

**2011 SURVEY RESULTS
QUINO CHECKERSPOT BUTTERFLY
MANZANITA WIND ENERGY PROJECT
SAN DIEGO COUNTY, CALIFORNIA**

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August 8, 2011

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Summary

Forde Biological Consultants (FBC) conducted surveys for *Euphydryas editha quino* (quino checkerspot) on and adjacent to the Manzanita and La Posta Indian reservations, San Diego County, California for San Diego Gas and Electric's proposed Manzanita Wind Energy project. Despite the presence of host and nectar plants, FBC did not detect adult *E. e. quino* within the survey area between March 15, 2011 and May 20, 2011 during 7 surveys.

Survey Area

The proposed project site is located on the Manzanita Indian Reservation, the La Posta Indian Reservation, and other adjacent private holdings west of the community of Live Oak Springs in eastern San Diego County (Exhibit A). These properties are included within the areas covered by the Live Oak Springs and the Sombrero Peak 7.5-minute USGS quadrangles at Sections 3, 10, and 15 in Township 16 South, Range 6 East and Sections 24, 25, 26, 33, 34, and 35 in Township 15 South, Range 6 East (Exhibit B). The survey area included proposed turbine, transmission, and switchyard locations (Exhibit C).

Background

The U.S. Fish and Wildlife Service (USFWS) officially listed *E. e. quino* as "endangered" on January 16, 1997 (USFWS 1997). For this reason, it is protected under the provisions of the Endangered Species Act of 1973, as amended. As such, the law prohibits "take" of this species, either directly or indirectly. In order to help landowners prevent "take", the USFWS requires developers of real property to determine presence or absence of this species within areas of its current range.

Euphydryas editha has a range extending from British Columbia and Alberta, Canada, south including Colorado and Utah, and west along the coast to northern Baja California, Mexico. Twenty subspecies are recognized based on localized ranges and morphological characteristics. All subspecies utilize plants in the Plantaginaceae and Orobanchaceae families for larval food. There are four subspecies of *E. editha* recognized as occurring within southern California including *E. e. quino*. Historically common, the range of *E. e. quino* included Los Angeles, Orange, western Riverside, southwestern San Bernardino, and San Diego counties in addition to northern Baja California, Mexico. Although once common, populations have rapidly declined to a few isolated areas of Orange, western Riverside and San Diego counties along with areas of northern Baja California.

E. e. quino is associated with a variety of habitats that include clay soil meadows and vernal pools, grassland, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland and semi-desert (Ballmer et al. 2000). Within these communities they are usually observed in openings or areas with sparse vegetation (including trails and dirt roads), and on hilltops and ridgelines. It ranges in elevation up to 5,000 feet above mean sea level. Despite association with a wide range of habitat, distribution of this species is restricted to areas that support larval host plants. The primary host plant for *E. e. quino* is *Plantago erecta*. Other host plants include *Plantago patagonica*, *Antirrhinum coulterianum*, and *Collinsia* (Pratt, 2010). *Castilleja excserta*, and *Cordylanthus rigidus* are considered secondary hosts (USFWS, 2002). *Collinsia* may serve as the

primary larval host plant for *E. e. quino* at higher elevations such as those within the study area (Pratt, 2010). Hatching from eggs, usually laid on the host plant, the early larvae feed for a period and enter a dormant stage or diapause during periods of poor host plant conditions. During this period, they often rest under vegetation and rocks. If adverse weather conditions occur, the larvae may reenter diapause multiple times emerging after fall or winter rains. Generally the flight season for *E. e. quino* occurs from late February through April, peaking in March or April.

Methodology

Frank Dittmer (TE-225938-0) conducted a habitat assessment across 375-acres of real property on January 25, 2011 including proposed transmission line, turbine, and switchyard areas. Within the survey area, Dittmer determined areas consisting of suitable habitat and excluded areas based on lack of suitable habitat. The USFWS protocol requires a minimum of five surveys throughout the flight season, on non-consecutive days, within non-excluded areas. Dittmer, Greg Chatman (TE-075112-1), Sarah Farmer (TE-192708-0), Bill Gendron (TE-098709-2), and Andrew Pignoli (TE-053020-2) timed the surveys based on information provided by the USFWS's at the Quino Checkerspot Butterfly, 2011 Monitoring Information reference site¹ and reviewed weather forecasts before initiation of surveys to verify that suitable conditions existed. The biologists conducted 7 surveys between March 15 and May 20, 2011, at an average rate of 13 acres per hour using parallel transects along transmission line corridors and roughly parallel meandering transects in other areas. Surveyors walked within 5 meters of excluded areas such as closed-canopy shrub lands in search of host plants and *E. e. quino*. The biologists also mapped locations of host plants (Exhibit C). The methods utilized during the assessment and the surveys are accordance with the methodology described in "*Quino Checkerspot Butterfly, (Euphydryas editha quino), Survey Protocol Information*" prepared and published by the US Fish and Wildlife Service, February 2002. Table 1, includes survey dates and weather conditions.

Table 1. Survey Dates/Survey Number/Weather Conditions

Date (2011)	Survey Number	Personnel	Time	Temperature (°F)	Wind Speed Average/Maximum (mph)	Cloud Cover (%)	General Sky Condition
3/15	1	Dittmer/Farmer	1000	72	5-7	25	clear/patchy
3/15	1	Dittmer/Farmer	1500	73	5-7	25	clear/patchy
3/16	1	Dittmer/Farmer	1000	60	7-10 (gusts to 16)	10	clear/patchy
3/16	1	Dittmer/Farmer	1400	60	7-10 (gusts to 16)	20	patchy
3/17	1	Dittmer/Farmer	1030	63	2-6	20	patchy/overcast
3/17	1	Dittmer/Farmer	1500	72	0-4	20	patchy/overcast
4/12	1	Farmer/Paymard	1130	60	7-10	0	clear
4/12	1	Farmer/Paymard	1700	65	6-8 (gusts to 10)	0	clear
4/14	1	Farmer/Paymard	1030	60	6-8	0	clear
4/14	1	Farmer/Paymard	1430	65	6-8	0	clear
3/29	2	Dittmer/Farmer	1100	62	2-4	20	patchy/overcast
3/29	2	Dittmer/Farmer	1300	65	2-4	5-10	clear/patchy
3/29	2	Dittmer/Farmer	1500	68	5-7	10	clear
3/30	2	Dittmer/Farmer	1030	62	5-10	10	clear/patchy
3/30	2	Dittmer/Farmer	1300	66	12-15	10	clear/patchy
3/30	2	Dittmer/Farmer	1430	66	12-15	10	clear
4/5	2	Pignoli/Paymard	1000	66	3-6	5	clear/patchy
4/5	2	Pignoli/Paymard	1215	72	4-7 (gusts to 13)	30	patchy
4/5	2	Pignoli/Paymard	1400	72	4-6	40	patchy
4/15	2	Dittmer/Paymard	1000	65	4-6 (gusts to 10)	0	clear

¹ http://www.fws.gov/Carlsbad/TEspecies/Documents/QuinoDocs/QuinoMonRef/Quino_Ref_Info.htm

2011 Survey Results, Quino Checkerspot Butterfly
Manzanita Wind Energy Project

Date (2011)	Survey Number	Personnel	Time	Temperature (°F)	Wind Speed Average/Maximum (mph)	Cloud Cover (%)	General Sky Condition
4/15	2	Dittmer/Paymard	1430	74	4-6	0	clear
4/16	2	Dittmer	1000	72	4-6	5	clear/patchy
4/16	2	Dittmer	1430	78	4-6	0	clear
4/5	3	Farmer	1000	62	0-2	5	clear
4/5	3	Farmer	1400	65	2-5	50	patchy/overcast
4/11	3	Farmer/Paymard	1230	60	5-7	40	clear/patchy
4/11	3	Farmer/Paymard	1500	62	5-7	45	clear/patchy
4/14	3	Dittmer/Farmer/Paymard	1500	65	4-6	0	clear
4/14	3	Dittmer/Farmer/Paymard	1630	65	4-6	0	clear
4/20	3	Farmer/Paymard	1030	70	2-6	5	clear
4/20	3	Farmer/Paymard	1600	72	4-7	5	clear
4/26	3	Dittmer	1200	70	0-4	0	clear
4/26	3	Dittmer	1400	74	4-6	5	clear
4/26	3	Dittmer	1600	68	0-4	0	clear
4/18	4	Dittmer/Farmer/Paymard	1100	64	15-20	50	patchy/overcast
4/18	4	Dittmer/Farmer/Paymard	1230	64	15-20	50	patchy/overcast
4/20	4	Dittmer/Gendron	1045	68	3-9	0	clear
4/20	4	Dittmer/Gendron	1200	70	2-7	0	clear
4/20	4	Dittmer/Gendron	1300	68	5-12	0	clear
4/20	4	Dittmer/Gendron	1400	65	6-11	0	clear
4/20	4	Dittmer/Gendron	1500	65	5-9	0	clear
4/21	4	Dittmer/Farmer	930	64	15+	0	clear
4/21	4	Dittmer/Farmer	1100	63	15+ (gusts to 20+)	0	clear
4/25	4	Dittmer/Farmer	1000	65	2-5	30	clear/hazy
4/25	4	Dittmer/Farmer	1430	65	5-10	0	clear
4/27	4	Dittmer	1000	63	2-6	0	clear
4/27	4	Dittmer	1500	72	2-6	0	clear
4/28	4	Dittmer/Farmer/Paymard	1000	73	4-8	0	clear
4/28	4	Dittmer/Farmer/Paymard	1445	75	4-10	0	clear
4/26	5	Gendron	1000	61	5-12	0	clear
4/26	5	Gendron	1100	65	3-6	0	clear
4/26	5	Gendron	1200	66	3-7	0	clear
4/26	5	Gendron	1300	67	2-7	0	clear
4/26	5	Gendron	1400	68	2-7	0	clear
4/26	5	Gendron	1500	68	4-11	0	clear
4/27	5	Farmer/Gendron	1000	62	4-14	0	clear
4/27	5	Farmer/Gendron	1100	64	4-11	0	clear
4/27	5	Farmer/Gendron	1200	67	4-14	0	clear
4/27	5	Farmer/Gendron	1300	69	6-13	0	clear
4/27	5	Farmer/Gendron	1400	68	4-10	0	clear
4/27	5	Farmer/Gendron	1500	69	2-7	0	clear
4/27	5	Farmer/Gendron	1600	69	4-10	0	clear
4/28	5	Chatman	1030	76	8-10	0	clear
4/28	5	Chatman	1130	84	2-4	0	clear
4/28	5	Chatman	1230	83	3-8	0	clear
4/28	5	Chatman	1330	88	6-10	0	clear
4/28	5	Chatman	1430	86	8-12	0	clear
4/28	5	Chatman	1500	84	8-12	0	clear
4/29	5	Chatman	1015	66	2-7	0	clear
4/29	5	Chatman	1115	78	4-8	0	clear
4/29	5	Chatman	1215	78	4-8	0	clear
4/29	5	Chatman	1315	80	4-8	0	clear
5/5	5	Dittmer/Farmer	1000	78	2-4	0	clear
5/5	5	Dittmer/Farmer	1200	80	2-4	0	clear
5/5	5	Dittmer/Farmer	1300	82	2-4	0	clear
5/5	5	Dittmer/Farmer	1430	81	2-4	0	clear
5/4	6	Farmer/Paymard	930	63	2-5	0	clear
5/4	6	Farmer/Paymard	1400	80	2-5	0	clear/hazy
5/5	6	Chatman	1000	74	3-7	0	clear
5/5	6	Chatman	1100	79	5-8	0	clear
5/5	6	Chatman	1200	83	7-10	0	clear
5/5	6	Chatman	1300	85	6-10	0	clear
5/5	6	Chatman	1400	86	7-11	0	clear

Date (2011)	Survey Number	Personnel	Time	Temperature (°F)	Wind Speed Average/Maximum (mph)	Cloud Cover (%)	General Sky Condition
5/5	6	Chatman	1430	85	6-10	0	clear
5/6	6	Dittmer/Farmer/Chatman	1030	75	6-10	0	clear
5/6	6	Dittmer/Farmer/Chatman	1130	79	4-8	0	clear
5/6	6	Dittmer/Farmer/Chatman	1230	83	4-8	0	clear
5/6	6	Dittmer/Farmer/Chatman	1300	84	8-11	0	clear
5/11	6	Farmer	930	66	2-5	0	clear
5/12	7	Chatman	1030	80	3-4	0	clear
5/12	7	Chatman	1130	84	3-5	0	clear
5/12	7	Chatman	1230	87	4-7	0	clear
5/12	7	Chatman	1330	88	3-4	0	clear
5/12	7	Chatman	1430	87	4-8	0	clear
5/12	7	Chatman	1530	84	5-8	0	clear
5/13	7	Chatman	1030	73	6-12	0	clear
5/13	7	Chatman	1130	78	6-10	0	clear
5/13	7	Chatman	1230	80	6-10	0	clear
5/13	7	Chatman	1330	81	8-11	0	clear
5/13	7	Chatman	1430	80	7-10	0	clear
5/20	7	Farmer	930	66	2-5	0	clear
5/20	7	Farmer	1330	75	2-5	0	clear

Results

Frank Dittmer did not observe larval host plants during the habitat assessment conducted on January 25, 2011; however, he and the other biologists observed small patches of *Cordylanthus rigidus* and *Antirrhinum coulterianum* during the surveys. The biologists also observed a population of *Collinsia heterophylla*, a secondary host plant, consisting of more than 350 individuals. The biologists surveyed areas dominated by host plants, extensively, in search of *E. e. quino*. The biologists noted that some host plants, bloomed late. The biologists also observed abundant nectar sources including *Cryptantha* sp., *Lasthenia californica*, *Layia platyglossa*, *Amsinkia* sp., *Lupinus bicolor*, and *Linanthus dianthiflorus*. Other potential nectar sources include *Rhus ovata*, *Eriophyllum confertiflorum*, and *Ceanothus* sp.

Despite the presence of host plants and nectar sources, the biologists did not observe adult or larval *E. e. quino* utilizing any of these resources or flying in the survey area after the first 5 surveys. Due to late blooming period of some host plants, most likely due to cooling and late season rain, and to encompass the entire 2011 flight season (April 4 through May 20), the biologists conducted two additional surveys. The biologists did not observe adult or larval *E. e. quino* utilizing host plants, nectar sources, or flying in the survey area during the additional surveys. Table 2 includes a list of species observed during the surveys.

Table 2. Species Observed


Common Name	Species Name	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Brush Footed Butterflies	Nymphalidae								
Mylitta Crescent	<i>Phyciodes mylitta</i>	0	0	0	1	0	0	0	1
Mourning Cloak	<i>Nymphalis antiopa</i>	0	0	1	0	0	1	0	2
Common Buckeye	<i>Junonia coenia</i>	6	6	30	16	44	35	17	154
West Coast Lady	<i>Vanessa annabella</i>	1	0	0	0	0	0	0	1
Painted Lady	<i>Vanessa cardui</i>	2	0	4	13	3	4	5	31
Satyr Anglewing	<i>Polygonia satyrus</i>	1	0	0	0	0	0	0	1
Skippers	Hesperiidae								
Northern White-Skipper	<i>Heliopetes ericetorum</i>	0	0	0	1	7	5	4	17
Fiery Skipper	<i>Hylephila phyleus</i>	0	0	1	10	1	0	0	12
Funereal Duskywing	<i>Erynnis funeralis</i>	0	0	0	1	6	0	0	7
Mournful Duskywing	<i>Erynnis tristis</i>	0	18	0	7	0	0	0	25
Propertius Duskywing	<i>Erynnis propertius</i>	13	16	17	4	5	2	3	60
Juba Skipper	<i>Hesperia Juba</i>	0	0	0	0	4	0	3	7
Unidentified Skipper	<i>Hesperia</i>	0	0	2	0	2	0	0	4
Hairstreaks	Lycaenidae								
Western Brown Elfin	<i>Incisalia angustinus</i>	2	2	4	6	0	0	0	14
Perplexing Hairstreak	<i>Callophrys perplexa</i>	9	48	25	37	5	1	0	125
Southern Blue	<i>Glaucopsyche hygdamus</i>	1	8	8	15	14	15	0	61
Acmon Blue	<i>Icaricia acmon</i>	21	11	39	38	32	22	10	173
Echo Blue	<i>Celastrina ladon</i>	0	0	0	0	5	12	2	19
Melissa Blue	<i>Plebejus melissa</i>	0	0	3	3	7	0	1	14
Western Tailed-Blue	<i>Everes amyntula</i>	0	0	0	0	1	0	0	1
Lupine Blue	<i>Icaricia monticola</i>	0	0	0	0	6	0	5	11
Arrowhead Blue	<i>Glaucopsyche piasus umbrosa</i>	0	0	0	40	20	50	0	110
Square Spotted blue	<i>Euphilotes battoides</i>	1	0	1	0	0	0	0	2
Unidentified Blue	<i>Polyommatae</i>	22	15	25	19	17	14	0	112
Metalmarks	Riodinidae								
Mormon Metalmark	<i>Apodemia mormo</i>	61	49	86	98	186	125	65	670
Swallowtails	Papilionidae								
Pale Swallowtail	<i>Papilio eurymedon</i>	1	3	1	3	9	8	7	32
Western Tiger Swallowtail	<i>Papilio rutulus</i>	1	1	1	2	0	2	0	7
Whites and Orangetips	Pieridae								
Sara's Orangetip	<i>Anthocharis sara</i>	30	46	43	41	18	9	3	190
Cabbage White	<i>Pieris rapae</i>	0	1	0	0	0	0	0	1
Checkered White	<i>Pontia protodice</i>	19	31	42	17	17	27	8	161
Orange Sulphur	<i>Colias eurytheme</i>	0	2	0	2	1	0	0	5
Harford's Sulphur	<i>Colias barfordii</i>	4	24	13	20	30	45	35	171
Sleepy Orange	<i>Eurema nicippe</i>	0	0	0	0	1	3	0	4
Spring White	<i>Pontia sisymbrii</i>	0	6	0	0	0	0	0	6
Dainty Sulphur	<i>Nathalis iole</i>	0	2	0	1	3	4	0	10
Cloudless Sulphur	<i>Phoebis sennae</i>	0	0	0	0	3	2	0	5
California Marble	<i>Euchloe hyantis</i>	0	0	0	5	4	0	0	9
Others									
Drasteria Moth		0	0	0	1	2	0	0	3

Conclusion

Host plants and nectar sources occur within the survey area indicating potentially suitable habitat within the survey area; however, the biologists did not detect *E. e. quino* during the surveys. Weather conditions, which included snow and freezing temperatures, may have contributed to the absence of *E. e. quino* (and *Chlosyne gabbii*, [Gabb's checkerspot]) during the 2011 surveys. This finding is consistent with the range indicated by the 2010 report prepared by Calantas.


Certification

This report concludes the findings of the *E. e. quino* survey conducted for SDG&E's Manzanita Wind Energy Project. Forde Biological Consultants certifies that the information in this report and attached exhibits fully and accurately disclose the results and survey methods implemented to meet the USFWS survey protocol and reporting requirements for the *E. e. quino*.



Andrew Pignolo, Federal Permit Number TE-053020-2
6/30/11

Date



Greg Chatman, Federal Permit Number TE-075112-1
7/16/11

Date




Frank Dittmer, Federal Permit Number TE-225938-0
6/30/11

Date



Sarah Farmer, Federal Permit Number TE-192708-0
6/30/11

Date



Bill Gendron, Federal Permit Number TE-098709-2
7/13/11

Date

References Cited

Ballmer, G., Hawks, D., Osborne, K., and Pratt, G.

2000 *The Quino Checkerspot Butterfly; Euphydryas editha quino*. Unpublished manuscript.

Calantas, Barbara

2010 *45-Day Summary Report of Focused Surveys for the Quino Checkerspot Butterfly for the Manzanita Wind Energy Project*. Unpublished letter report on file at Laguna Mountain Environmental, Inc.

Pratt, Gordon F.

2010 A New Larval Food Plant, *Collinsia concolor*, for the Endangered Quino Checkerspot, *Euphydryas editha quino*. *Journal of the Lepodoptera Society* 64(1) 36-37.

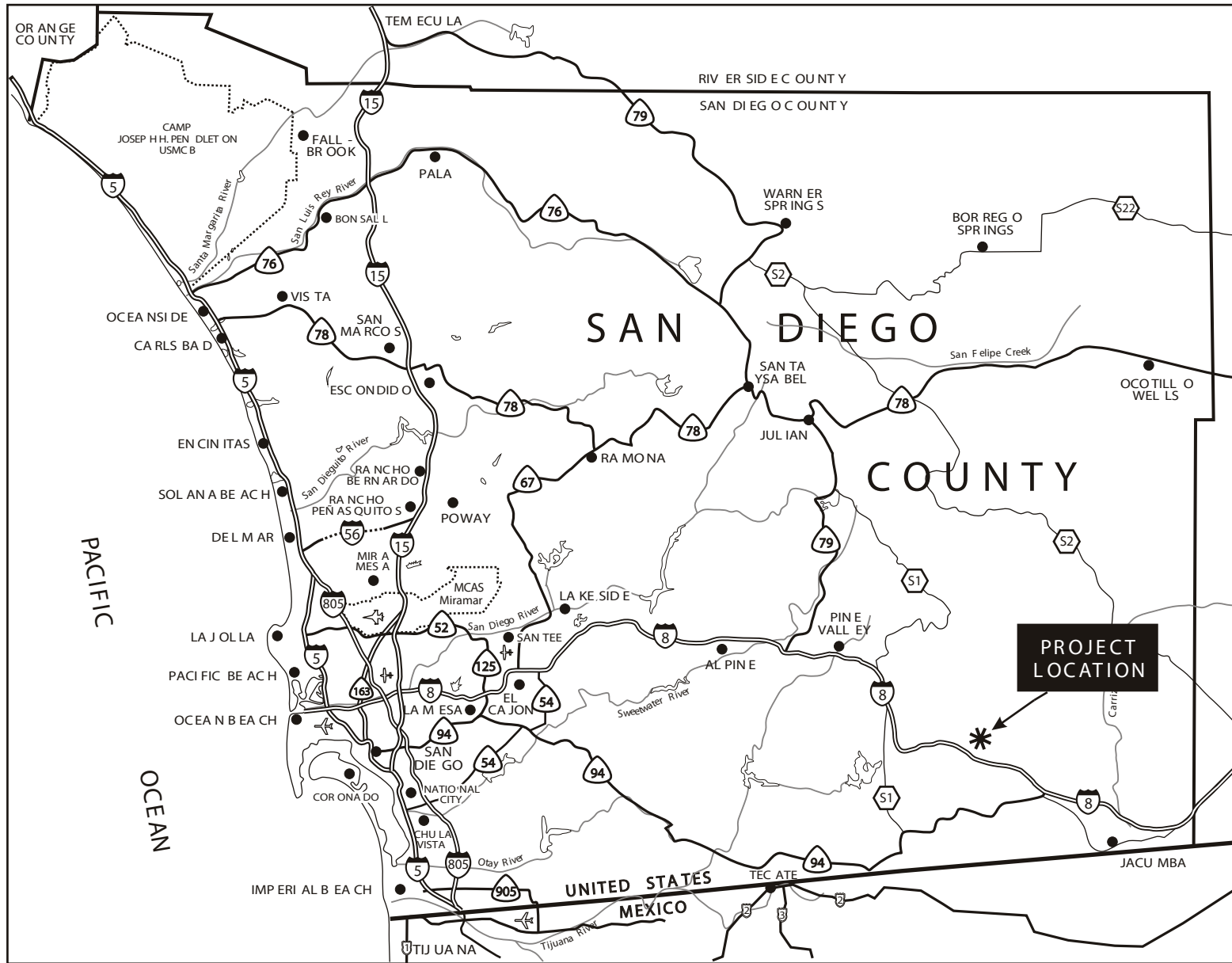
U.S. Fish and Wildlife Service (USFWS)

1997 *Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Laguna Mountains Skipper and Quino Checkerspot Butterfly*. Federal Register 62(11):2313-2322.

2001 *Quino Checkerspot Butterfly (Euphydryas editha quino)*. Survey Protocol Information. Unpublished manuscript available from the Carlsbad Field Office, Carlsbad, California.

2011 *Quino Checkerspot Butterfly (Euphydryas editha quino)*, 2011 Monitoring Information. Located at http://www.fws.gov/carlsbad/TEspecies/Documents/QuinoDocs/QuinoMonRef/Quino_Ref_Info.htm

APPENDIX A. Copies of Original Field Notes

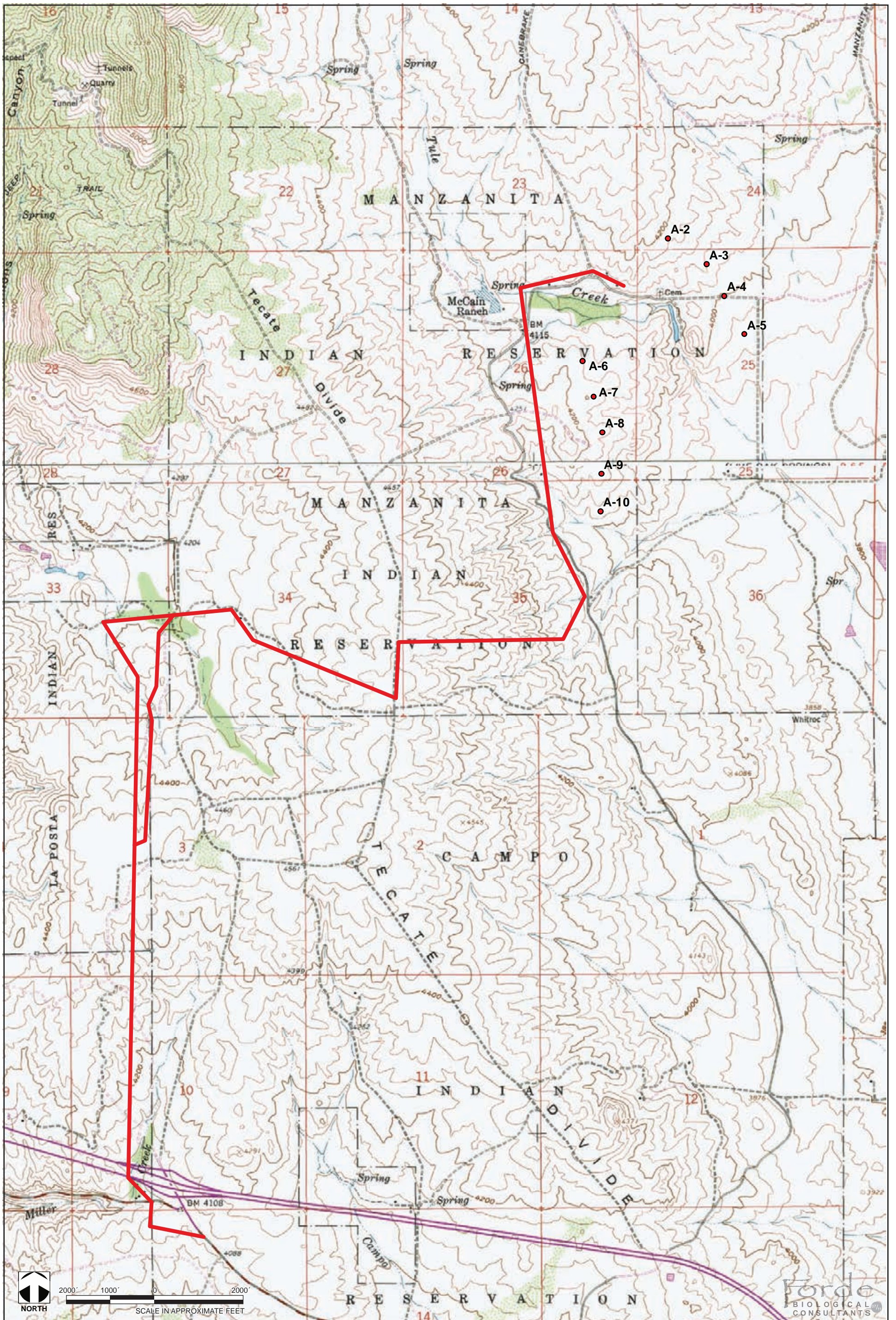


SOURCE: Laguna Mountain Environmental, 7/11.

exhibit A

Regional Location

2011 Survey Results for Quino Checkerspot Butterfly
Manzanita Wind Energy Project, San Diego County, California

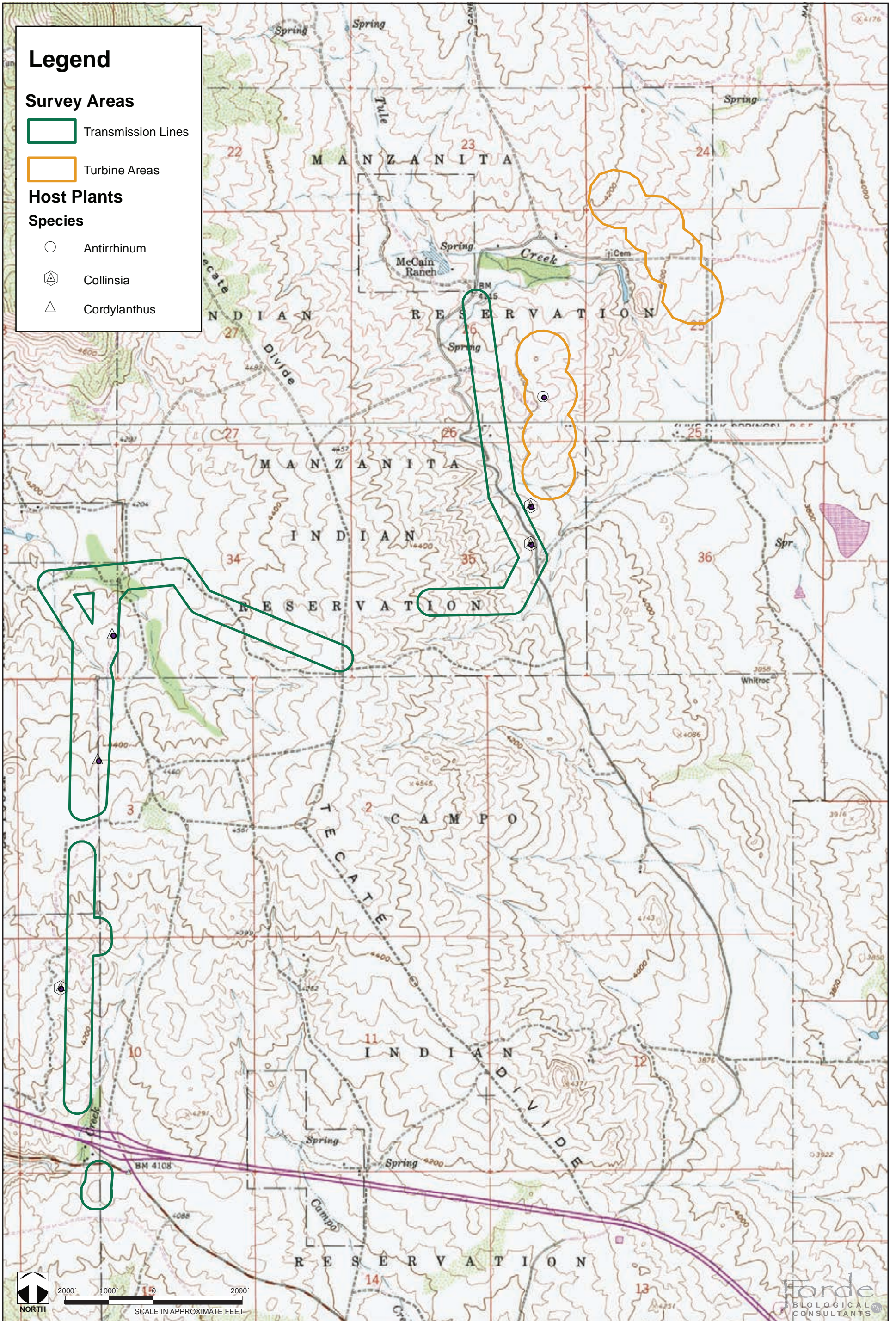


SOURCE: ESA Associates: USGS 7.5' Sombra Peak and Live Oak Springs Quadrangle.

exhibit B

Project Location

2011 Survey Results for Quino Checkerspot Butterfly
Manzanita Wind Energy Project, San Diego County, California



SOURCE: ESA Associates: USGS 7.5' Sombrero Peak and Live Oak Springs Quadrangle.

exhibit C

Survey Area

2011 Survey Results for Quino Checkerspot Butterfly
Manzanita Wind Energy Project, San Diego County, California



Surveyor Dattman Segment # 3

Date: 4/20/11

Comments: 3 Survey teams in the field today.

Bill doing #1 (Mangie's Pass) / Sarah / Marshall
doing Private Pass (N. of I-8) to La Posta.

Somewhat Windy today. 2-8 mph. 15 mph
by 4 PM.

Plant Communities and Habitat Information:

Sage scrub, Chaparral
mt. Mahogany abundant. Some in bloom some past/dry.
* Oak Riparian. (mostly) few Oak in Bloom.
* Wall Flower along Rds. abundant.

Host Plants Present:

last year Pseudanthus. (No growth this year
^{Noted} * Collinsia Purpurea approx 15+ plants @ the
following Coordinates. N. 32. 73707
W-116. 36128

Nectar Plants Present:

Gold field (same as past yr's.
Nothing new to note.

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location MANRANITA Survey Segment SOUTH OF I-8
 Surveyor BILL GENDRON Date 4/20/11 Survey Week Number 4
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: ALL Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 1045	0	(clear) patchy overcast drizzle shower	3-9 West	68
1200	0	(clear) patchy overcast drizzle shower	2-7 W	70
		clear patchy overcast drizzle shower		
1300	0	(clear) patchy overcast drizzle shower	5-12 W	68
1400	0	(clear) patchy overcast drizzle shower	6-11 W	65
1500	0	(clear) patchy overcast drizzle shower	5-9 W	65
Stop 1530		clear patchy overcast drizzle shower		

Habitat onsite (circle as applicable): hilltops, (ridges), rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	5,7,10	22 0
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) 11	2	0	<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady) 1	1	1	Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip) 111	3	0
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper) 1	1	0	<i>Colias harfordii</i> (Harford's Sulphur)		
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing) 1	1	0	<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)			<i>EUCHLOG hyantis</i> 1,4	5	0
<i>Ochlodes agricola</i> (Rural Skipper)			<i>LYCAENIDAE - NOID</i> 1	1	0
Lycaenidae (Hairstreaks)			<i>DRASTERIA</i> MOTH 1	1	0
<i>Athides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elf)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak) 1	1	0			
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lyzdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue) 1	1	0			
<i>Celastrina ladon</i> (Echo Blue)					

MANZANITA
Surveyor BILL GENDRON Segment # So. of I-8 Date: 4/20/11

Comments:

WARM DAY WITH STRONG BREEZES AND OCCASIONAL GUSTS OF WIND BUT WITHIN PROTOCOL LIMITS.

107 SPECIES OF BUTTERFLY OBSERVED. ONLY A. MORMO IN GREAT NUMBERS. DIVERSITY IS GOOD. ALL FAMILIES ARE IN FLIGHT.

NECTAR SOURCES ARE ADEQUATE. CRYPTANTHA AND LASTHENIA ARE ABUNDANT.

NO QCB HOST PLANTS WERE OBSERVED.

Plant Communities and Habitat Information:

HIGH DESERT CHAPARRAL DOMINATED BY MANZANITA AND CHEMISE. VEGETATION IS TOO DENSE IN AREAS TO THE POINT OF EXCLUSION FROM SURVEY

Host Plants Present:

NO EVIDENCE OF PLANTAGO.
NO OTHER POTENTIAL HOST PLANTS WERE FOUND.

Nectar Plants Present:

CRYPTANTHA, MUSTARDS, GOLD FIELDS, GOLDEN YARROWS, MANZANITA, ARABIS, ASTERS, ANSINKIA, CEANOETHUS, LUPINES, GROUND PINK

Quino Sighting NONE Date: _____ GPS Location: _____

Photographs Taken: NONE

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

* Day Canceled due to High Winds

Quino Checkerspot General Form

Adult Survey

Location San Antonio R. 15 Survey Segment _____
 Surveyor Dan & Fran Date 4/21/11 Survey Week Number 4
 Survey Partner(s) London
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>9:30</u>		<u>clear</u> patchy overcast drizzle shower	<u>15+ mph</u>	<u>64 F</u>
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop <u>11:00</u>		<u>clear</u> patchy overcast drizzle shower	<u>15+ Gust to 20+</u>	

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, *Plantago*, *Castilleja*, *Cordylanthus*, *Antirrhinum*, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotas sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopterus ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)		
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)					
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Aitides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche hydamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)					
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

DAY CALLED due to High Wind.
204 MPA

Plant Communities and Habitat Information:

Host Plants Present:

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location Manzanita Wind Farm Survey Segment Manzanita Wind office to oak trees
 Surveyor Sarah Farmer Date 4/25/11 Survey Week Number 4
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky					Wind (range)	Temp (F)
Start 10:00	30%	clear	hazy patchy	overcast	drizzle	shower	2-5 mph	65°
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
Stop 2:30	0%	clear	patchy	overcast	drizzle	shower	5-10 mph	65 F

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Blantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources, Colubina

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			Riodinidae (Metalmarks)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			Papilionidae (Swallowtails)		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			<i>Apodemia mormo</i> (Mormon Metalmark) 11 41 30		
<i>Junonia coenia</i> (Common Buckeye) 11 11	10		<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White) 11	2	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)	2	
<i>Heliopterus ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) 11	2	
<i>Hylephila phyleus</i> (Fiery Skipper) 11 11	10		<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)			<i>Blw</i> 11	5	
<i>Ochlodes agricola</i> (Rural Skipper)			<i>Arrowhead blue</i>	10	
Lycaenidae (Hairstreaks)			<div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> Total 108 </div>		
<i>Aitides holesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elf)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak) 11	2				
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue) 11 11	5				
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

Most plants in full bloom. Goldfields look they are just beginning to dry out.

Plant Communities and Habitat Information:

Chamise Chaparral, coastal sage scrub

Host Plants Present:

6' Collinsia obsoleta, tallest ~ 2 inches, recently bloomed

Nectar Plants Present:

Goldfields, Rock Goss, Phacelia, wall flower, chia, fiddleneck, composites
White layia, filaree, popcorn, bigada blupine

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location Maryanita Res. Survey Segment #4
 Surveyor Dittman Date 4/25/11 Survey Week Number 4
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: McLean Ranch South Elevation: Max 4100 Min 4039

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>10:00</u>	<u>0</u>	<u>clear</u> patchy overcast drizzle shower	<u>0-2</u>	<u>65</u> F
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop <u>2:30</u>	<u>0%</u>	<u>clear</u> patchy overcast drizzle shower	<u>0-2 mph</u>	<u>75</u> F

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent) <u>SAY TREE</u>	<u>1</u>		<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) <u>11</u>	<u>20</u>	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) <u>11</u>	<u>2</u>		<i>Papilio eurymedon</i> (Pale Swallowtail) <u>11</u>	<u>2</u>	
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady) <u>111</u>	<u>3</u>		Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip) <u>11</u>	<u>12</u>	
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) <u>1</u>	<u>6</u>	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mourning Duskywing) <u>11</u>	<u>7</u>		OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing) <u>11</u>			<div style="border: 1px solid black; border-radius: 50%; padding: 20px; display: inline-block;"> TOTAL = <u>89</u> </div>		
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atides holesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elf)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak) <u>11</u>	<u>10</u>				
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue) <u>1</u>	<u>1</u>				
<i>Icarcia acmon</i> (Acmon Blue) <u>11</u>	<u>11</u>				
<i>Celastrina ladon</i> (Echo Blue)					
<i>Chlorostilbon</i> Blue <u>11</u>	<u>8</u>				

Surveyor

Dittmer

Segment #

4

Date:

4/25/11

Comments:

McPain Ranch South along rd & line.

Gold field getting crisp - in full sun. They're the first to come out through in spring.
Warm today compared to last week. Slight breeze.

Red tail out. seen three today.

Noted 15+ Woolly Amaryllis on road rd & UASA out area. In loose sand - orange/red underbellies. Approx $\frac{1}{2}$ cm in length.

The penstemon is as big as last year's growth. But seems to be wicking, not sure if that's a characteristic

Plant Communities and Habitat Information:

Oak Riparian, live Oak, Chaparral. No. 9. in disturbed areas and hill sides along the road.

Early Onion (*Allium haematostichum*)
CA. Penny, Nicotiana - blooming good now.
Penstemon *centranthoides* (Beaked) little wicky, ~~some~~
Buck Pappus, Mallow (white)

Host Plants Present:

Nothing new to note in this section. see previous weeks notes for same section.

Nectar Plants Present:

Same as previous.

 Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Manzanita Wind Farm
Quino Checkerspot General Form

Adult Survey

Location LA POSA CASINO South / Private prop N of I-8 Survey Segment #2
 Surveyor D. Hines Date 4/27/11 Survey Week Number 4
 Survey Partner(s) [Signature]
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4200 Min 4000

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>10:00</u>	<u>0%</u>	<u>clear</u> patchy overcast drizzle shower	<u>2-6</u>	<u>63 F</u>
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop <u>3:00</u>	<u>0</u>	<u>clear</u> patchy overcast drizzle shower	<u>2-6</u>	<u>70 F</u>

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	<u>10</u>	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)	<u>1</u>	<u>(1)</u>
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)	<u>11</u>	<u>3</u>
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)	<u>11</u>	<u>2</u>
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Purgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)					
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycenidae (Hairstreaks)					
<i>Atides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)	<u>14</u>	<u>8</u>			
<i>Icaricia acmon</i> (Acmon Blue)	<u>11</u>	<u>3</u>			
<i>Celastrina ladon</i> (Echo Blue)					
			<u>TOTAL</u>	<u>27</u>	

Surveyor _____ Segment # _____

Date: _____

Comments:

Plant Communities and Habitat Information:

Host Plants Present:

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Manzanita Wind Farm
 Quino Checkerspot General Form

Adult Survey

Location ~~Western~~ Alt Route Survey Segment #2 6A
 Surveyor Dittmer Date 4/28/11 Survey Week Number 54
 Survey Partner(s) N/A
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4200 Min 3820

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 10-	70%	clear patchy overcast drizzle shower	4-8 mph	73°F
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop 2:45	40%	clear patchy overcast drizzle shower	4-10 mph	75°F

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue) III	3	
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail) I		I
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady) III I	6		Picridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip) III III	12	
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White) III III	7	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) III I	6	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertus</i> (Propertius Duskywing)			<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> TOTAL = 61 </div>		
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atides holesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elf) III ?	3				
<i>Callophrys perplexa</i> (Perplexing Hairstreak) III	4				
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue) III	5				
<i>Icarcia acmon</i> (Acmon Blue) III III	10				
<i>Celastrina ladon</i> (Echo Blue)					
Unidentified Blue III	5				

Surveyor _____

Segment #

3

Date:

4/28/11

Comments:

Greg Chapman working WJ as today. Doing
the line from Mansanita Tribal office
down to Mc Cain Ranch.

~~Spruce~~ Farmer / Mansanita Payment Working
on Alternate Route EAST

as mentioned before area very disturbed by
pad construction and some Rd. grading.

Warm & Windy today.

Plant Communities and Habitat Information:

Chaparral, NWG.

Host Plants Present:

Antirrhinum. 15+ plants, Blooming
8-12" high. No sign of feeding.

Nectar Plants Present:

 Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

68 Adult Survey

Location Masonita Wind farm

Survey Segment Easternmost alt. alignment

Surveyor S. Foster

Date 4/28/11 Survey Week Number 4

Survey Partner(s) Marshall Raymond

Total Acres: _____ Portion Surveyed: 0 Elevation: Max 4210 Min 3870

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>10:00</u>	<u>0%</u>	<u>clear</u> patchy overcast drizzle shower	<u>4-8 mph</u>	<u>73°</u>
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop <u>2:30</u>	<u>0%</u>	<u>clear</u> patchy overcast drizzle shower	<u>4-8 mph</u>	<u>76°</u>

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources. Collinsia

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melisso</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	<u>8</u>	<u>1</u>
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)	<u>1</u>	<u>1</u>
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)	<u>2</u>	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)	<u>1</u>	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertus</i> (Propertius Duskywing)	<u>1</u>	<u>1</u>	<i>Dainty sulphur</i>	<u>1</u>	
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atides holesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)	<u>2</u>	<u>1</u>			
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)	<u>1</u>				
<i>Celastrina ladon</i> (Echo Blue)					

TOTAL 19

Surveyor _____ Segment # _____

Date: _____

Comments:

Plant Communities and Habitat Information:

Host Plants Present:

Collinsia 7', 20' 20'

Nectar Plants Present:

Dune evening primrose, golden yellow, blue curls, popcorn, sugar beets, f. lancea
mini lupine, purple nightshade, fiddleheads, goldfish, parastim
white lupine, bigada lupine, sun cups, chia, phacelia, globe gilia, purple larkspur,
summer lilac, ground pink, woolly adonis

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location MANZANITA Survey Segment SOUTH OF I-8
 Surveyor BILL SENDRON Date 4/26/11 Survey Week Number 5
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: ALL Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 1000	0	(clear) patchy overcast drizzle shower	5-12 W	61
1100	0	(clear) patchy overcast drizzle shower	3-6 W	65
1200	0	(clear) patchy overcast drizzle shower	3-7 W	66
1300	0	(clear) patchy overcast drizzle shower	2-7 W	67
1400	0	(clear) patchy overcast drizzle shower	2-7 W	68
Stop 1500	0	(clear) patchy overcast drizzle shower	4-11 W	68

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			X <i>Plebejus melissa</i> (Melissa Blue) 11	2	0
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			X <i>Apodemia mormo</i> (Mormon Metalmark) 15, 10, 5	30	0
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
X <i>Junonia coenia</i> (Common Buckeye) 1	1	0	X <i>Papilio eurymedon</i> (Pale Swallowtail) 1	1	0
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			X <i>Anthocharis sara</i> (Sara's Orangetip) 1, 1	2	0
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopterus ericetorum</i> (Northern White-Skipper)			X <i>Colias harfordii</i> (Harford's Sulphur) 1	1	0
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing) 11	2	0	<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
X <i>Erynnis propertius</i> (Propertius Duskywing) 1	1	0	ERYNNIS SP. 1	1	0
<i>Ochlodes agricola</i> (Rural Skipper)			ICARICIA LUPINI 1, 2	4	0
Lycenidae (Hairstreaks)			EUCHLOE SP. 2	2	0
<i>Atlides halesus</i> (Great Purple Hairstreak)			HORNED LIZARD		
<i>Incisalia augustinus</i> (Western Brown Elfin)				4	-
X <i>Callophrys perplexa</i> (Perplexing Hairstreak) 1	1	0			
<i>Strymon melinus</i> (Gray Hairstreak)					
X <i>Glaucopsyche lygdamus</i> (Southern Blue) 1	1	0			
X <i>Icaricia acmon</i> (Acmon Blue) 1, 1, 3, 1	6	0			
X <i>Celastrina ladon</i> (Echo Blue) 1	1	0			

MANZANITA

Surveyor Bill Gendron Segment # So. of I-8 Date: 4/26/11

Comments:

WARM DAY WITH MODERATE WINDS AND CLEAR SKIES.
14 SPECIES OBSERVED. A. MORMO IS VERY COMMON.
OTHER SPECIES ARE SCARCE. ALL LEP FAMILIES ARE
FLYING. EARLY SPECIES ARE NEAR END OF ADULT
SEASON
NECTAR RESOURCES ARE ABUNDANT.
NO QCB HOST PLANTS WERE FOUND.

Plant Communities and Habitat Information:

DESERT CHAPARRAL

Host Plants Present:

NONE FOUND

Nectar Plants Present:

CRYPTANTHA, MUSTARDS, LASTHENIA, YARROW, MANZANITA,
ARABIS, ASTERS, AM SINKIA, CEANOETHUS, LUPINES,
CHIA

Quino Sighting NONE Date: _____ GPS Location: _____

Photographs Taken: NONE

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location Manzanita Wind Farm Survey Segment #3 La Posta Casero north
 Surveyor S. FANNO Date 4/27/11 Survey Week Number 5
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 10:00	0%	clear patchy overcast drizzle shower	2-6 mph	63°
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop 2:30	0%	clear patchy overcast drizzle shower	2-4 mph	72°

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources, Salicaria

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	11	20
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	10		<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)	11	4
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)	1	1
<i>Hylephila phyleus</i> (Fiery Skipper)	1		<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)			<i>Woodrat blue</i>	11	5
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Ailides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia angustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icaricia acmon</i> (Acmon Blue)	5				
<i>Celastrina ladon</i> (Echo Blue)					
			Total 46		

Surveyor _____ Segment # _____

Date: _____

Comments:

Coldfield beginning to dry out. Collinsia in full bloom. Although conditions were good, not a lot of butterflies and bees.

Plant Communities and Habitat Information:

Chamise Chaparral

Host Plants Present:

Collinsia

Nectar Plants Present:

Blue gilia, fiddleneck, purple flower, filaree, gold fields, rock wren, wild cucumber, white lilya, phacelia, wallflower, hebe, lupine, mine lupine, woolly daisy, baby blue eyes, purple kerlock

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

But did this section. Regen to her notes.

Quino Checkerspot General Form

Adult Survey

Location MANZANITA TRIBAL OFFICE West Survey Segment # 2
 Surveyor Gordon Date 4/27/11 Survey Week Number 5
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: office to pavement Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 10:00	2	clear patchy overcast drizzle shower	2-10	63F
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop		clear patchy overcast drizzle shower		

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopterus ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)		
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)					
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycanidae (Hairstreaks)					
<i>Allides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Collophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche hygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)					
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor Gondron Segment # _____

Date: 4/27/11

Comments:

Bill has these notes for this day
Refer to his notes for this day.

Plant Communities and Habitat Information:

Host Plants Present:

Nectar Plants Present:

Ouino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location MANZANITA Survey Segment SECTION 2
 Surveyor BILL GENDRON Date 4/27/11 Survey Week Number 5
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: ALL Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 1000	0	clear patchy overcast drizzle shower	4-14 NE	62
1100	0	clear patchy overcast drizzle shower	4-11 NE	64
1200	0	clear patchy overcast drizzle shower	4-14 NE	67
1300	0	clear patchy overcast drizzle shower	6-13 NE	69
1400	0	clear patchy overcast drizzle shower	4-10 NE	68
1500	0	clear patchy overcast drizzle shower	2-7 NE	69
Stop 1600	0	clear patchy overcast drizzle shower	4-10 NE	69

Habitat onsite (circle as applicable) hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue) 1	1	0
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) 5, 10, 10, 25	0	0
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) 5, 2, 5	12	0	<i>Papilio eurymedon</i> (Pale Swallowtail) 1	1	1
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady) 1	1	0	Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip) 1	1	0
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur) 1	1	0
<i>Heliopetes ericetorum</i> (Northern White-Skipper) 1	1	0	<i>Colias harfordii</i> (Harford's Sulphur)		
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)			DRASTERIA MOTH 1, 1	2	0
<i>Ochloides agricola</i> (Rural Skipper)			ERYNNIS BRIZO 1	1	0
Icaenidae (Hairstreaks)			HESTERIA JUBA 1, 2	3	0
<i>Atlides halesus</i> (Great Purple Hairstreak)			GLAUCOPSCHE PIASUS 20	20	0
<i>Incisalia augustinus</i> (Western Brown Elfin)			EUCHLOE SP. 2	2	0
<i>Callophrys perplexa</i> (Perplexing Hairstreak) 2	2	0			
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue) 1, 1, 2, 1	5	0			
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor BILL GENDRON Segment # SECTION 2 Date: 4/27/11

Comments:

WARM DAY WITH MODERATE WINDS AND CLEAR SKIES.

15 SPECIES OBSERVED. SPRING SPECIES ARE ON THE WING WITH EARLY SPECIES IN DECINE. BUCKEYES ARE PLENTIFUL AND THE ONLY COMMON NYMPHALIDAE TO BE FOUND.

NECTAR RESOURCES ARE ABUNDANT.

NO QCB HOST PLANTS WERE FOUND.

Plant Communities and Habitat Information:

DESERT CHAPARRAL DOMINATED BY MANZANITA, Ceanothus, CHAMISE AND BUCKWHEAT

AREA BURNED WITHIN 10 YEARS. GROWTH IS NOT MATURE.

Host Plants Present:

NONE FOUND

Nectar Plants Present:

AMSIKIA, CRYPTANTHA, PRIMROSE, MUSTARDS, Ceanothus, ARABIS, LASTHENIA, PHACELIA, LUPINES,

Quino Sighting NONE Date: _____ GPS Location: _____

Photographs Taken: NONE

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location San Diego Co, Marzanita Ind. Res. Survey Segment TEGATE RIDGE/CANEBAUGH RD.
 Surveyor GREG CHATMAN Date 28 APR 2011 Survey Week Number 5
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4,452ft Min 4,050ft.

Time (24 hr)	% Cloud	Sky					Wind (range)	Temp (F)
Start 10:30 AM	☉	clear	patchy	overcast	drizzle	shower	8-10 mph	76°
11:30 AM		clear	patchy	overcast	drizzle	shower	2-4 mph	84°
12:30 PM		clear	patchy	overcast	drizzle	shower	3-8 mph	83°
1:30 PM		clear	patchy	overcast	drizzle	shower	6-10 mph	88°
2:30 PM		clear	patchy	overcast	drizzle	shower	8-12 mph	86°
3:00 PM	↓	clear	patchy	overcast	drizzle	shower	8-12 mph	84°
Stop		clear	patchy	overcast	drizzle	shower		

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leonira</i> (Leonira Checkerspot)			Riodinidae (Metamarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	304	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	7	☉	<i>Papilio eurymedon</i> (Pale Swallowtail)	2	×
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutilus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orange-tips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orange-tip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orange-tip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Collias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericiorum</i> (Northern White-Skipper)	2		<i>Collias harrfordii</i> (Harrford's Sulphur)	2	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)			JUBA SKIPPER	1	
<i>Ochlodes agricola</i> (Rural Skipper)			CLOUBLESS SULPHUR	1	
Lycenidae (Hairstreaks)			DAUNTY SULPHUR	1	
<i>Ailides holesus</i> (Great Purple Hairstreak)					
<i>Inicola angustinus</i> (Western Brown Elfin)					
<i>Calliphrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icaricia acmon</i> (Acmon Blue)	1				
<i>Celastrina ladon</i> (Echo Blue)	2				

Surveyor GREY CHATMAN Segment # TELEATE RIDGE / CANEBREAK RD.Date: 28 APR 2011

- Comments: - GOOD SURVIVAL CONDITIONS
- STEADY BREEZE IN SOME AREAS, BUTTERFLIES STILL ON-THE-WING
 - GOOD HABITAT, WITH RIDGES + HILLSIDES, PATCHES OF COLLUSIA
 - MORNING HOURS, MARCHES MOST COMMON BUTTERFLY IN ASSOCIATION
w/ LOCALLY ABUNDANT ERIOGONUM FASCICULATUM (BUCKWHEAT)
 - Buckwheat's MOST MOST COMMON
- SPENT AMPLE TIME ON RIDGES NEAR HOST (COLLUSIA)
w/ N/D OLLIVIO CHECKERSPOTS OBSERVED!

Plant Communities and Habitat Information:

DESERT

SAN DIEGOAN SCRUB - Cercocarpus, Adenostoma,
Quercus, Ceanothus, GOOD ROCK OUTCROPS + RIDGES
- Eriogonum fasciculatum, Lotus, Cryptantha, Golden yarrow

Host Plants Present:

Collisia concolor - CHINESE HOUSES IN SEVERAL
SMALL PATCHES

GPS COORDINATES (UTM) - 11S, 0562712, 3622942
11S, 0562468, 3623204

Nectar Plants Present:

Cryptantha, Lasthenia, Golden yarrow

 Quino Sighting

Date:

GPS Location:

Photographs Taken:

1. <u>Collisia PATCHES</u>	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Greg Chapman Did this Section.

Quino Checkerspot General Form

Adult Survey

Location MANZANITA TRIBAL OFFICE E/N Survey Segment # 3
 Surveyor CHAPMAN Date 4-28/11 Survey Week Number 5
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop		clear patchy overcast drizzle shower		

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, *Plantago*, *Castilleja*, *Cordylanthus*, *Antirrhinum*, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)		
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)					
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)					
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor Chapman Segment # _____

Date: 4/28/11

Comments:

Refer to Chapman
Notes for this day.

Plant Communities and Habitat Information:

Host Plants Present:

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location SAN DIEGO CO., MANZANITA INDIAN RES. Survey Segment UPPER DIABLO CYN.Surveyor GREG CHAPMAN Date 29 APR 2011 Survey Week Number 5Survey Partner(s) NONETotal Acres: _____ Portion Surveyed: _____ Elevation: Max 4121ft Min 3920ft

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 10:15	0	clear patchy overcast drizzle shower	2-7 mph	66°
11:15	↓	clear patchy overcast drizzle shower	4-8 mph	78°
12:15	↓	clear patchy overcast drizzle shower	4-8 mph	78°
1:15	↓	clear patchy overcast drizzle shower	4-8 mph	80°
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop		clear patchy overcast drizzle shower		

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, *Plantago*, *Castilleja*, *Cordylanthus*, *Antirrhinum*, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marino Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	30+	x
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	4	x	<i>Papilio eurymedon</i> (Pale Swallowtail)	2	x
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orange-tips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orange-tip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orange-tip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)	3	y-	<i>Colias harfordii</i> (Harford's Sulphur)	4	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mourning Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)			<i>Phoberus semmae</i>	2	
<i>Ochlodes agricola</i> (Rural Skipper)			(<i>Cloudless Sulphur</i>)		
Lycenidae (Hairstreaks)			<i>Nathalis iole</i>	2	x
<i>Atides holaxus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elf)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche hydamus</i> (Southern Blue)	1				
<i>Icarcia acmon</i> (Acmon Blue)					
<i>Celastrina ladon</i> (Echo Blue)	2				

Surveyor CAROL CHATMAN Segment # UPPER DIABLO CYN.Date: 29 APR 2011

Comments: - Rocky outcrops between old Hwy 80 + I-8 rest habitat
 - access rd's + open area south of old Hwy 80 marginal.
 - A. nympha most common species - (PENNY FLIGHT) → TRENCH AREA.
 - ILLINOIS ARE MOSTLY WORN INDIVIDUALS (POST PINK)
 - MOST TIME SPENT NEAR ROCKY OUTCROPS + OPEN AREAS

W/NO QUINO CHELICERSPOT BUTTERFLIES OBSERVED

Plant Communities and Habitat Information: Chamise, Buckwheat, Cercocarpus, Cottonwood, Yucca, Nanzanite,

- Good Habitat but with no host plants present

Host Plants Present: NONE OBSERVED

Nectar Plants Present: Lasthenia, Cryptantha, Golden yarrow, Blue dicks

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Manzanita Wind Farm
Quino Checkerspot General Form

Adult Survey

Location LA Pesta South to I-8 Survey Segment #2 Private Property
 Surveyor Dettmer Date 4-29-11 Survey Week Number 5
 Survey Partner(s) Raymond (RANKING)
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4000 Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>10:00</u>	<u>0</u>	clear patchy overcast drizzle shower	<u>5-10 mph</u>	<u>60 F</u>
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop <u>2:30</u>	<u>0</u>	clear patchy overcast drizzle shower	<u>5-10 mph</u>	<u>65 °F</u>

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources. (Pantasia)

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue) <u>11</u>	<u>2</u>	
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) <u>10</u>		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) <u>11</u>	<u>2</u>		<i>Papilio eurymedon</i> (Pale Swallowtail) <u>1</u>	<u>1</u>	
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) <u>1</u>	<u>1</u>	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)					
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Artides holesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue) <u>11</u>	<u>2</u>				
<i>Icarcia acmon</i> (Acmon Blue) <u>11</u>	<u>5</u>				
<i>Celastrina ladon</i> (Echo Blue)					
<i>Lupan Blue</i> <u>11</u>	<u>2</u>				

Total = 47

Surveyor Ditman Segment # #1

Date: 4/29/11

Comments:

Chapman doing seg #1, Margie's property
Refer to his notes for that section.

Most of the Blue nectar were just North
of I-8 in a small w/ wet on abundant

Plant Communities and Habitat Information:

Chaparral dominated by
Mt. Mahogany and *Platanus*.

Host Plants Present:

Lemon *Lanarius*, Lotus, Finger-Pod.

Collected 20+ plants around base of Mt. Mahogany.

① N 32.71521

W 116.36527

1293m elevation

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

* Chapman has notes for his section.
 * East of many with a govt to Rd.

Quino Checkerspot General Form

Adult Survey

Location W. Alt turbine location Survey Segment #36A
 Surveyor Dutton Date 5/5/11 Survey Week Number 105
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4000 Min 3920

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>10 -</u>	<u>0</u>	<u>clear</u> patchy overcast drizzle shower	<u>2-4 mph</u>	<u>78 F</u>
		clear patchy overcast drizzle shower		
<u>1200</u>	<u>0</u>	<u>clear</u> patchy overcast drizzle shower	<u>2-4</u>	<u>80 F</u>
		clear patchy overcast drizzle shower		
<u>100</u>	<u>0</u>	<u>clear</u> patchy overcast drizzle shower	<u>2-4</u>	<u>82 F</u>
		clear patchy overcast drizzle shower		
Stop <u>230</u>	<u>0</u>	<u>clear</u> patchy overcast drizzle shower	<u>2-4</u>	<u>81 F</u>

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue) III	3	
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) III III III	26	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) III	6		<i>Papilio eurymedon</i> (Pale Swallowtail) II		2
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady) II	2		Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip) III III I	11	
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White) III II	8	
Hesperiidae			<i>Collias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Collias harfordii</i> (Harford's Sulphur) III III III	13	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing) III	3		<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing) I	1		<div style="border: 1px solid black; border-radius: 50%; padding: 20px; display: inline-block;"> TOTAL = 93 </div>		
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycanidae (Hairstreaks)					
<i>Atides holesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche hygdamus</i> (Southern Blue) III III	10				
<i>Icaricia acmon</i> (Acmon Blue) III III	8				
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor Dutton Segment # 3

Date: 5-5-11

Comments: Very warm. may be last week of surveys.
Greg Chapman here today surveying
east of mangrove trail oppid along the
rd.

Plant Communities and Habitat Information:

chaparral, cleared Residential fields.
NW 1/4 mix w/ Buckwheat

Host Plants Present:

Nectar Plants Present: Anticarsina

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location Manzanita wind farm

Survey Segment Eastern MNT

LOB

new alignment

Surveyor Sarah Fairman

Date 5/5/11

Survey Week Number W35

Survey Partner(s) 2

Total Acres: _____

Portion Surveyed: _____

Elevation: Max _____

Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start 10:00	0%	clear patchy overcast drizzle shower	5-7mph	75°
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
		clear patchy overcast drizzle shower		
Stop 2:00	0%	clear patchy overcast drizzle shower	5-7mph	82°

Habitat onsite (circle as applicable): hillocks, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	5	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	11	2	<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Picridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)	9	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)	8	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)	1	
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)	1		<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)	3		<div style="border: 1px solid black; border-radius: 50%; padding: 20px; display: inline-block;"> TOTAL = 33 </div>		
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atides holaxus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)	2				
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)	2				
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor Farmer

Segment # 67

Date: 5/5/11

Comments:

Plant Communities and Habitat Information: Chaparral

Host Plants Present:

Callunisia 3/17

Nectar Plants Present:

Goldfields, golden yarrow, chia, popcorn, purple californica, purple nightshade, purple larkspur, Phacelia, white daisy, lemon linanthus, wild hyacinth, white gilia, yellow Hacken, white layla, blue curls,

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

#3

Location Manzanita Wind farm Survey Segment La Posta Cajon heading north
 Surveyor Sarah Farmer Date 3/4/11 Survey Week Number 30/6
 Survey Partner(s) Marshall Payment
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky					Wind (range)	Temp (F)
Start 9:30	0%	clear	patchy	overcast	drizzle	shower	2-5 mph	63°
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
Stop 2:00	0%	clear	patchy	overcast	drizzle	shower	2-5 mph	80°

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, *Plantago*, *Castilleja*, *Cordylanthus*, *Antirrhinum*, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbi</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)	1		<i>Apodemia mormo</i> (Mormon Metalmark)	25	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	15		<i>Papilio eurymedon</i> (Pale Swallowtail)	1	
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)	1	
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)	5	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)	1	
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)			<i>Doritis sulphur</i>	2	
<i>Ochlodes agricola</i> (Rural Skipper)			<i>Amorpha blue</i>	5	
Lycenidae (Hairstreaks)			<i>Amorpha blue</i>	10	
<i>Atides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)	11	3			
<i>Celastrina ladon</i> (Echo Blue)					
			Total 71		

Comments:

Could/likely drying out a few pockets of healthy
 robust plants. Callensia in bloom? Many seasonal
 arrangements that got previously contained water
 have now dried out.

Plant Communities and Habitat Information:

Chamise chaparral, coastal sage scrub

Host Plants Present:

Callensia 350+ Callensia appear to be healthy & robust
 in full bloom scattered throughout entire section

Nectar Plants Present:

Mauia popom, goldfields, golden yarrow, filago, many linaria flus,
 bayada lupine, yellow tacson, white loxia, fiddleneck, cali prony,
 arizma lupine,

 Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location SAN DIEGO CO. / MARIANITA IND. RES. Survey Segment TEATE RIDGE / CANEBASK RD.
 Surveyor DEB CHADMAN Date 5 May 2011 Survey Week Number 6
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4450ft Min 4050ft

Start 10:00 AM	☉	clear	patchy	overcast	drizzle	shower	3-7 mph	74°
11:00 AM		clear	patchy	overcast	drizzle	shower	5-8 mph	79°
12:00 PM		clear	patchy	overcast	drizzle	shower	7-10 mph	83°
1:00 PM		clear	patchy	overcast	drizzle	shower	6-10 mph	85°
2:00 PM		clear	patchy	overcast	drizzle	shower	7-11 mph	86°
2:30 PM		clear	patchy	overcast	drizzle	shower	6-10 mph	85°
Stop		clear	patchy	overcast	drizzle	shower		

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, *Plantago*, *Castilleja*, *Cordylanthus*, *Antirrhinum*, nectar sources.

Nymphalidae (Brush Footed Butterflies)				<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)				<i>Philotas sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)				<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)				<i>Everes arryntulus</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)				<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)				Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)				<i>Apodemia mormo</i> (Mormon Metalmark)		30+
<i>Basilarchia lorquini</i> (Lorquin's Admiral)				Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	5	+		<i>Papilio eurymedon</i> (Pale Swallowtail)		3 x
<i>Vanessa annabella</i> (West Coast Lady)				<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)				<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)	2			Pieridae (Whites and Orange-tips)		
<i>Vanessa virginiensis</i> (American Lady)				<i>Anthocharis cethura</i> (Desert Orange-tip)		
Danaidae				<i>Anthocharis sara</i> (Sara's Orange-tip)		2
<i>Danaus gilippus</i> (Queen)				<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)				<i>Pontia protodice</i> (Checkered White)		6
Hesperiidae				<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)	3			<i>Colias harfordii</i> (Harford's Sulphur)		10
<i>Hylephila phyleus</i> (Fiery Skipper)				<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)				Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)				<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)				OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)				<i>Nathalis iole</i>		1
<i>Ochlodes agricola</i> (Rural Skipper)				<i>Phoebastria sennae</i> (cloudless sulfur)		2 x
Lycaenidae (Hairstreaks)						
<i>Attilas helesus</i> (Great Purple Hairstreak)						
<i>Inclisalia augustinus</i> (Western Brown Elf)						
<i>Callophrys perplexa</i> (Perplexing Hairstreak)						
<i>Strymon melinus</i> (Gray Hairstreak)						
<i>Glaucopsyche lygdamus</i> (Southern Blue)						
<i>Icarcia acmon</i> (Acmon Blue)	2					
<i>Celastrina ladon</i> (Echo Blue)	2					

Surveyor ARLE CHATMAN Segment # TERATE RIDGE/CANESBROOK RD. Date: 5 May 2011

Comments: - GOOD SURVEY CONDITIONS
 - SPENT MOST TIME ON RIDGES & ROADS ALONG SURVEY AREA AND HOST PATCHES.
 - NO QUILNO CHELONER SPOT BUTTERFLIES WERE OBSERVED

- *Apodemia nuda* - most abundant
 - *Papilio eurymedon* - fresh males hilltopping
 - *Anthracoceros sara* - several broad males

Plant Communities and Habitat Information: Same as last (RR to 28 APR 2011)

Host Plants Present: *Cellisig coccoloba* on several north slope areas.
(Visit = RR to 28 APR 2011)

Nectar Plants Present: *Cryptantha*, *Lactuca*, *Welder yarrow*

Quilno Sighting Date: GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Chapman's notes for this day.

Quino Checkerspot General Form

Adult Survey

Location Manzanita twice to
 Surveyor Chapman Date 5-5-11 Survey Segment #3 Survey Week Number 6
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky					Wind (range)	Temp (F)
Start 10		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
Stop ?		clear	patchy	overcast	drizzle	shower		

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, *Plantago*, *Castilleja*, *Cordylanthus*, *Antirrhinum*, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)		
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)					
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atlides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)					
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

Plant Communities and Habitat Information:

Host Plants Present:

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location SAN DIEGO Co. / MANZANITA TRAP, RES.
 Surveyor CALEB CRAMER Survey Segment UPPER DIABLO CYN.
 Survey Partner(s) NONE Date 6 MAY 2011 Survey Week Number 10
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4121 Min 3920

Start <u>10:30 AM</u>	<u>☉</u>	<u>clear</u>	<u>patchy</u>	<u>overcast</u>	<u>drizzle</u>	<u>shower</u>	<u>6-10 mph</u>	<u>75°</u>
<u>11:30 AM</u>	<u>↓</u>	<u>clear</u>	<u>patchy</u>	<u>overcast</u>	<u>drizzle</u>	<u>shower</u>	<u>4-8 mph</u>	<u>79°</u>
<u>12:30 PM</u>	<u>↓</u>	<u>clear</u>	<u>patchy</u>	<u>overcast</u>	<u>drizzle</u>	<u>shower</u>	<u>4-8 mph</u>	<u>83°</u>
<u>1:00 PM</u>	<u>↓</u>	<u>clear</u>	<u>patchy</u>	<u>overcast</u>	<u>drizzle</u>	<u>shower</u>	<u>8-11 mph</u>	<u>84°</u>
		<u>clear</u>	<u>patchy</u>	<u>overcast</u>	<u>drizzle</u>	<u>shower</u>		
		<u>clear</u>	<u>patchy</u>	<u>overcast</u>	<u>drizzle</u>	<u>shower</u>		
Stop		<u>clear</u>	<u>patchy</u>	<u>overcast</u>	<u>drizzle</u>	<u>shower</u>		

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Anthriscum, nectar sources, Collinsia

Nymphalidae (Brush Footed Butterflies)		<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)		<i>Philotet sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)		<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)		<i>Evers amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylina</i> (Mylina Crescent)		<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)		Riodinidae (Metalmarks)		
<i>Nymphalis antiope</i> (Mourning Cloak)		<i>Apodemis morio</i> (Mormon Metalmark)	<u>20+</u>	<u>+</u>
<i>Basilarchia lorquini</i> (Lorquin's Admiral)		Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	<u>3</u>	<i>Papilio eurymedon</i> (Pale Swallowtail)	<u>2</u>	<u>x</u>
<i>Vanessa annabella</i> (West Coast Lady)		<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)		<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)	<u>2</u>	Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)		<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae		<i>Anthocharis sara</i> (Sara's Orangetip)	<u>1</u>	<u>x</u>
<i>Danaus gilippus</i> (Queen)		<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)		<i>Pontia protodice</i> (Checkered White)		
Hesperiidae		<i>Collias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)	<u>2</u>	<i>Collias harfordii</i> (Harford's Sulphur)	<u>7</u>	
<i>Hylephila phyleus</i> (Fiery Skipper)		<i>Eurema nictippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)		Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)		<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mourful Duskywing)		OTHERS: <i>Nathalis iole</i>	<u>1</u>	
<i>Erynnis propretius</i> (Propretius Duskywing)				
<i>Ochlodes agricola</i> (Rural Skipper)				
Lycenidae (Hairstreaks)				
<i>Athides halesus</i> (Great Purple Hairstreak)				
<i>Incisalia augustinus</i> (Western Brown Elfin)				
<i>Callophrys perplexa</i> (Perplexing Hairstreak)				
<i>Strymon melinus</i> (Gray Hairstreak)				
<i>Glaucopsyche lygdamus</i> (Southern Blue)				
<i>Icaricia acmon</i> (Acmon Blue)	<u>1</u>			
<i>Celastrina ladon</i> (Echo Blue)				

Surveyor GREG CHATMAN Segment # UPPER DIABOLO CYN Date: 6 May 2011

Comments: - GOOD MONITORING CONDITIONS
 - SPENT TIME IN OPEN AREAS, GRASS & HILLSIDES NEAR I-8.
 - N/O OLLIVIERI CITREUS SPOT BUTTERFLIES WERE OBSERVED
 - MORNING METEOROLOGICALS - ASSOCIATED W/BUCKLEUP - MOST ABUNDANT

Plant Communities and Habitat Information: REFERTO 29 APR-2011 (SAME)

Host Plants Present: NONE OBSERVED

Nectar Plants Present: Lasthenis, Cryptantha, Blue daisies, Golda yellow.

Quino Sighting Date: GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location Manzanita Wind Farm Survey Segment Manzanita tubal eggs to oak tree
 Surveyor Sisak Turner Date 5/16/11 Survey Week Number 12
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4240 Min 3800+

Time (24 hr)	% Cloud	Sky				Wind (range)	Temp (F)	
Start 9:45	0%	clear	patchy	overcast	drizzle	shower	2-5 mph	75°
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
Stop 1:30	0%	clear	patchy	overcast	drizzle	shower	2-5 mph	82°

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	13	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	4		<i>Papilio eurymedon</i> (Pale Swallowtail)		
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)	3	
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)	7	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)	8	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)	2	
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis properitus</i> (Propertius Duskywing)			<i>Amphigast blue</i> 35°	35°	
<i>Ochlodes agricola</i> (Rural Skipper)			<div style="border: 1px solid black; border-radius: 50%; padding: 20px; display: inline-block;"> TOTAL = 76 </div>		
Lycaenidae (Hairstreaks)					
<i>Atlides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)	4				
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

Plant Communities and Habitat Information:

Host Plants Present:

Callisera 60+

Nectar Plants Present:

Goldfield, woolly daisy, blue curls, ground pink, popcorn, cali penny,

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Surveyor _____ Segment # _____

Date: _____

Comments:

Warm - gold fields and most early to/noon
dying up. One more week
pens toward in full bloom.

Most of the Blues were at I-8 in a valley
w/ a small running creek. Mostly standing to 4
and high green N.W.G.
They were common, some melissa and Southern

Plant Communities and Habitat Information:

Chaparral, N.W.G. Mt. Mariposa
Aster leaf Cheery A. B. abundant

Host Plants Present:

collinsia, blooming 6-10" high. locations
already plotted last week.

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Surveyor _____ Segment # _____

Date: _____

Comments:

Plant Communities and Habitat Information:

Host Plants Present:

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location SAN DIEGO Co. / MANZANITA IMP. RES. Survey Segment UPPER MIDDLE CYN
 Surveyor GREG CHESTMAN Date 12 MAY 2011 Survey Week Number 7
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4460ft Min 4160ft

Start	10:30 AM	☉	clear	patchy	overcast	drizzle	shower	3-4 mph	80°
	11:30 AM		clear	patchy	overcast	drizzle	shower	3-5 mph	84°
	12:30 AM		clear	patchy	overcast	drizzle	shower	4-7 mph	87°
	1:30 AM		clear	patchy	overcast	drizzle	shower	3-4 mph	88°
	2:30 AM		clear	patchy	overcast	drizzle	shower	4-8 mph	87°
	3:30 AM	☽	clear	patchy	overcast	drizzle	shower	5-8 mph	87°
Stop			clear	patchy	overcast	drizzle	shower		

Habitat onsite (circle as applicable): hilltops, edges, rock outcrops, open soils, soil crusts, clay soils, old roads, Plantago, Castilleja, Cordylanthus, Antirrhinum, nectar sources.

Nymphalidae (Brush Footed Butterflies)			<i>Lepotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		2
<i>Charidryas gabbi</i> (Gabb's Checkerspot)			<i>Everes annytula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark)	30+	1
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	5	✓	<i>Papilio eurymedon</i> (Pale Swallowtail)	2	K
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)	3		Pieridae (Whites and Orange-tips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orange-tip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orange-tip)		1
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		2
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)	2	✓	<i>Colias harfordii</i> (Harford's Sulphur)	12+	✓
<i>Hylephila phyleus</i> (Ficry Skipper)			<i>Eurema nictippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis iritis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propretius</i> (Propretius Duskywing)			<i>Hesperia juha</i>		2
<i>Ochlodes agricola</i> (Rural Skipper)			<i>Icaricia nauticalis</i>		2
Lycaenidae (Hairstreaks)					
<i>Atilides halesus</i> (Great Purple Hairstreak)					
<i>Incisalin augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche hydamus</i> (Southern Blue)					
<i>Icaricia acmon</i> (Acmon Blue)	1				
<i>Celasirina ladon</i> (Echo Blue)					

Surveyor ARIEL CHITMANSegment # UPPER-MILLET-CYN Date: 12 May 2011

Comments: GOOD HABITAT W/ NO HOT, RANGED FROM OUTCROPS, MEZAN SURGES
-B- SPENT TIME IN OPEN AREAS, ALONG ROADS AND RIVERS
- NO OLLAND CATERPILLAR BUTTERFLIES WERE OBSERVED.
- MUDWORM METACOMES - MOST ABUNDANT, ASSOCIATED W/ BUCKWHEAT.
- COLIAS MARJORAE - ASSOCIATED W/ LATE SCOPARIA (OVIPOSITION WITH 8-10)

Plant Communities and Habitat Information: CHAMISE, MADRACHTA, CEROCARPUS, CEANOETHUS,
QUERCUS, BUCKWHEAT, LOTES, ARUMIT

Host Plants Present: NONE OBSERVED

Nectar Plants Present: Lactuca, Goldenroam, Cryptantha, Bluebellies

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.

2.

3.

4.

5.

6.

7.

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11.

12.

Surveyor GREG CRATMAN Segment # TERRATE RING CANBY BREW RD. Date: 13 MAY 2011

Comments: SPELT TAKE MOSTLY ON RINGS, HUCTOS + NODAL HOST.

NO QUINO (CHECKERSPOT BUTTERFLIES) WERE OBSERVED.

Plant Communities and Habitat Information: (REFER TO 28 APR 2011)

Host Plants Present: (LITM'S = 28 APR 2011)

Nectar Plants Present: Lactuca, Buddleia, cryptantha, Blue dills

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

Quino Checkerspot General Form

Adult Survey

Location Manzanita Wind farm Survey Segment W/S - Easternmost segment
 Surveyor Sarah Tamm Date 5/20/11 Survey Week Number 7
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky					Wind (range)	Temp (F)
Start 9:30	0%	(clear)	patchy	overcast	drizzle	shower	2-5 mph	66°
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
		clear	patchy	overcast	drizzle	shower		
Stop 1:30	0%	(clear)	patchy	overcast	drizzle	shower	2-5	75°

Habitat onsite (circle as applicable): hilltops, ridges, rock outcrops, open soils, soil crusts, clay soils, old roads, *Plantago*, *Castilleja*, *Cordylanthus*, *Antirrhinum*, nectar sources.

Butterfly Species	Count (Total)	Hill-topping	Butterfly Species	Count (Total)	Hill-topping
Nymphalidae (Brush Footed Butterflies)			<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas editha quino</i> (Quino Checkerspot)			<i>Philotes sonorensis</i> (Sonoran Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)			<i>Plebejus melissa</i> (Melissa Blue)		
<i>Charidryas gabbii</i> (Gabb's Checkerspot)			<i>Everes amyntula</i> (Western Tailed-Blue)		
<i>Phycoides mylitta</i> (Mylitta Crescent)			<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) IIII	10	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) IIII	7		<i>Papilio eurymedon</i> (Pale Swallowtail) II	2	
<i>Vanessa annabella</i> (West Coast Lady)			<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa atalanta</i> (Red Admiral)			<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)			Pieridae (Whites and Orangetips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangetip)		
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White) III	3	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) IIII	13	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)			<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing) III	3				
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atlides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche hydamus</i> (Southern Blue)					
<i>Icaricia acmon</i> (Acmon Blue) IIII	7				
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

The plants in bloom in the area have changed. This is beginning to dry out. Goldfinches have all died out. Penstemon's (Shanlet) are in full bloom and vibrant. No host plants observed. They may have dried out.

Plant Communities and Habitat Information:

Host Plants Present:

None observed.

Nectar Plants Present:

Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.