TO THE TOP.
Ecological: 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.
General: NESTING OBSERVED ON 30 APR 2003, BUT NO CHICKS WERE SEEN.

Owner/Manager: UNKNOWN

Buteo swainsoni

Swainson's hawk

Element Code: ABNKC19070

Status _____	NDDB Element Ranks _____	Other Lists _____
Federal: None	Global: G5	CDFG Status:
State: Threatened	State: S2	

Habitat Associations _____

General: BREEDS IN GRASSLANDS WITH WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH
Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.

Occurrence No. 1713	Map Index: 70510	EO Index: 71415	Dates Last Seen _____
Occ Rank: Fair			Element: 2006-04-19
Origin: Natural/Native occurrence			Site: 2006-04-19
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2007-11-26

Quad Summary: Brentwood (3712186/463B)
County Summary: Contra Costa

Lat/Long: 37.98555° / -121.66776°	Township: 02N
UTM: Zone-10 N4205048 E616992	Range: 03E
Radius: 80 meters	Section: 29
Elevation: 12 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: SE
Symbol Type: POINT	

Location: EAST SIDE OF KNIGHTSEN AVE, 0.35 MILE SOUTH OF THE INTERSECTION OF KNIGHTSEN AVE & EAST CYPRESS ROAD, NORTH OF KNIGHTSEN
Ecological: NEST TREE IS A EUCALYPTUS; SURROUNDED BY A DEFUNCT AGRICULTURAL FIELD OF NON-NATIVE GRASSES AND WEEDY SPECIES.
General: 2 ADULTS OBSERVED ON THE NEST ON 19 APR 2006.
Owner/Manager: UNKNOWN

Dendroica petechia brewsteri

yellow warbler

Element Code: ABPBX03018

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5T3?

CDFG Status: SC

State: None

State: S2

Habitat Associations

General: RIPARIAN PLANT ASSOCIATIONS. PREFERS WILLOWS, COTTONWOODS, ASPENS, SYCAMORES, & ALDERS FOR NESTING & FORAGING.

Micro: ALSO NESTS IN MONTANE SHRUBBERY IN OPEN CONIFER FORESTS.

Occurrence No. 2

Map Index: 08079

EO Index: 24917

Dates Last Seen

Occ Rank: Unknown

Element: 1975-06-13

Origin: Natural/Native occurrence

Site: 1975-06-13

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 1989-08-10

Quad Summary: Inverness (3812217/485D)

County Summary: Marin

Lat/Long: 38.06047° / -122.81333°

Township: 03N

UTM: Zone-10 N4212541 E516375

Range: 09W

Radius: 1/5 mile

Mapping Precision: NON-SPECIFIC

Section: 35

Qtr: XX

Elevation: 20 ft

Symbol Type: POINT

Meridian: M

Location: A HALF A MI SW OF POINT REYES STATION - OLEMA MARSH.

Location Detail: NEST IN WILLOW.

General: FROM NORTH AMERICAN NEST RECORD CARD PROGRAM.

Owner/Manager: UNKNOWN

Geothlypis trichas sinuosa

saltmarsh common yellowthroat

Element Code: ABPBX1201A

Status

NDDB Element Ranks

Other Lists

Federal: None
 State: None

Global: G5T2
 State: S2

CDFG Status: SC

Habitat Associations

General: RESIDENT OF THE SAN FRANCISCO BAY REGION, IN FRESH AND SALT WATER MARSHES.

Micro: REQUIRES THICK, CONTINUOUS COVER DOWN TO WATER SURFACE FOR FORAGING; TALL GRASSES, TULE PATCHES, WILLOWS FOR NESTING.

Occurrence No. 105 Map Index: 60047 EO Index: 60083 Dates Last Seen
 Occ Rank: Good Element: 2004-05-24
 Origin: Natural/Native occurrence Site: 2004-05-24
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-02-17

Quad Summary: Antioch North (3812117/481D)
 County Summary: Sacramento

Lat/Long: 38.04755° / -121.82860° Township: 02N
 UTM: Zone-10 N4211739 E602780 Range: 01E
 Area: Mapping Precision: NON-SPECIFIC Section: 02 Qtr: E
 Elevation: 6 ft Symbol Type: POLYGON Meridian: M

Location: WEST SIDE OF THE NW ISLAND WITHIN THE SHERMAN ISLAND WILDLIFE AREA, APPROXIMATELY 2 MILES NORTH OF ANTIOCH.
 Location Detail: LOCATION MAPPED ACCORDING TO UTM COORDINATES GIVEN.
 Ecological: HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS.
 General: 3 TO 11 INDIVIDUALS (BREEDING) DETECTED AT 4 DIFFERENT POINTS BETWEEN 5 JAN AND 24 MAY 2004. 2 POINTS SAMPLED 2X AND 2 POINTS SAMPLED 3X DURING THE SURVEY PERIOD.
 Owner/Manager: DFG-LOWER SHERMAN ISL WA

Occurrence No. 106 Map Index: 60061 EO Index: 60097 Dates Last Seen
 Occ Rank: Good Element: 2004-05-24
 Origin: Natural/Native occurrence Site: 2004-05-24
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-02-17

Quad Summary: Antioch North (3812117/481D)
 County Summary: Sacramento

Lat/Long: 38.05178° / -121.82010° Township: 02N
 UTM: Zone-10 N4212218 E603520 Range: 01E
 Area: Mapping Precision: NON-SPECIFIC Section: 01 Qtr: XX
 Elevation: 7 ft Symbol Type: POLYGON Meridian: M

Location: CENTRAL PORTION OF THE NW ISLAND WITHIN THE SHERMAN ISLAND WILDLIFE AREA, APPROXIMATELY 2 MILES NORTH OF ANTIOCH.
 Location Detail: LOCATION MAPPED ACCORDING TO UTM COORDINATES GIVEN.
 Ecological: HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS.
 General: 1 TO 7 INDIVIDUALS (BREEDING) DETECTED AT 7 DIFFERENT POINTS BETWEEN 5 JAN AND 24 MAY 2004. POINTS SAMPLED 1-3 TIMES DURING THE SURVEY PERIOD.
 Owner/Manager: DFG-LOWER SHERMAN ISL WA

Occurrence No. 107 Map Index: 60069 EO Index: 60105 Dates Last Seen
 Occ Rank: Good Element: 2004-05-25
 Origin: Natural/Native occurrence Site: 2004-05-25
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2005-02-17

Quad Summary: Antioch North (3812117/481D)
 County Summary: Contra Costa

Lat/Long: 38.04076° / -121.86976° Township: 02N
 UTM: Zone-10 N4210940 E599178 Range: 01E
 Area: Mapping Precision: NON-SPECIFIC Section: 04 Qtr: XX
 Elevation: 5 ft Symbol Type: POLYGON Meridian: M

Location: WEST SIDE OF BROWNS ISLAND, NE OF PITTSBURG.
 Location Detail: LOCATION MAPPED ACCORDING TO UTM COORDINATES GIVEN.
 Ecological: HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS.
 General: 1 TO 4 INDIVIDUALS (BREEDING) DETECTED AT 5 DIFFERENT POINTS BETWEEN 24 APR AND 25 MAY 2004. POINTS SAMPLED 1-2 TIMES DURING THE SURVEY PERIOD.
 Owner/Manager: EBRPD

Geothlypis trichas sinuosa

saltmarsh common yellowthroat

Element Code: ABPBX1201A

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G5T2

CDFG Status: SC

State: None

State: S2

Habitat Associations

General: RESIDENT OF THE SAN FRANCISCO BAY REGION, IN FRESH AND SALT WATER MARSHES.

Micro: REQUIRES THICK, CONTINUOUS COVER DOWN TO WATER SURFACE FOR FORAGING; TALL GRASSES, TULE PATCHES, WILLOWS FOR NESTING.

Occurrence No. 108

Map Index: 60071

EO Index: 60107

Dates Last Seen

Occ Rank: Good

Element: 2004-05-25

Origin: Natural/Native occurrence

Site: 2004-05-25

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2005-02-17

Quad Summary: Antioch North (3812117/481D)

County Summary: Contra Costa

Lat/Long: 38.04000° / -121.85956°

UTM: Zone-10 N4210867 E600074

Area:

Elevation: 5 ft

Township: 02N

Range: 01E

Section: 10

Meridian: M

Mapping Precision: NON-SPECIFIC

Symbol Type: POLYGON

Qtr: XX

Location: EAST SIDE OF BROWNS ISLAND, NE OF PITTSBURG.

Location Detail: LOCATION MAPPED ACCORDING TO UTM COORDINATES GIVEN.

Ecological: HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS.

General: 1 TO 5 INDIVIDUALS (BREEDING) DETECTED AT 5 DIFFERENT POINTS BETWEEN 3 JAN AND 25 MAY 2004. POINTS SAMPLED 1-2 TIMES DURING THE SURVEY PERIOD.

Owner/Manager: EBRPD

Lanius ludovicianus

loggerhead shrike

Element Code: ABPBR01030

Status _____	NDDB Element Ranks _____	Other Lists _____
Federal: None	Global: G4	CDFG Status: SC
State: None	State: S4	

Habitat Associations _____

General: BROKEN WOODLANDS, SAVANNAH, PINYON-JUNIPER, JOSHUA TREE, & RIPARIAN WOODLANDS, DESERT OASES, SCRUB & WASHES.

Micro: PREFERS OPEN COUNTRY FOR HUNTING, WITH PERCHES FOR SCANNING, AND FAIRLY DENSE SHRUBS AND BRUSH FOR NESTING.

Occurrence No.: 3	Map Index: 51565	EO Index: 51565	Dates Last Seen _____
Occ Rank: Fair			Element: 2003-03-19
Origin: Natural/Native occurrence			Site: 2003-03-19
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2003-06-18

Quad Summary: Brentwood (3712186/463B)

County Summary: Contra Costa

Lat/Long: 37.99279° / -121.69362°	Township: 02N
UTM: Zone-10 N4205820 E614710	Range: 03E
Radius: 80 meters	Section: 30
Elevation: 10 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: NW
Symbol Type: POINT	

Location: 0.25 MILE NW OF THE INTERSECTION OF HIGHWAY 4 AND CYPRESS ROAD, OAKLEY

Location Detail: NEST IS LOCATED IN AN ORNAMENTAL TREE NEAR AN ABANDONED HOUSE.

Ecological: 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.

Threat: THREATENED BY PROPOSED DEVELOPMENT.

General: 4 ADULTS OBSERVED AT THE NEST SITE ON 19 MAR 2003.

Owner/Manager: PVT

Laterallus jamaicensis coturniculus

California black rail

Element Code: ABNME03041

Status _____	NDDB Element Ranks _____	Other Lists _____
Federal: None	Global: G4T1	CDFG Status:
State: Threatened	State: S1	

Habitat Associations _____

General: INHABITS FRESHWATER MARTSHES, WET MEADOWS & SHALLOW MARGINS OF SALTWATER MARSHES BORDERING LARGER BAYS.
Micro: NEEDS WATER DEPTHS OF ABOUT 1 INCH THAT DOES NOT FLUCTUATE DURING THE YEAR & DENSE VEGETATION FOR NESTING HABITAT.

Occurrence No. 109	Map Index: 34892	EO Index: 7052	Dates Last Seen _____	
Occ Rank: Poor			Element: 1981-11-XX	
Origin: Natural/Native occurrence			Site: 1981-11-XX	
Presence: Presumed Extant				
Trend: Unknown			Record Last Updated: 1996-08-19	

Quad Summary: Jersey Island (3812116/480C)
County Summary: Contra Costa

Lat/Long: 38.00600° / -121.71977°	Township: 02N
UTM: Zone-10 N4207254 E612393	Range: 02E
Area: 21.1 acres	Section: 23
Elevation: 5 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: NE
Symbol Type: POLYGON	

Location: NORTHWEST OF OAKLEY; JUST SOUTH OF BIG BREAK; 1.0 KM WNW OF SEWAGE DISPOSAL PONDS.
Location Detail: LAND USE AT TIME WAS MINIMAL (MARSH UNDEVELOPED); ADJACENT LANDS WERE ABANDONED ASPARAGUS FIELDS AND VINEYARDS; RUDERAL FIELDS EXIST ALONG RR ROW.
Ecological: HABITAT PRIMARILY SALICORNIA; BRACKISH MARSH; UPPER MARSH WITH LITTLE TIDAL INFLUENCE (IF ANY); SOILS FAIRLY DRY (EVEN IN MID-NOVEMBER)
Threat: POSSIBLE THREAT: HIGH DENSITY, SINGLE FAMILY HOUSING DEVELOPMENT ADJACENT TO WETLAND.
General: 5/18/1978-T. MANOLIS REPORTED 3 CALLING RAILS (WESTERN BIRDS, 9:151-158, 1978). 11/XX/1981-2 ADULTS RESPONDED TO CENSUS TAPE WITH FREQUENT CALL SEQUENCES OF "KIC-KIC-KERR"; OVERALL SITE QUALITY WAS RATED FAIR TO POOR.
Owner/Manager: UNKNOWN

Occurrence No. 124	Map Index: 62939	EO Index: 62993	Dates Last Seen _____	
Occ Rank: Unknown			Element: 1993-04-13	
Origin: Natural/Native occurrence			Site: 1993-04-13	
Presence: Presumed Extant				
Trend: Unknown			Record Last Updated: 2005-10-25	

Quad Summary: Bouldin Island (3812115/480D), Jersey Island (3812116/480C)
County Summary: Contra Costa

Lat/Long: 38.00715° / -121.62378°	Township: 02N
UTM: Zone-10 N4207502 E620819	Range: 03E
Area: 132.5 acres	Section: 22
Elevation: 0 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: XX
Symbol Type: POLYGON	

Location: ISLAND COMPLEX IN SAND MOUND SLOUGH, JUST SOUTH OF BETHEL ISLAND. ABOUT 1 MILE SW OF FRANKS TRACK.
Location Detail: TAPED CALLS ALSO PLAYED ON THE TWO ISLANDS TO THE NORTHEAST, BUT NO RAILS DETECTED.
General: TAPED CALLS PLAYED AT 11 STATIONS ON 13 APR 1993. RAILS RESPONDED TO CALLS AT 4 STATIONS.
Owner/Manager: UNKNOWN

Occurrence No. 136	Map Index: 68638	EO Index: 69045	Dates Last Seen _____	
Occ Rank: Excellent			Element: 2006-06-19	
Origin: Natural/Native occurrence			Site: 2006-06-19	
Presence: Presumed Extant				
Trend: Unknown			Record Last Updated: 2007-12-13	

Quad Summary: Antioch North (3812117/481D)
County Summary: Contra Costa

Lat/Long: 38.03749° / -121.86219°	Township: 02N
UTM: Zone-10 N4210586 E599847	Range: 01E
Radius: 80 meters	Section: 09
Elevation: 6 ft	Meridian: M
Mapping Precision: SPECIFIC	Qtr: XX
Symbol Type: POINT	

Location: BROWNS ISLAND, JUST NORTH OF PITTSBURG.
Location Detail: 2004 LOCATION GIVEN ONLY AS "BROWN'S ISLAND"
Ecological: 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%).
General: 3 DETECTED IN 2004 DURING BREEDING SEASON SURVEY ON "BROWN'S ISLAND". 1 ADULT OBSERVED JUST SOUTH OF THE MAIN INTERIOR SLOUGH ON 19 JUN 2006.
Owner/Manager: EBRPD

Laterallus jamaicensis coturniculus

California black rail

Element Code: ABNME03041

Status _____	NDDB Element Ranks _____	Other Lists _____
Federal: None	Global: G4T1	CDFG Status:
State: Threatened	State: S1	

Habitat Associations _____

General: INHABITS FRESHWATER MARTSHES, WET MEADOWS & SHALLOW MARGINS OF SALTWATER MARSHES BORDERING LARGER BAYS.
Micro: NEEDS WATER DEPTHS OF ABOUT 1 INCH THAT DOES NOT FLUCTUATE DURING THE YEAR & DENSE VEGETATION FOR NESTING HABITAT.

Occurrence No. 174	Map Index: 60061	EO Index: 71474	Dates Last Seen _____	
Occ Rank: Unknown			Element: 2005-04-30	
Origin: Natural/Native occurrence			Site: 2005-04-30	
Presence: Presumed Extant				
Trend: Unknown			Record Last Updated: 2007-12-13	

Quad Summary: Antioch North (3812117/481D)
County Summary: Sacramento

Lat/Long: 38.05178° / -121.82010°	Township: 02N
UTM: Zone-10 N4212218 E603520	Range: 01E
Area:	Section: 01 Qtr: XX
Elevation: 7 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Location: CENTRAL PORTION OF THE NW ISLAND WITHIN THE SHERMAN ISLAND WILDLIFE AREA, APPROXIMATELY 2 MILES NORTH OF ANTIOCH.
Location Detail: LOCATION MAPPED ACCORDING TO MAP PROVIDED.
Ecological: 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.
General: 7 DETECTED IN 2004 DURING BREEDING SEASON SURVEY ON "SHERMAN ISLAND". 4 BREEDING ADULTS DETECTED BETWEEN APR AND MAY 2004. 7 DETECTED ON 30 APR 2005.
Owner/Manager: DFG-LOWER SHERMAN ISL WA

Occurrence No. 175	Map Index: 60047	EO Index: 71475	Dates Last Seen _____	
Occ Rank: Unknown			Element: 2005-03-31	
Origin: Natural/Native occurrence			Site: 2005-03-31	
Presence: Presumed Extant				
Trend: Unknown			Record Last Updated: 2007-12-13	

Quad Summary: Antioch North (3812117/481D)
County Summary: Sacramento

Lat/Long: 38.04755° / -121.82860°	Township: 02N
UTM: Zone-10 N4211739 E602780	Range: 01E
Area:	Section: 02 Qtr: E
Elevation: 6 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Location: WEST SIDE OF THE NW ISLAND WITHIN THE SHERMAN ISLAND WILDLIFE AREA, APPROXIMATELY 2 MILES NORTH OF ANTIOCH.
Location Detail: LOCATION MAPPED ACCORDING TO MAP PROVIDED.
Ecological: HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS.
General: 7 DETECTED IN 2004 DURING BREEDING SEASON SURVEY ON "SHERMAN ISLAND". 3 BREEDING ADULTS DETECTED BETWEEN APR AND MAY 2004. 4 DETECTED ON 30 APR 2005.
Owner/Manager: DFG-LOWER SHERMAN ISL WA

Occurrence No. 176	Map Index: 60071	EO Index: 71476	Dates Last Seen _____	
Occ Rank: Unknown			Element: 2005-03-31	
Origin: Natural/Native occurrence			Site: 2005-03-31	
Presence: Presumed Extant				
Trend: Unknown			Record Last Updated: 2007-12-13	

Quad Summary: Antioch North (3812117/481D)
County Summary: Contra Costa

Lat/Long: 38.04000° / -121.85956°	Township: 02N
UTM: Zone-10 N4210867 E600074	Range: 01E
Area:	Section: 10 Qtr: XX
Elevation: 5 ft	Meridian: M

Mapping Precision: NON-SPECIFIC
Symbol Type: POLYGON

Location: EAST SIDE OF BROWNS ISLAND, NE OF PITTSBURG.
Location Detail: LOCATION MAPPED ACCORDING TO MAP PROVIDED.
Ecological: HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS.
General: 3 BREEDING ADULTS DETECTED BY VOCALIZATIONS ON 24 APR 2004. 3 DETECTED IN 2004 DURING BREEDING SEASON SURVEY ON "BROWN'S ISLAND". 4 BREEDING ADULTS DETECTED BY VOCALIZATIONS ON 31 MAR 2005.
Owner/Manager: EBRPD

Laterallus jamaicensis coturniculus

California black rail

Element Code: ABNME03041

Status

NDDB Element Ranks

Other Lists

Federal: None

Global: G4T1

CDFG Status:

State: Threatened

State: S1

Habitat Associations

General: INHABITS FRESHWATER MARTSHES, WET MEADOWS & SHALLOW MARGINS OF SALTWATER MARSHES BORDERING LARGER BAYS.

Micro: NEEDS WATER DEPTHS OF ABOUT 1 INCH THAT DOES NOT FLUCTUATE DURING THE YEAR & DENSE VEGETATION FOR NESTING HABITAT.

Occurrence No. 177

Map Index: 60069

EO Index: 71477

Dates Last Seen

Occ Rank: Good

Element: 2005-03-31

Origin: Natural/Native occurrence

Site: 2005-03-31

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2008-02-25

Quad Summary: Antioch North (3812117/481D)

County Summary: Contra Costa

Lat/Long: 38.04076° / -121.86976°

UTM: Zone-10 N4210940 E599178

Area:

Elevation: 5 ft

Township: 02N

Range: 01E

Section: 04

Qtr: XX

Mapping Precision: NON-SPECIFIC

Symbol Type: POLYGON

Meridian: M

Location: WEST SIDE OF BROWNS ISLAND, NE OF PITTSBURG.

Location Detail: LOCATION MAPPED ACCORDING TO 2005 MAP PROVIDED. 2004 LOCATION GIVEN ONLY AS "BROWN'S ISLAND".

Ecological: HABITAT CONSISTS OF A BRACKISH MARSH. VEGETATION COMPRISED OF SALICORNIA VIRGINICA, SCIRPUS SPP., TYPHA SPP., AND PHRAGMITES AUSTRALIS.

General: 6 BREEDING ADULTS DETECTED BY VOCALIZATIONS ON 31 MAR 2005. 3 DETECTED IN 2004 DURING BREEDING SEASON SURVEY ON "BROWN'S ISLAND".

Owner/Manager: EBRPD

Oenothera deltooides ssp. howellii

Antioch Dunes evening-primrose

Element Code: PDONA0C0B4

_____ Status _____ NDDB Element Ranks _____ Other Lists _____
 Federal: Endangered Global: G5T1
 State: Endangered State: S1.1 CNPS List: 1B.1

_____ Habitat Associations _____

General: INTERIOR DUNES.

Micro: REMNANT RIVER BLUFFS AND SAND DUNES EAST OF ANTIOCH. 0-30M.

Occurrence No. 1 Map Index: 10588 EO Index: 13828 Dates Last Seen _____
 Occ Rank: Unknown Element: 2001-04-07
 Origin: Natural/Native occurrence Site: 2001-04-07
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2003-07-17

Quad Summary: Antioch North (3812117/481D)
 County Summary: Contra Costa

Lat/Long: 38.01509° / -121.79322° Township: 02N
 UTM: Zone-10 N4208176 E605932 Range: 02E
 Area: 33.6 acres Mapping Precision: SPECIFIC Section: 18 Qtr: S
 Elevation: 10 ft Symbol Type: POLYGON Meridian: M

Location: DUNES EAST OF ANTIOCH, NORTH OF WILBUR AVE AND EXTENDING WEST BEYOND THE SEWAGE PLANT AND EAST TO THE GYPSUM PLANT.
 Location Detail: INCLUDES PART OF THE STAMM UNIT OF THE USFWS ANTIOCH DUNES PRESERVE. SEV SUBPOPS LUMPED HERE: "NORTHEAST," "E PLATEAU," "TRIANGLE SECTION TO OAKS," "SOUTHEAST," "SOUTH OF PATH," AND "HARD PAN #4," AND POSSIBLY MORE.
 Ecological: GROWING ON STABILIZED DUNES ON LOOSE SAND. ASSOCIATED WITH ERYSIMUM CAPITATUM VAR ANGUSTATUM. CENTAUREA SOLSTITIALIS INVASIVE IN SOME AREAS.
 Threat: SAND EXCAVATION, COMPETITION WITH EXOTICS, AND BEETLE PREDATION THREATEN. SITE IS SURROUNDED BY INDUSTRY.
 General: MANY PLANTS IN 1977, 150 IN 1978, FEW IN 1980. 4320 SEEN OVER BOTH REFUGE UNITS IN 1988 & 5181 SEEN IN 1990. 350 OBS IN 2001. DESIGNATED CRITICAL HABITAT IN 1978 BY USFWS. SITE IS ACTIVELY MANAGED BY USFWS TO ENHANCE RARE PLANTS.
 Owner/Manager: USFWS-ANTIOCH DUNES NWR

Occurrence No. 4 Map Index: 10622 EO Index: 13827 Dates Last Seen _____
 Occ Rank: Unknown Element: 2001-04-14
 Origin: Natural/Native occurrence Site: 2001-04-14
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 2003-07-17

Quad Summary: Antioch North (3812117/481D)
 County Summary: Contra Costa

Lat/Long: 38.01407° / -121.78365° Township: 02N
 UTM: Zone-10 N4208074 E606773 Range: 02E
 Area: 31.1 acres Mapping Precision: SPECIFIC Section: 17 Qtr: S
 Elevation: 40 ft Symbol Type: POLYGON Meridian: M

Location: DUNES EAST OF ANTIOCH, NORTH OF WILBUR AVE & EAST OF THE GYPSUM PLANT; INCLUDES THE AREA OF THE TWO PGE TOWERS.
 Location Detail: SITE INCLUDE THE SARDIS UNIT OF THE USFWS ANTIOCH DUNES RESERVE. SEV SUBPOPS INCL HERE INCLUDING "SARDIS UNIT," "1992 DUNES," "S OF 1992 DUNES," "S PLATEAU," "SW CORNER SLOPE," "1993 DUNES," "S SLOPE," "W OF PG&E UNIT," AND POSSIBLY MORE.
 Ecological: GROWING ON STABILIZED INTERIOR DUNE ALONG RIVER BLUFFS AND IN LOOSE SAND. ASSOCIATED WITH GUTIERREZIA SP. ERYSIMUM CAPITATUM ANGUSTATUM, ERIOGONUM NUDUM AURICULATUM.
 Threat: INVASIVE EXOTICS, SAND MINING, BEETLE PREDATION THREATEN. INDUSTRY SURROUNDS THE SITE.
 General: 90 PLANTS IN 1977, 872 IN 1978, 100'S IN 1979, 50 IN 1981. 4320 SEEN OVER BOTH UNITS OF REFUGE IN 1988, 5181 IN 1990. 264 PLANTS OBSERVED IN 2001. USFWS DESIGNATED CRITICAL HABITAT IN 1978. ACTIVELY MANAGED BY USFWS FOR THE RARE PLANTS.
 Owner/Manager: PVT, USFWS-ANTIOCH DUNES NWR

Occurrence No. 7 Map Index: 10368 EO Index: 18813 Dates Last Seen _____
 Occ Rank: Unknown Element: 1979-XX-XX
 Origin: Natural/Native occurrence Site: 1979-XX-XX
 Presence: Presumed Extant
 Trend: Unknown Record Last Updated: 1994-07-15

Quad Summary: Antioch North (3812117/481D)
 County Summary: Contra Costa

Lat/Long: 38.03408° / -121.86634° Township: 02N
 UTM: Zone-10 N4210203 E599487 Range: 01E
 Radius: 1/5 mile Mapping Precision: NON-SPECIFIC Section: 9 Qtr: XX
 Elevation: Symbol Type: POINT Meridian: M

Location: BETW PITTSBURG & BROWN ISL AT NEW YORK SLOUGH.
 Ecological: IN SAND DUNES.
 General: 10 PLANTS THRIVING IN 1979. 10 PLANTS SUCCESSFULLY TRANSPLANTED IN 1978.
 Owner/Manager: PVT

Oenothera deltooides ssp. howellii

Antioch Dunes evening-primrose

Element Code: PDONA0C0B4

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
Federal: Endangered **Global:** G5T1 **CNPS List:** 1B.1
State: Endangered **State:** S1.1

Habitat Associations _____
General: INTERIOR DUNES.
Micro: REMNANT RIVER BLUFFS AND SAND DUNES EAST OF ANTIOCH. 0-30M.

Occurrence No. 8 **Map Index:** 10328 **EO Index:** 18814 **Dates Last Seen** _____
Occ Rank: Unknown **Element:** 1984-XX-XX
Origin: Transplant Outside of Native Hab./Range **Site:** 1984-XX-XX
Presence: Presumed Extant **Record Last Updated:** 1995-12-29
Trend: Unknown

Quad Summary: Antioch North (3812117/481D), Honker Bay (3812118/481C)
County Summary: Contra Costa

Lat/Long: 38.03964° / -121.87773° **Township:** 02N
UTM: Zone-10 N4210807 E598480 **Range:** 01E
Radius: 1/5 mile **Mapping Precision:** NON-SPECIFIC **Section:** 9 **Qtr:** XX
Elevation: _____ **Symbol Type:** POINT **Meridian:** M

Location: ON THE WEST END OF BROWN'S ISLAND.
Ecological: IN SAND DUNES. ASSOCIATED WITH PHYLLA, RUBUS, CYNODON DACTYLON, AND ENCROACHING WETLAND PERENNIALS (I.E. JUNCUS).
Threat: ONLY APPARENT THREAT IS FROM ENCROACHING VEGETATION (WEEDS IN ADDITION TO WETLAND SP.).
General: 10 PLANTS SUCCESSFULLY TRANSPLANTED IN 1978, 10 PLANTS OBSERVED THRIVING IN 1979. 6 PLANTS SEEN IN 1984, 1985, OR 1986 BY HAVLIK. IN 1978.
Owner/Manager: PVT, REG PARKS, STATE?

Occurrence No. 9 **Map Index:** 26065 **EO Index:** 5204 **Dates Last Seen** _____
Occ Rank: Fair **Element:** 1999-12-15
Origin: Natural/Native occurrence **Site:** 1999-12-15
Presence: Presumed Extant **Record Last Updated:** 2003-07-17
Trend: Unknown

Quad Summary: Jersey Island (3812116/480C)
County Summary: Contra Costa

Lat/Long: 38.00357° / -121.72898° **Township:** 02N
UTM: Zone-10 N4206973 E611588 **Range:** 02E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 23 **Qtr:** W
Elevation: 19 ft **Symbol Type:** POINT **Meridian:** M

Location: NORTH OF OAKLEY, JUST EAST OF SOUTH-TENDING BEND OF HIGHWAY 4. SOUTH OF BIG BREAK.
Location Detail: NORTH SIDE OF RAILROAD TRACKS. ADJACENT TO EAST BAY REGIONAL PARK LAND "BIG BREAK."
Ecological: INLAND DUNE HABITAT; VERY WEEDY.
Threat: POSSIBLY THREATENED BY EXOTIC SPECIES.
General: 12-20 PLANTS OBSERVED IN 1994 BY LINDENMEYER. 10-30 PLANTS OBSERVED IN 1995, 1996 & 1997. 30 PLANTS IN 1998. SITE BURNED IN 1999, PLANTS PRESENT IN DECEMBER VISIT. NEEDS FIELDWORK TO LOCATE LINDENMEYER & MUTH SITES MORE PRECISELY.
Owner/Manager: PVT

Thamnophis gigas

giant garter snake

Element Code: ARADB36150

Status _____ **NDDB Element Ranks** _____ **Other Lists** _____
 Federal: Threatened **Global:** G2G3 **CDFG Status:**
 State: Threatened **State:** S2S3

Habitat Associations _____
General: PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.
Micro: THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA.

Occurrence No. 47 **Map Index:** 24895 **EO Index:** 27584 **Dates Last Seen** _____
Occ Rank: Unknown **Element:** 19XX-XX-XX
Origin: Natural/Native occurrence **Site:** 1987-XX-XX
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 1999-12-06

Quad Summary: Antioch North (3812117/481D), Jersey Island (3812116/480C)
County Summary: Sacramento

Lat/Long: 38.02960° / -121.75083° **Township:** 02N
UTM: Zone-10 N4209835 E609631 **Range:** 02E
Radius: 1/5 mile **Mapping Precision:** NON-SPECIFIC **Section:** 10 **Qtr:** XX
Elevation: 10 ft **Symbol Type:** POINT **Meridian:** M

Location: SAN JOAQUIN RIVER AT NORTH END OF ANTIOCH BRIDGE, (OFF ROUTE 160, ABOUT 4.1 MILES EAST OF ANTIOCH).
General: SPECIMEN DEPOSITED IN UNIVERSITY OF MICHIGAN MUSEUM OF ZOOLOGY. SNAKE OBSERVED PROIR TO, BUT NOT DURING 1986-87 STUDY BY G. HANSEN.
Owner/Manager: UNKNOWN

Occurrence No. 150 **Map Index:** 39776 **EO Index:** 34778 **Dates Last Seen** _____
Occ Rank: Fair **Element:** 1998-08-24
Origin: Natural/Native occurrence **Site:** 1998-08-24
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 1998-09-22

Quad Summary: Jersey Island (3812116/480C)
County Summary: Sacramento

Lat/Long: 38.08689° / -121.70771° **Township:** 03N
UTM: Zone-10 N4216244 E613327 **Range:** 02E
Area: **Mapping Precision:** NON-SPECIFIC **Section:** 24 **Qtr:** XX
Elevation: 0 ft **Symbol Type:** POLYGON **Meridian:** X

Location: BETWEEN HWY 160 AND HORSESHOE BEND, SOUTH OF BRANNAN ISLAND STATE RECREATION AREA.
Location Detail: SNAKE OBSERVED ON THE WATER SIDE OF THE LEVEE.
Ecological: VEGETATION IS RUDERAL HERBACEOUS, ALONG A SAND BAR, WITH LOTS OF WATER HYACINTH, SOME SCIRPUS, BLACKBERRY, AND A FEW YOUNG COTTONWOODS; SOME CONCRETE RIPRAP.
Threat: THREATENED BY ACTIVELY ERODING LEVEES AND ASSOCIATED EMERGENCY REPAIRS.
General: 1 ADULT SNAKE OBSERVED ON 24 AUGUST 1998.
Owner/Manager: UNKNOWN

Occurrence No. 170 **Map Index:** 47697 **EO Index:** 47697 **Dates Last Seen** _____
Occ Rank: Fair **Element:** 2002-04-02
Origin: Natural/Native occurrence **Site:** 2003-09-23
Presence: Presumed Extant
Trend: Unknown **Record Last Updated:** 2005-06-28

Quad Summary: Jersey Island (3812116/480C)
County Summary: Contra Costa

Lat/Long: 38.05708° / -121.64667° **Township:** 03N
UTM: Zone-10 N4213012 E618729 **Range:** 03E
Radius: 80 meters **Mapping Precision:** SPECIFIC **Section:** 33 **Qtr:** XX
Elevation: 5 ft **Symbol Type:** POINT **Meridian:** M

Location: SW LEVEE OF WEBB TRACT, 10 MILES NE OF ANTIOCH
Location Detail: SNAKE WAS FOUND NEAR THE FERRY DOCK.
Ecological: 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.
Threat: THREATENED BY LAND USE PRACTICES (AGRICULTURE, FLOODING, ETC) AND A POTENTIAL WATER STORAGE PROJECT.
General: 1 ADULT CAPTURED ON 2 APR 2002. SNAKES WERE NOT OBSERVED DURING ACTIVE OR INCIDENTAL SURVEYS OR DURING TRAPPING ON WEBB TRACT- TRAPPING OCCURRED 19 MAY-23 SEP 2003.
Owner/Manager: PVT