OE-0209

1995 Annual Biological Monitoring Report for Unexploded Ordnance Removal Sites at Former Fort Ord

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1995 Annual Biological Monitoring Report for UXO Removal at Former Fort Ord

EXECUTIVE SUMMARY

Compliance with Fort Ord's Installation-Wide Multispecies Habitat Management Plan (HMP) (U S. Army Corps of Engineers 1994) requires that biological resources be monitored after unexploded ordnance (UXO) removal activities have been completed. The monitoring is to confirm that vegetation and special-status species populations have adequately regenerated.

The methods employed and the results of the second year of study, designed to adhere to the HMP guidelines, are presented in this report. This information is intended to provide direction during habitat recovery and restoration efforts following the removal of UXO.

Vegetation studies involved conducting surveys for sand gilia (*Gilia tenuiflora* ssp. *arenaria*) at site 12, which was subject to UXO removal activities, and of site 10, which is slated for UXO removal activities in the near future. The sand gilia population at site 12 was not affected by the UXO removal activities. The boundaries of the population on site 10 were demarcated with flagging tape so that the area could be identified by UXO removal teams. Data were collected on the sand gilia at site 10 to characterize the population.

No vegetation studies were conducted to characterize maritime chaparral because no new UXO sites supporting maritime chaparral have been disturbed since vegetation baseline data were collected in 1994.

Wildlife surveys focused on (1) determining the presence or absence of federally listed fairy shrimp species and associated special-status wetland amphibian species, and (2) describing the physical and biological characteristics of water bodies potentially affected by UXO removal.

No federally listed threatened or endangered fairy shrimp species were observed during the wildlife investigations. Larvae of California tiger salamanders (*Ambystoma tigrinum californiense*), a Category 1 candidate for federal listing as threatened or endangered, were observed in water bodies 5 and 11

Vegetation conditions in water bodies potentially affected by UXO removal did not appear substantially different from conditions observed during the baseline studies.

BACKGROUND

1994 Baseline Studies

In early 1994, the U.S. Army Corps of Engineers (Corps) retained Jones & Stokes Associates to collect baseline data on biological resources at former Fort Ord that could potentially be affected by UXO removal activities. UXO removal is necessary on several parts of the installation to allow disposal of the property to various public and private entities.

Biological baseline data were collected in 1994 in compliance with guidelines related to UXO removal described in Chapter 3 of the Installation-Wide Multispecies HMP for Fort Ord (U.S. Army Corps of Engineers 1994). Results of the biological baseline studies were presented in the Fort Ord 1994 Annual Monitoring Report for Biological Baseline Studies at Unexploded Ordnance Sites (Jones & Stokes Associates 1995).

Vegetation baseline data were collected at six sites where UXO removal was anticipated. In addition, baseline data on wetland wildlife species were collected at 12 water bodies that could potentially be affected by UXO removal activities (Figure 1). Baseline vegetation data were also collected at 9 of these 12 water bodies.

Although there are several UXO removal sites at former Fort Ord beyond those monitored, the HMP only requires that data be collected at sites within areas proposed as habitat reserves or corridors that support maritime chaparral, wetlands, or populations of sand gilia, Monterey spineflower, Seaside bird's-beak, or coast wallflower. Baseline data were collected only at sites that fit these criteria and were planned for UXO removal in the near future.

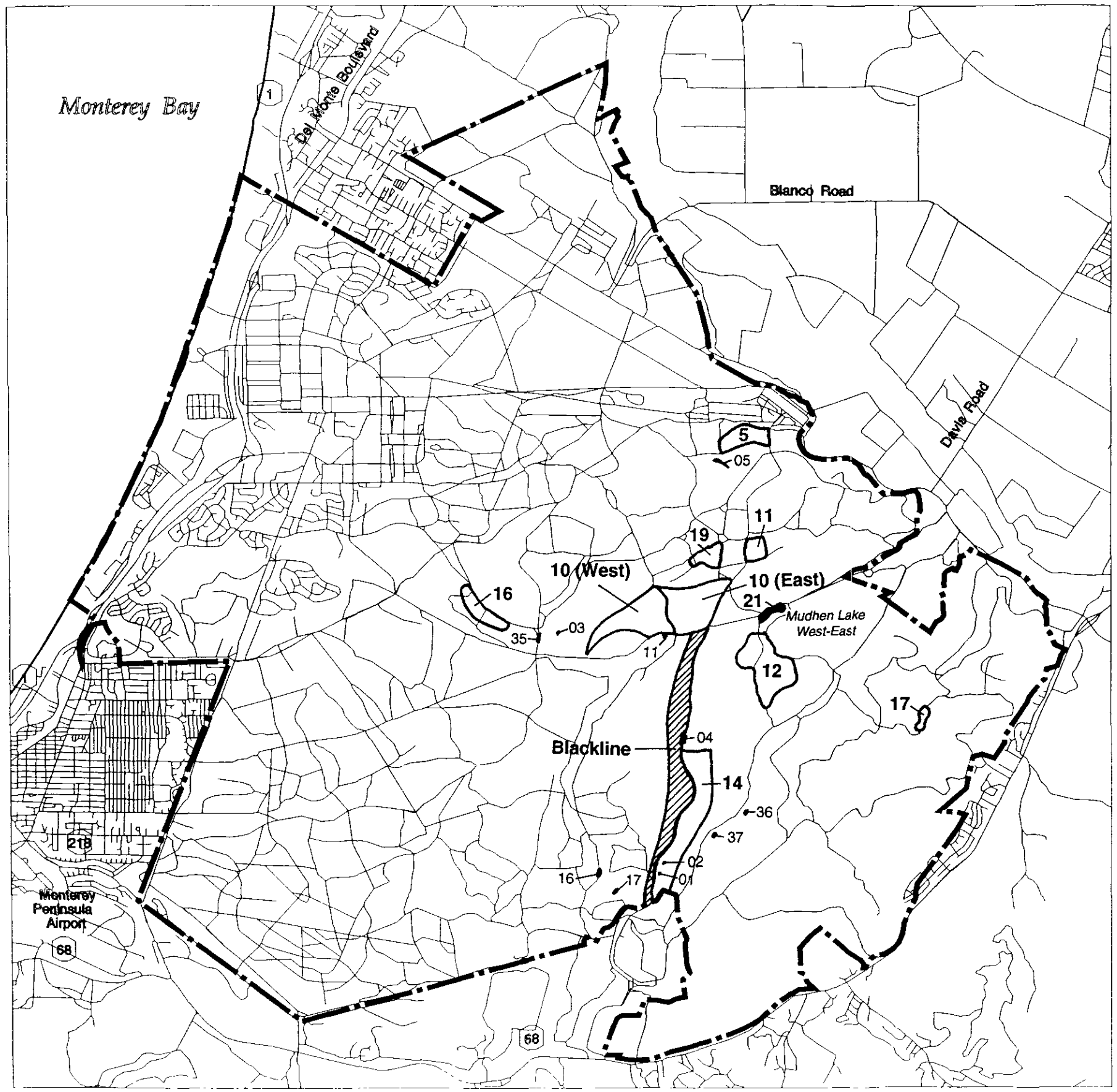
1995 Monitoring and Surveys

Monitoring of sites that were disturbed by UXO removal since completion of the biological baseline studies was initiated in the winter of 1995. Monitoring of disturbed sites was completed to fulfill additional guidelines in Chapter 3 of the HMP for monitoring of regeneration of vegetation and special-status species populations after UXO removal. The HMP requires 5 years of monitoring after UXO removal. The 1995 monitoring is considered the first of these 5 years.

Vegetation Monitoring

Of the 6 UXO removal sites and 12 water bodies where baseline data were collected in 1994, UXO removal sites 12 (Picnic Canyon) and 21 (Mudhen Lakes East and West) were the only sites disturbed. UXO removal activities also took place at sites outside of water bodies 5, 16, and 17

Figure 1
Sites Considered for 1994
Biological Monitoring Surveys



LEGEND

- Proposed Unexploded Ordnance Removal Site
- Water Bodies (Vernal Pools and Ponds)
- Blackline

Scale 1:60,000

0 1 2 3 miles
0 2,500 5,000 7,500 10,000 feet
0 1 2 3 kilometers

which could indirectly affect these wetlands. Because these were the only areas disturbed by UXO removal activities between 1994 and 1995, they are the only sites that required vegetation monitoring.

No new baseline surveys were conducted in the remaining four UXO removal sites and at four of the remaining seven water bodies The 1994 baseline data for these areas are considered sufficient to support accurate vegetation monitoring once UXO removal occurs. However, baseline vegetation surveys were conducted at water bodies 11, 36, and 37 because no vegetation baseline data were collected at these sites in 1994. Also, additional sand gilia surveys were conducted at site 10 in order to flag sand gilia populations before UXO removal occurred. Populations were flagged to notify UXO removal teams of the presence of a sensitive resource.

Surveys for threatened and endangered fairy shrimp species and associated special-status wetland amphibians were conducted in all water bodies surveyed during the 1994 baseline studies. Five water bodies were associated with UXO removal sites that had been disturbed (pools 5, 16, 17, and Mudhen Lakes East and West). Pool 5 was considered potentially disturbed by UXO removal activities at site 5; pools 16 and 17 were considered potentially disturbed by UXO removal activities at Wolf Hill; and Mudhen Lakes East and West were considered potentially disturbed by removal of UXO at site 21. Surveys in these water bodies are considered the first year of post-disturbance monitoring. All other water bodies were also surveyed in order to follow the U.S. Fish and Wildlife Service (USFWS) protocol for determining the presence or absence of listed fairy shrimp species.

The USFWS protocol requires that water bodies be surveyed for fairy shrimp once every 2 weeks during the time pools first hold water until the time they dry. This series of surveys must be completed for two consecutive wet seasons with no observations of listed fairy shrimp species to make a determination that listed species do not occur. The 1995 survey season is considered the first year when the USFWS survey protocol was completed.

General Contents and Purpose of this Report

The findings presented in this report represent the first year of vegetation monitoring at sites 12 and 21, the first year of wetland monitoring at pools 5, 16, 17, and Mudhen Lakes East and West, the first complete year of USFWS protocol level surveys for listed species of fairy shrimp, the second year of sand gilia surveys at site 10, and the first collection of vegetation baseline data at water bodies 11, 36, and 37.

This information will be used during UXO removal activities to identify measures to minimize impacts on HMP resources and as a baseline in restoration efforts following UXO removal to reestablish healthy maritime chaparral, vernal pools, and ponds. The objectives of these efforts will be to restore ecosystem function in these habitats and to establish self-sustaining populations of HMP species.

METHODS

The methods described below were used to gather data on HMP plants, wildlife, and habitats. These methods were developed in accordance with the monitoring guidelines specified in the HMP. Sites addressed during the 1995 biological monitoring surveys are shown in Figure 2. The following areas were surveyed or monitored:

- **Site 12.** A sand gilia population identified at site 12 in 1994 was monitored to determine if it had been affected by UXO removal activities.

- **Water bodies 5, 16, 17, and Mudhen Lakes East and West (site 21).** UXO removal activities occurred in or near these sites. Potential effects on vegetation and wetland wildlife were monitored.

- **Water bodies 11, 36, and 37.** Vegetation baseline data were collected at these water bodies to support the wetland wildlife monitoring.

- **Twelve water bodies potentially within or adjacent to UXO removal areas.** All water bodies where wildlife baseline data were collected in 1994 were also surveyed for wetland wildlife species in accordance with the USFWS fairy shrimp survey protocol.

- **The eastern section of site 10 (east of Hennekins Ranch Road).** This location was surveyed to relocate and flag the known sand gilia population to ensure UXO removal personnel would be able to locate it during cleanup. Data were also collected to characterize the population.

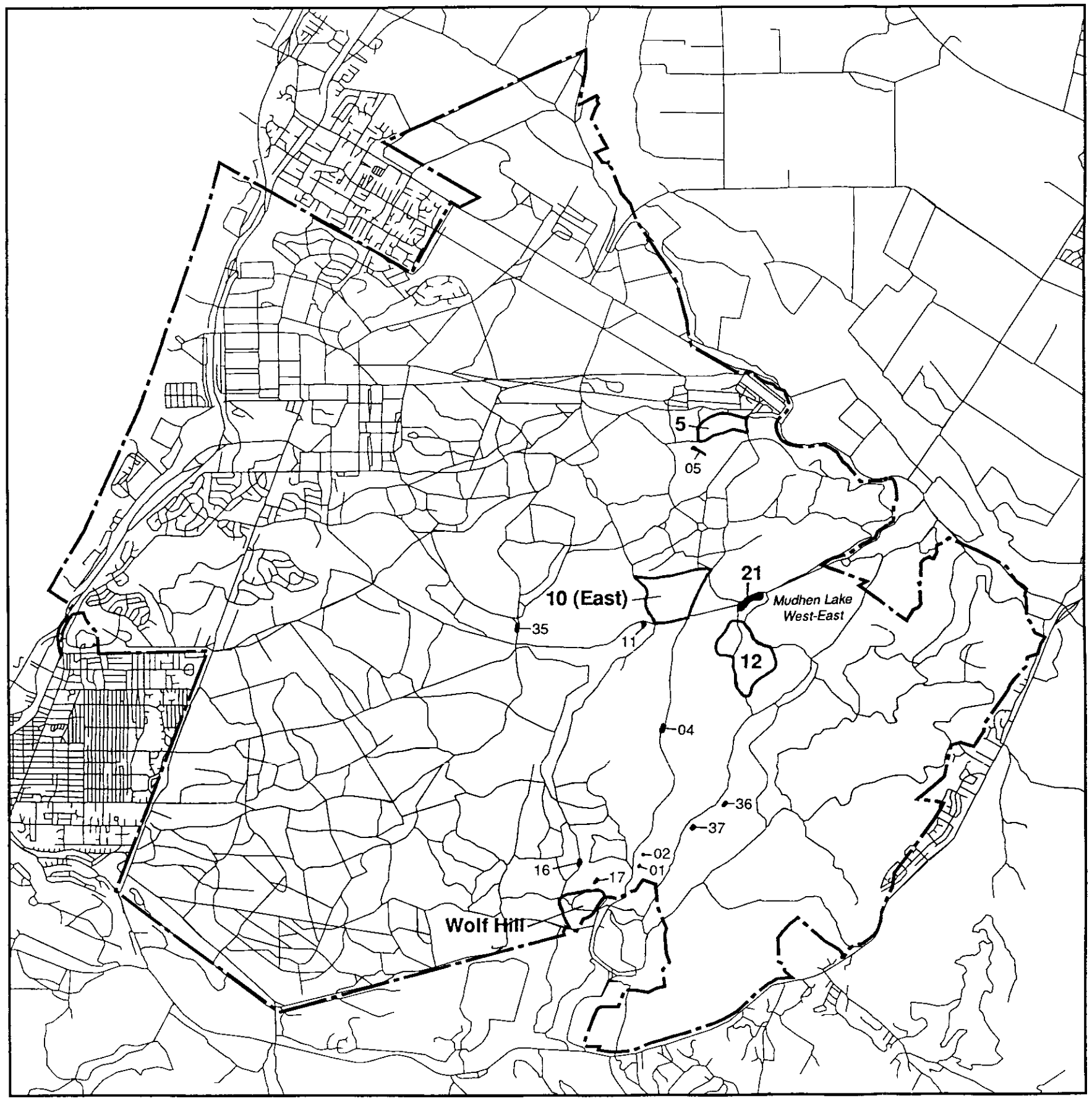
Plants Considered in the Habitat Management Plan

The methods used to monitor species of herbaceous and shrub vegetation considered in the HMP and to record wetland vegetation baseline data are described below.

Herbaceous Species

Jones & Stokes Associates botanists conducted field surveys on April 11 through 14, 1995, for sand gilia on sites 10 and 12. The objectives of the surveys were to relocate the populations, determine the condition of sand gilia at site 12 following UXO removal, and flag the population on site 10, which was scheduled for UXO removal in the near term. The sand gilia populations were relocated and mapped on color copies of 1:12,000-scale aerial photographs taken in 1992 Once relocated, the population size was estimated, the health and vigor of the populations were assessed, and the surrounding habitats were described.

Figure 2
Sites Considered for 1995
Biological Monitoring Surveys



LEGEND

Unexploded Ordnance Removal Site

Water Bodies (Vernal Pools and Ponds)

Scale 1:60,000

0 1 2 3 miles

0 2,500 5,000 7,500 10,000 feet

0 1 2 3 kilometers

A localized occurrence of Seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*) was found during the 1992 baseline surveys along Eucalyptus Road in the eastern part of site 10. This late-blooming species will be relocated shortly and shown to the base biologist, who will inform UXO personnel of its occurrence and flag it prior to UXO removal activities.

Site 19, another site proposed for near-term UXO removal, was not visited because no sand gilia was found during previous surveys on this site.

Surveys for other herbaceous HMP species were not conducted because these species were not observed on these sites during the 1994 surveys or during the 1992 baseline surveys (U.S. Army Corps of Engineers 1992). The 1994 baseline data for these areas are considered sufficient to support accurate vegetation monitoring once UXO removal occurs.

Shrub Species

No field surveys were conducted for HMP shrub species. Sites where baseline data were collected in 1994 were not monitored because no UXO removal activities have occurred in these areas. The 1994 vegetation baseline data for these areas are considered sufficient to support accurate vegetation monitoring once UXO removal occurs. No new sites supporting maritime chaparral habitat were identified for near-term UXO removal, so no new surveys were required.

Wildlife Considered in the Habitat Management Plan

The HMP wildlife species that could be affected by current UXO removal activities and that require post-disturbance monitoring in the HMP include federally listed fairy shrimp species and associated wetland amphibian species (California tiger salamander, California red-legged frog). The sampling method and means of identifying fairy shrimp and amphibians are described below.

Although only five water bodies required monitoring because of UXO removal in the vicinity (pools 5, 16, 17, and Mudhen Lakes East and West), an additional seven water bodies that had not been disturbed were surveyed. These additional seven water bodies (which could be disturbed by UXO removal activities in the future) were surveyed to follow the USFWS protocol for determining the presence or absence of listed fairy shrimp species. If it can be confirmed that listed fairy shrimp species do not occur in these water bodies, future monitoring for the species after UXO removal will not be required.

Sampling Method

During winter 1995, Jones & Stokes Associates biologist Sean Bechta conducted field surveys for special-status shrimp and associated wetland wildlife species on January 11 and 26, February 10 and 24, and March 10 and 24, 1995. Fairy shrimp surveys were conducted under Federal Fish and

Wildlife Permit Number PRT-795934 authorized through Section 10(a)(1)(A) of the Endangered Species Act. Field surveys followed USFWS Interim Survey Guidelines to Permittees for the Endangered Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, Riverside Fairy Shrimp, Vernal Pool Tadpole Shrimp, and the Threatened Vernal Pool Fairy Shrimp (1995).

A total of 12 water bodies were surveyed. Water bodies were labeled as numbers 01, 02, 04, 05, 11, 16, 17, 35, 36, 37, Mudhen Lake West, and Mudhen Lake East. This labeling system was carried over from wetland wildlife surveys conducted by Jones & Stokes Associates in 1992 (U.S. Army Corps of Engineers 1992). New numbers were added as needed for water bodies not previously surveyed. The location of each water body surveyed is shown in Figure 2. Each water body was investigated during each of the six field visits

All surveyed water bodies were either within proposed UXO removal sites or close enough to the edge of a site that, if the area of UXO occurrence expanded, the water body could be affected.

Each water body was surveyed using a dip net with appropriate mesh size to capture fairy shrimp In several instances, a "kick" net of larger mesh size was also used to attempt to capture amphibian larvae. The number of times each net was passed through the water and the relative abundance and species of invertebrates and amphibians captured were recorded. Water body characteristics such as depth, water temperature, turbidity, and water surface area, as well as wildlife species observed near the water body, were also recorded. All data were documented on standardized data sheets (see Appendix A).

Biologists sampled both the perimeter and the water column of each water body. Depth was measured at the deepest point possible up to 4 feet deep. If the water column could be sampled sufficiently and the depth determined without entering a water body, all sampling was done from shore to limit disturbance of the habitat.

Fairy Shrimp Identification

Where fairy shrimp were encountered, a general level of abundance was determined in the field. The abundance estimate was based on the number of fairy shrimp captured per pass of the dip net through the water. Voucher specimens of captured fairy shrimp were preserved in alcohol as per the standards of the California Academy of Sciences and brought to Jones & Stokes Associates' office for identification. Biologists qualified in fairy shrimp identification examined the voucher specimens and determined the species of fairy shrimp present.

Amphibian Identification

All amphibian egg masses, larvae, and adults encountered during surveys were identified in the field, and species were recorded on the data sheets. No voucher specimens were collected

Photography Points

Standardized photography points were established at each water body in 1994. Slides were taken from the photography point during each sampling visit (except for the February 10 survey when the camera battery was expired), as well as from other locations in several instances. One complete set of slides has been turned over to the Corps Sacramento District project manager, another set was delivered to the Army biologist at the Presidio of Monterey Annex Environmental Office, and a third set is available at Jones & Stokes Associates' office.

Wetland Vegetation Sampling

On April 13 and 14, 1995, Jones & Stokes Associates botanists recorded the vegetation characteristics of eight water bodies (5, 16, 17, 11, 36, 37, and Mudhen Lakes East and West). Data collected included the dominant species and percent cover occupied by submergent, floating, and emergent plants.

Water bodies 5, 16, 17, and Mudhen Lakes East and West were surveyed because they could be disturbed by UXO removal in their vicinity. Pool 5 was considered potentially disturbed by UXO removal activities at site 5; pools 16 and 17 were considered potentially disturbed by UXO removal activities at Wolf Hill; and Mudhen Lakes East and West were considered potentially disturbed by removal of UXO at site 21. Vegetation surveys in these water bodies are considered part of the first year of post-disturbance monitoring.

Water bodies 11, 36, and 37 were surveyed to provide vegetation baseline data prior to disturbance from UXO removal. No vegetation baseline data were collected at these sites during the 1994 baseline surveys. Data were collected in 1995 to describe existing conditions so they may be compared with conditions after UXO removal is complete.

RESULTS

Sand Gilia

Sand gilia populations at UXO sites 10 and 12 were identified previously during focused surveys for sand gilia in 1993 and 1994. The population at site 10 was revisited this year to flag the boundaries for identification by UXO removal personnel. The population is located in the eastern section of site 10 (Figures 2 and 3).

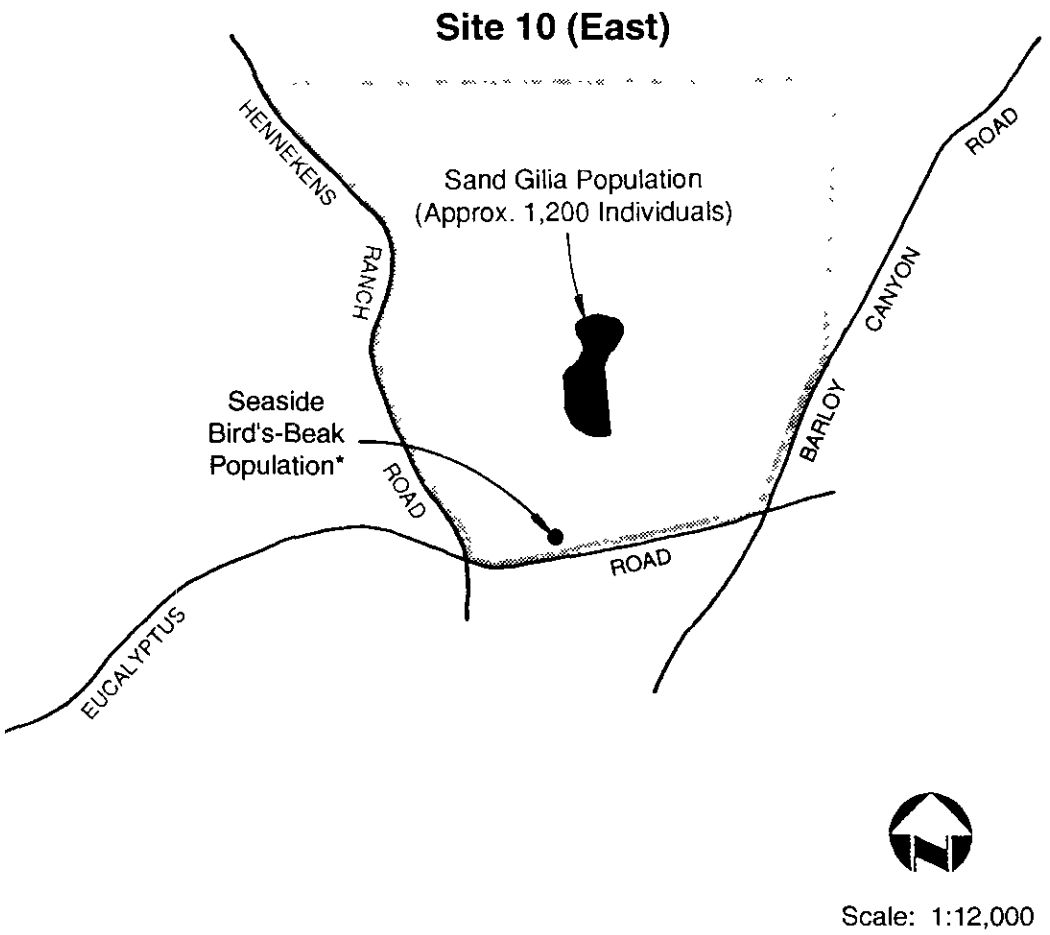
Roughly 1,200 individuals were observed over an approximately 2.5-acre area (Figure 3). Individuals were present at moderate density and were scattered in a patchy distribution throughout the area. The population was greatly expanded, both in overall distribution and density, as compared to that present in 1994. The expansion, health, and vigor of the population can be attributed to the extremely wet winter of 1995 that provided optimal conditions for sand gilia germination and establishment The areas supporting sand gilia were characterized by a sandy substrate and approximately 60% total vegetative cover. Plant species associated with this sand gilia population are chamise (*Adenostoma fasiculatum*), rush rose (*Helianthemum scoparium*), California croton (*Croton californicus*), common wedge-leaf horkelia (*Horkelia cuneata* var. *cuneata*), and sticky monkeyflower (*Mimulus auranticus*).

At site 12, sand gilia occurs along an old road and in adjacent areas on a slope above an existing dirt road (Figure 4). The dense population totaled approximately 2,500 individuals this year, near double that in 1994 The area occupied by sand gilia was also slightly larger, covering approximately 1 acre. Species associated with this sand gilia population are wild oat (*Avena fatua*), red brome (*Bromus rubens*), bracken fern (*Pteridium aquilinum* var. *pubescens*), blue dicks (*Dichelostemma capitatum*), and California filago (*Filago californica*). The surrounding vegetation, which is dominated by oak woodland and coastal scrub, consists of species such as coast live oak (*Quercus agrifolia*), black sage (*Salvia mellifera*), Eastwood's ericameria (*Ericameria fasciculata*), and coyote brush (*Baccharis pilularis*). The population was not affected by UXO activities that occurred elsewhere within site 12.

Wetland Wildlife Species

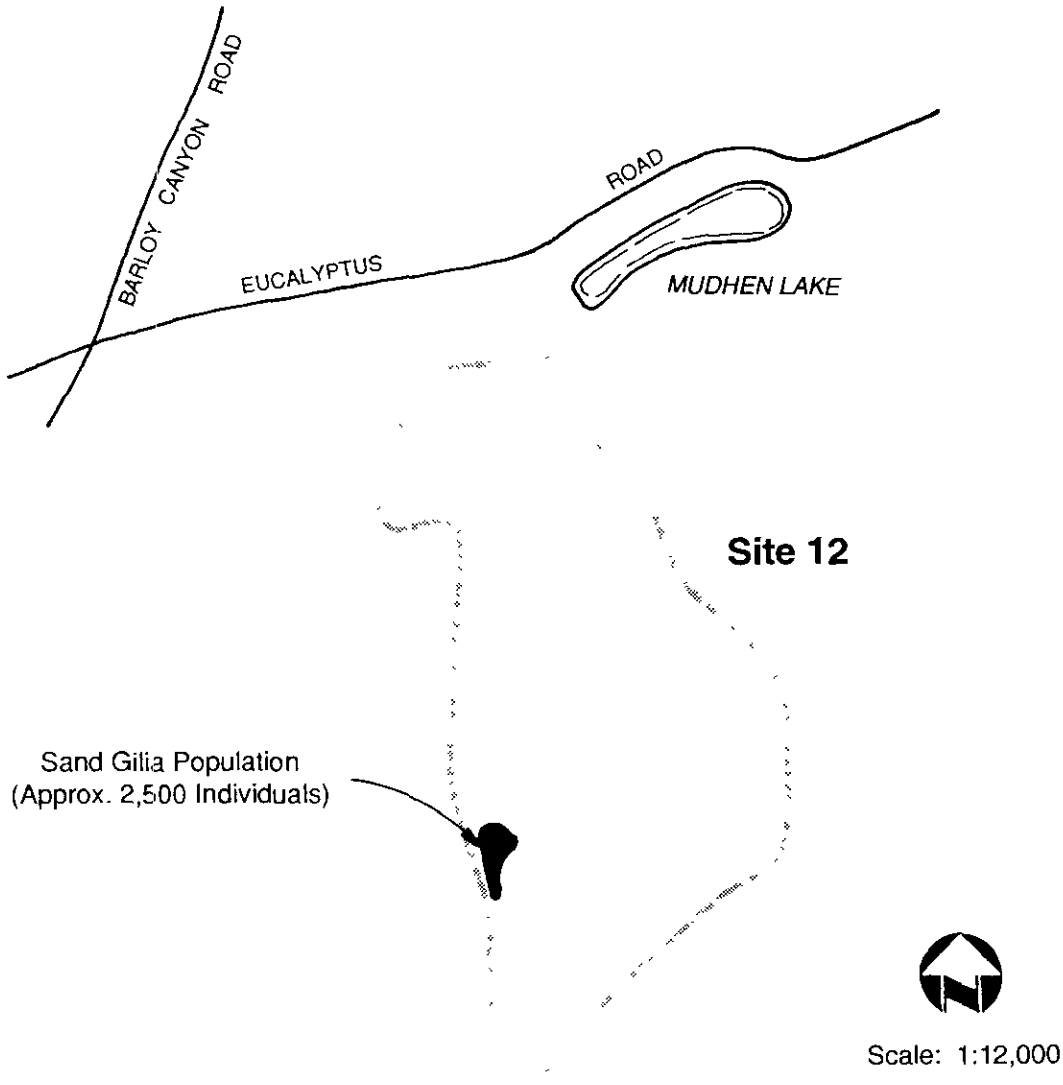
Results of the 1995 fairy shrimp and amphibian investigations are described below. For water bodies 5, 16, 17, and Mudhen Lakes East and West, the survey results support the first year of biological monitoring after UXO removal. For the remaining seven water bodies, the survey results are considered the first year of data toward completion of the USFWS survey protocol for determining the presence or absence of listed species of fairy shrimp.

Figure 3
Area Occupied by Sand Gilia and Approximate Location of Seaside Bird's-Beak Population at Site 10 (East) during 1995 Surveys



* Source: U.S. Army Corps of Engineers, Sacramento District 1992.

Figure 4
Area Occupied by Sand Gilia at Site 12
during 1995 Surveys



Fairy Shrimp

Table 1 summarizes the results of the 1995 fairy shrimp surveys at Fort Ord. The pool number, habitat classification, approximate size, depth during each visit, occurrence and abundance of fairy shrimp species, and vegetation characteristics of each water body are listed. Vegetation data for pools 11, 36, and 37 were collected in 1995. Vegetation data for the remaining pools were collected during the 1994 baseline surveys.

California linderiella (*Linderiella occidentalis*) was the only fairy shrimp species encountered during the 1995 wetland wildlife surveys at Fort Ord. No fairy shrimp species listed as threatened or endangered under the Endangered Species Act were observed.

Survey Timing. The protocol for fairy shrimp surveys provided by the USFWS at the time of the 1995 field visits required surveys of ephemeral water bodies every 2 weeks beginning when water bodies first hold water and ending when they are dry.

When surveys were initiated in mid-January 1995, all 12 water bodies surveyed were holding at least 1 inch of water. However, many of these water bodies, such as Mudhen Lake and stock ponds 36 and 37, hold water all year except under drought conditions. Also, UXO removal personnel who had been at former Fort Ord for several months stated that ephemeral water bodies they encountered first began holding water after a series of winter storms within a week prior to surveys beginning

All listed fairy shrimp species require more than a week of inundation to hatch from eggs and mature to adults. Because surveys were initiated within a week after ephemeral water bodies began to hold water, no occurrences of listed species would be missed. It is believed that USFWS survey protocol requirements for timing of survey initiation were fulfilled.

Not all ephemeral water bodies at Fort Ord were dry when surveys were ended. However, occurrences of late-season fairy shrimp were not likely to be missed during the survey. As stated above, many of the water bodies where California linderiella occur at Fort Ord are permanent or semi-permanent and retain water well beyond the time adult fairy shrimp typically occur. Also, the decline in California linderiella occurrence between surveys indicates that fairy shrimp had completed or were very close to completing their life cycle for the year. These results correspond with data collected during wetland wildlife surveys in 1992 and 1994. California linderiella were present in several water bodies in late March of both years, but by mid to late April, none were encountered. It is believed that USFWS survey protocol requirements for timing of survey completion were fulfilled.

Special-Status Amphibians

California tiger salamander larvae (*Ambystoma tigrinum californiense*) were observed in two water bodies during the 1995 surveys, pools 05 and 11 (Figure 2). Potential tiger salamander eggs were also observed in pools 01 and 02. Tiger salamander larvae were observed in pool 01 in 1992. However, all potential salamander eggs (as well as most Pacific treefrog [*Hyla regilla*] eggs)

Table 1. Results of Winter and Spring 1995 Fairy Shrimp Surveys at Fort Ord

				Occurrence of California Linderiella						Water Depth (inches)						Vegetation				
Water Body	Habitat Classification	Approximate Size	Listed Fairy Shrimp Observed	Abundance Visit 1	Abundance Visit 2	Abundance Visit 3	Abundance Visit 4	Abundance Visit 5	Abundance Visit 6	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6	Dominants	Percent Submergent	Percent Floating	Percent Emergent	Absolute Cover (Percent)
01	Dammed Swale	1,500 sq ft	None	None	None	High	Moderate	Low	None	>40	36	36	40	>40	>40	[a] Eleocharis macrostachya	0	0	100	35
02	Dammed Swale	300 sq ft	None	None	None	Low To Moderate	Low To Moderate	None	None	25	24	27	24	34	32	[a] Eleocharis macrostachya	0	0	100	30
04	Stock Pond	0.25 acre	None	None	None	None	None	None	None	19	>40	>40	>40	>40	>40	[a] Bromus rubens, Gnaphalium sp., Polypogon monspeliensis, and Bromus hordeaceus	0	0	100	25
05	Vernal Pool	3.0 acres	None	None	Moderate	Moderate	Low	None	Very Low	11	17	20	20	30	>40	[a] Eleocharis macrostachya, Juncus balticus, Rumex crispus, and Lotus corniculatus	0	0	100	90
11	Vernal Pool	0.5 acre	None	Larvae[c] Present	None	Moderate	Moderate To High	None	Moderate	1	12	9	10	25	–	[b] Eleocharis macrostachya and Rumex crispus	0	0	100	90
16	Pond	0.5 acre	None	None	High	High	High	Low To Moderate	Low	>40	>40	>40	>40	>40	>40	[b] Cyperus sp., Carex spp., and Juncus effusus	0	0	100	10
17	Marsh/ Pond	0.15 acre	None	None	None	None	None	None	None	11	10	16	7	21	10	[b] Juncus effusus	0	0	100	80
35	Swale	0.4 acre	None	Moderate	Moderate	High	Moderate	None	None	30	40	20	15	>40	>40	[a] Eleocharis macrostachya and Plantago lanceolata	0	0	100	15
36	Stock Pond	0.3 acre	None	None	None	None	None	None	None	>40	>40	>40	>40	>40	>40	[b] Eleocharis macrostachya, and Xanthium strumarium	0	0	100	5
37	Stock Pond	0.5 acre	None	None	None	None	None	None	None	>40	>40	>40	>40	>40	>40	[b] Eleocharis macrostachya, Juncus sp., and Lotus corniculatus	0	0	100	5
Mudhen Lake West	Pond	1.5 acres	None	None	None	None	None	None	None	20	>40	>40	>40	>40	>40	[b] Eleocharis macrostachya and Juncus balticus	0	0	100	5
Mudhen Lake East	Pond	3.0 acres	None	None	None	None	None	None	None	>40	>40	>40	>40	>40	>40	[b] Rumex acetosella and Lolium multiflorum	0	0	100	5

[a] Vegetation conditions are based on 1994 baseline surveys.
[b] Vegetation conditions are based on 1995 surveys.
[c] Fairy shrimp larvae were identified in water samples; however larvae were not developed enough to determine species.
– = Not surveyed

appeared to have died before hatching. Egg mortality may have been due to extreme water flows through the pools during the severe winter storms in 1995.

No California red-legged frogs (*Rana aurora draytoni*) were observed during the surveys. Pacific treefrog adults and larvae were encountered in most water bodies at former Fort Ord, California newt (*Taricha torosa*) were observed in two stock ponds (36 and 37); and bullfrog larvae (*Rana catesbeiana*) were abundant at both Mudhen Lake East and West.

Wetland Vegetation Surveys

Table 2 describes vegetation characteristics at water bodies 5, 16, 17, and Mudhen Lakes East and West. All five water bodies could be disturbed by UXO removal activities. Vegetative conditions in 1995 were not substantially different from those in 1994. Results of further monitoring in the upcoming years will better indicate whether or not vegetation in these water bodies has been affected by UXO removal.

Vegetative conditions for water bodies where baseline data were collected (pools 11, 36, and 37) are included in Table 1.

muddy and the water was extremely turbid from sediment entering the water body. Because of the seasonal influx of large amounts of sediment into pond 17, it is believed that any fairy shrimp eggs that might be present would be continuously covered by soil and mud and would not be able to hatch successfully.

Considering that no fairy shrimp species have been observed at pond 17 during numerous field surveys and the continued seasonal influx of sediment described, it is extremely unlikely that fairy shrimp occur at the water body or that populations would become established if eggs were introduced from other water bodies.

Conclusion

Because of the various adverse habitat conditions described for Mudhen Lake East, Mudhen Lake West, and pond 17, and the absence of fairy shrimp during previous surveys, it is recommended that a second year of USFWS protocol level surveys not be required to determine that listed fairy shrimp species are absent from these water bodies.

ACKNOWLEDGMENTS

This monitoring report was prepared by Vicki Lake and Sean Bechta. Michael Rushton served as principal-in-charge on this project. Sean Bechta acted as project manager and coordinated the wildlife field studies, and Vicki Lake coordinated the botanical field studies. Jones & Stokes Associates staff members who assisted in report production were Charlotte Glenn, word processing operator; Sara Noland, editor; and Tony Rypich and Christy Anderson, graphic artists.

CITATIONS

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U.S. Army Corps of Engineers. 1992. Flora and fauna baseline study of Fort Ord, California. December. Sacramento District. With technical assistance from Jones & Stokes Associates, Inc. (JSA 90-214.) Sacramento, CA.

_____. 1994. Installation-wide multispecies habitat management plan for Fort Ord, California. February. Sacramento District. With technical assistance from Jones & Stokes Associates. (JSA 90-214.) Sacramento, CA.

Appendix A. Freshwater Invertebrate Sampling Data Sheets

Fresh ter Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #1

Date: 1/11/95 Time: 1110 Observer(s): S. Berlta

Sample Number: 1 Location: Pond #1

Sampling Method: fish net, (dip net), sien, other: 10"x14" diamet green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, ~~pool in stream,~~ roadside ditch, stock pond, other: ~~drained~~ dammed-up swail

Substrate: grass

When Inubdated: ? When Desiccated: _____

Adjacent upland: Oak woodland + grassland

Habitat Condition: (undisturbed) (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 7-40 in. Surface area: ___ ft² or 25 by 50 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 52 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 74 (°F)/°C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 30%

Vegetative Cover: Total: 0 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 24 swipes w/ net

no fairy shrimp observed

- tree frog adult + egg masses

- small water beetles

General Comments: Pool at capacity - spillway working well water still flowing in + flowing out easily

Fresh ter Invertebrate Sampling Dat Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #2

Date: 1/11/95 Time: 1130 Observer(s): S. Bechta

Sample Number: 1 Location: Pond #2

Sampling Method: fish net, (dip net), sien, other: 10"x14" dip net, green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: dammed swail

Substrate: grass

When Inubdated: ? (recently) When Desiccated: _____

Adjacent upland: Oak woodland & grassland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 25 in. Surface area: ___ ft² or 8' by 20' ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 52 (°F)/ °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 73 (°F)/ °C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 30%

Vegetative Cover: Total: 10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: no fairy shrimp observed - tree frog egg masses 10 swipes w/net

General Comments: pool at capacity, overflowing dam but holding up O.K. ~0.5 cfs flow

Fresh ter Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #4

Date: 1/11/95 Time: 10:45 Observer(s): A. Bechta

Sample Number: 1 Location: Pond #4

Sampling Method: fish net, (dip net), sien, other: 10" x 14" net green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: dammed up swail

Substrate: mud

When Inubdated: recently When Desiccated: _____

Adjacent upland: Grassland + oak woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 19 in. Surface area: ___ ft² or 125 by 75 ft.

Turbidity: none, slight, moderate, (extreme), other: _____

Water temperature: 53 (°F)/ °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 68 (°F)/ °C Wind speed: 0-5

Wind direction (from): N Cloud cover: 40%

Vegetative Cover: Total: 5-10 % (of water area)

Algae: 70 % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 30 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: _____

13 swipes with dip net - no life invert or otherwise just algae - although hear a tree frog

General Comments: Need to repair spillway - if pond overflows have heavy erosion in spillway, may lose the pond

Fresh ter Invertebrate Sampling Dat Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #5

Date: 1/11/95 Time: 1250 Observer(s): D. Bachta

Sample Number: 1 Location: Pond #5

Sampling Method: fish net, (dip net), sien, other: 10"x14" dip net green mesh

Habitat Type: (vernal pool), rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate: Grass/Veg

When Inubdated: recently When Desiccated:

Adjacent upland: oak woodland + grassland

Habitat Condition: (undisturbed), slightly/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 11 in. Surface area: ___ ft² or 75 by 100 ft.

Turbidity: (none), slight, moderate, extreme, other:

Water temperature: 60 (°F) °C pH: ____ Conductivity: ____ D.O.: ____

Weather Conditions: Air temperature: 68 (°F) °C Wind speed: 2-8

Wind direction (from): S/SE Cloud cover: 90%

Vegetative Cover: Total: 40 % (of water area)

Algae: ____ % (of total vegetative cover)

Submergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ____ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed:

25 swipes w/net - no Fairy shrimp
- water boatmen
- sow bug looking things
- hear tree frogs calling

General Comments:

Fresh ter Invertebrate Sampling Dat Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #11

Date: 1/11/95 Time: 1025 Observer(s): S. Bechta

Sample Number: 1 Location: _____

Sampling Method: fish net, dip net, sien, other: visual

Habitat Type: (vernal pool,) rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: Veg, grass, soil

When Inubdated: not yet When Desiccated: _____

Adjacent upland: Oak Woodland

Habitat Condition: (undisturbed,) slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 1 in. Surface area: na ft^2 or ___ by ___ ft.

Turbidity: (none,) slight, moderate, extreme, other: _____

Water temperature: — °F / °C pH: — Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 66 °F / °C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 40%

Vegetative Cover: Total: 100 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: _____

Not holding water yet except for ~1" of water in some small depressions

no adult shrimp seen & no measurements taken

taking water sample for larvae because see a lot of tiny swimming inverts.

- hear tree frogs around
- cottontail rabbit
- taking photos
- hear hummingbirds

Fairy Shrimp Larvae Present
too small to determine species
Identified by Stephanie Myers
1/17/95

General Comments: _____

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818 1914

Project or Site Name & Location: Fort Ord Pond #16

Date: 1/11/95 Time: 1425 Observer(s): S. Bachtold

Sample Number: 1 Location: Pond #16

Sampling Method: fish net, (dip net), sien, other: 10"x14" dip net green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: pond in swale

Substrate: mud

When Inubdated: probably all year When Desiccated: _____

Adjacent upland: Maritime Chaparral + oak woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 240" in. Surface area: ___ ft² or 125 by 75 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 56 (°F) / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 68 (°F) / °C Wind speed: 0-5 ~~5E~~

Wind direction (from): SE Cloud cover: 100% slight drizzl

Vegetative Cover: Total: 5 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 30 swipes w/ dip net
no fairy shrimp
- Mallards
- Hear frog frogs
- misc. inverts + larvae
- sow bug looking things

General Comments: Pond at about max. capacity

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818 1914

Project or Site Name & Location: Fort Ord Pond #17

Date: 1/11/95 Time: 1325 Observer(s): A. Buchta

Sample Number: 1 Location: Pond #17

Sampling Method: fish net, (dip net), sien, other: 10"x14" Dip Net green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: pond in a depression near road

Substrate: mud

When Inubdated: ? (recently) When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 11 in. Surface area: ___ ft² or 50 by 70 ft.

Turbidity: none, slight, moderate, (extreme), other: _____

Water temperature: 52 (°F)/ °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 64 (°F)/ °C Wind speed: 0-10 mph

Wind direction (from): SE Cloud cover: 95%

Vegetative Cover: Total: 40 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: Cat tails

Taxa Collected or Observed:

33 swipes w/ dip net - no fairy shrimp observed

heard a lot of tree frogs around but saw none

some egg masses

- water beetles + boatmen (few)

- misc. inverts + larvae (few)

General Comments: highest I have seen water - system of pools split by cattails etc. - a lot of sediment deposited from storm if this keeps up there won't be a pond much longer

Fresh ter Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond 35

Date: 1/11/95 Time: 0925 Observer(s): S. Bechta

Sample Number: 1 Location:

Sampling Method: fish net, (dip net), sien, other: 10"x14" Dipnet Green mesh

Habitat Type: (vernal pool), rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other:

Substrate: Mud/+Typical FO sandy soil

When Inubdated: Early January 95 When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: Cleared of Veg by heavy equipment in 92, returning to natural State

Water Conditions: Water depth: 30 in. Surface area: ___ ft² or 100 by 250 ft.

Turbidity: none, slight, moderate, extreme, other:

Water temperature: 54 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 65 (°F)/°C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 20%

Vegetative Cover: Total: 5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed:

Collected fairy shrimp specimens - California linderiella sp.
25 swipes w/ dip net Identified by Stephanie Myers
at least a few shrimp in almost every swipe 1/17/95
∴ abundance = moderate
- heard tree frogs around & 1 egg mass - no tadpoles
- other invert. abundance low
- hummingbirds around - species unknown

General Comments: 2 depressions full of water to north
one is pond #3 - water flowing from #35 to #3
shrimp of same species in both other water bodies

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #36

Date: 1/11/95 Time: 1555 Observer(s): S. Bahls

Sample Number: 1 Location: Pond #36

Sampling Method: fish net, (dip net), sien, other: 10"x14" green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: mud

When Inubdated: probably all year When Desiccated:

Adjacent upland: grassland & oak savannah

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: sheep grazing

Water Conditions: Water depth: 40 in. Surface area: ___ ft² or 75 by 100 ft.

Turbidity: none, slight, moderate, (extreme), other: sediment flowing in from rain

Water temperature: 56 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 65 (°F)/°C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100% raining

Vegetative Cover: Total: 5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net
No Fairy Shrimp

Water Boatmen
Sow Bug type things
misc. insect larval
Hear tree frogs

General Comments: No Photo - Ran out of Film
Pond at capacity - Spillway working well
water exiting at 2-3 cfs
major errosion on dam from flow down from hillside

Fresh[illegible]er Invertebrate Sampling Data [illegible]heet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #37

Date: 1/11/95 Time: 1155 Observer(s): A. Beutler

Sample Number: 1 Location: Pond #37

Sampling Method: fish net, (dip net), sien, other: 10"x14" dip net green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: mud

When Inubdated: probably all year When Desiccated:

Adjacent upland: grassland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: sheep grazing

Water Conditions: Water depth: 40" in. Surface area: ___ ft² or 20 by 175 ft.

Turbidity: none, slight, moderate, (extreme), other:

Water temperature: 56 °F / °C pH: ____ Conductivity: ____ D.O.: ____

Weather Conditions: Air temperature: 67 (°F) / °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 40%

Vegetative Cover: Total: 5 % (of water area)

Algae: ____ % (of total vegetative cover)

Submergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ____ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed:

30 swipes w/ net No fairy shrimp observed
walked whole perimeter of pond
Abundant water boatmen
water beetles
things that look like sow bugs
misc. insect/fly larvae

General Comments: at capacity, water flowing through spillway

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Mudhen Lake West

Date: 1/11/95 Time: 1455 Observer(s): S. Bachta

Sample Number: 1 Location: Mudhen Lake West

Sampling Method: fish net, (dip net), sien, other: ~~D~~ 10"x14" green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud

When Inubdated: 1/10/94 When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/moderately (heavily) trampled, contains trash, other: Veg cut by UXO Removal teams - heavy foot traffic

Water Conditions: Water depth: 20 in. at deepest Surface area: ___ ft² or ~~no pools~~ 50 by 50 ft. two main pools 50x50 each

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 56 (°F) / °C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 66 (°F) / °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100%

Vegetative Cover: Total: 20 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: ~~POA~~

Taxa Collected or Observed: 30 swipes w/net no fairy shrimp

hear a lot of true frogs & western toad

gambusia in one pond - just a couple of small young ones

a lot of snails conical and dome shells

General Comments: UXO Removal in progress

several small pools

- escort says just started holding water yesterday

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818 1914

Project or Site Name & Location: Fort Ord Mudhen Lake East

Date: 1/11/95 Time: 1615 Observer(s): S. Bachta

Sample Number: 1 Location: Mudhen Lake East

Sampling Method: fish net, (dip net), sien, other: 10"x14" net green mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: mud

When Inubdated: water in it all year When Desiccated:

Adjacent upland: Oak woodland

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: Veg cut for VXO Removal / heavy foot traffic

Water Conditions: Water depth: 740 in. Surface area: ~~350~~ ft² or 350 by 150 ft.

Turbidity: none, (slight), moderate, extreme, other:

Water temperature: ____ °F / °C pH: ____ Conductivity: ____ D.O.: ____

Weather Conditions: Air temperature: 68 (°F) / °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100%

Vegetative Cover: Total: 40 % (of water area)

Algae: ____ % (of total vegetative cover)

Submergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ____ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes - no fairy shrimp present

Great Blue Heron
American Egret
Cormorants
American Coot
Pacific tree frog + Western Toad
Bull Frog Larvae - collected one - Confirmed Bullfrog larvae at SSA lab 1/17/95
Cattle Egret

General Comments: VXO Removal In Progress
not even close to full capacity

Freshwater Invertebrate Sampling Data Sheet

Jones & S , Associates, 2600 V Street, Sacramento, CA 9 -1914

Project or Site Name & Location: Fort Ord Pond #1

Date: 1/26/95 Time: 0950 Observer(s): A. Beutz

Sample Number: 2 Location: Pond #1

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: dammed swale

Substrate: grass/mud - mostly has grass

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Grassland / Oak Woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, (contains slight trash),

other: _____

Water Conditions: Water depth: 36 (in.) Surface area: ___ ft² or 35 by 45 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 52 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 56 (°F)/°C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 100%

Vegetative Cover: Total: 5-10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes - no fairy shrimp

super abundant tree frog eggs

- in deepest parts at bottom seems like different egg type

General Comments: At maximum capacity - spillway working well

Freshwater Invertebrate Sampling Data Sheet

Jones & St. Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #2

Date: 11/26/95 Time: 10:05 Observer(s): A. Bachta

Sample Number: 2 Location: Pond #2

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

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Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: dammed swale

Substrate: grass + soil

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Grassland / Oak Woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 24 (in.) Surface area: ___ ft² or 10 by 20 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 53 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 59 (°F)/°C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100%

Vegetative Cover: Total: 5-10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 11 Swipes - NO Fairy shrimp

tree frog eggs

General Comments: Pool at maximum capacity - has flow in + out of it

Freshwater Invertebrate Sampling Data Sheet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 9[illegible]-1914

Project or Site Name & Location: Fort Ord Pond #4

Date: 1/26/95 Time: 10:15 Observer(s): A. Burke

Sample Number: 2 Location: Pond #4

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: dammed swail

Substrate: mud / grass

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Grassland / Maritime Chap.

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, (contains trash), other: trash + veg matter floating on edges

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 150 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other: higher on edges where newly inundated

Water temperature: 53 (°F) °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 60 (°F) °C Wind speed: 0-5

Wind direction (from): S Cloud cover: 100

Vegetative Cover: Total: 0-5 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes net - no fairy shrimp

hear tree frogs

found tree frog eggs

General Comments: Highest I have ever seen this pond

Water going over spillway + spillway being cut back severely - only about 5' left before starting to reduce pond capacity

Freshwater Invertebrate Sampling Data Sheet

Jones & St. Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #5

Date: 1/26/95 Time: 14:50 Observer(s): A Bechta

Sample Number: 2 Location: Pond #5

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: (vernal pool), rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate: Grass/Veg/Soil

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Annual Grassland + Oak Woodland

Habitat Condition: (undisturbed), slightly/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 17 in. Surface area: ___ ft² or 75 by 300 ft.

Turbidity: (none), slight, moderate, extreme, other:

Water temperature: 57 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 60 (°F)/°C Wind speed: 0-5

Wind direction (from): S Cloud cover: 100%

Vegetative Cover: Total: 10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species:

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 30 swipes- Fairy shrimp (a few) almost every swipe ∴ moderate abundance - shrimps have distinct red color + seem to be associated with mud shrimp

~6 mallards

6 BH, Great Egret

Hear tree frogs

Tree frog eggs

Confirmed California Linderiella by Chris Rogers 1/27/95

General Comments: Much more full than last visit

Freshwater Invertebrate Sampling Data Sheet

Jones & St , Associates, 2600 V Street, Sacramento, CA 95 -1914

Project or Site Name & Location: Fort Ord Pond #11

Date: 1/26/95 Time: 13:20 Observer(s): S. Barbe

Sample Number: 2 Location: Pond #11

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: (vernal pool), rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate: Grass + Veg

When Inubdated: between 1/11/95 + 1/26/95 When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, (slightly), moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 12 in. Surface area: ___ ft² or 50 by 75 ft.

Turbidity: none, (slight), moderate, extreme, other:

Water temperature: 52 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 63 (°F)/°C Wind speed: ~~0-5~~ 5-10

Wind direction (from): W Cloud cover: 100%

Vegetative Cover: Total: 50 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 30 swipes w/ net - No fairy shrimp either pool dried between now + last time + all larvae seen 1/11 died - or they completed their life cycle.

Hear Super-Abundant Tree Frogs

Hear Western Toad

Tree Frog eggs

Took invert + water sample together (mostly snails)

Snails very abundant

General Comments: Not even close to full - wonder why filling so little relative to other areas

Freshwater Invertebrate Sampling Data Sheet

Jones & St . Associates, 2600 V Street, Sacramento, CA 95 -1914

Project or Site Name & Location: Fort Ord - Pond #16

Date: 1/26/95 Time: 11:20 Observer(s): S. Bachtel

Sample Number: 2 Location: Pond #16

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, (other: pool in swale)

Substrate: mud + grass

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Maritime Chaparral Oak woodlands

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 7 40 in. Surface area: ___ ft² or 10 by 75 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 53 (°F) °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 63 (°F) °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100%

Vegetative Cover: Total: 10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 10 Swipes - A lot of fairy shrimp every swipe - ∴ abundant (high abundance)

Confirmed California Lindeiella by Chris Rogers 1/27/95

Bear tree frogs

Bear western toad

tree frog eggs

pair of Mallards

General Comments: at maximum capacity - drain-off has created new pool SE just north of here

Freshwater Invertebrate Sampling Data Sheet

Jones & S[illegible] Associates, 2600 V Street, Sacramento, CA 9[illegible]-1914

Project or Site Name & Location: Fort Ord Pond #17

Date: 1/26/95 Time: 0925 Observer(s): S. Bennett

Sample Number: 2 Location: Pond #17

Sampling Method: fish net, (dip net), sien, other: 6mm Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, (other): pool at head of swail

Substrate: Mud

When Inubdated: ~~Maritime~~ When Desiccated:

Adjacent upland: Maritime Chap/ Oak Woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 10 in. Surface area: ___ ft² or 75 by 40 ft.

Turbidity: none, slight, moderate, (extreme), other:

Water temperature: 49 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 57 (°F)/°C Wind speed: 0-5

Wind direction (from): NW Cloud cover: 100%

Vegetative Cover: Total: 40 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 Swipes no fairy shrimp

hear tree frogs - picked up eggs

General Comments: Major sediment dumped into pond since last visit

Freshwater Invertebrate Sampling Data Sheet

Jones & St Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #35

Date: 1/26/95 Time: 14:00 Observer(s): A. Beckta

Sample Number: 2 Location: Pond #35

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland:

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: old engineers training area - but recovering

Water Conditions: Water depth: 40 in. Surface area: ___ ft² or 150 by 50 ft.

Turbidity: none, slight, moderate, (extreme), other:

Water temperature: 55 (°F)/°C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 62 (°F)/°C Wind speed: 5-10

Wind direction (from): SW Cloud cover: 100%

Vegetative Cover: Total: 5 % (of water area)

Algae: % (of total vegetative cover)

Submergent vascular plants: % (of total vegetative cover)

Dominant species:

Floating vascular plants: % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net
a few Fairy shrimp with almost every swipe
- moderate abundance
- some shrimp collected seemed to be of a different color
- also collected water sample

Confirmed California linderiella by Chris Rogers 1/27/95

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & St Associates, 2600 V Street, Sacramento, CA 95 914

Project or Site Name & Location: ~~[illegible]~~ Fort Ord: Pond #3B

Date: 1/26/95 Time: 12:50 Observer(s): L. Beckta

Sample Number: 2 Location: Pond #3B

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland: annual grassland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: sheep grazing

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 75 by 75 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 53 (°F)/°C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 64 (°F)/°C Wind speed: 0-5

Wind direction (from): E Cloud cover: 100%

Vegetative Cover: Total: 5-10 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 Swipes w/net - No Fairy Shrimp

hear western toad
hear tree frogs
pair mallards
Black Phoebe

General Comments: At max. capacity, water flowing in rout Spillway working fine

Freshwater Invertebrate Sampling Data Sheet

Jones & St Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #37

Date: 1/26/95 Time: 12:25 Observer(s): L Berlitz

Sample Number: 2 Location: Pond #37

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland: Annual Grassland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: Sheep grazing

Water Conditions: Water depth: 40 in. Surface area: ___ ft² or 150 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 55 (°F)/°C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 63 (°F)/°C Wind speed: 0-5

Wind direction (from): E Cloud cover: 100%

Vegetative Cover: Total: 0-5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100% % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 21 Swims - No Fairy Shrimp

took sample of inverts

1 CA Newt Larvae captured - fairly mature (4 legs)

1 Dead tree frog seen (floating in water)

tree frog eggs

hear western toads

General Comments: At full capacity. Spillway working well. Water flowing in + out

Freshwater Invertebrate Sampling Data Sheet

Jones & S[illegible], Associates, 2600 V Street, Sacramento, CA 9[illegible]-1914

Project or Site Name & Location: Mudhen West Fort Ord

Date: 1/26/95 Time: 0830 Observer(s): A. Bechta

Sample Number: 2 Location: Mudhen West

Sampling Method: fish net, (dip net), sien, other: Green Mesh

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud

When Inubdated: Early January When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/moderately (heavily) trampled, contains trash, other: UXO Removal activities

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 300 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 53 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 54 (°F)/°C Wind speed: 0 [illegible]

Wind direction (from): — Cloud cover: 100%

Vegetative Cover: Total: 0-5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed:

20 swipes w/ net - No Fairy Shrimp
Took samples of inverts found
hear tree frogs

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & St Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Mudhen East

Date: 1/26/95 Time: 0850 Observer(s): A. Bechta

Sample Number: 2 Location: Mudhen East

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland:

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: UXO Removal activities

Water Conditions: Water depth: 40 in. Surface area: ___ ft² or 200 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 53 (°F)/°C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 52 (°F)/°C Wind speed: 0-5

Wind direction (from): W Cloud cover: 100%

Vegetative Cover: Total: 95 % (of water area)

Algae: 10 % (of total vegetative cover)

Submergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ____ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 990 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes - no fairy shrimp
Bullfrog tadpoles present

American Robin, Dark Eyed Junco
great egret, GBH, Mud hens (i.e. coots)
(confirmed Cormorants are immature double-crested

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #1

Date: 2/10/95 Time: 1145 Observer(s): A. Bechta

Sample Number: 3 Location: Pond #1

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate: mud / veg.

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Grassland / Oak Woodland

Habitat Condition: undisturbed, (slightly) moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 36 in. Surface area: ___ ft² or 20 by 30 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 56 (°F) / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 60 (°F) °C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 10

Vegetative Cover: Total: 5 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 5 swipes w/ net

A lot of ~~other~~ Fairy shrimp in Each Pass

Fairy shrimp abundance high - only took 5 swipes to minimize disturbance to pool

- True frog larvae

Confirmed California Linderiella by Christopher Rogers 2/27/95

General Comments: No Photo because Camera Battery Dead

Only very slight amount of water running through spillway

Freshwa · Invertebrate Sampling Data eet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 95 [illegible]1914

Project or Site Name & Location: Fort Ord Pond #2

Date: 2/10/95 Time: 1155 Observer(s): S. Bechta

Sample Number: 3 Location: Pond #2

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate: veg + mud

When Inubdated: _____ When Desiccated: _____

Adjacent upland: grassland / oak woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 27 in. Surface area: ___ ft² or 10 by 20 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 59 (F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 61 (F)/°C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 10%

Vegetative Cover: Total: 10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 7 swipes + 2 or 3 fairy shrimp in each - abundance = mod to low
- true frog larvae
- misc. inverts
- beetles

Confirmed CA linderiella by Christopher Rogers 2/27/95

General Comments: No Photo Taken Because Camera Battery Dead
Small amound of water flowing over edge

Freshwa Invertebrate Sampling Data . :et

Jones & St . Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #4

Date: 2/10/95 Time: 1220 Observer(s): A. Beckte

Sample Number: 3 Location: Pond #4

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud & Veg

When Inubdated: When Desiccated:

Adjacent upland: Grassland/ Scrub

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: Grassland/Scrub

Water Conditions: Water depth: 7+0 in. Surface area: ___ ft² or 150 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 58 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 61 (°F)/°C Wind speed: 0-5

Wind direction (from): S Cloud cover: 10%

Vegetative Cover: Total: 5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net - No Fairy Shrimp

True Frog larvae

Suspicious other eggs & larvae in eggs

General Comments: No Photo Taken Because Camera Battery Dead

small amt. of water flowing out of pool

Freshwa[illegible] Invertebrate Sampling Data [illegible]eet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 95[illegible]1914

Project or Site Name & Location: Fort Ord Pond #5

Date: 2/10/95 Time: 1355 Observer(s): A. Barbour

Sample Number: 3 Location: Pond #5

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: (vernal pool), rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate: Vegetation

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 20 in. Surface area: ___ ft² or 200 by 100 ft.

Turbidity: none, (slight), moderate, extreme, other:

Water temperature: 59 (°F)/ °C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 60 (°F)/ °C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 15%

Vegetative Cover: Total: 50 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 15 swipes w/ net

a few Fairy shrimp almost every swipe

moderate abundance - took voucher specimen

very young amph. ~~eggs~~ larvae present - tiger sal. or CA newt

beetles

snales

water boatmen

true frog larvae

Confirmed CA linderiella by Christopher Rogers 2/27/95

General Comments: No Photo Taken Because Camera Battery Dead

Freshwa[illegible] Invertebrate Sampling Data [illegible]eet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 95[illegible]1914

Project or Site Name & Location: Fort Ord Pond #11

Date: 2/10/95 Time: 1255 Observer(s): A. Berlta

Sample Number: 3 Location: Pond #11

Sampling Method: fish net, (dip net) sien, other: Green Mesh Aquarium Net

Habitat Type: (vernal pool) rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate: Veg. / Grass

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 9 in. Surface area: ___ ft² or 60 by 80 ft.

Turbidity: none, (slight), moderate, extreme, other:

Water temperature: 59 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 60 (°F)/°C Wind speed: 0-5

Wind direction (from): S Cloud cover: 10%

Vegetative Cover: Total: 60 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 10 swipes w/ net
Fairy Shrimp Found - Moderate Abundance
- A lot of snails
- True Frog larvae + eggs
- Hear western toad

Confirmed CA linderiella by Christopher Rogers 2/27/95

General Comments: No Photo Taken Because Camera Battery Dead

Freshwa[illegible] Invertebrate Sampling Data [illegible]eet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 95[illegible]1914

Project or Site Name & Location: Fort Ord Pond #16

Date: 2/10/95 Time: 0955 Observer(s): L Beckt

Sample Number: 3 Location: Pond #16

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: Dammed Swail

Substrate: Mud

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Oak Woodland / Maritime Chaparral

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 100 by 75 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 52 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 61 (°F)/°C Wind speed: 0-5

Wind direction (from): W Cloud cover: ~~cl~~ 40%

Vegetative Cover: Total: 5 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 5 swipes w/ net - abundant Fairy Shrimp each swipe - abundance high
- took Shrimp voucher specimens + H20 Sample
- Only 5 swipes taken to minimize disturbance to pool

Confirmed CA linderiella by Christopher Rogers 2/27/95

General Comments: No Photo Because Camera Battery Dead
Pool no longer overflowing
New Pool to North still Holding Water

Freshwa · Invertebrate Sampling Data . eet

Jones & St . Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #17

Date: 2/10/95 Time: 0910 Observer(s): S. Beckta

Sample Number: 3 Location: Pond #17

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: Dammed Swale

Substrate: Mud

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Grassland/Oak Woodland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 16 in. Surface area: ___ ft² or 60 by 30 ft.

Turbidity: none, slight, moderate, (extreme), other: _____

Water temperature: 49 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 63 (°F)/°C Wind speed: 0-5

Wind direction (from): W Cloud cover: 5% Sunney because higher elevation + above fog

Vegetative Cover: Total: 50 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes w/ dip net - No Fairy Shrimp
Tree frog larvae
Mosquito Larvae
Deer Tracks
Still getting a lot of sediment - Note; sediment from water coming out of culverts from Laguna Seca
Sediment not from Wolf Hill
- Red winged Blackbird

General Comments: No Photo Because Camera Battery Dead

Freshwa[ter] Invertebrate Sampling Data [Sh]eet

Jones & St[ratton] Associates, 2600 V Street, Sacramento, CA 95[8]14

Project or Site Name & Location: Fort Ord Pond #35

Date: 2/10/95 Time: 1320 Observer(s): A. Berlta

Sample Number: 3 Location: Pond #35

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly (moderately) heavily trampled, contains trash, other: old engineer training area - scraped bare 1992

Water Conditions: Water depth: 20 in. Surface area: ___ ft² or 25 by 70 ft.

Turbidity: none, slight, moderate, (extreme), other:

Water temperature: 56 (°F) / °C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 74 (°F) / °C Wind speed: 0-5

Wind direction (from): S Cloud cover: 10%

Vegetative Cover: Total: 5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 10 swipes w/ net
Abundant Fairy Shrimp Present (High)
took voucher specimens
Tree Frog eggs + larvae present
Confirmed CA linderiella by Christopher Rogers 2/27/95

General Comments: No photo taken because camera Battery Dead
Holding significantly less water

Freshwa[illegible] Invertebrate Sampling Data [illegible]eet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 95 [illegible]1914

Project or Site Name & Location: Fort Ord Pond #36

Date: 2/10/95 Time: 1105 Observer(s): A. Barbe

Sample Number: 3 Location: Pond #36

Sampling Method: fish net, (dip net), sien, other: 6mm Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland: Annual Grassland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: Sheep Grazing

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 25 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 52 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 51 (°F)/°C Wind speed: 0-5

Wind direction (from): SE Cloud cover: 90%

Vegetative Cover: Total: 5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: 60 % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 40 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/net - no Fairy Shrimp
true frog larvae & eggs
suspicious amph. larvae - could be tiger salamander or CA newt
suspicious amph. eggs - single egg, definitely not newt or true frog - key says "tiger salamander, frog, or hylid".

General Comments: No photo taken because camera Battery Dead
Water still going through spillway - just little bit

Freshwa · Invertebrate Sampling Data . :et

Jones & St. ; Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #37

Date: 2/10/95 Time: 1040 Observer(s): A. Sechta

Sample Number: 3 Location: Pond #37

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland: Grassland / Oak Woodland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: sheep grazing

Water Conditions: Water depth: 7 40 in. Surface area: ___ ft² or 100 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 51 (°F) / °C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 62 (°F) / °C Wind speed: 0-5

Wind direction (from): W Cloud cover: 100%

Vegetative Cover: Total: 15 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100% % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net - no fairy shrimp
water boatmen
very young tree frog larvae
dragonfly larvae

General Comments: No Photo Taken because Camera Battery Dead
water still flowing out of spillway

Freshwa[illegible] - Invertebrate Sampling Data [illegible]eet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 95[illegible]1914

Project or Site Name & Location: Fort Ord Mudhen East

Date: 2/10/95 Time: 0845 Observer(s): A. Beatty

Sample Number: 3 Location: Mudhen East

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

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Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud & Veg.

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: UXO Removal Activities

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 400 by 150 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 53 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 52 (°F)/°C Wind speed: 0-5

Wind direction (from): W Cloud cover: 100% Foggy

Vegetative Cover: Total: 20 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 Swipes - No Fairy Shrimps
Took Invert Sample
Copepods
Snails
Dragonfly Larvae
Clam Shrimp
- American Coot
- Belted Kingfisher

General Comments: NO Photo - Camera Battery Dead

Freshwater Invertebrate Sampling Data Sheet

Jones & St[illegible] Associates, 2600 V Street, Sacramento, CA 95[illegible]-1914

Project or Site Name & Location: Fort Ord Mudhen West

Date: 2/10/95 Time: 0830 Observer(s): L. Barkett

Sample Number: 3 Location: Mudhen West

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud + Veg

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: UXO Removal conducted

Water Conditions: Water depth: >40 in. Surface area: ___ ft² or 300 by 75 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 52 (°F) °C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 51 (°F) °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100% Foggy

Vegetative Cover: Total: 10-15 % (of water area)

Algae: % (of total vegetative cover)

Submergent vascular plants: % (of total vegetative cover)

Dominant species:

Floating vascular plants: % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes - no Fairy shrimp
Mallards, Coot, Black Phoebe
Bull Frog Larvae
Clam Shrimp
Snails
Water Boatmen

General Comments: No Photo - Camera Battery Dead

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #1

Date: 2/24/95 Time: 1530 Observer(s): A. Bechta

Sample Number: 4 Location: Pond #1

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate: Veg + Mud

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Oak Woodland + grassland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 40 in. Surface area: ___ ft² or 20 by 30 ft.

Turbidity: none, (slight), moderate, extreme, other: _____

Water temperature: 58 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 56 (°F)/°C Wind speed: 0-5

Wind direction (from): E Cloud cover: 100%

Vegetative Cover: Total: 10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes - fairy shrimp lrt + miss.
moderate abundance
abundant tree frog larvae
giant water beetle

Confirmed CA linderiella by Christopher Rogers 3/8/95

General Comments: Water no longer running through spillway

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #2

Date: 2/24/95 Time: 1540 Observer(s): A. Barbour

Sample Number: 4 Location: Pond #2

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: dammed swail

Substrate: Veg & Soil

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Oak Woodland / grassland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 24 in. Surface area: ___ ft² or 8 by 10 ft.

Turbidity: none, (slight), moderate, extreme, other: _____

Water temperature: 55 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 58 (°F)/°C Wind speed: 0-5

Wind direction (from): E Cloud cover: 100%

Vegetative Cover: Total: 10 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 10 swipes w/ net - fairy shrimp abundance low to moderate

shrimp seem bigger than in other pools

true frog eggs & larvae

abundant little water turtles

mucky looking amphibian (salamander?) eggs like they died

Confirmed CA linderiella by Christopher Rogers 3/8/95

General Comments: _____

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #4

Date: 2/24/95 Time: 1235 Observer(s): A. Becker

Sample Number: 4 Location: Pond #4

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Soil + Veg

When Inubdated: When Desiccated:

Adjacent upland: Grassland / Oak Woodland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other:

Water Conditions: Water depth: 7+0 in. Surface area: ___ ft² or 200 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 58 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 60 (°F)/°C Wind speed: 0-5

Wind direction (from): N Cloud cover: 100%

Vegetative Cover: Total: 5 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net - No Fairy Shrimp

True Frog eggs + larvae

water beetles

water boatmen

seed shrimp

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #5

Date: 2/24/95 Time: 0950 Observer(s): A Berlitz

Sample Number: 4 Location: Pond #5

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: (vernal pool), rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate: Veg & Soil

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 20 in. Surface area: ___ ft² or 75 by 300 ft.

Turbidity: none, (slight), moderate, extreme, other:

Water temperature: ~~62~~ 56 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 62 (°F)/°C Wind speed: 0-5

Wind direction (from): NE Cloud cover: 100% Foggy + Hazy

Vegetative Cover: Total: 75 % (of water area)

Algae: 5 % (of total vegetative cover)

Submergent vascular plants: 5 % (of total vegetative cover)

Dominant species:

Floating vascular plants: 5 % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 85 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 25 swipes w/ net
a few fairy shrimp : abundance low

Found salamander larvae - relatively abundant in deepest part of pool - can tell for sure they are salamander - assuming tiger salamander

Pacific Tree Frog tadpoles

Confirmed CA linderiella by Christopher Rogers 3/8/95

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #11

Date: 2/24/95 Time: 0930 Observer(s): A. Bechta

Sample Number: 4 Location: Pond #11

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: (vernal pool), rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate: Veg & Soil

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 10 in. Surface area: ___ ft² or 80 by 80 ft.

Turbidity: none, (slight), (moderate), extreme, other:

Water temperature: 56 (°F)/ °C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 56 (°F)/ °C Wind speed: 0-5

Wind direction (from): E Cloud cover: 100% Cloudy, Foggy

Vegetative Cover: Total: 85 % (of water area)

Algae: % (of total vegetative cover)

Submergent vascular plants: 5 % (of total vegetative cover)

Dominant species:

Floating vascular plants: % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 95 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 15 swipes w/net - got fairy shrimp abundance = mod → high

Hyper abundant treefrog tadpoles

Confirmed CA linderiella by Christopher Rogers 3/6/95

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #16

Date: 2/24/95 Time: 1115 Observer(s): A. Bachta

Sample Number: 4 Location: Pond #16

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: dammed swail

Substrate: soil

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Maritime Chaparral

Habitat Condition: undisturbed, (slightly)/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 450 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 56 (°F)/ °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 56 (°F)/ °C Wind speed: 0-5

Wind direction (from): N Cloud cover: 100%

Vegetative Cover: Total: 5 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 10 Swipes w/ net - Very Abundant fairy shrimp

2 Mallards

Confirmed CA linderiella by Christopher Rogers 3/8/95

General Comments: _____

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #17

Date: 2/24/95 Time: 1200 Observer(s): A. Bachta

Sample Number: 4 Location: Pond #17

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate: Mud

When Inubdated: _____ When Desiccated: _____

Adjacent upland: Maritime Chaparral / Oak Woodland

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: lots of silt deposited

Water Conditions: Water depth: 7 in. Surface area: ___ ft² or 7½ by 7½ ft.

Turbidity: none, slight, moderate, (extreme), other: _____

Water temperature: 57 (°F)/°C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 60 (°F)/°C Wind speed: 0-5

Wind direction (from): N Cloud cover: 100%

Vegetative Cover: Total: 50 % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes w/ net - No Fairy Shrimp not much of anything

General Comments: _____

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95[illegible]1914

Project or Site Name & Location: Fort Ord Pond #35

Date: 2/24/95 Time: 1700 Observer(s): A. Barbe

Sample Number: 4 Location: Pond #35

Sampling Method: fish net, (dip net), sien, other: 6 mm Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other:

Substrate: Mud

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: bulldozed in 1991

Water Conditions: Water depth: 15 in. Surface area: ___ ft² or 80 by 30 ft.

Turbidity: none, slight, (moderate), (extreme), other:

Water temperature: 56 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 60 (°F)/°C Wind speed: 0-5

Wind direction (from): W Cloud cover:

Vegetative Cover: Total: 15 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net - fairy shrimp on & off from 0 in net - to 1, to ~10 moderate abundance
Black Phoebe
tree frog larvae + eggs
nymphs (damsel fly ?) highly abundant - took voucher specimens
american robin

Confirmed CA lindericlla by Christopher Rogers 3/8/95

General Comments: Water level steadily declining

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #36

Date: 2/24/95 Time: 1630 Observer(s): A. Becht

Sample Number: 4 Location: Pond #36

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: mud/soil

When Inubdated: When Desiccated:

Adjacent upland: annual grassland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: sheep grazing

Water Conditions: Water depth: 7+0 in. Surface area: ___ ft² or 100 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 57 (°F)/°C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 57 (°F)/°C Wind speed: 10-5

Wind direction (from): NW Cloud cover: 100%

Vegetative Cover: Total: 10 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net - No Fairy shrimp
1 CA Newt Egg Mass
abundant copepods
ghost nymphs
misc. inverts
water boatmen etc.

General Comments: Small water flow out of spillway

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #37

Date: 2/24/95 Time: 1605 Observer(s): A. Barbe

Sample Number: 4 Location: Pond #37

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: soil + veg.

When Inubdated: When Desiccated:

Adjacent upland: annual grassland

Habitat Condition: undisturbed, slightly/(moderately)/heavily trampled, contains trash, other: sheep grazing

Water Conditions: Water depth: 7 40 in. Surface area: ___ ft² or 100 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 58 (°F)/°C pH: Conductivity: D.O.:

Weather Conditions: Air temperature: 57 (°F)/°C Wind speed: 0-5

Wind direction (from): NW Cloud cover: 100%

Vegetative Cover: Total: 10 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: 60 % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 40 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net - no fairy shrimp
abundant - ghost nymphs, copepods
Hear tree frogs
tree frog larvae few & very small, some eggs
1 large newt larvae (~3")

- Dead treefrogs floating on water each visit
35 visible this visit

General Comments: water no longer running through spillway

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Mudhen West

Date: 2/24/95 Time: 1030 Observer(s): A. Bechta

Sample Number: 4 Location: Mudhen West

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Soil + Veg

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: Veg Removed for UXO Removal

Water Conditions: Water depth: 7 40 in. Surface area: ___ ft² or 350 by 75 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 58 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 58 (°F)/°C Wind speed: 0-5

Wind direction (from): E Cloud cover: 100%

Vegetative Cover: Total: 10 % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 100 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 Swipes - no fairy shrimp
clam shrimp
~15 Mallards
American Coot
Killdeer
3 Cormorants
Bull frog larvae
hear tree frogs

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Mudhen East

Date: 2/24/95 Time: 1030 Observer(s): A. Berlitz

Sample Number: 4 Location: Mudhen East

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other:

Substrate: Mud / Soil

When Inubdated: When Desiccated:

Adjacent upland: Oak Woodland

Habitat Condition: undisturbed, slightly/moderately/(heavily) trampled, contains trash, other: Veg cut for UXO Removal

Water Conditions: Water depth: 40 in. Surface area: ___ ft² or 300 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 58 (°F)/°C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: 56 (°F)/°C Wind speed: 0-5

Wind direction (from): N Cloud cover: 100 %

Vegetative Cover: Total: 30 % (of water area)

Algae: 5 % (of total vegetative cover)

Submergent vascular plants: 5 % (of total vegetative cover)

Dominant species:

Floating vascular plants: 5 % (of total vegetative cover)

Dominant species:

Emergent vascular plants: 285 % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/ net no Fairy shrimp.
Double-Crested Cormorant 5
American Coot
Bull Frog larvae + adults
tree frog adults

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & ikes Associates, 2600 V Street, Sacramento, CA . 18-1914

Project or Site Name & Location: Fort Ord Pond #1

Date: 3/10/95 Time: 1100 Observer(s): J. Bakka

Sample Number: 5 Location: Pond #1

Sampling Method: fish net, (dip net,) sien, other: green mesh aquarium net

Habitat Type: vernal pool, rock outcrop pool, (swale,) pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 7-40 in. Surface area: ___ ft² or 50 by 30 ft.

Turbidity: none, slight, (moderate,) extreme, other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: 0

Wind direction (from): _____ Cloud cover: 100% Evening

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes w/ net - 2 Fairy shrimp very low abundance
- tree frog larvae - multiple age classes
adult tree frogs heard
giant water beetle larvae
clam shrimp
sow bugs
damsel fly larvae

Confirmed CA Linderiella by Christopher Rogers 3/20/95

General Comments: At maximum capacity
big flow out - water going over spillway
+ all the top of levee of dam

Freshwater Invertebrate Sampling Data Sheet

Jones & ...kes Associates, 2600 V Street, Sacramento, CA ...18-1914

Project or Site Name & Location: Fort Ord Pond #2

Date: 3/10/95 Time: 1115 Observer(s): L. Barkett

Sample Number: 5 Location: Pond #2

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

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Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(See previous survey forms)

Water Conditions: Water depth: 34 in. Surface area: ___ ft² or 12 by 15 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: 0-5

Wind direction (from): W Cloud cover: 100% Raining

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(See previous survey forms)

Taxa Collected or Observed: 10 swipes w/ net - no fairy shrimp
very little life - current probably washed it out
a lot of dead tree frog eggs
a few small live tree frog larvae

General Comments: Huge water flow - strong current passing through pool at maximum capacity and then sum

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #4

Date: 3/10/95 Time: 1040 Observer(s): A Beckett

Sample Number: 5 Location: Pond #4

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

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Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond) other:

Substrate:

When Inubdated: When Desiccated:

Adjacent upland:

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: >40 in. Surface area: ___ ft² or 300 by 120 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: not taken °F / °C pH: ___ Conductivity: ___ D.O.: ___

Weather Conditions: Air temperature: not taken °F / °C Wind speed: Big Gusts - but very occasional - mostly no wind

Wind direction (from): all over Cloud cover: 100% Big Storm Raining

Vegetative Cover: Total: ___ % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/net - No Fairy Shrimp

clam shrimp

Seed Shrimp

1 leech

Tree Frog larvae - multiple age classes

small water beetles

ghost nymphs

water boatmen

General Comments: At maximum capacity - huge flow coming out

Powerful sulfur smell emanating from pond

Freshwater Invertebrate Sampling Data Sheet

Jones & ..kes Associates, 2600 V Street, Sacramento, CA ..18-1914

Project or Site Name & Location: Fort Ord Pond #5

Date: 3/10/95 Time: 1255 Observer(s): A Beetle

Sample Number: 5 Location: Pond #5

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

Habitat Type: (vernal pool) rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(see previous survey forms)

Water Conditions: Water depth: 30 in. Surface area: ___ ft² or 500 by 150 ft.

Turbidity: none, (slight) moderate, extreme, other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100% slight rain

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(see previous survey forms)

Taxa Collected or Observed: 25 swipes w/net - NO Fairy Shrimp
CA Tiger Salamanders multiple age classes
larvae
Tree frog larvae
multiple age classes
seed shrimp
giant water beetle larvae
mosquito larvae
pair Canada Geese
Mallards

General Comments: Water still has same reddish tinge it always has

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA. 18-1914

Project or Site Name & Location: Fort Ord Pond #11

Date: 3/10/95 Time: 1330 Observer(s): A. Burkett

Sample Number: 5 Location: Pond #11

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

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Habitat Type: (vernal pool), rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other:

Substrate:

When Inubdated: When Desiccated:

Adjacent upland:

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 25 in. Surface area: ___ ft² or 120 by 75 ft.

Turbidity: none, (slight), moderate, extreme, other:

Water temperature: not taken °F / °C pH: ____ Conductivity: ____ D.O.: ____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: 10-15

Wind direction (from): SW Cloud cover: 100% Raining Again Fairly Hard

Vegetative Cover: Total: ____ % (of water area)

Algae: ____ % (of total vegetative cover)

Submergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ____ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 25 swipes - no Fairy shrimp

Hear tree frogs

1 Dead adult tree frog

Hyper-abundant tree frog larvae - multiple age classes

Giant Water Beetle larvae

Seed shrimp

Snails

Sow bugs

Misc. insect larvae

General Comments:

Freshwater Invertebrate Sampling Data Sheet

Jones & ... Associates, 2600 V Street, Sacramento, CA ... 18-1914

Project or Site Name & Location: Fort Ord Pond #16

Date: 3/10/95 Time: 0940 Observer(s): S. Beckta

Sample Number: 5 Location: Pond #16

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate:

When Inubdated: When Desiccated:

Adjacent upland:

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other:

(See previous survey forms)

Water Conditions: Water depth: 7+0 in. Surface area: ___ ft² or 100 by 80 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: not taken °F / °C pH: ____ Conductivity: ____ D.O.: ____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: high gusts

Wind direction (from): all over Cloud cover: 100% for storm lots of rain

Vegetative Cover: Total: ____ % (of water area)

Algae: ____ % (of total vegetative cover)

Submergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ____ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: ____ % (of total vegetative cover)

Dominant species:

(See previous survey forms)

Taxa Collected or Observed: 10 swipes w/ net
couple of fairy shrimp most swipes
abundance low to moderate
leech
clam shrimp
seed shrimp
giant water bettle larvae
true fly larvae
2 mollusks

Confirmed CA Lindiniella by Christopher Rogers 3/20/95

General Comments: at full capacity for water

Freshwater Invertebrate Sampling Data Sheet

Jones & _ kes Associates, 2600 V Street, Sacramento, CA 5 .8-1914

Project or Site Name & Location: Fort Ord Pond #17

Date: 3/10/95 Time: 0840 Observer(s): J. Nichols

Sample Number: 5 Location: Pond #17

Sampling Method: fish net, (dip net,) sien, other: green mesh aquarium net

Habitat Type: vernal pool, rock outcrop pool, (swale,) pool in stream, roadside ditch, stock pond, other: dammed swale

Substrate: Mud

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 21 in. Surface area: ___ ft² or 60 by 7 ft.

Turbidity: none, slight, moderate, (extreme,) other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: High Gusts

Wind direction (from): all over Cloud cover: 100% raining big storm

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes w/net - no shrimp

tree frog larvae

seed shrimp

damsel fly larvae

General Comments: At max. capacity

pretty major flows coming in from lagoons sec

culverts - dropping a lot overnight

Freshwater Invertebrate Sampling Data Sheet

Jones & _ _ okes Associates, 2600 V Street, Sacramento, CA > _18-1914

Project or Site Name & Location: Fort Ord Pond #35

Date: 3/10/95 Time: 1345 Observer(s): A Beltz

Sample Number: 5 Location: Pond #35

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 7+0 in. Surface area: ___ ft² or 250 by 75 ft.

Turbidity: none, slight, moderate, (extreme), other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: 10-15 Gusty

Wind direction (from): SW Cloud cover: 100% Raining

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes w/net - No Fairy Shrimp

Some Bugs

Some Frog Larvae

Small Snails

Misc Invert's

General Comments: Fullest I have ever seen this

Inundating trunks of some oaks

Freshwater Invertebrate Sampling Data Sheet

Jones & ...kes Associates, 2600 V Street, Sacramento, CA 18-1914

Project or Site Name & Location: Fort Ord Pond #36

Date: 3/10/95 Time: 1200 Observer(s): J. Becker

Sample Number: 5 Location: Pond #36

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

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Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 120 by 100 ft.

Turbidity: none, slight, (moderate), (extreme), other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 100% very slight rain

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes w/net - No Fairy Shrimp

Copepods

Water boatmen

true frog larvae

giant water beetle larvae

misc. inverts

gnat eggs

General Comments: Very Fast flow through spillway culvert

culvert 2/3 full

Freshwater Invertebrate Sampling Data Sheet

Jones & . ›kes Associates, 2600 V Street, Sacramento, CA : 18-1914

Project or Site Name & Location: Fort Ord Pond # 37

Date: 3/10/95 Time: 1140 Observer(s): A. Becker

Sample Number: 5 Location: Pond #37

Sampling Method: fish net, (dip net), sien, other: green mesh aquarium net

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Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(See previous survey forms)

Water Conditions: Water depth: 7 40 in. Surface area: ___ ft² or 130 by 100 ft.

Turbidity: none, slight, (moderate), (extreme), other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: 0-5

Wind direction (from): W Cloud cover: 100% Rain only very light now

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(See previous survey forms)

Taxa Collected or Observed: 20 swipes w/ dip net - NO fairy shrimp

free floating larvae - few & small

ghost mysids

sow bugs

mise - insect larvae

Copepods

General Comments: Spillway about ½ full

Freshwater Invertebrate Sampling Data Sheet

Jones & ...kes Associates, 2600 V Street, Sacramento, CA ...8-1914

Project or Site Name & Location: Fort Ord Mudhen West

Date: 3/10/95 Time: 0600 Observer(s): A Beckta

Sample Number: 5 Location: Mudhen West

Sampling Method: fish net, (dip net), sien, other: 6mm Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

(See previous survey sheets)

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: See previous survey sheets

Water Conditions: Water depth: >40 in. Surface area: ___ ft² or 300 by 100 ft.

Turbidity: none, slight, moderate, (extreme), other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: _____

Wind direction (from): _____ Cloud cover: Lots Raining Hard Huge storm, very windy

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(See previous survey sheets)

Taxa Collected or Observed: 20 swipes w/ net - No fairy shrimp

5-1 Mallards

Sow bugs

1 bullfrog larvae

General Comments: Pond at fullest I have ever seen it

Freshwater Invertebrate Sampling Data Sheet

Jones & . ..es Associates, 2600 V Street, Sacramento, CA 9 .8-1914

Project or Site Name & Location: Fort Cox Mudhen East

Date: 3/16/05 Time: 1 Bio Observer(s): A Bachtz

Sample Number: 5 Location: Mudhen East

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

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Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, (stock pond), other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 7 ½ in. Surface area: ___ ft² or 400 by 125 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: not taken °F / °C pH: _____ Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: not taken °F / °C Wind speed: High

Wind direction (from): all over Cloud cover: 100 big storm constant rain

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes - no shrimp

Coots

Cormorants

3 bullfrog larvae

copepods

damselfly larvae

General Comments: _____

Freshwater Invertebrate Sampling Data Sheet

Jones & ..okes Associates, 2600 V Street, Sacramento, CA . . 318-1914

Project or Site Name & Location: Fort Ord Pond #4

Date: 3/24/95 Time: 1230 Observer(s): K. Beckett

Sample Number: 6 Location: Pond #4

Sampling Method: fish net, dip net, sien, other: 6 mm mesh aquarium net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(see previous data sheets)

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 240 by 200 ft.

Turbidity: none, slight, moderate, extreme, other: _____

Water temperature: 57 °F / °C pH: 6.2 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 71° °F / °C Wind speed: 1-5

Wind direction (from): N Cloud cover: 30%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(see previous data sheets)

Taxa Collected or Observed: Tree frog larva; Water boatmen; small water beetles, clam shrimp, giant water bentle larva, ghost nymphs, dragon fly larva.

20 swipes w/net no fairy shrimp

General Comments: Very very full. Heavy flow over spillway

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #5

Date: 3/24/95 Time: 1430 Observer(s): A Bachta

Sample Number: 6 Location: Pond #5

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(See previous data sheets)

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 400 by 300 ft.

Turbidity: none, (slight), moderate, extreme, other: still slight red tinge

Water temperature: 72 (°F)/°C pH: 6.1 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 64 (°F)/°C Wind speed: 5-10

Wind direction (from): W Cloud cover: 10%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(See previous data sheet)

Taxa Collected or Observed: 20 swipes w/net - 1 fairy shrimp abundance very low

8-15 tiger salamander larvae observed range in size from 1"-3"

clam shrimp, seed shrimp, tree frog larvae, giant water beetle larvae, water boatmen dragon fly larvae

Confirmed CA Lindenilla by Christopher Rogers 4/4/95

General Comments: Has gained a lot of water since last survey. Can't walk to deepest part any more. Still slight red tinge in water. Almost all organisms seem darker than in other ponds (herbs and inverts)

Freshwater Invertebrate Sampling Data Sheet

Jones & ... kes Associates, 2600 V Street, Sacramento, CA ... 18-1914

Project or Site Name & Location: Fort Ord Pond #1

Date: 3/24/95 Time: 1055 Observer(s): A Berlitz

Sample Number: 6 Location: Pond #1

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net + Kick Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 7 4 0 in. Surface area: ___ ft² or 20 by 30 ft.

Turbidity: none, slight, (moderate) extreme, other: _____

Water temperature: 54 °F / °C pH: 6.2 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 64 °F / °C Wind speed: 0-5

Wind direction (from): N Cloud cover: 30%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: tree frog larva various stages tree frog adult; clam shrimp; dragon fly larva; gnat water beetle larva

20 swipes w/ net, no fairy shrimp

10 swipes w/ kick net - no tiger salamander

General Comments: Small flow through spillway

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: First Ord Pond #2

Date: 3/24/95 Time: 1115 Observer(s): A. Berhte

Sample Number: 6 Location: Pond #2

Sampling Method: fish net, dip net, sien, other: Green Mesh Aquarium net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(See previous data sheets)

Water Conditions: Water depth: 32 in. Surface area: ___ ft² or 10 by 20 ft.

Turbidity: none, slight, moderate, extreme, other: _____

Water temperature: 54 °F / °C pH: 6.1 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 72 °F / °C Wind speed: 0-5

Wind direction (from): N Cloud cover: 30 %

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(See previous data sheets)

Taxa Collected or Observed: Tree frog larva various stages

Hear adult tree frogs Dragon fly larva, giant beetle

larva, small water beetle dead amphibian type

10 swipes w/net — no shrimp

General Comments: Small flow in + out

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #11

Date: 3/24/95 Time: 15:15 Observer(s): A. Berlitz

Sample Number: 6 Location: Pond #11

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: ___ in. Surface area: ___ ft² or 175 by 150 ft.

Turbidity: none, slight, moderate, extreme, other: _____

Water temperature: 70 (°F)/°C pH: 6.0 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 63 (°F)/°C Wind speed: 5-15

Wind direction (from): W Cloud cover: 10%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: 20 swipes w/net

several fairy shrimp on most swipes - moderate abundance

2 tiger salamander larvae ~1.5" long

seed shrimp — seems like 2 age classes: 2 hatches

snails

small water beetles

abundant true frog larvae - multiple age classes — Confirmed CA Lindoriella by Christopher Rogers 4/4/95

5 mallards

dragonfly larvae

giant water beetle larvae

General Comments: Very full, gained a lot of water from yesterdays storms.

Freshwater Invertebrate Sampling Data Sheet

Jones & [illegible]kes Associates, 2600 V Street, Sacramento, CA 18-1914

Project or Site Name & Location: Fort Ord Pond #16

Date: 3/24/95 Time: 0935 Observer(s): A Boehlke

Sample Number: 6 Location: Pond #16

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, (swale), pool in stream, roadside ditch, stock pond, other: dammed swail

Substrate:

When Inubdated: When Desiccated:

Adjacent upland:

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other:

Water Conditions: Water depth: 7+0 in. Surface area: ___ ft² or 275 by 125 ft.

Turbidity: none, slight, (moderate), extreme, other:

Water temperature: 56 (°F / °C pH: 6.3 Conductivity: D.O.:

Weather Conditions: Air temperature: 60 (°F / °C Wind speed: 0-5

Wind direction (from): SW Cloud cover: 30 %

Vegetative Cover: Total: ___ % (of water area)

Algae: ___ % (of total vegetative cover)

Submergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Floating vascular plants: ___ % (of total vegetative cover)

Dominant species:

Emergent vascular plants: ___ % (of total vegetative cover)

Dominant species:

Taxa Collected or Observed: 20 swipes w/net - Couple of shrimp intermittent on some swipes. Abundance low
Pair of red-tail hawks in area
Pair of Canada geese
tree frog larvae (various age classes) and eggs
Dragon Fly larvae
clam shrimp
giant water beetle larvae
seed shrimp

Confirmed CA Linderiella by Christopher Rogers 4/4/95

General Comments: Storm yesterday. Full to capacity. New pool to south evident I hadn't!

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA . 818-1914

Project or Site Name & Location: Fort Ord Pond #17

Date: 3/24/95 Time: 1135 Observer(s): A. Barbe

Sample Number: 6 Location: Pond #17

Sampling Method: fish net, (dip net), sien, other: Green mesh aquarium net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 10 in. Surface area: ___ ft² or 30 by 60 ft.

Turbidity: none, slight, moderate, (extreme), other: _____

Water temperature: 58 °F / °C pH: 6.3 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 65 (°F) / °C Wind speed: 0-5

Wind direction (from): NE Cloud cover: 30%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: tree frog larva various ages, dragon fly larva, small water beetle; red wing black birds ♂ ♀ 20 sweeps w/net no fairy shrimp

General Comments: Very small # flws coming in pools much smaller than previous visits

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #35

Date: 3/24/95 Time: 1545 Observer(s): A. Berlla

Sample Number: 6 Location: Pond #35

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(See previous data sheets)

Water Conditions: Water depth: 7-10 in. Surface area: ___ ft² or 400 by 100 ft.

Turbidity: none, slight, moderate, extreme, other: _____

Water temperature: 56 (°F) / °C pH: 6.1 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 61 (°F) / °C Wind speed: 5-10

Wind direction (from): NW Cloud cover: 10%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: Very little emergent because high water has inundated

(See previous data sheets)

Taxa Collected or Observed: 25 swipes w/net - No Fairy Shrimp.
Very little life in general
tree frog larvae
dead slugs
dead sow-bugs
dragonfly larvae
seed shrimp

General Comments: Extremely full. Just as full as last visit
Small amount of flow in + out of pool

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Pond #36

Date: 3/24/95 Time: 1300 Observer(s): A. Berlta

Sample Number: 6 Location: Pond #36

Sampling Method: fish net, (dip net), sien, other: Green mesh aquarium net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or 100 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 70 °F / °C pH: 6.7 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 72 (°F) / °C Wind speed: 0-5

Wind direction (from): N Cloud cover: 30%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: tree Frog larva; cope pods; dragon fly larva; giant water beetle, larva; seed shrimp; snails ghosts nymphs; adult treefrog; treefrog eggs (2) California newt eggs, water boatmen, 20 swipes w/net no fairy shrimp

General Comments: Moderate Water Flow through spillway

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Ord Pond #37

Date: 3/24/95 Time: 1205 Observer(s): A Beck G

Sample Number: 6 Location: Pond #37

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net + Kick Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(See previous data sheets)

Water Conditions: Water depth: 7 40 in. Surface area: ___ ft² or 150 by 100 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 58 °F / °C pH: 6.7 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 59 (°F) / °C Wind speed: 0-5

Wind direction (from): NW Cloud cover: 30%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(See previous data sheets)

Taxa Collected or Observed: phobee black, dragon fl. larva, tree frog larva, seed shrimp, cope pods, ghosts nymphs
20 swips with dip net no fairy shrimp, tree frog eggs
water beatmen, california newt eggs
10 swips w/ kick net no tiger salamanders

General Comments: moderate water flow out small way

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95818-1914

Project or Site Name & Location: Fort Old Madhen West

Date: 3/24/95 Time: 1345 Observer(s): A. Beckett

Sample Number: 6 Location: Madhen West

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

Water Conditions: Water depth: 740 in. Surface area: ___ ft² or ~~600~~ 200 by ~~300~~ ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 58 °F / °C pH: 6.5 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 76 (°F) / °C Wind speed: 0-5

Wind direction (from): NW Cloud cover: 20%

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Taxa Collected or Observed: turkey, mallards (2) bullfrogs; giant water beetle larva, adult tree frog, seed shrimp, water boatmen, bull frog larva, tree frog larva, clam shrimp pair Canada geese

20 sweeps w/net no fairy shrimp

General Comments: Very, very full. Dam almost submerged.

Freshwater Invertebrate Sampling Data Sheet

Jones & Stokes Associates, 2600 V Street, Sacramento, CA 95 1914

Project or Site Name & Location: Fort Ord Mudhen East

Date: 3/24/95 Time: 1330 Observer(s): A. Burkett

Sample Number: 6 Location: Mudhen East

Sampling Method: fish net, (dip net), sien, other: Green Mesh Aquarium Net

Habitat Type: vernal pool, rock outcrop pool, swale, pool in stream, roadside ditch, stock pond, other: _____

Substrate: _____

When Inubdated: _____ When Desiccated: _____

Adjacent upland: _____

Habitat Condition: undisturbed, slightly/moderately/heavily trampled, contains trash, other: _____

(see previous data sheets)

Water Conditions: Water depth: 240 in. Surface area: ___ ft² or 200 by 350 ft.

Turbidity: none, slight, (moderate), extreme, other: _____

Water temperature: 61 °F / °C pH: 6.6 Conductivity: _____ D.O.: _____

Weather Conditions: Air temperature: 76 (°F) / °C Wind speed: 0-5

Wind direction (from): 0-5 Cloud cover: E

Vegetative Cover: Total: _____ % (of water area)

Algae: _____ % (of total vegetative cover)

Submergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Floating vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

Emergent vascular plants: _____ % (of total vegetative cover)

Dominant species: _____

(see previous data sheets)

Taxa Collected or Observed: adult bull Frog, bull Frog larva ~~HH HHH HHH~~ (33) cope pods; snails; dragon fly larva; one double crested cormorant

American Coots

20 swipes no fairy shrimp

Pair of Mallards

General Comments: Very, Very Full. Dam almost submerged.