

Appendix C

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

LATERALLUS JAMAICENSIS COTURNICULUS
CALIFORNIA BLACK RAIL
Element Code: ABNME03041

—List Status— MDDB Element Ranks —Other Lists—
Federal: None Global: G4T1 CDFG Status:
State: Threatened State: S1

—Habitat Associations—

General: MAINLY INHABITS SALT-MARSHES BORDERING LARGER BAYS.
Micro: OCCURS IN TIDAL SALT MARSH HEAVILY GROWN TO PICKLEWEED; ALSO IN FRESH-WATER AND BRACKISH MARSHES, ALL AT LOW ELEVATION.

Occurrence No. 35 Map Index:09889 —Dates Last Seen— Lat/Long: 38°03'08" / 122°00'15" Township: 02N
Occ Rank: Unknown Element: 1994-04-XX UTM: Zone-10 N4211882 E587371 Range: 01W
Origin: Natural/Native occurrence Site: 1994-04-XX Precision: NON-SPECIFIC Section: 05 Qtr NW
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Decreasing Area: 477.4 ac Elevation: 5 ft
Main Source: JONES & STOKES ASSOC. 1984 (LIT)
Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C)
County Summary: CONTRA COSTA
SNA Summary: Shore Acres/Pt Chicago
Location: AVON-PORT CHICAGO MARSH BETWEEN PILES AT RR YARD AND MIDDLE POINT.
Comments:
Distribution: 1994, 3 PAIRS DETECTED IN MARSH OFF WHITE ROAD NEAR PIER 3 AND 1 IN MARSH OFF FROID STREET. RED FOX
PREDATION MAY BE PART OF THE REASON FOR THE POPULATION DECLINE.
Ecological:
Threat:
General: RAILS OBSERVED BY DFG PERSONNEL IN 1976. 21 RAILS RESPONDED TO TAPED CALLS IN 1982. 5 PAIRS IDENTIFIED BY
CALLS IN 1994.
Owner/Manager: DOD-CONCORD NWS

Occurrence No. 75 Map Index:09723 —Dates Last Seen— Lat/Long: 38°02'37" / 122°03'08" Township: 02N
Occ Rank: Unknown Element: 1982-06-09 UTM: Zone-10 N4210871 E583166 Range: 02W
Origin: Natural/Native occurrence Site: 1982-06-09 Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: M
Trend: Unknown Radius: 1/5 mile Elevation:
Main Source: JONES & STOKES ASSOC. 1984 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: AVON-PORT CHICAGO MARSH; ALONG HASTINGS SLOUGH, N OF WATERFRONT RD.
Comments:
Distribution:
Ecological: HABITAT IS SALT MARSH SUBJECT TO LITTLE TIDAL ACTION.
Threat:
General: 3 RAILS HEARD DURING SPOTLIGHT SURVEY.
Owner/Manager: DOD-NAVY

Occurrence No. 88 Map Index:09580 —Dates Last Seen— Lat/Long: 38°05'00" / 122°06'22" Township: 03N
Occ Rank: Unknown Element: 1987-12-22 UTM: Zone-10 N4215232 E578395 Range: 02W
Origin: Natural/Native occurrence Site: 1987-12-22 Precision: NON-SPECIFIC Section: 29 Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: M
Trend: Unknown Radius: 1/5 mile Elevation: 1 ft
Main Source: LEONG, R. 1987 (OBS)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary: Cutoff Slough Marsh
Location: APPROX 3 MI NE OF BENECIA, NEAR LAKE HERMAN RD AND HWY 680 JUNCTION.
Comments:
Distribution:
Ecological: HABITAT IS SPARTINA-SALICORNIA MARSH.
Threat:
General: TWO ADULTS OBSERVED IN 1987. FORMERLY LEASED FOR DUCK HUNTING. OVERALL SITE QUALITY IS EXCELLENT; HOWEVER,
SOME DEVELOPMENT NEARBY.
Owner/Manager: PVT

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RALLUS LONGIROSTRIS OBSOLETUS CALIFORNIA CLAPPER RAIL Element Code: ABNME05016	—List Status—	NDDB Element Ranks	—Other Lists—
	Federal: Endangered	Global: G5T1	CFG Status:
	State: Endangered	State: S1	

—Habitat Associations—
 General: SALT-WATER & BRACKISH MARSHES TRAVERSED BY TIDAL SLOUGHS IN THE VICINITY OF SAN FRANCISCO BAY.
 Micro: ASSOCIATED WITH ABUNDANT GROWTHS OF PICKLEWEED, BUT FEEDS AWAY FROM COVER ON INVERTEBRATES FROM MUD-BOTTOMED SLOUGHS.

Occurrence No. 73 Map Index:09777 —Dates Last Seen— Lat/Long: 38°05'04" / 122°01'18" Township: 03N
 Occ Rank: Unknown Element: 1985-09-09 UTM: Zone-10 N4215432 E585788 Range: 02W
 Origin: Natural/Native occurrence Site: 1985-09-09 Precision: NON-SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 322.0 ac Meridian: M
 Trend: Unknown Elevation: 5 ft
 Main Source: KOVACH, S. 1985 (LIT)
 Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C)
 County Summary: SOLANO
 SNA Summary: RYER ISLAND
 Location: RYER ISLAND, SUISUN BAY.
 —Comments—
 Distribution:
 Ecological:
 Threat:
 General: 1-2 CLAPPER RAILS HEARD CALLING IN THE VICINITY OF THE OLD DUCK CLUB HOUSING AREA.
 Owner/Manager: DOD-NAVY

Occurrence No. 81 Map Index:38875 —Dates Last Seen— Lat/Long: 38°03'25" / 122°00'59" Township: 99X
 Occ Rank: Unknown Element: 1994-04-XX UTM: Zone-10 N4212379 E586297 Range: 99X
 Origin: Natural/Native occurrence Site: 1994-04-XX Precision: SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 13.5 ac Meridian: X
 Trend: Unknown Elevation: 1 ft
 Main Source: MORRISON, M. 1994 (LIT)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: CONTRA COSTA
 SNA Summary:
 Location: CONCORD NAVAL WEAPONS STATION, EAST OF BELLOMA SLOUGH, 1 MILE S OF GILLESPIE POINT ON ROE ISLAND & 0.8 MILE W OF BURTON.
 —Comments—
 Distribution: 2 PAIRS IN MARSH OFF WHITE ROAD NEAR PIER 3 AND 1 PAIR IN MARSH OFF FROID STREET.
 Ecological:
 Threat:
 General: 3 PAIRS LOCATED IN 1994 SURVEY. BLACK RAILS ALSO FOUND HERE.
 Owner/Manager: DOD-CONCORD NWS

Occurrence No. 82 Map Index:41088 —Dates Last Seen— Lat/Long: 38°02'43" / 122°02'22" Township: 02N
 Occ Rank: Excellent Element: 1998-09-XX UTM: Zone-10 N4211085 E584272 Range: 02W
 Origin: Natural/Native occurrence Site: 1998-09-XX Precision: NON-SPECIFIC Section: 01 Qtr XX
 Presence: Presumed Extant Symbol Type: POINT Radius: 1/5 mile Meridian: M
 Trend: Unknown Elevation: 5 ft
 Main Source: FLANNERY, A. 1998 (OBS)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: CONTRA COSTA
 SNA Summary:
 Location: CONCORD NAVAL WEAPONS STATION. NORTH OF WATERFRONT RD., EAST OF HASTINGS SLOUGH, WEST & SOUTH OF OTTER SLUICE.
 —Comments—
 Distribution:
 Ecological: UNDISTURBED SALT AND BRACKISH MARSH.
 Threat:
 General: 3-4 BIRDS OBSERVED SEPT 1998.
 Owner/Manager: DOD-CONCORD NWS

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Search of All Records in the Vine Hill
7.5' USGS Quadrangle

GEOTILYPIS TRICHAS SINUOSA
SALTMARSH COMMON YELLOWTHROAT
Element Code: ABPBX1201A

—List Status—
Federal: None
State: None

—NDDB Element Ranks—
Global: G5T2
State: S2

—Other Lists—
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. 65 Map Index:24890 —Dates Last Seen— Lat/Long: 38°05'04" / 122°01'09" Township: 03N
Occ Rank: Unknown Element: XXXX-XX-XX UTM: Zone-10 N4215447 E586023 Range: 02W
Origin: Natural/Native occurrence Site: 1985-09-09 Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 941.6 ac Elevation: 5 ft
Main Source: KOVACH, S. 1985 (LIT)
Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C)
County Summary: SOLANO
SNA Summary: Ryer Island
Location: RYER ISLAND, SUISUN BAY.
—Comments—
Distribution:
Ecological:
Threat:
General: OBSERVED BY U.S. FISH & WILDLIFE SERVICE REFUGE PERSONNEL IN THE PAST (R. LOWE, PERS COMM). NOT OBSERVED DURING 1985 SURVEY.
Owner/Manager: DOD-CONCORD NWS

Occurrence No. 66 Map Index:15961 —Dates Last Seen— Lat/Long: 38°04'19" / 122°01'59" Township: 02N
Occ Rank: Unknown Element: XXXX-XX-XX UTM: Zone-10 N4214028 E584819 Range: 02W
Origin: Natural/Native occurrence Site: 1985-09-09 Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 259.0 ac Elevation:
Main Source: KOVACH, S. 1985 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary: Roe Island
Location: ROE ISLAND, SUISUN BAY.
—Comments—
Distribution:
Ecological:
Threat:
General: OBS BY U.S.FISH & WILDLIFE REFUGE PERSONNEL IN THE PAST (R. LOWE, PERS COMM). NOT OBS DURING 1985 SURVEY.
Owner/Manager: DOD-NAVY

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MELOSPIZA MELODIA MAXILLARIS
SUISUN SONG SPARROW
Element Code: ABPBXA301K

—List Status—
Federal: None
State: None

NDDB Element Ranks
Global: 65T2
State: S2

—Other Lists—
CDFG Status: SC

—Habitat Associations—

General: RESIDENT OF BRACKISH-WATER MARSHES SURROUNDING SUISUN BAY.
Micro: INHABITS CATTAILS, TULE AND OTHER SEDGES, AND SALICORNIA; ALSO KNOWN TO FREQUENT TANGLES BORDERING SLOUGHS.

Occurrence No. 5 Map Index:09889 —Dates Last Seen—
Occ Rank: Unknown Element: 1982-XX-XX Lat/Long: 38°03'08" / 122°00'15"
Origin: Natural/Native occurrence Site: 1982-XX-XX UTM: Zone-10 N4211882 E587371 Township: 02N
Presence: Presumed Extant Precision: NON-SPECIFIC Range: 01W
Trend: Unknown Symbol Type: POLYGON Section: 05 Qtr NW
Main Source: JONES & STOKES ASSOC. 1984 (LIT) Area: 477.4 ac Meridian: M
Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C) Elevation: 5 ft
County Summary: CONTRA COSTA
SNA Summary: Shore Acres/Pt Chicago
Location: CONCORD NAVAL WEAPONS STATION, SUISUN BAY; BETWEEN BELLOMA SLOUGH AND CHEMICAL PLANT.
Comments:
Distribution:
Ecological:
Threat:
General: 4 OBSERVATIONS.
Owner/Manager: DOD-CONCORD NWS

Occurrence No. 6 Map Index:09706 —Dates Last Seen—
Occ Rank: Unknown Element: 1982-XX-XX Lat/Long: 38°02'40" / 122°03'27"
Origin: Natural/Native occurrence Site: 1982-XX-XX UTM: Zone-10 N4210953 E582692 Township: 02N
Presence: Presumed Extant Precision: NON-SPECIFIC Range: 02W
Trend: Unknown Symbol Type: POLYGON Section: XX Qtr XX
Main Source: JONES & STOKES ASSOC. 1984 (LIT) Area: 1,582.0 ac Meridian: M
Quad Summary: VINE HILL (3812211/482D) Elevation:
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: MARSH AREA BETWEEN PORT CHICAGO AND PACHECO CREEK, BORDERED ON SOUTH BY SPRR TRACKS, CONCORD NWS.
Comments:
Distribution:
Ecological:
Threat:
General: THREE DIFFERENT OBSERVATIONS DURING SALT MARSH HARVEST MOUSE TRAPPING SURVEY.
Owner/Manager: DOD-CONCORD NWS

Occurrence No. 9 Map Index:09772 —Dates Last Seen—
Occ Rank: Unknown Element: 1982-XX-XX Lat/Long: 38°02'33" / 122°02'07"
Origin: Natural/Native occurrence Site: 1982-XX-XX UTM: Zone-10 N4210763 E584654 Township: 02N
Presence: Presumed Extant Precision: NON-SPECIFIC Range: 02W
Trend: Unknown Symbol Type: POINT Section: XX Qtr XX
Main Source: JONES & STOKES ASSOC. 1984 (LIT) Radius: 1/5 mile Meridian: M
Quad Summary: VINE HILL (3812211/482D) Elevation: 3 ft
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: 0.5 MI E OF PORT CHICAGO, IN MARSH AREA ON S SIDE OF WATERFRONT RD, CONCORD NWS.
Comments:
Distribution:
Ecological:
Threat:
General: OBSERVATION.
Owner/Manager: DOD-NAVY

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MELOSPIZA MELODIA MAXILLARIS (cont.)
SUISUN SONG SPARROW
Element Code: ABPXA301K

—List Status—	—NDDB Element Ranks—	—Other Lists—
Federal: None	Global: G5T2	CDFG Status: SC
State: None	State: S2	

Occurrence No. 12 Map Index:09695 —Dates Last Seen— Lat/Long: 38°06'55" / 122°03'54" Township: 03N
 Occ Rank: Unknown Element: 1986-XX-XX UTM: Zone-10 N4218821 E581970 Range: 02W
 Origin: Natural/Native occurrence Site: 1986-XX-XX Precision: SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 981.8 ac Meridian: M
 Trend: Increasing Elevation:
 Main Source: MARSHALL, J. ET AL 1987 (LIT)
 Quad Summary: VINE HILL (3812211/482D)*, BENICIA (3812212/482C), FAIRFIELD SOUTH (3812221/482A)
 County Summary: SOLANO
 SNA Summary: Cutoff Slough Marsh
 Location: MORROW ISLAND AND SOUTH JOICE ISLAND.
 —Comments—
 Distribution: 591 PAIRS ESTIMATED. COMPILATION OF 1976-86 DATA.
 Ecological: NARROW STRIP OF BRACKISH COASTAL MARSH ALONG THE SHORES. CONNECTED TO GOODYEAR, CORDELIS & SUISUN SLOUGHS.
 Threat:
 General:
 Owner/Manager: PVT

Occurrence No. 16 Map Index:09989 —Dates Last Seen— Lat/Long: 38°06'37" / 121°59'04" Township: 03N
 Occ Rank: Unknown Element: 1986-XX-XX UTM: Zone-10 N4218330 E589033 Range: 01W
 Origin: Natural/Native occurrence Site: 1986-XX-XX Precision: SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 3,093.8 ac Meridian: M
 Trend: Increasing Elevation:
 Main Source: MARSHALL, J. ET AL 1987 (LIT)
 Quad Summary: HONKER BAY (3812118/481C)*, DENVERTON (3812128/481B), VINE HILL (3812211/482D), FAIRFIELD SOUTH (3812221/482A)
 County Summary: SOLANO
 SNA Summary:
 Location: GRIZZLY BAY SHORE ISLANDS AT SUISUN CUTOFF, SUISUN AND GRIZZLY BAYS.
 —Comments—
 Distribution: AT GRIZZLY BAY SHORE 433 PAIRS ESTIMATED IN 412 ACRES OF FORMER MUD FLATS NOW COVERED WITH MARSH VEGETATION.
 854 PAIRS ESTIMATED ON 813 ACRES OF TIDAL HABITAT ON THE ISLANDS AT SUISUN CUTOFF. COMPILATION OF 1976-86
 DATA.
 Ecological:
 Threat:
 General:
 Owner/Manager: PVT

Occurrence No. 18 Map Index:15961 —Dates Last Seen— Lat/Long: 38°04'19" / 122°01'59" Township: 02N
 Occ Rank: Unknown Element: 1986-XX-XX UTM: Zone-10 N4214028 E584819 Range: 02W
 Origin: Natural/Native occurrence Site: 1986-XX-XX Precision: NON-SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 259.0 ac Meridian: M
 Trend: Unknown Elevation:
 Main Source: MARSHALL, J. ET AL 1987 (LIT)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: SOLANO
 SNA Summary: Roe Island
 Location: ROE ISLAND, 2 MI N OF PORT CHICAGO, IN SUISUN BAY.
 —Comments—
 Distribution:
 Ecological: THIS ISLAND IS WITHIN FLIGHT RANGE OF OTHER ISLANDS IN THE VICINITY OF SUISUN CUTOFF.
 Threat:
 General: FROM COMPILATION OF 1976-86 DATA.
 Owner/Manager: DOD-NAVAL WEAPONS STA CONCORD

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Search of All Records in the Vine Hill
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AGELAIUS TRICOLOR (NESTING COLONY)
TRICOLORED BLACKBIRD
Element Code: ABPBXB0020

—List Status—
Federal: None
State: None

NDDB Element Ranks
Global: G3
State: S3

—Other Lists—
CDFG Status: SC

—Habitat Associations—

General: HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN THE CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.
Micro: REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.

* SENSITIVE *

Occurrence No. 268	Map Index:	—Dates Last Seen—	Lat/Long: /	Township:
Occ Rank: None		Element: 1980-04-19	UTM:	Range:
Origin: Natural/Native occurrence		Site: 1980-04-19	Precision:	Section: Qtr
Presence: Possibly Extirpated			Symbol Type:	Meridian:
Trend: Unknown			Radius:	Elevation:

Main Source: BEEDY, E. ET AL 1991 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary:
Location: *SENSITIVE* Location information suppressed.
Comments:
Distribution: Please contact the California Natural Diversity Database, California Department of Fish and Game, for more information: (916) 324-3812.
Ecological:
Threat:
General:
Owner/Manager:

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
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POGONICHTHYS MACROLEPIDOTUS
SACRAMENTO SPLITTAIL
Element Code: AFCJB34020

—List Status—
Federal: Threatened
State: None

NDDB Element Ranks
Global: G2
State: S2

—Other Lists—
CDFG Status: SC

—Habitat Associations—

General: ENDEMIC TO THE LAKES AND RIVERS OF THE CENTRAL VALLEY, BUT NOW CONFINED TO THE DELTA, SUISUN BAY & ASSOCIATED MARSHES.
Micro: SLOW MOVING RIVER SECTIONS, DEAD END SLOUGHS. REQUIRE FLOODED VEGETATION FOR SPAWNING & FORAGING FOR YOUNG.

Occurrence No. 5 Map Index:40823 —Dates Last Seen— Lat/Long: 38°06'40" / 122°05'52" Township: 03N
Occ Rank: Unknown Element: 1998-05-15 UTM: Zone-10 N4218346 E579090 Range: 02W
Origin: Natural/Native occurrence Site: 1998-05-15 Precision: NON-SPECIFIC Section: 17 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 339.3 ac Elevation: 0
Main Source: FEYRER, F. 1998 (PERS)
Quad Summary: VINE HILL (3812211/482D)*, FAIRFIELD SOUTH (3812221/482A)
County Summary: SOLANO
SNA Summary:
Location: GOODYEAR SLOUGH, JUST EAST OF RAILROAD TRACKS, WESTERN BOUNDARY OF MORROW ISLAND, SUISUN MARSH.
Comments:
Distribution:
Ecological: TIDAL ESTUARINE MARSH.
Threat:
General: 15 CAPTURED BETWEEN 20 MARCH AND 15 MAY 1998, STANDARD LENGTH RANGE (PRESUMED IN MILLIMETERS, INFO NOT GIVEN)
IS 118-300 MM, TOTAL WEIGHT RANGE IS 32.2-500 GRAMS (PRESUMED IN GRAMS INFO NOT GIVEN).
Owner/Manager: UNKNOWN

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REITHRODONTOMYS RAVIVENTRIS
SALT-MARSH HARVEST MOUSE
Element Code: AMAFF02040

—List Status— NDDB Element Ranks —Other Lists—
Federal: Endangered Global: G1G2 CDFG Status:
State: Endangered State: S1S2

—Habitat Associations—

General: ONLY IN THE SALINE EMERGENT WETLANDS OF SAN FRANCISCO BAY AND ITS TRIBUTARIES.
Micro: PICKLEWEED IS PRIMARY HABITAT. DO NOT BURROW, BUILD LOOSELY ORGANIZED NESTS. REQUIRE HIGHER AREAS FOR FLOOD ESCAPE.

Occurrence No. 4 Map Index:09706 —Dates Last Seen— Lat/Long: 38°02'40" / 122°03'27" Township: 02N
Occ Rank: Good Element: 1998-09-XX UTM: Zone-10 N4210953 E582692 Range: 02W
Origin: Natural/Native occurrence Site: 1998-09-XX Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Increasing Area: 1,582.0 ac Elevation:
Main Source: SCHAUB, D. 1971 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: AVON-PORT CHICAGO MARSH; BOUNDED ON SOUTH BY WATERFRONT ROAD, ON EAST BY BELLOMA SLOUGH, ON NORTH BY SUISUN BAY.

—Comments—
Distribution: MOST TRAPPING OCCURRED (1982-83) IN THE VICINITY OF BELLOMA SLOUGH. 1987 TRAPPING AT PT EDITH. 1998 TRAPPING WAS NORTH & EAST OF OTTER SLUIGE.
Ecological: HABITAT DOMINATED BY SALICORNIA, W/SOME DISTICHLIS AND ATRIPLEX.
Threat: FILLING.
General: 1982-83: 33 TRAPPED IN 3 STUDY PLOTS. 1987: 25 TRAPPED IN 1 NIGHT AT POINT EDITH. 1989: 64 TRAPPED (SOME JUVENILES, MANY PREGNANT FEMALES). 1998: 13 TRAPPED, 1 SENT TO MVZ.
Owner/Manager: DFG-PT EDITH, DOD-CONCORD NWS

Occurrence No. 62 Map Index:09603 —Dates Last Seen— Lat/Long: 38°02'15" / 122°06'07" Township: 02N
Occ Rank: Unknown Element: 1958-11-15 UTM: Zone-10 N4210154 E578791 Range: 02W
Origin: Natural/Native occurrence Site: 1958-11-15 Precision: NON-SPECIFIC Section: 08 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 559.3 ac Elevation: 3 ft
Main Source: FISLER, G. 1958 (MUS)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary:
Location: 2 MI NE OF MARTINEZ, BETWEEN BENICIA-MARTINEZ BRIDGE AND PACHECO CREEK-AVON REFINERY.

—Comments—
Distribution:
Ecological:
Threat: NEARBY OIL REFINERIES ARE MAIN THREAT.
General: MVZ SPECIMENS FROM 1937 (#80665-80667), 1957 (#121394-121403), AND 1958 (#129974-129979).
Owner/Manager: UNKNOWN

Occurrence No. 64 Map Index:09752 —Dates Last Seen— Lat/Long: 38°02'11" / 122°02'33" Township: 02N
Occ Rank: Unknown Element: 1983-XX-XX UTM: Zone-10 N4210082 E584015 Range: 02W
Origin: Natural/Native occurrence Site: 1983-XX-XX Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 322.9 ac Elevation:
Main Source: JONES & STOKES ASSOC. 1984 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: AVON-PORT CHICAGO MARSH, BOUNDED ON WATERFRONT ROAD ON NORTH, SPRR ON SOUTH AND EAST, HASTINGS SLOUGH ON WEST.

—Comments—
Distribution: TWO SMHM TRAPPED FROM TWO STUDY PLOTS NEAR WATERFRONT RD IN 1982-83. SITE IS WITHIN THE CONCORD NAVAL WEAPONS STATION.
Ecological: HABITAT DOMINATED BY SALICORNIA MARSH.
Threat:
General:
Owner/Manager: DOD-CONCORD NWS

California Department of Fish and Game
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Search of All Records in the Vine Hill
7.5' USGS Quadrangle

REITHRODONTOMYS RAVIVENTRIS (cont.)
SALT-MARSH HARVEST MOUSE
Element Code: AMAFF02040

—List Status—
Federal: Endangered
State: Endangered

—MDDDB Element Ranks—
Global: G1G2
State: S1S2

—Other Lists—
CDFG Status:

Occurrence No. 65 Map Index:09889 —Dates Last Seen—
Occ Rank: Good Element: 1991-06-XX Lat/Long: 38°03'08" / 122°00'15"
Origin: Natural/Native occurrence Site: 1991-06-XX UTM: Zone-10 N4211882 E587371 Township: 02N
Presence: Presumed Extant Precision: NON-SPECIFIC Range: 01W
Trend: Increasing Symbol Type: POLYGON Section: 05 Qtr NW
Area: 477.4 ac Meridian: M
Elevation: 5 ft

Main Source: JONES & STOKES ASSOC. 1984 (LIT)
Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C)
County Summary: CONTRA COSTA
SNA Summary: Shore Acres/Pt Chicago
Location: AVON-PORT CHICAGO MARSH, BOUNDED BY BELLOMA SLOUGH ON WEST, ON SOUTH BY SPRR TRACKS, & BY CHEMICAL PLANT ON EAST.

—Comments—
Distribution: BUFFER ZONE FOR THE CONCORD NAVAL WEAPONS STATION. CAPTURES FROM A 1994 REPORT COVERING RANGE 1985 TO 1994.
Ecological: HABITAT IS COASTAL BRACKISH MARSH GRADING INTO COASTAL SALT MARSH, VEGETATED BY SALICORNIA WITH AN EQUAL AMOUNT OF DISTICHLIS; UPPER EDGES BEING INVADED BY PEPPERGRASS (LEPIDIUM LATIFOLIUM).
Threat: BUFFER ZONE FOR CONCORD NWS; EAST PORTION UNDERGOING REMEDIATION FOR EARLIER HEAVY METAL CONTAMINATION.
General: POP DETERMINED BY SHELLHAMMER, 1977. 2 TRAPPED AT 2 PLOTS IN 1982-83; 22 CAPTURES WITH 2 RECAPTURES SEP-OCT 1985; MIDDLE POINT MARSH APRIL-JUNE 1991, 147 CAPTURES IN 1250 TRAPNIGHTS. 53 CAPTURED IN 390 TRAPNIGHTS MAY-JUNE, 1991.
Owner/Manager: DOD-CONCORD NWS

Occurrence No. 127 Map Index:24890 —Dates Last Seen—
Occ Rank: Unknown Element: 1985-09-09 Lat/Long: 38°05'04" / 122°01'09"
Origin: Natural/Native occurrence Site: 1985-09-09 UTM: Zone-10 N4215447 E586023 Township: 03N
Presence: Presumed Extant Precision: NON-SPECIFIC Range: 02W
Trend: Unknown Symbol Type: POLYGON Section: XX Qtr XX
Area: 941.6 ac Meridian: M
Elevation: 5 ft

Main Source: KOVACH, S. 1985 (LIT)
Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C)
County Summary: SOLANO
SNA Summary: Ryer Island
Location: RYER ISLAND, SUISUN BAY.

—Comments—
Distribution: ONE CAPTURED DURING 1985 SURVEY.
Ecological: CRITICAL HABITAT IS DENSE COVER OF MARSH VEGETATION AND PRESENCE OF PERIPHERAL HIGH MARSH OR UPLAND REFUGIAL HABITAT DURING HIGH TIDE.
Threat:
General: 1994 REPORT, SAMPLING DONE FROM 1985 TO 1994, CAPTURES INDICATED ON WEST END OF ISLAND.
Owner/Manager: DOD-NAVY

Occurrence No. 128 Map Index:15961 —Dates Last Seen—
Occ Rank: Unknown Element: 1994-XX-XX Lat/Long: 38°04'19" / 122°01'59"
Origin: Natural/Native occurrence Site: 1994-XX-XX UTM: Zone-10 N4214028 E584819 Township: 02N
Presence: Presumed Extant Precision: NON-SPECIFIC Range: 02W
Trend: Unknown Symbol Type: POLYGON Section: XX Qtr XX
Area: 259.0 ac Meridian: M
Elevation:

Main Source: KOVACH, S. 1985 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary: Roe Island
Location: ROE ISLAND, SUISUN BAY.

—Comments—
Distribution: 11 INDIVIDUALS TRAPPED ON ISLAND DURING 1985 SURVEY. 8 CAUGHT ON EAST SIDE OF THE ISLAND, 3 ON THE WEST SIDE.
Ecological: PRIMARILY AREA OF PICKLEWEED AND ASSORTED ANNUAL GRASSES AND TIDAL SLOUGH WITH STANDARD HALOPHYTE SPECIES.
Threat: DREDGE SPOILING.
General: 6 CAPTURED SEPT TO NOV 1989. 1994 REPORT INDICATED CAPTURES FROM 1985 TO 1994.
Owner/Manager: DOD-NAVY

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

REITHRODONTOMYS RAVIVENTRIS (cont.)
SALT-MARSH HARVEST MOUSE
Element Code: AMAFF02040

—List Status— NDDB Element Ranks —Other Lists—
Federal: Endangered Global: G1G2 CDFG Status:
State: Endangered State: S1S2

Occurrence No. 138 Map Index:37568 —Dates Last Seen— Lat/Long: 38°01'16" / 122°05'57" Township: 02N
Occ Rank: Poor Element: 1990-04-20 UTM: Zone-10 N4208346 E579074 Range: 02W
Origin: Natural/Native occurrence Site: 1990-04-20 Precision: NON-SPECIFIC Section: 17 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Area: 134.3 ac Meridian: M
Trend: Unknown Elevation: 1 ft
Main Source: VOUCHILAS, C. 1990 (OBS)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary:
Location: SHELL MARSH, SE OF THE INTERSECTION HIGHWAY 680 AND WATERFRONT ROAD, 1 MILE NE OF MARTINEZ.
Comments:
Distribution:
Ecological: GENERAL AREA DOMINATED BY SALT GRASS AND ALKALI HEATH.
Threat:
General: 1 CAPTURED APRIL 1990. 6 ANIMALS CAPTURED IN SMALL AREAS OF PICKLEWEED BETWEEN 17 SEPT AND 14 NOV 1989.
Owner/Manager: UNKNOWN

Occurrence No. 139 Map Index:37598 —Dates Last Seen— Lat/Long: 38°01'09" / 122°05'00" Township: 02N
Occ Rank: Fair Element: 1989-08-18 UTM: Zone-10 N4208120 E580453 Range: 02W
Origin: Natural/Native occurrence Site: 1989-08-18 Precision: NON-SPECIFIC Section: 16 Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: M
Trend: Unknown Radius: 1/5 mile Elevation: 1 ft
Main Source: SHELLHAMMER, H. 1995 (OBS)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary:
Location: ACME LAND FILL, 0.8 MILE S OF WATERFRONT ROAD AND 0.3 MILE W OF PACHECO CREEK, 2 MILES ENE OF MARTINEZ.
Comments:
Distribution: MICE FOUND IN THE TIDAL SLOUGH AREA, PLUS AN AREA E SIDE OF PARCEL WITH MODERATLY GOOD STANDS OF PICKLEWEED.
Ecological: PRIMARILY AREA OF PICKLEWEED AND ASSORTED ANNUAL GRASSES AND TIDAL SLOUGH WITH STANDARD HALOPHYTE SPECIES.
Threat: SANITARY LAND FILL.
General: 9 CAPTURED, 2 JUVENILES, 7 ADULTS (INCLUDING 2 PREGNANT & 2 LACTATING FEMALES).
Owner/Manager: PVT

Occurrence No. 140 Map Index:37603 —Dates Last Seen— Lat/Long: 38°06'32" / 122°04'08" Township: 03N
Occ Rank: Good Element: 1989-11-14 UTM: Zone-10 N4218095 E581637 Range: 02W
Origin: Natural/Native occurrence Site: 1989-11-14 Precision: NON-SPECIFIC Section: 15 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Area: 107.2 ac Meridian: M
Trend: Unknown Elevation: 1 ft
Main Source: SHELLHAMMER, H. 1995 (OBS)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary:
Location: MORROW ISLAND, EDGE OF BAY, ~2 MILES EAST OF HIGHWAY 680 AND ~0.5 MILE SOUTH OF MOUTH OF SUISUN SLOUGH.
Comments:
Distribution: LOW BAY ISLAND (MAPPED ACCORDING TO APPROXIMATE LAT-LONG COORDINATES GIVEN).
Ecological: VARIOUS MIXTURES OF PICKLEWEED, PERENNIAL PEPPER GRASS, BULRUSH, GOLDEN ASTER, COMMON CATTAIL, COMMON REED & OTHER HALOPHYTES & BRACKISH WATER PLANTS.
Threat: BACK FILLING. SITE QUALITY; GOOD TO FAIR.
General: 6 CAPTURED 1989.
Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

REITHRODONTOMYS RAVIVENTRIS (cont.)
SALT-MARSH HARVEST MOUSE
Element Code: AMAFF02040

—List Status—
Federal: Endangered
State: Endangered

NDDB Element Ranks
Global: G1G2
State: S1S2

—Other Lists—
CDFG Status:

Occurrence No. 156 Map Index:09580 —Dates Last Seen— Lat/Long: 38°05'00" / 122°06'22" Township: 03N
Occ Rank: Unknown Element: 1985-XX-XX UTM: Zone-10 N4215232 E578395 Range: 02W
Origin: Natural/Native occurrence Site: 1985-XX-XX Precision: NON-SPECIFIC Section: 29 Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: M
Trend: Unknown Radius: 1/5 mile Elevation: 1 ft
Main Source: ENVIRONMENTAL SERVICES OFFICE 1994 (LIT)
Quad Summary: VINE HILL (3812211/4820)
County Summary: SOLANO
SNA Summary: Cutoff Slough Marsh
Location: NEAR THE SOUTH END OF GOODYEAR SLOUGH. APPROX 3 MI NE OF BENECIA, NEAR LAKE HERMAN RD AND HWY 680 JUNCTION.
—Comments—
Distribution:
Ecological: CRITICAL HABITAT IS DENSE COVER OF MARSH VEGETATION AND PRESENCE OF PERIPHERAL HIGH MARSH OR UPLAND REFUGIAL HABITAT DURING HIGH TIDE.
Threat:
General: SAMPLING DONE FROM 1985 TO 1994.
Owner/Manager: UNKNOWN

Occurrence No. 157 Map Index:37843 —Dates Last Seen— Lat/Long: 38°07'18" / 122°05'54" Township: 03N
Occ Rank: Unknown Element: 1985-XX-XX UTM: Zone-10 N4219503 E579024 Range: 02W
Origin: Natural/Native occurrence Site: 1985-XX-XX Precision: NON-SPECIFIC Section: 08 Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: M
Trend: Unknown Radius: 1/5 mile Elevation: 1 ft
Main Source: ENVIRONMENTAL SERVICES OFFICE 1994 (LIT)
Quad Summary: VINE HILL (3812211/4820)
County Summary: SOLANO
SNA Summary:
Location: E OF MORROW ISLAND & GOODYEAR SLOUGH, 0.6 MILES SE OF PIERCE, 0.3 MILE E OF HIGHWAY 680 & 2 MILES E MOUTH SUISUN SLOUGH.
—Comments—
Distribution:
Ecological: CRITICAL HABITAT IS DENSE COVER OF MARSH VEGETATION AND PRESENCE OF PERIPHERAL HIGH MARSH OR UPLAND REFUGIAL HABITAT DURING HIGH TIDE.
Threat:
General: SAMPLING DONE FROM 1985 TO 1994.
Owner/Manager: UNKNOWN

Occurrence No. 158 Map Index:37844 —Dates Last Seen— Lat/Long: 38°07'04" / 122°04'45" Township: 03N
Occ Rank: Unknown Element: 1985-XX-XX UTM: Zone-10 N4219087 E580718 Range: 02W
Origin: Natural/Native occurrence Site: 1985-XX-XX Precision: NON-SPECIFIC Section: 10 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 32.5 ac Elevation: 1 ft
Main Source: ENVIRONMENTAL SERVICES OFFICE 1994 (LIT)
Quad Summary: VINE HILL (3812211/4820)
County Summary: SOLANO
SNA Summary:
Location: MORROW ISLAND, 0.6 MILES WSW OF MOUTH OF SUISUN SLOUGH AND 1.4 MILES E OF HIGHWAY 680.
—Comments—
Distribution: MICE TRAPPED ON BOTH NORTH AND SOUTH SIDES OF THE LEVEE.
Ecological: CRITICAL HABITAT IS DENSE COVER OF MARSH VEGETATION AND PRESENCE OF PERIPHERAL HIGH MARSH OR UPLAND REFUGIAL HABITAT DURING HIGH TIDE.
Threat:
General: SAMPLING DONE FROM 1985 TO 1994.
Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

REITHROCONTOMYS RAVIVENTRIS (cont.)
SALT-MARSH HARVEST MOUSE
Element Code: AMAFF02040

—List Status—	NDDB Element Ranks	—Other Lists—
Federal: Endangered	Global: G1G2	CDFG Status:
State: Endangered	State: S1S2	

Occurrence No. 164 Map Index:41879 —Dates Last Seen— Lat/Long: 38°04'22" / 122°06'44" Township: 03N
 Occ Rank: Good Element: 1999-08-18 UTM: Zone-10 N4214073 E577867 Range: 02W
 Origin: Natural/Native occurrence Site: 1999-08-18 Precision: SPECIFIC Section: 29 Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 274.0 ac Meridian: M
 Trend: Unknown Elevation: 0
 Main Source: FINFROCK, P. 1999 (OBS)
 Quad Summary: VINE HILL (3812211/482D)*, BENICIA (3812212/482C)
 County Summary: SOLANO
 SNA Summary:
 Location: GOODYEAR SLOUGH UNIT, NE OF THE BENICIA-MARTINEZ BRIDGE, GRIZZLY ISLAND WILDLIFE AREA.
 Comments:
 Distribution:
 Ecological: HABITAT CONSISTS OF A MANAGED WETLAND.
 Threat:
 General: 18 SMHM CAPTURES AND 11 RECAPTURES DURING 284 TRAPNIGHTS BETWEEN 16-18 AUG 1999.
 Owner/Manager: DFG-GRIZZLY ISLAND WA

Occurrence No. 165 Map Index:41881 —Dates Last Seen— Lat/Long: 38°04'41" / 122°06'45" Township: 03N
 Occ Rank: Good Element: 1999-05-13 UTM: Zone-10 N4214659 E577835 Range: 02W
 Origin: Natural/Native occurrence Site: 1999-05-13 Precision: SPECIFIC Section: 29 Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 41.1 ac Meridian: M
 Trend: Unknown Elevation: 0
 Main Source: FINFROCK, P. 1999 (OBS)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: SOLANO
 SNA Summary:
 Location: BENICIA INDUSTRIAL UNIT, NE OF THE BENICIA-MARTINEZ BRIDGE, GRIZZLY ISLAND WILDLIFE AREA.
 Comments:
 Distribution: TRAPS WERE SET IN PICKLEWEED.
 Ecological: HABITAT CONSISTS OF A MANAGED WETLAND.
 Threat:
 General: 10 SMHM CAPTURES AND 1 RECAPTURE DURING 120 TRAPNIGHTS BETWEEN 12-13 MAY 1999.
 Owner/Manager: DFG

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

COASTAL BRACKISH MARSH

Element Code: CTT52200CA

—List Status— NDDB Element Ranks —Other Lists—
Federal: None Global: G2
State: None State: S2.1

—Habitat Associations—

General: None for this Element
Micro: None for this Element

Occurrence No. 6 Map Index:09989 —Dates Last Seen— Lat/Long: 38°06'37" / 121°59'04" Township: 03N
Occ Rank: Unknown Element: 1977-06-XX UTM: Zone-10 N4218330 E589033 Range: 01W
Origin: Natural/Native occurrence Site: 1977-06-XX Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 3,093.8 ac Elevation:
Main Source: JONES & STOKES ASSOC. 1979 (LIT)
Quad Summary: HONKER BAY (3812118/481C)*, DENVERTON (3812128/481B), VINE HILL (3812211/482D), FAIRFIELD SOUTH (3812221/482A)
County Summary: SOLANO
SNA Summary:
Location: SIMMONS ISL NEAR GRIZZLY BAY.
Comments:
Distribution: FRINGES & POCKETS ALONG ISL & BAY SHORE.
Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
Threat:
General:
Owner/Manager: UNKNOWN

Occurrence No. 7 Map Index:09777 —Dates Last Seen— Lat/Long: 38°05'04" / 122°01'18" Township: 03N
Occ Rank: Unknown Element: 1977-06-XX UTM: Zone-10 N4215432 E585788 Range: 02W
Origin: Natural/Native occurrence Site: 1977-06-XX Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 322.0 ac Elevation: 5 ft
Main Source: JONES & STOKES ASSOC. 1979 (LIT)
Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C)
County Summary: SOLANO
SNA Summary: RYER ISLAND
Location: RYER ISLAND IN SUISUN BAY.
Comments:
Distribution:
Ecological: FRINGE ON N & S OF ISLAND. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
Threat: ADJACENT AREAS ARE DUCK CLUBS.
General:
Owner/Manager: UNKNOWN

Occurrence No. 8 Map Index:15961 —Dates Last Seen— Lat/Long: 38°04'19" / 122°01'59" Township: 02N
Occ Rank: Unknown Element: 1977-06-XX UTM: Zone-10 N4214028 E584819 Range: 02W
Origin: Natural/Native occurrence Site: 1977-06-XX Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 259.0 ac Elevation:
Main Source: JONES & STOKES ASSOC. 1979 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary: Roe Island
Location: ROE ISLAND IN SUISUN BAY, CONCORD NAVAL WEAPONS STATION.
Comments:
Distribution: COVERAGE OVER ENTIRE ISLAND.
Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
Threat:
General:
Owner/Manager: DOD-CONCORD NWS

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

COASTAL BRACKISH MARSH (cont.)

Element Code: CTT52200CA

—List Status—
Federal: None
State: None

NDDB Element Ranks
Global: G2
State: S2.1

—Other Lists—

Occurrence No. 11 Map Index:10001 —Dates Last Seen— Lat/Long: 38°02'46" / 121°58'50" Township: 02N
Occ Rank: Unknown Element: 1977-06-XX UTM: Zone-10 N4211204 E589452 Range: 01W
Origin: Natural/Native occurrence Site: 1977-06-XX Precision: SPECIFIC Section: 04 Qtr SE
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 1,098.4 ac Elevation:
Main Source: JONES & STOKES ASSOC. 1979 (LIT)
Quad Summary: HONKER BAY (3812118/481C)*, VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary: Shore Acres/Pt Chicago
Location: MCAVOY HARBOR, S SUISUN BAY.
Comments:
Distribution:
Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
Threat: PARTIALLY IN NAVAL RES IN INDUSTRIAL AREA.
General:
Owner/Manager: UNKNOWN

Occurrence No. 14 Map Index:09740 —Dates Last Seen— Lat/Long: 38°03'24" / 122°02'39" Township: 02N
Occ Rank: Unknown Element: 1977-06-XX UTM: Zone-10 N4212331 E583846 Range: 02W
Origin: Natural/Native occurrence Site: 1977-06-XX Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 43.4 ac Elevation:
Main Source: JONES & STOKES ASSOC. 1979 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: SUISUN BAY; SEAL ISLANDS.
Comments:
Distribution: COVERAGE OVER ENTIRE ISLAND.
Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
Threat:
General:
Owner/Manager: DOD-NAVY

Occurrence No. 15 Map Index:09666 —Dates Last Seen— Lat/Long: 38°02'22" / 122°06'16" Township: 02N
Occ Rank: Unknown Element: 1977-06-XX UTM: Zone-10 N4210352 E578600 Range: 02W
Origin: Natural/Native occurrence Site: 1977-06-XX Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 1,928.9 ac Elevation:
Main Source: JONES & STOKES ASSOC. 1979 (LIT)
Quad Summary: VINE HILL (3812211/482D)*, BEMICIA (3812212/482C)
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: PT EDITH, SUISUN BAY.
Comments:
Distribution:
Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
Threat: NEXT TO HEAVY INDUSTRY AND OIL REFINERY.
General:
Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

COASTAL BRACKISH MARSH (cont.)

Element Code: CTT52200CA

—List Status—
Federal: None
State: None

NDDB Element Ranks
Global: G2
State: S2.1

—Other Lists—

Occurrence No. 16 Map Index: 09695 —Dates Last Seen— Lat/Long: 38°06'55" / 122°03'54" Township: 03N
Occ Rank: Unknown Element: 1986-08-06 UTM: Zone-10 N4218821 E581970 Range: 02W
Origin: Natural/Native occurrence Site: 1986-08-06 Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Area: 981.8 ac Meridian: M
Trend: Unknown Elevation:
Main Source: JONES & STOKES ASSOC. 1979 (LIT)
Quad Summary: VINE HILL (3812211/482D)*, BENICIA (3812212/482C), FAIRFIELD SOUTH (3812221/482A)
County Summary: SOLANO
SNA Summary: Cutoff Slough Marsh
Location: E EDGE MORROW ISL, W EDGE OF SOUTHERN PART OF JOICE ISL, SUISUN BAY.
Comments:
Distribution: FRINGE OF ISL AND SLOUGH.
Ecological: TAXA PRESENT INCL SCIRPUS CERNUUS, TRIGLOCHIN STRICTA, JUNCUS SP, LILAEOPSIS MASONII. ON REYES SALTY CLAY.
Threat:
General: PORTION 1/4 MI N OF JOICE ISL CLUB HOUSE SEEN 1986. PROPERTY OWNED BY HUNT CLUB. THIS WAS OCC #016 OF
CTT52200CA
Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

LILAEOPSIS MASONII
MASON'S LILAEOPSIS
Element Code: PDAP119030

—List Status—	—NDDB Element Ranks—	—Other Lists—
Federal: None	Global: G3	CNPS List: 1B
State: Rare	State: S3.1	R-E-D Code: 2-3-3

—Habitat Associations—

General: FRESHWATER AND BRACKISH MARSHES, RIPARIAN SCRUB.
Micro: TIDAL ZONES, IN MUDDY OR SILTY SOIL FORMED THROUGH RIVER DEPOSITION OR RIVER BANK EROSION. 0-10M.

Occurrence No. 79 Map Index:22541 —Dates Last Seen— Lat/Long: 38°03'10" / 122°04'00" Township: 02N
 Occ Rank: Unknown Element: 1988-04-27 UTM: Zone-10 N4211879 E581887 Range: 02W
 Origin: Natural/Native occurrence Site: 1988-04-27 Precision: NON-SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
 Trend: Unknown Area: 26.7 ac Elevation: 5 ft
 Main Source: GOLDEN, M. & P. FIEDLER 1991 (LIT)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: CONTRA COSTA
 SNA Summary:
 Location: POINT EDIT EAST TO MOUTH OF SLOUGH.
 Comments:
 Distribution:
 Ecological: THIS POPULATION IS CONSIDERED TO BE THE MOST "DOWN-RIVER" POPULATION FOR LILAEOPSIS MASONII.
 Threat: THIS POPULATION WAS IMPACTED BY THE SHELL OIL REFINERY SPILL OF 1988.
 General: THE ULTIMATE IMPACT OF THE OIL SPILL ON THIS POPULATION IS UNKNOWN AT THIS TIME.
 Owner/Manager: UNKNOWN

Occurrence No. 102 Map Index:23561 —Dates Last Seen— Lat/Long: 38°02'40" / 122°05'25" Township: 02N
 Occ Rank: Good Element: 1992-06-XX UTM: Zone-10 N4210924 E579825 Range: 02W
 Origin: Natural/Native occurrence Site: 1992-06-XX Precision: SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POINT Meridian: M
 Trend: Unknown Radius: 80 meters Elevation: 0
 Main Source: ROGERS, C. 1992 (OBS)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: CONTRA COSTA
 SNA Summary:
 Location: EAST BANK OF PACHECO CREEK NEAR MOUTH, 1.6 KM (1 MI) FROM WATERFRONT ROAD BRIDGE.
 Comments:
 Distribution:
 Ecological: GROWING IN TIDALLY INFLUENCED COASTAL BRACKISH MARSH.
 Threat:
 General: TOTAL AREA OF POPULATION >5 SQUARE METERS.
 Owner/Manager: UNKNOWN

Occurrence No. 114 Map Index:24985 —Dates Last Seen— Lat/Long: 38°03'25" / 122°00'44" Township: 02N
 Occ Rank: Good Element: 1991-06-XX UTM: Zone-10 N4212377 E586654 Range: 01W
 Origin: Natural/Native occurrence Site: 1991-06-XX Precision: SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
 Trend: Unknown Area: 9.2 ac Elevation: 5 ft
 Main Source: BOURSIER, P. 1991 (OBS)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: CONTRA COSTA
 SNA Summary:
 Location: SUISUN BAY; CONCORD NAVAL WEAPONS STATION, 250-500 METERS EAST OF BELLOMA SLOUGH ALONG THE SHORE OF SUISUN BAY.
 Comments:
 Distribution: 2 SEPARATE POPULATIONS; ONE IS 7000' NORTH OF BAY POINT, THE OTHER IS 1000' EAST OF THE FIRST.
 Ecological: ON WATERS EDGE WHERE WAVE ACTION SATURATES THE SUBSTRATE. IN BRACKISH AREA OF TIDAL MARSH NEAR PHRAGMITES COMMUNIS AND SCIRPUS CALIFORNICUS. CORDYLANTHUS MOLLIS SSP. MOLLIS AND LATHYRUS JEPSONII VAR. JEPSONII ARE FOUND NEARBY.
 Threat: MOSQUITO ABATEMENT CHANNELS PRESENT; IMPACT TO RARE PLANTS IS UNKNOWN.
 General: EACH OF THE TWO COLONIES IS ABOUT 1/2 SQUARE METER IN SIZE.
 Owner/Manager: DOD-CONCORD NWS

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

LILAEOPSIS MASONII (cont.)
MASON'S LILAEOPSIS
Element Code: PDAP119030

—List Status—
Federal: None
State: Rare

—NDDB Element Ranks—
Global: G3
State: S3.1

—Other Lists—
CNPS List: 18
R-E-D Code: 2-3-3

Occurrence No. 131 Map Index:26538 —Dates Last Seen— Lat/Long: 38°03'17" / 122°02'23" Township: 02N
Occ Rank: Unknown Element: 1995-09-08 UTM: Zone-10 N4212102 E584238 Range: 02W
Origin: Natural/Native occurrence Site: 1995-09-08 Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 11.7 ac Elevation: 5 ft
Main Source: DEPARTMENT OF WATER RESOURCES 1994 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary:
Location: SOUTHERN SHORE OF SUISUN BAY; SOUTH OF SEAL ISLANDS, 0.5-0.7 AIR MILE EAST OF POINT EDITH.
—Comments—
Distribution:
Ecological:
Threat:
General: MAP DETAIL BY DWR-ENVIRONMENTAL SERVICES OFFICE (1994) IS MAIN SOURCE OF INFORMATION FOR THIS SITE. PLANTS ALSO SEEN IN THIS VICINITY IN 1995 (ZEBELL AND FIEDLER, 1996).
Owner/Manager: UNKNOWN

Occurrence No. 133 Map Index:01055 —Dates Last Seen— Lat/Long: 38°03'18" / 122°02'52" Township: 99X
Occ Rank: Unknown Element: 1992-06-29 UTM: Zone-10 N4212161 E583528 Range: 99X
Origin: Natural/Native occurrence Site: 1992-06-29 Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: X
Trend: Unknown Area: 13.2 ac Elevation: 5 ft
Main Source: DEPARTMENT OF WATER RESOURCES 1992 (MAP)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary:
Location: SEAL ISLANDS, NAVAL WEAPONS CENTER-CONCORD, SUISUN BAY.
—Comments—
Distribution: SEEN AT SEVEN LOCATIONS ALONG PERIMETER OF ISLAND.
Ecological:
Threat:
General: MAP DETAIL IS ONLY SOURCE OF INFORMATION.
Owner/Manager: DOD-NAVY

Occurrence No. 134 Map Index:08435 —Dates Last Seen— Lat/Long: 38°04'10" / 122°02'13" Township: 99X
Occ Rank: Unknown Element: 1992-09-29 UTM: Zone-10 N4213777 E584456 Range: 99X
Origin: Natural/Native occurrence Site: 1992-09-29 Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: X
Trend: Unknown Area: 95.3 ac Elevation: 5 ft
Main Source: DEPARTMENT OF WATER RESOURCES 1992 (MAP)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary:
Location: ROE ISLAND, NAVAL WEAPONS CENTER-CONCORD, SUISUN BAY.
—Comments—
Distribution: AT SCATTERED LOCATIONS ALONG PERIMETER OF MOST OF THE ISLAND.
Ecological:
Threat:
General: MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE.
Owner/Manager: DOD-CONCORD NWS

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

LILAEOPSIS MASONII (cont.) MASON'S LILAEOPSIS Element Code: PDAPI19030		—List Status— Federal: None State: Rare	NDDB Element Ranks Global: G3 State: S3.1	—Other Lists— CNPS List: 1B R-E-D Code: 2-3-3
Occurrence No. 135	Map Index:03573	—Dates Last Seen— Element: 1992-09-29 Site: 1992-09-29	Lat/Long: 38°04'55" / 122°01'21" UTM: Zone-10 N4215160 E585715 Precision: SPECIFIC Symbol Type: POLYGON Area: 113.4 ac	Township: 99X Range: 99X Section: XX Qtr XX Meridian: X Elevation: 5 ft
Occ Rank: Unknown Origin: Natural/Native occurrence Presence: Presumed Extant Trend: Unknown Main Source: DEPARTMENT OF WATER RESOURCES 1992 (MAP) Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C) County Summary: SOLANO SNA Summary: Location: RYER ISLAND, NAVAL WEAPONS CENTER-CONCORD, SUISUN BAY. Comments: Distribution: MAPPED AT SCATTERED LOCATIONS ALONG PERIMETER OF ISLAND. Ecological: Threat: General: MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE. Owner/Manager: DOD-CONCORD NWS				
Occurrence No. 136	Map Index:26539	—Dates Last Seen— Element: 1992-06-17 Site: 1992-06-17	Lat/Long: 38°06'07" / 122°00'04" UTM: Zone-10 N4217400 E587561 Precision: SPECIFIC Symbol Type: POLYGON Area: 72.5 ac	Township: 03N Range: 01W Section: 17 Qtr XX Meridian: M Elevation: 5 ft
Occ Rank: Unknown Origin: Natural/Native occurrence Presence: Presumed Extant Trend: Unknown Main Source: DEPARTMENT OF WATER RESOURCES 1992 (MAP) Quad Summary: VINE HILL (3812211/482D)*, HONKER BAY (3812118/481C) County Summary: SOLANO SNA Summary: Location: WEST END OF SIMMONS ISLAND, GRIZZLY BAY. Comments: Distribution: SEVERAL COLONIES MAPPED ALONG LENGTH OF SUISUN CUTOFF AND ALONG GRIZZLY BAY SHORELINE FROM PT. BUCKLER EAST TO ROARING RIVER. Ecological: Threat: General: MAP DETAIL IS ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE. Owner/Manager: UNKNOWN				
Occurrence No. 156	Map Index:43724	—Dates Last Seen— Element: 1992-XX-XX Site: 1992-XX-XX	Lat/Long: 38°07'21" / 122°04'03" UTM: Zone-10 N4219630 E581731 Precision: SPECIFIC Symbol Type: POLYGON Area: 68.7 ac	Township: 03N Range: 02W Section: 10 Qtr XX Meridian: M Elevation: 0
Occ Rank: Unknown Origin: Natural/Native occurrence Presence: Presumed Extant Trend: Unknown Main Source: DEPARTMENT OF WATER RESOURCES 1994 (LIT) Quad Summary: VINE HILL (3812211/482D)*, FAIRFIELD SOUTH (3812221/482A) County Summary: SOLANO SNA Summary: Location: SOUTHERN TIP OF JOICE ISLAND AT MOUTH OF SUISUN SLOUGH, SUISUN MARSH. Comments: Distribution: SEVERAL COLONIES ALONG SOUTHERN AND SOUTHEASTERN TIP OF JOICE ISLAND, ONE COLONY ON ADJACENT SHORE OF MORROW ISLAND. Ecological: Threat: General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL FROM DWR-ENVIRONMENTAL SERVICES OFFICE (1994). Owner/Manager: UNKNOWN				

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

ASTER LENTUS
SUISUN MARSH ASTER
Element Code: PDASTOT540

—List Status—
Federal: None
State: None

NDDB Element Ranks
Global: G2
State: S2.2

—Other Lists—
CNPS List: 1B
R-E-D Code: 2-2-3

—Habitat Associations—

General: MARSHES AND SWAMPS (BRACKISH AND FRESHWATER). ENDEMIC TO THE SAC/SAN JOAQUIN RIVER DELTA.
Micro: MOST OFTEN SEEN ALONG SLOUGHS WITH PHRAGMITES, SCIRPUS, BLACKBERRY, TYPHA, ETC. 0-3M.

Occurrence No. 81 Map Index:37593 —Dates Last Seen— Lat/Long: 38°05'40" / 122°00'39" Township: 99X
Occ Rank: Unknown Element: 1993-10-XX UTM: Zone-10 N4216537 E586731 Range: 99X
Origin: Natural/Native occurrence Site: 1993-10-XX Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: X
Trend: Unknown Radius: 1/10 mile Elevation: 0
Main Source: DEPT. OF WATER RESOURCES 1994 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary:
Location: WEST END OF SIMMONS ISLAND ALONG SUISUN CUTOFF, GRIZZLY BAY.
Comments:
Distribution: ONE COLONY MAPPED.
Ecological: BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Threat:
General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL PROVIDED BY DWR REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994" (1994).
Owner/Manager: UNKNOWN

Occurrence No. 82 Map Index:37594 —Dates Last Seen— Lat/Long: 38°05'11" / 122°06'03" Township: 03N
Occ Rank: Unknown Element: 1993-10-XX UTM: Zone-10 N4215604 E578846 Range: 02W
Origin: Natural/Native occurrence Site: 1993-10-XX Precision: SPECIFIC Section: 20 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 2.1 ac Elevation: 0
Main Source: ALLEN, P. 1991 (MAP)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary:
Location: WEST OF SUISUN BAY, ALONG THE SOUTHERN END OF GOODYEAR SLOUGH, ABOUT 0.6 MILE SOUTH OF BAHIA.
Comments:
Distribution: TWO COLONIES MAPPED ALONG THE WESTERN EDGE OF GOODYEAR SLOUGH. MORE COLONIES MAY OCCUR IN THE AREA ACCORDING TO DWR REPORT, BUT NO SPECIFIC LOCATIONS GIVEN.
Ecological: BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Threat:
General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL FROM 1991 SURVEY BY ALLEN. LESS DETAILED MAP ALSO PROVIDED BY DWR REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994" (1994).
Owner/Manager: UNKNOWN

Occurrence No. 83 Map Index:37595 —Dates Last Seen— Lat/Long: 38°06'06" / 122°05'32" Township: 03N
Occ Rank: Unknown Element: 1993-10-XX UTM: Zone-10 N4217285 E579585 Range: 02W
Origin: Natural/Native occurrence Site: 1993-10-XX Precision: SPECIFIC Section: 16 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 12.5 ac Elevation: 0
Main Source: ALLEN, P. 1991 (MAP)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary:
Location: WEST OF GRIZZLY BAY, ALONG GOODYEAR SLOUGH FROM BAHIA NORTH 1 MILE TO MORROW ROAD CROSSING.
Comments:
Distribution: 13 COLONIES MAPPED AS 11 POLYGONS ALONG A 1 MILE LENGTH OF THE SLOUGH.
Ecological: BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
Threat:
General: MAIN SOURCE OF INFO FOR SITE IS MAP DETAIL FROM ALLEN (1991). LESS DETAILED MAP ALSO PROVIDED BY DWR REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994"(1994). INCLUDES FORMER EO# 84.
Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

ASTER LENTUS (cont.)
SUISUN MARSH ASTER
Element Code: PDASTOT540

—List Status—	NDDB Element Ranks	—Other Lists—
Federal: None	Global: G2	CNPS List: 1B
State: None	State: S2.2	R-E-D Code: 2-2-3

Occurrence No. 85 Map Index:37597 —Dates Last Seen— Lat/Long: 38°07'02" / 122°05'56" Township: 03N
 Occ Rank: Unknown Element: 1993-10-XX UTM: Zone-10 N4219023 E578980 Range: 02W
 Origin: Natural/Native occurrence Site: 1993-10-XX Precision: SPECIFIC Section: 08 Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 14.9 ac Meridian: M
 Trend: Unknown Elevation: 0
 Main Source: ALLEN, P. 1991 (MAP)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: SOLANO
 SNA Summary:
 Location: MORROW ISLAND, ALONG GOODYEAR SLOUGH IN THE VICINITY OF MORROW ISLAND FARM, WEST OF GRIZZLY BAY.
 Comments:
 Distribution: 15 COLONIES MAPPED AS 6 POLYGONS OVER APPROXIMATELY 1 MILE OF THE SLOUGH. MORE COLONIES MAY OCCUR IN THE AREA ACCORDING TO DWR REPORT, BUT NO SPECIFIC LOCATIONS GIVEN FOR THOSE.
 Ecological: BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
 Threat:
 General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL FROM 1991 SURVEY BY ALLEN. LESS DETAILED MAP ALSO PROVIDED BY DWR REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994" (1994).
 Owner/Manager: UNKNOWN

Occurrence No. 86 Map Index:37599 —Dates Last Seen— Lat/Long: 38°07'19" / 122°04'41" Township: 03N
 Occ Rank: Unknown Element: 1993-10-XX UTM: Zone-10 N4219555 E580809 Range: 02W
 Origin: Natural/Native occurrence Site: 1993-10-XX Precision: NON-SPECIFIC Section: 10 Qtr XX
 Presence: Presumed Extant Symbol Type: POINT Meridian: M
 Trend: Unknown Radius: 1/10 mile Elevation: 0
 Main Source: DEPT. OF WATER RESOURCES 1994 (LIT)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: SOLANO
 SNA Summary:
 Location: NORTHEAST END OF MORROW ISLAND, ALONG SUISUN SLOUGH ABOUT 0.75 MILE WEST OF CONFLUENCE WITH GRIZZLY BAY.
 Comments:
 Distribution: ONE COLONY MAPPED.
 Ecological: BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
 Threat:
 General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL PROVIDED BY DWR REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994" (1994).
 Owner/Manager: UNKNOWN

Occurrence No. 87 Map Index:37600 —Dates Last Seen— Lat/Long: 38°07'34" / 122°03'38" Township: 99X
 Occ Rank: Unknown Element: 1993-10-XX UTM: Zone-10 N4220003 E582333 Range: 99X
 Origin: Natural/Native occurrence Site: 1993-10-XX Precision: NON-SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Meridian: X
 Trend: Unknown Area: 63.7 ac Elevation: 0
 Main Source: DEPT. OF WATER RESOURCES 1994 (LIT)
 Quad Summary: VINE HILL (3812211/482D)*, FAIRFIELD SOUTH (3812221/482A)
 County Summary: SOLANO
 SNA Summary:
 Location: SOUTH END OF JOICE ISLAND, ALONG MOUTH OF SUISUN SLOUGH AND GRIZZLY BAY.
 Comments:
 Distribution: SEVERAL COLONIES MAPPED ALONG APPROXIMATELY 1 MILE OF THE SHORELINE.
 Ecological: BRACKISH SLOUGHS AND RIVERBANKS AFFECTED BY TIDAL FLUCTUATIONS. ASSOCIATED WITH SCIRPUS, TYPHA, AND JUNCUS.
 Threat:
 General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP DETAIL PROVIDED BY DWR REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994" (1994).
 Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

LATHYRUS JEPSONII VAR JEPSONII
DELTA TULE PEA
Element Code: PDFAB250D2

—List Status—
Federal: None
State: None

NDDB Element Ranks
Global: G5T2
State: S2.2

—Other Lists—
CNPS List: 1B
R-E-D Code: 2-2-3

—Habitat Associations—

General: FRESHWATER AND BRACKISH MARSHES. MOST OF DISTRIBUTION RESTRICTED TO THE SACRAMENTO/SAN JOAQUIN RIVER DELTA.
Micro: OFTEN FOUND W/TYPHA, ASTER LENTUS, ROSA CALIF., JUNCUS SPP., SCIRPUS, ETC. USUALLY ON MARSH AND SLOUGH EDGES.

Occurrence No. 26 Map Index:36512 —Dates Last Seen— Lat/Long: 38°05'17" / 122°01'43" Township: 03N
Occ Rank: Unknown Element: 1992-XX-XX UTM: Zone-10 N4215811 E585188 Range: 02W
Origin: Natural/Native occurrence Site: 1992-XX-XX Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: X
Trend: Unknown Radius: 1/10 mile Elevation: 5 ft
Main Source: DEPT. OF WATER RESOURCES 1994 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary: Ryer Island
Location: RYER ISLAND, CONCORD NAVAL WEAPONS STATION, SUISUN BAY.
—Comments—
Distribution: SINGLE COLONY MAPPED ON THE WEST HALF OF THE ISLAND ABOUT 0.7 MILE SOUTHEAST OF GARNET POINT.
Ecological:
Threat:
General: OBSERVED DURING 1985 BIOLOGICAL SURVEY BY TOM HARVEY AND LEE ROBINSON, SF BAY NATIONAL WILDLIFE REFUGE; AND
JIM PARKER, NWS CONCORD.
Owner/Manager: DOD-CONCORD NWS

Occurrence No. 27 Map Index:36518 —Dates Last Seen— Lat/Long: 38°04'20" / 122°02'16" Township: 03N
Occ Rank: Unknown Element: 1985-09-09 UTM: Zone-10 N4214045 E584411 Range: 02W
Origin: Natural/Native occurrence Site: 1985-09-09 Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: X
Trend: Unknown Area: 30.8 ac Elevation: 5 ft
Main Source: KOVACH, S. 1985 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary: Roe Island
Location: ROE ISLAND, SUISUN BAY.
—Comments—
Distribution: COMMON ALONG MOST OF THE SLOUGH EDGES. MAPPED IN WEST END OF ISLAND.
Ecological:
Threat:
General: OBSERVED DURING 1985 BIOLOGICAL SURVEY BY TOM HARVEY AND LEE ROBINSON, SF BAY NATIONAL WILDLIFE REFUGE; AND
JIM PARKER, NWS CONCORD.
Owner/Manager: DOD-NAVY

Occurrence No. 30 Map Index:09740 —Dates Last Seen— Lat/Long: 38°03'24" / 122°02'39" Township: 02N
Occ Rank: Unknown Element: 1985-09-09 UTM: Zone-10 N4212331 E583846 Range: 02W
Origin: Natural/Native occurrence Site: 1985-09-09 Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 43.4 ac Elevation:
Main Source: KOVACH, S. 1985 (LIT)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: SUISUN BAY; SEAL ISLANDS.
—Comments—
Distribution: COMMON AMONG MOST OF THE SLOUGH EDGES.
Ecological:
Threat:
General: OBSERVED DURING 1985 BIOLOGICAL SURVEY BY TOM HARVEY AND LEE ROBINSON, SF BAY NATIONAL WILDLIFE REFUGE; AND
JIM PARKER, NWS CONCORD.
Owner/Manager: DOD-NAVY

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

LATHYRUS JEPSONII VAR JEPSONII (cont.)
DELTA TULE PEA
Element Code: PDFAB250D2

—List Status—	—NDDB Element Ranks—	—Other Lists—
Federal: None	Global: G5T2	CNPS List: 1B
State: None	State: S2.2	R-E-D Code: 2-2-3

Occurrence No. 41 Map Index:24891 —Dates Last Seen— Lat/Long: 38°03'23" / 122°00'40" Township: 02N
 Occ Rank: Good Element: 1991-06-XX UTM: Zone-10 N4212338 E586749 Range: 01W
 Origin: Natural/Native occurrence Site: 1991-06-XX Precision: SPECIFIC Section: XX Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 12.3 ac Meridian: M
 Trend: Unknown Elevation: 5 ft
 Main Source: BOURSIER, P. 1991 (OBS)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: CONTRA COSTA
 SNA Summary:
 Location: CONCORD NAVAL WEAPONS STATION, 0.7 KM (0.5 MI) EAST OF BELLOMA SLOUGH ALONG THE SHORE OF SUISUN BAY.
 Comments:
 Distribution: MAPPED BETWEEN THE ROAD AND THE WATER'S EDGE.
 Ecological: TIDAL BRACKISH MARSH, FOUND IN AREAS DOMINATED BY LEPIDIUM LATIFOLIUM AND JUNCUS BALTICUS. THE LATHYRUS WAS GROWING ON AND THROUGH THE BRANCHES OF LEPIDIUM AND BACCHARIS PILULARIS SSP. CONSANGUINEA. LILAEOPSIS MASONII GROWING NEARBY.
 Threat:
 General: 13 PLANTS OBSERVED IN 1991. LAND IS PRESENTLY UNUSED; MOSQUITO ABATEMENT CHANNELS HAD BEEN DUG PREVIOUSLY IN THIS AREA.
 Owner/Manager: DOD-CONCORD NWS

Occurrence No. 87 Map Index:37688 —Dates Last Seen— Lat/Long: 38°05'28" / 122°05'42" Township: 03N
 Occ Rank: Unknown Element: 1992-XX-XX UTM: Zone-10 N4216132 E579337 Range: 02W
 Origin: Natural/Native occurrence Site: 1992-XX-XX Precision: SPECIFIC Section: 21 Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 96.4 ac Meridian: M
 Trend: Unknown Elevation: 5 ft
 Main Source: DEPT. OF WATER RESOURCES 1994 (LIT)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: SOLANO
 SNA Summary:
 Location: SOUTH END OF GOODYEAR SLOUGH BETWEEN I-680 AND SUISUN BAY, EAST OF CARQUINEZ STRAIT.
 Comments:
 Distribution: NUMEROUS COLONIES MAPPED ALONG THE SOUTHERN MILE OF THE SLOUGH IN 1992.
 Ecological:
 Threat:
 General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP FROM 1994 REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994 (DWR). SEVERAL COLONIES REPORTED IN 1991 MAP BY P. ALLEN.
 Owner/Manager: UNKNOWN

Occurrence No. 88 Map Index:37689 —Dates Last Seen— Lat/Long: 38°07'03" / 122°05'54" Township: 03N
 Occ Rank: Unknown Element: 1992-XX-XX UTM: Zone-10 N4219033 E579040 Range: 02W
 Origin: Natural/Native occurrence Site: 1992-XX-XX Precision: SPECIFIC Section: 08 Qtr XX
 Presence: Presumed Extant Symbol Type: POLYGON Area: 43.9 ac Meridian: M
 Trend: Unknown Elevation: 5 ft
 Main Source: DEPT. OF WATER RESOURCES 1994 (LIT)
 Quad Summary: VINE HILL (3812211/482D)
 County Summary: SOLANO
 SNA Summary:
 Location: GOODYEAR SLOUGH ALONG WEST SIDE OF MORROW ISLAND, WEST OF SUISUN BAY.
 Comments:
 Distribution: NUMEROUS COLONIES MAPPED ALONG THE SLOUGH IN VICINITY OF MORROW ISLAND FARM, 1992.
 Ecological:
 Threat:
 General: MAIN SOURCE OF INFORMATION FOR THIS SITE IS MAP FROM 1994 REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994 (DWR). SEVERAL COLONIES REPORTED IN 1991 MAP BY P. ALLEN.
 Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

LATHYRUS JEPSONII VAR JEPSONII (cont.)
DELTA TULE PEA
Element Code: PDFAB250D2

—List Status—
Federal: None
State: None

—NDDB Element Ranks—
Global: G5T2
State: S2.2

—Other Lists—
CNPS List: 1B
R-E-D Code: 2-2-3

Occurrence No. 116 Map Index: 37727 —Dates Last Seen— Lat/Long: 38°07'37" / 122°04'55" Township: 03N
Occ Rank: Unknown Element: 1992-XX-XX UTM: Zone-10 N4220106 E580477 Range: 02W
Origin: Natural/Native occurrence Site: 1992-XX-XX Precision: SPECIFIC Section: 10 Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Area: 32.6 ac Meridian: M
Trend: Unknown Elevation: 5 ft
Main Source: DEPT. OF WATER RESOURCES 1994 (LIT)
Quad Summary: FAIRFIELD SOUTH (3812221/482A)*, VINE HILL (3812211/482D)
County Summary: SOLANO
SNA Summary:
Location: SUISUN SLOUGH ABOUT 0.5-1 MILE SOUTH OF CONFLUENCE WITH CORDELIA SLOUGH, SUISUN SLOUGH.
Comments:
Distribution: SEVERAL COLONIES MAPPED IN 1992.
Ecological:
Threat:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS MAP FROM 1994 REPORT "SUMMARY OF SENSITIVE PLANT AND WILDLIFE RESOURCES IN SUISUN MARSH DURING WATER YEARS 1984-1994 (DWR).
Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

MONARDELLA VILLOSA SSP GLOBOSA
ROBUST MONARDELLA
Element Code: PDLAM180P7

—List Status—
Federal: None
State: None

NDDB Element Ranks
Global: G5TH
State: SH?

—Other Lists—
CNPS List: 1B
R-E-D Code: 3-2-3

—Habitat Associations—

General: CHAPARRAL, CISMONTANE WOODLAND.
Micro: OPENINGS. 30-300M.

Occurrence No. 5 Map Index: 32594 —Dates Last Seen— Lat/Long: 38°00'49" / 122°07'57" Township: 02N
Occ Rank: Unknown Element: XXXX-XX-XX UTM: Zone-10 N4207459 E576158 Range: 02W
Origin: Natural/Native occurrence Site: XXXX-XX-XX Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POINT Meridian: M
Trend: Unknown Radius: 1 mile Elevation: 200 ft
Main Source: JEPSON, W. 1943 (LIT)
Quad Summary: BENICIA (3812212/482C)*, BRIONES VALLEY (3712282/465B), VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary:
Location: MARTINEZ.
—Comments—
Distribution:
Ecological:
Threat:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS UNDATED COLLECTION BY K. BRANDEGEE CITED IN "A FLORA OF CALIFORNIA, VOL 3" BY JEPSON (1948).
Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Data Base

Search of All Records in the Vine Hill
7.5' USGS Quadrangle

CORDYLANTHUS MOLLIS SSP MOLLIS
SOFT BIRD'S-BEAK
Element Code: PDSCROJ002

—List Status—
Federal: Endangered
State: Rare

—NDDB Element Ranks—
Global: G2T1
State: S1.1

—Other Lists—
CNPS List: 1B
R-E-D Code: 3-2-3

—Habitat Associations—

General: COASTAL SALT MARSH.

Micros: IN COASTAL SALT MARSH WITH DISTICHLIS, SALICORNIA, FRANKENIA, ETC. 0-3M.

Occurrence No. 4 Map Index:09524 —Dates Last Seen— Lat/Long: 38°01'43" / 122°07'34" Township: 02N
Occ Rank: None Element: 1881-07-12 UTM: Zone-10 N4209144 E576698 Range: 02W
Origin: Natural/Native occurrence Site: 1993-08-18 Precision: NON-SPECIFIC Section: XX Qtr XX
Presence: Extirpated Symbol Type: POINT Meridian: M
Trend: Unknown Radius: 1 mile Elevation: 5 ft
Main Source: CHUANG & HECKARD 1973 (LIT)
Quad Summary: BENICIA (3812212/482C)*, VINE HILL (3812211/482D)
County Summary: CONTRA COSTA, SOLANO
SNA Summary:
Location: SALT MARSHES NEAR MARTINEZ.
Comments:
Distribution:
Ecological: SALT MARSH HABITAT.
Threat: MUCH OF AREA DREDGED, FILLED, DIKED AND DEVELOPED. INVASION OF EXOTIC PLANTS, FLUCTUATING SALINITY AND SHORE EROSION.
General: POPULATION LAST SEEN IN 1881. NO SUITABLE HABITAT REMAINS IN 1986. MARSHES TO W AND E OF MARTINEZ MARINA SEARCHED IN 1991 AND 1993: NO PLANTS FOUND.
Owner/Manager: EBRPD-MARTINEZ SHORELINE RP

Occurrence No. 14 Map Index:09730 —Dates Last Seen— Lat/Long: 38°02'32" / 122°03'04" Township: 02N
Occ Rank: Good Element: 1995-11-02 UTM: Zone-10 N4210713 E583275 Range: 02W
Origin: Natural/Native occurrence Site: 1995-11-02 Precision: SPECIFIC Section: XX Qtr XX
Presence: Presumed Extant Symbol Type: POLYGON Meridian: M
Trend: Unknown Area: 12.3 ac Elevation: 7 ft
Main Source: RUYGT, J. 1993 (OBS)
Quad Summary: VINE HILL (3812211/482D)
County Summary: CONTRA COSTA
SNA Summary: Hastings Slough
Location: CONCORD NAVAL WEAPONS STATION; HASTINGS SLOUGH, N OF WATERFRONT RD NEAR BRIDGE, AND JUST W OF OXBOW.
Comments:
Distribution: TWO SUBPOPULATIONS: ONE ON W SIDE OF LEVEE NEAR TRANSITION TO UPLAND VEGETATION AND OTHER 600M TO THE W OF THE SOUTHERN BRANCH OF THE OXBOW WHERE IT JOINS HASTINGS SLOUGH. IMPAIRED HYDROLOGY AND INVASION BY LEPIDIUM LATIFOLIUM THREATEN.
Ecological: EDGE OF SALT MARSH VEGETATION IN DRY SITES THAT APPEAR TO BE SEASONALLY FLOODED. WITH DISTICHLIS SPICATA, SALICORNIA VIRGINICA, TRIGLOCHIN MARITIMA, ATRIPLEX TRIANGULARIS, SCIRPUS AMERICANUS, LEPIDIUM LATIFOLIUM, AND LIMONIUM CALIFORNICA.
Threat: HABITAT USED AND DISTURBED BY THE NAVY IN THE PAST. FORMER HOMESITE? REMNANTS OF FENCE, OLD ABANDONED BOATS, GARBAGE.
General: HUNDREDS OF PLANTS IN A 60 FOOT STRIP IN 1985, 1000-1500 IN '88, 5833 PLANTS OBSERVED OVER 8900 SQ METERS IN '93, OVER 4000 IN 1994, 23,000 PLANTS IN NW POLYGON IN '95. POSSIBLE THAT MORE PLANTS OCCUR FURTHER E; MORE SEARCHES NEEDED.
Owner/Manager: DOD-CONCORD NWS