

**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 excerta*, 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
Proterops Duskywing	<i>Erynnis proterops</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 augustinus</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 hydamus</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>Polyommata</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 harfordii</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>Phoebastria 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*.



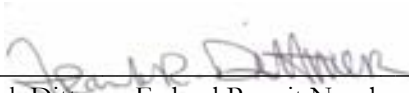
Andrew Pignolo, Federal Permit Number TE-053020-2

6/30/11
Date



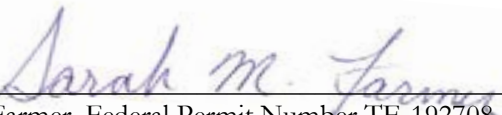
Greg Chatman, Federal Permit Number TE-075112-1

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

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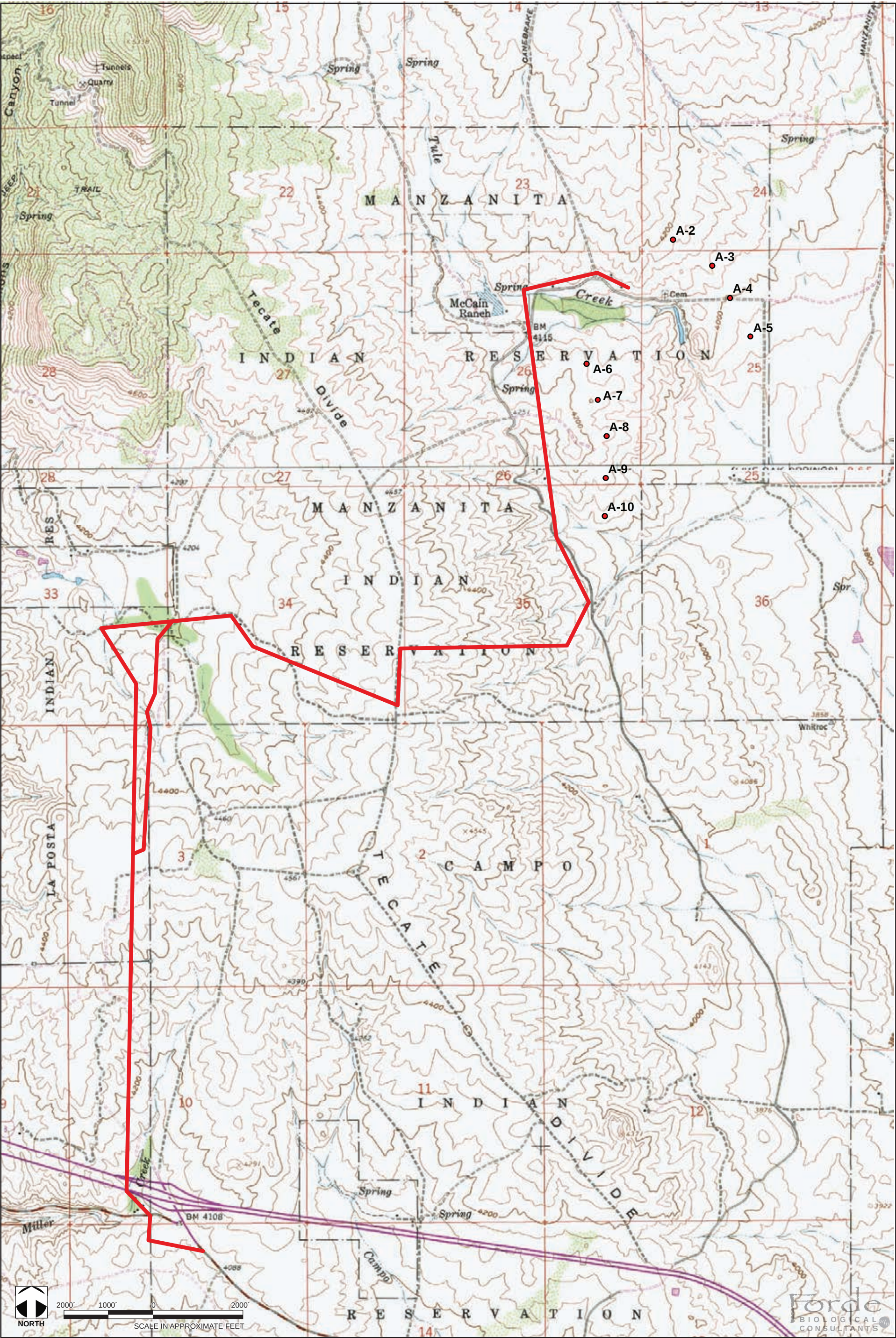
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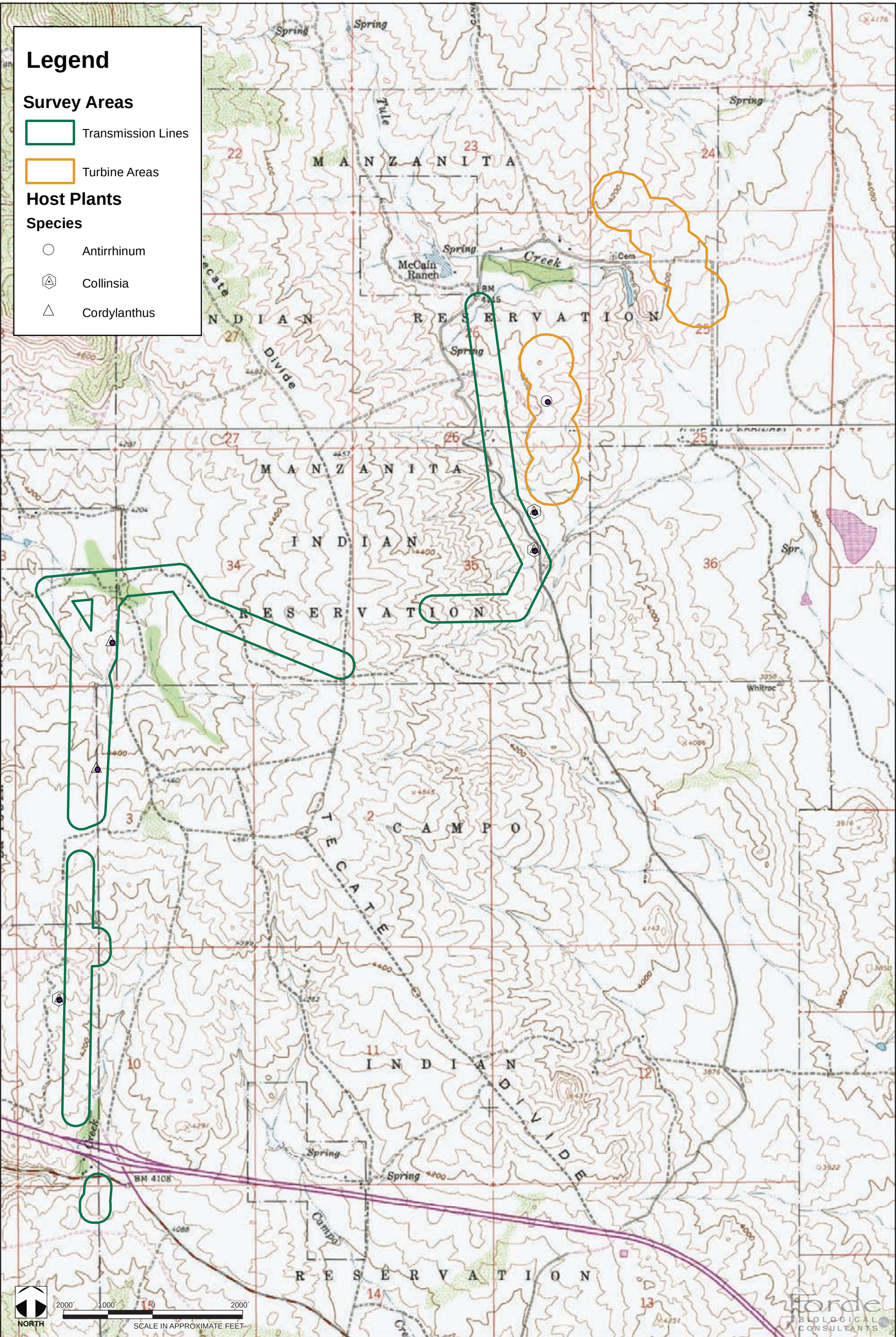
2011 *Quino Checkerspot Butterfly (Euphydryas editha quino)*, 2011 Monitoring Information. Located at http://www.fws.gov/carlsbad/TEspecies/Documents/QuinoDocs/QuinoMonRef/Quino_Ref_Info.htm

APPENDIX A. Copies of Original Field Notes

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.



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

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. Coarse / we Oak in Bloom.
* Wall Flower along Rds. Abundant.

Host Plants Present:

1st year Pterodanthus. (No growth this year
* ^{Noted} Collinsia parviflora 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>Heliopterus erictorum</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>EUCHLOE 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 Elfin)					
✓ <i>Callophrys perplexa</i> (Perplexing Hairstreak) 1	1	0			
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
✓ <i>Icaricia 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.

10+ SPECIES OF BUTTERFLY OBSERVED. ONLY A. MORFO 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 Juanito Res Survey Segment _____
 Surveyor Dan & Fran Date 4/21/11 Survey Week Number 4
 Survey Partner(s) Brandon
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>930</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>1100</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>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>Evers 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>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)					
<i>Icarcia acmon</i> (Acmon Blue)					
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

DAY Called due to High Wind.
20+ mph

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.

Adult Survey

Time (24 hr)	% Cloud	Sky					Wind (range)	Temp (F)
Start 10:00	30%	clear	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, *Calceolaria*

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) XX HH	30	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) HH XII	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) II	2	
Hesperidae			<i>Colias eurytheme</i> (Orange Sulphur)	2	
<i>Heliopeetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) II	2	
<i>Hylephila phyleus</i> (Fiery Skipper) HH HH	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> HH	5	
<i>Ochlodes agricola</i> (Rural Skipper)			<i>Arrowhead blue</i>	AD	
Lycaenidae (Hairstreaks)					
<i>Atilides holesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elf)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak) II	2		Total		
<i>Strymon melinus</i> (Gray Hairstreak)			108		
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icaricia acmon</i> (Acmon Blue) HH	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 glauca, tallest ~ 2 inches, recently bloomed

Nectar Plants Present:

Goldfields, Rock Cress, manilla, wall flower, chia, fiddleneck, ornithoglossum, white lily, filaree, popcorn, bigleaf 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 Maryanita Res.Surveyor DittmanDate 4/25/11Survey Segment #4Survey Week Number 4

Survey Partner(s)

Total Acres:

Portion Surveyed: McLean RanchElevation: Max 4100Min 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>74.5</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>0-2 mph</u>	<u>75 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) <u>1</u> <u>SAGE TREE</u>	<u>1</u>		<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Thessalia leonira</i> (Leonira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) <u>11</u> <u>11</u> <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>11</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>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>11</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>					
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atides holesus</i> (Great Purple Hairstreak)					
<i>Inisalia 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>Icaricia acmon</i> (Acmon Blue) <u>11</u> <u>11</u>	<u>11</u>				
<i>Celastrina ladon</i> (Echo Blue)					
<i>Chloridea blue</i> <u>11</u>	<u>8</u>				

TOTAL = 89

Surveyor

Dittmer

Segment #

4

Date:

4/25/11

Comments:

McPain Ranch South along Rd 4 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 Asters on road Rd 4
 UASD out area. In loose sand - orange/red
 underbellies. Approx 1/2 cm in length.

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

Plant Communities and Habitat Information:

Oak Riparian, Live Oak, Chaparral. No 4.
 in disturbed areas and hill sides along the road.
 Early Onon (allium haematocytum)
 CA. Penny, Nicotiana - blooming good now.
 Penstemon centranthoides (Beaked) little white, some
 Bush Poppy, 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 Pasa Casino South / Private prop N 1/2 I-8
 Surveyor D. Hemen Date 4/27/11 Survey Segment #2 Survey Week Number 4
 Survey Partner(s) _____
 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		
		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>71 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>Philoetes 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>Heliopterus 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>Stirmon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)	<u>11</u>	<u>8</u>			
<i>Icaricia acmon</i> (Acmon Blue)	<u>11</u>	<u>3</u>			
<i>Celastrina ladon</i> (Echo Blue)					

TOTAL 27

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 Manzanita Wind Farm

Survey Segment #2 6A

Surveyor D. H. Miller

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 <u>10-</u>	<u>70%</u>	<u>clear</u> patchy overcast drizzle shower	<u>4-8 mph</u>	<u>73°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>2:45</u>	<u>40%</u>	<u>clear</u> patchy overcast drizzle shower	<u>4-10 mph</u>	<u>75°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) <u>III</u>	<u>3</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)		
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)			<i>Papilio eurymedon</i> (Pale Swallowtail) <u>I</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) <u>III</u>	<u>6</u>		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) <u>II</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) <u>II</u>	<u>7</u>	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) <u>II</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> (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 Elf) <u>III</u>	<u>3</u>				
<i>Callophrys perplexa</i> (Perplexing Hairstreak) <u>II</u>	<u>4</u>				
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue) <u>III</u>	<u>5</u>				
<i>Icaricia acmon</i> (Acmon Blue) <u>III</u>	<u>10</u>				
<i>Celastrina ladon</i> (Echo Blue)					
<i>Unidentified Blue</i> <u>III</u>	<u>5</u>				

Surveyor _____

Segment #

3

Date:

4/28/11

Comments:

Greg Chapman working w/ us today. Doing the line from Mansanita Tribal office down to Mt. Cain Ranch.

Stacy Farmer / Mansanita Paysond 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 Mauzanita Wind FarmSurveyor S. FarmerSurvey Segment Easternmost alt. alignmentSurvey Partner(s) Marshall PaysonDate 4/28/11Survey Week Number 4

Total Acres: _____

Portion Surveyed: 0Elevation: 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> (Mourning Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)	<u>1</u>	<u>1</u>	<i>Danix 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 bush, filices,
mini lupine, purple nightshade, fiddleheads, goldfish, porcupine,
white lupine, bigleaf lupine, sun cups, chia, phacelia, globe gilia, purple hawkweed,
summer dillanthes, ground pink, woolly daisy

☐ 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)		
Ilesperidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopterus erictorum</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	<i>ERYNNIS</i> sp. 1	1	0
<i>Ochlodes agricola</i> (Rural Skipper)			<i>ICARICIA LUPINI</i> 1, 2	4	0
Lycenidae (Hairstreaks)			<i>EUCHLOE</i> sp. 2	2	0
<i>Atides halesus</i> (Great Purple Hairstreak)			HORNED LIZARD	4	-
<i>Incisalia angustinus</i> (Western Brown Elfin)					
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,
ACACIAS, ASTERS, AMISINKIA, Ceanothus, LUPINES,
CHIA

☐ Quino Sighting NONE

Date:

GPS Location:

Photographs Taken: NONE

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

Adult Survey

Survey Segment La Posta Casino north
Survey Week Number 5

Date 4/27/11 Survey Week Number 5

Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

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

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>Thestalis leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) IIII H	20	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) IIII IHI ID	ID		<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>Anthrocharis cethura</i> (Desert Orangetip)		
Danaidae			<i>Anthrocharis sara</i> (Sara's Orangetip) IIII	4	
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)		
Hesperidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) I	I	
<i>Hylephila phylaeanus</i> (Fiery Skipper)	I		<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)			Vandenberg blue IIII	5	
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycanidae (Hairstreaks)					
<i>Atilides halesus</i> (Great Purple Hairstreak)			Total		
<i>Incisalia augustinus</i> (Western Brown Elfin)			46		
<i>Callophyrs perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lydamus</i> (Southern Blue)					
<i>Icaricia acmon</i> (Acmon Blue) IIII	5				
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

Calafield 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:

Globe gilia, fiddleneck, purple flower, filaree, gold fields, rock wren, wild cucumber, white lily, phacelia, wallflower, hebe, lupine, mine lupine, woolly daisy, baby blue eyes, purple berberis

☐ 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 TRIBAL OFFICE Survey Segment West #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	63°F
		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 erictorum</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)					
Lycenidae (Hairstreaks)					
<i>Atides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elfin)					
<i>Colophrys perplexa</i> (Perplexing Hairstreak)					
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopteryx hydamus</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:

☐ 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 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	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
X <i>Junonia coenia</i> (Common Buckeye) 5, 2, 5	12	0	X <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)		
X <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			X <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			X <i>Colias eurytheme</i> (Orange Sulphur) 1	1	0
X <i>Heliopterus erictorum</i> (Northern White-Skipper) 1	1	0	<i>Colias hartfordii</i> (Hartford'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>Ochlodes agricola</i> (Rural Skipper)			ERYNNIS BRIZO 1	1	0
Lycenidae (Hairstreaks)			HESTERIA JUBA 1, 2	3	0
<i>Atilides halesus</i> (Great Purple Hairstreak)			GLAUCOPSYCHE PIASUS 20	20	0
<i>Incisalia augustinus</i> (Western Brown Elfin)			EUCHLOE SP. 2	2	0
X <i>Callophrys perplexa</i> (Perplexing Hairstreak) 2	2	0			
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
X <i>Icaricia 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 TEJATE RIDGE/CANEBAUGH RD.
 Surveyor GREG CHATMAN Date 28 APR 2011 Survey Week Number 5
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4,450ft 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>Phycodes 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)	30+	
<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 rufus</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>Collas eurytheme</i> (Orange Sulphur)		
<i>Heliopterus ericatorum</i> (Northern White-Skipper)	2		<i>Colias harfordii</i> (Harford's Sulphur)	2	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescent</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)			JUBA SKIPPER	1	
<i>Ochlodes agricola</i> (Rural Skipper)			CLOUBLESS SULPHUR	1	
Lycaenidae (Hairstreaks)			DAINTY SULPHUR	1	
<i>Artides holesus</i> (Great Purple Hairstreak)					
<i>Inisalia 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)	1				
<i>Celastrina ladon</i> (Echo Blue)	2				

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

Comments: - GOOD SURVIVAL CONDITIONS
 - ~~STREET~~ BREEZE IN SOME AREAS, BUTTERFLIES STILL ON THE WING
 - GOOD HABITAT, WITH RIDGES + HILLS, PATCHES OF COLLINSIA
 - MORMON HARTS MARCHES MOST COMMON BUTTERFLY IN ASSOCIATION
 w/ LOCALLY ABUNDANT ERIOGONUM FASCICULATUM (BUCKWHEAT)
 - BUCKWHEAT'S MOST MOST COMMON
 - SPENT AMPLE TIME ON RIDGES NEAR HOST (COLLINSIA)
 w/ N/D QUINO CHECKERSPOTS OBSERVED!

Plant Communities and Habitat Information:

^{DESER} SAN DIEGO SCRUB - *Cercocarpus*, *Adenostoma*,
Quercus, *Ceanothus*, ~~GOOD~~ ROCK OUTCROPS + RIDGES
 - *Eriogonum fasciculatum*, *Lotus*, *Cryptantha*, Golden yarrow

Host Plants Present:

Collinsia concolor - CHINESE HOUSES IN SEVERAL
 SMALL PATCHES

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

Nectar Plants Present:

Cryptantha, *Lactheria*, Golden yarrow

☐ Quino Sighting

Date:

GPS Location:

Photographs Taken:

1. <i>Collinsia</i> PATCHES	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 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)					
<i>Icaricia 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 5
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4121 ft Min 3920 ft

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>Evers emyntula</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>Basiliarchia 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 Orangerips)		
<i>Vanessa virginiensis</i> (American Lady)			<i>Anthocharis cethura</i> (Desert Orangerip)		
Danaidae			<i>Anthocharis sara</i> (Sara's Orangerip)		
<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 albescent</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 semae</i>	2	
<i>Ochlodes agricola</i> (Rural Skipper)			(Cloudless Sulphur)		
Lycenidae (Hairstreaks)			<i>Nathalis iole</i>	2	x
<i>Atides holaxus</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)	1				
<i>Celastrina ladon</i> (Echo Blue)	2				

Surveyor CARL 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. n. n. most common species - (PINK FLIGHT) → TRENCH POST.
 - PICKETTES ARE MOSTLY WORK INDIVIDUALS (PAST POST)
 - MOST TIME SPENT NEAR ROCKY OUTCROPS + OPEN AREAS

W/NO QUINO CHELICERSPOUT BUTTERFLIES OBSERVED

Plant Communities and Habitat Information: Chamise, BUCKWHEAT, CEROCARPUS, CORN BRASS,
MANZANITA,

- 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 D. Hume Date 4-29-11 Survey Week Number 5
Survey Partner(s) Raymond (R. Hume)
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		
		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>Atilides holesus</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 lygdamus</i> (Southern Blue) <u>11</u>	<u>2</u>				
<i>Icarcia acmon</i> (Acmon Blue) <u>11</u>	<u>3</u>				
<i>Celastrina ladon</i> (Echo Blue)					
<u>Lupin Blue</u> <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 notsoal were just North
of I-8 in a small w/ water abundant

Plant Communities and Habitat Information:

Chaparral dominated by
Mt. Mahogany and *Platanus*.

Host Plants Present:

Lemon *Lanarius*, Lotus, Finger-Pod.

Collection 20+ plants around base of Mt. Mahogany.

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.

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, Anthriscum, 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) <u>III</u>	<u>3</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>Apodemis mormo</i> (Mormon Metalmark) <u>IIII</u>	<u>26</u>	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) <u>III</u>	<u>6</u>		<i>Papilio eurymedon</i> (Pale Swallowtail) <u>II</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>II</u>	<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>IIII</u>	<u>11</u>	
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White) <u>IIII</u>	<u>8</u>	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) <u>IIII</u>	<u>13</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) <u>III</u>	<u>3</u>		<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mournful Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing) <u>I</u>	<u>1</u>				
<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 hygdamus</i> (Southern Blue) <u>IIII</u>	<u>10</u>				
<i>Icaricia acmon</i> (Acmon Blue) <u>IIII</u>	<u>8</u>				
<i>Celastrina ladon</i> (Echo Blue)					

Total = 93

Surveyor Detton Segment # 3

Date: 5-5-11

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

Plant Communities and Habitat Information:

chaparral, cleared Residential fields.
WNG mix w/ Buckwheat

Host Plants Present:

Nectar Plants Present: Anticarsium

☐ 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 FarmSurveyor Sarah FarmerSurvey Segment EasternmostDate 5/5/11Survey Week Number WASSurvey Partner(s) 2

Total Acres: _____

Portion Surveyed: _____

Elevation: Max _____

Min _____

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>5-7mph</u>	<u>75°</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>2:00</u>	<u>0%</u>	<u>clear</u>	patchy	overcast	drizzle	shower	<u>5-7mph</u>	<u>82°</u>

Habitat onsite (circle as applicable): millions, 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>1</u>	<u>5</u>	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) <u>1</u>	<u>2</u>		<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) <u>1</u>	<u>9</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>	<u>8</u>	
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange) <u>1</u>	<u>1</u>	
<i>Pyrgus albescens</i> (White Checkered-Skipper)			Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing) <u>1</u>	<u>1</u>		<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis tristis</i> (Mourning Duskywing)			OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing) <u>1</u>	<u>3</u>				
<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) <u>1</u>	<u>2</u>				
<i>Strymon melinus</i> (Gray Hairstreak)					
<i>Glaucopsyche lygdamus</i> (Southern Blue)					
<i>Icaricia acmon</i> (Acmon Blue) <u>1</u>	<u>2</u>				
<i>Celastrina ladon</i> (Echo Blue)					

Total = 33

Surveyor

Farmer

Segment #

67

Date:

5/5/11

Comments:

Plant Communities and Habitat Information:

Chaparral

Host Plants Present:

Callunaria 30%

Nectar Plants Present:

Goldfields, golden yarrow, chia, popcorn, purple californica, purple nightshade,
 purple larkspur, Phacelia, white daisy, lemon linanthus, wild hyacinth,
 white gilia, yellow rock rose, white lily, 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

Location Mantamita Wind Farm Survey Segment La Puesta Cerrito heading north
 Surveyor Sarah Farmer Date 3/4/11 Survey Week Number 36
 Survey Partner(s) Marshall Payman
 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 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>Thestalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)	1		<i>Apodemia mormo</i> (Mormon Metalmark) IIII IVV #H 2S	25	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	IS		<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)			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> (Checkerred White)		
Hesperidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) III	S	
<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>Dainty sulphur II</i>	II	
<i>Ochlodes agricola</i> (Rural Skipper)			<i>American blue IIII HHH HHH</i>	HS	
Lycenidae (Hairstreaks)			<i>American blu</i>	ID	
<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 lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)	III	3			
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

Could/likely drying at 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:

maulin popom, alfalfa, golden yarrow, filago, many linum flus, lycopodium, yellow lichen, white lichen, fiddleneck, cali prony, origanum, 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. / MANZANITA IND. RES. Survey Segment TEATE RIDGE / CANEBARK RD.
 Surveyor ADRIAN 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	<u>2</u>	<u>clear</u>	patchy	overcast	drizzle	shower	3-7 mph	74°
11:00 AM	<u>1</u>	clear	patchy	overcast	drizzle	shower	5-8 mph	79°
12:00 PM	<u>1</u>	clear	patchy	overcast	drizzle	shower	7-10 mph	83°
1:00 PM	<u>1</u>	clear	patchy	overcast	drizzle	shower	6-10 mph	85°
2:00 PM	<u>1</u>	clear	patchy	overcast	drizzle	shower	7-11 mph	86°
2:30 PM	<u>1</u>	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>Euphydryas editha quino</i> (Quino Checkerspot)						<i>Leptotes marina</i> (Marine Blue)		
<i>Euphydryas chalcedona</i> (Chalcedon Checkerspot)						<i>Philotis 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 mynitus</i> (Western Tailed-Blue)		
<i>Thessalia leanira</i> (Leanira Checkerspot)						<i>Brephidium exilis</i> (Western Pygmy-Blue)		
<i>Nymphalis antiopa</i> (Mourning Cloak)						Riodinidae (Metalmarks)		
<i>Basilaria lorquini</i> (Lorquin's Admiral)						<i>Apodemis mormo</i> (Mormon Metalmark)	30+	
<i>Junonia coenia</i> (Common Buckeye)	5	+				Papilionidae (Swallowtails)		
<i>Vanessa annabella</i> (West Coast Lady)						<i>Papilio eurymedon</i> (Pale Swallowtail)	3	x
<i>Vanessa atalanta</i> (Red Admiral)						<i>Papilio rutulus</i> (Western Tiger Swallowtail)		
<i>Vanessa cardui</i> (Painted Lady)	2					<i>Papilio zelicaon</i> (Anise Swallowtail)		
<i>Vanessa virginiensis</i> (American Lady)						Pieridae (Whites and Orange-tips)		
Danidae						<i>Anthocharis cethura</i> (Desert Orange-tip)		
<i>Danaus gilippus</i> (Queen)						<i>Anthocharis sara</i> (Sara's Orange-tip)	2	
<i>Danaus plexippus</i> (Monarch)						<i>Pieris rapae</i> (Cabbage White)		
Hesperiidae						<i>Pontia protodice</i> (Checkered White)	6	
<i>Heliopetes ericetorum</i> (Northern White-Skipper)	3					<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Hylephila phyleus</i> (Fiery Skipper)						<i>Colias harfordii</i> (Harford's Sulphur)	10	
<i>Pyrgus albescens</i> (White Checkered-Skipper)						<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Erynnis funeralis</i> (Funereal Duskywing)						Satyridae (Satyrids)		
<i>Erynnis tristis</i> (Mournful Duskywing)						<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis propertius</i> (Propertius Duskywing)						OTHERS:		
<i>Ochlodes agricola</i> (Rural Skipper)						<i>Nathalis iole</i>	1	
Lycaenidae (H Hairstreaks)						<i>Phoebastria senegalensis</i> (cloudless sulfur)	2	x
<i>Atides halesus</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 CHATMANSegment # TERATE RIDGE/CANABROOK RD. Date: 5 May 2011Comments: - GOOD SURVEY CONDITIONS

- SPENT MOST TIME ON RIDGES & ROADS ALONG SURVEY AREA AND HOST PATCHES.
- NO QULINO 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: Celliaria concinna on several north slope areas.
(Visits = RR to 28 Apr 2011)Nectar Plants Present: Cryptantha, Lactaria, Golden yarrow☐ Qulino 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 Survey Segment #3
 Surveyor Chapman Date 5-5-11 Survey Week Number 6
 Survey Partner(s) _____
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max _____ Min _____

Time (24 hr)	% Cloud	Sky	Wind (range)	Temp (F)
Start <u>10</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		
		clear patchy overcast drizzle shower		
Stop <u>?</u>		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 proterpius</i> (Proterpius 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>Glauropsyche lydamus</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, DES. Survey Segment UPPER DIABLO CYN.
 Surveyor CHRIS KATMAN Date 6 MAY 2011 Survey Week Number 12
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4121 Min 3920

Start 10:30 AM	☒	(clear)	patchy	overcast	drizzle	shower	6-10 mph	75°
11:30 AM	☒	clear	patchy	overcast	drizzle	shower	4-8 mph	79°
12:30 PM	☒	clear	patchy	overcast	drizzle	shower	4-8 mph	83°
1:00 PM	☒	clear	patchy	overcast	drizzle	shower	8-11 mph	84°
		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, Anthriscum, nectar sources, Collinsia

Nymphalidae (Brush Footed Butterflies)		Lepidoptera (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>Evers amyntula</i> (Western Tailed-Blue)	
<i>Phycodes mylitta</i> (Mylitta Crescent)		<i>Brephidium exilis</i> (Western Pygmy-Blue)	
<i>Thessalia leandra</i> (Leandra Checkerspot)		Riodinidae (Metalmarks)	
<i>Nymphalis antiope</i> (Mourning Cloak)		<i>Apodemis mormo</i> (Mormon Metalmark)	2 of ✓
<i>Basilarchia lorquini</i> (Lorquin's Admiral)		Papilionidae (Swallowtails)	
<i>Junonia coenia</i> (Common Buckeye)	3	<i>Papilio eurymedon</i> (Pale Swallowtail)	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)	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)	1 ✓
<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>Heliopeus ericetorum</i> (Northern White-Skipper)	2	<i>Colias harfordii</i> (Harford's Sulphur)	7
<i>Hylephila phyleus</i> (Ficry 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>Nathalis iole</i>	1
<i>Erynnis propertius</i> (Propertius Duskywing)			
<i>Ochlodes agricola</i> (Rural Skipper)			
Lycenidae (Hairstreaks)			
<i>Atides halesus</i> (Groat Purple Hairstreak)			
<i>Inclisalia 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)	1		
<i>Celastrina ladon</i> (Echo Blue)			

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

Comments: - GOOD MONITORING CONDITIONS
 - SPENT TIME IN OPEN AREAS, REAR & HILLTOPS NEAR I-8.
 - N/O ORANGE BUTTERFLIES WERE OBSERVED
 - MORPHO METALLARUM - ASSOCIATED W/BUCKWHEAT - MOST ABUNDANT

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

Host Plants Present: NONE OBSERVED

Nectar Plants Present: Lespedeza, Cryptantha, Blueberries, Golda yellow.

☐ Quino Sighting

Date:

GPS Location:

Photographs Taken:

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

Adult Survey

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°

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)	111	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)	11	3
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White)	11	7
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur)	11	8
<i>Hylephila phyleus</i> (Fiery Skipper)			<i>Eurema nicippe</i> (Sleepy Orange)	11	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 propertius</i> (Propertius Duskywing)			<i>Amphispiza bilineata</i> 35+		35+
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Atilides halesus</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 lygdamus</i> (Southern Blue)					
<i>Icarcia acmon</i> (Acmon Blue)	111	4			
<i>Celastrina ladon</i> (Echo Blue)					

Surveyor _____ Segment # _____

Date: _____

Comments:

Plant Communities and Habitat Information:

Host Plants Present:

Callisaya 60+

Nectar Plants Present:

Goldfield, deeply 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.

Adult Survey

#2

班 6

Min

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

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>Theusalia leanira</i> (Leanira Checkerspot)			Riodinidae (Metalmarks)		
<i>Nymphalis antiopa</i> (Mourning Cloak)			<i>Apodemia mormo</i> (Mormon Metalmark) IIII IIA IIA IIA	32	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) IIA I	6		<i>Papilio eurymedon</i> (Pale Swallowtail)		
<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) III	3	
<i>Danaus gilippus</i> (Queen)			<i>Pieris rapae</i> (Cabbage White)		
<i>Danaus plexippus</i> (Monarch)			<i>Pontia protodice</i> (Checkered White) IIA IIA I	11	
Hesperidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopeiss ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) IIA III	8	
<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)					
Lycenidae (Hairstreaks)					
<i>Atides holesus</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 lygdamus</i> (Southern Blue) IIA IIA IIA IIA IIA IIA IIA IIA IIA IIA					
<i>Icarcia acmon</i> (Acmon Blue) IIA IIA IIA IIA IIA IIA IIA IIA IIA IIA	37				
<i>Celastrina ladon</i> (Echo Blue) IIA IIA IIA IIA IIA IIA IIA IIA IIA IIA					

Surveyor _____ Segment # _____

Date: _____

Comments:

Warm - gold fields and most early bloom
dying up. One more week
plus toward in full bloom.

Most of the Blues were at I-8 in a valley
w/ a small running creek. Mostly standing H₂O
and high green NWG.
They were common, some melissa and Southern

Plant Communities and Habitat Information:

Chaparral, NWG. Mt. Marajonez
Rocky Oak Cheery 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.

Adult Survey

Time (24 hr)	% Cloud	Sky					Wind (range)	Temp (F)
Start 9:30	0%	clear	patchy	overcast	drizzle	shower	2-5 mph	
		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, *Callisema*

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) III	5	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) II	2		<i>Papilio eurymedon</i> (Pale Swallowtail) II	2	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>Heliopeetes ericetorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) III III	9	
<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) II	2	1	Blue IIII	4	
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Athides halesus</i> (Great Purple Hairstreak)					
<i>Incisalia augustinus</i> (Western Brown Elf)					
<i>Callophrys perplexa</i> (Perplexing Hairstreak) I	1				
<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 IND. RES. Survey Segment UPPER MILLER CYN
 Surveyor BRET CHETMAN Date 12 MAY 2011 Survey Week Number 7
 Survey Partner(s) NONE
 Total Acres: _____ Portion Surveyed: _____ Elevation: Max 4460 ft Min 4160 ft

Start <u>10:30 AM</u>	<u>0</u>	<u>clear</u>	patchy	overcast	drizzle	shower	<u>3-4 mph</u>	<u>80°</u>
<u>11:30 AM</u>	<u>1</u>	clear	patchy	overcast	drizzle	shower	<u>3-5 mph</u>	<u>84°</u>
<u>12:30 PM</u>	<u>1</u>	clear	patchy	overcast	drizzle	shower	<u>4-7 mph</u>	<u>87°</u>
<u>1:30 PM</u>	<u>1</u>	clear	patchy	overcast	drizzle	shower	<u>3-4 mph</u>	<u>88°</u>
<u>2:30 PM</u>	<u>1</u>	clear	patchy	overcast	drizzle	shower	<u>4-8 mph</u>	<u>87°</u>
<u>3:30 PM</u>	<u>1</u>	clear	patchy	overcast	drizzle	shower	<u>5-8 mph</u>	<u>87°</u>
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)	<u>2</u>	
<i>Charidryas gabbii</i> (Gabb's Checkerspot)				<i>Evers antynula</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>30+</u>	<u>+</u>
<i>Basilarchia lorquini</i> (Lorquin's Admiral)				Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye)	<u>5</u>	<u>+</u>		<i>Papilio eurymedon</i> (Pale Swallowtail)	<u>2</u>	<u>+</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>3</u>			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)	<u>1</u>	
<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>Heliopterus ericetorum</i> (Northern White-Skipper)	<u>2</u>	<u>+</u>		<i>Colias harfordii</i> (Harford's Sulphur)	<u>12+</u>	<u>+</u>
<i>Hylephila phyleus</i> (Ficry Skipper)				<i>Eurema nicippe</i> (Sleepy Orange)		
<i>Pyrgus albescent</i> (White Checkered-Skipper)				Satyridae (Satyrids)		
<i>Erynnis funeralis</i> (Funereal Duskywing)				<i>Coenonympha californica</i> (Common California Ringlet)		
<i>Erynnis iris</i> (Mournful Duskywing)				OTHERS:		
<i>Erynnis propertius</i> (Propertius Duskywing)				<i>Hesperia juha</i>	<u>2</u>	
<i>Ochlodes agricola</i> (Rural Skipper)				<i>Icaricia nauticalis</i>	<u>2</u>	
Lycaenidae (Hairstreaks)						
<i>Ailides halesus</i> (Great Purple Hairstreak)						
<i>Incolia angustinus</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)	<u>1</u>					
<i>Celasirina ladon</i> (Echo Blue)						

Surveyor ALICE CHATMANSegment # UPPER MILLER CYN Date: 12 May 2011

Comments: GOOD HABITAT W/ NO HOT, RASSED ROCK OUTCROPS, NEZZAR SURGES
-B- SPENT TIME IN OPEN AREAS, ALONG ROADS AND RIVERS
- NO OIL AND CHEMICALS BUTTERFLIES WERE OBSERVED.
- MORMON METERWORMS - MOST ABUNDANT, ASSOCIATED W/ BUCKWHEAT.
- COLIAS MARJORAE - ASSOCIATED W/ LATE SCOPARIA (OVIPOSITION WITH 8-10)

Plant Communities and Habitat Information: CHAMISE, MANZANITA, CEROCARPUS, CEANOTHUS,
QUERCUS, BUCKWHEAT, LOTUS, ARVISA

Host Plants Present: NONE OBSERVED

Nectar Plants Present: LATHRUM, GILDED YARROW, CRYPTANTHUS, BLUEBELLS

☐ Quino Sighting

Date:

GPS Location:

Photographs Taken:

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

Surveyor GREG CHATMANSegment # TELETYPE RINGCANADIAN RD.Date: 13 May 2011

Comments:

SPELT TIME NOTING ON RINGS, HUCTOS + NODAL HOST.NO QUINO (HELMERIS) BUTTERFLIES WERE OBSERVED.

Plant Communities and Habitat Information:

(REFER TO 28 APR 2011)

Host Plants Present:

(LATM's = 28 APR 2011)

Nectar Plants Present:

Lactuca, Buddleia, cryptantha, Blue dills☐ Quino Sighting

Date:

GPS Location:

Photographs Taken:

1.

2.

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12.

Quino Checkerspot General Form

Adult Survey

Location Manzanita Wind Farm Survey Segment lvs - 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) HHH	10	
<i>Basilarchia lorquini</i> (Lorquin's Admiral)			Papilionidae (Swallowtails)		
<i>Junonia coenia</i> (Common Buckeye) HHH	7		<i>Papilio eurymedon</i> (Pale Swallowtail) HH	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) HH	3	
Hesperiidae			<i>Colias eurytheme</i> (Orange Sulphur)		
<i>Heliopterus erictorum</i> (Northern White-Skipper)			<i>Colias harfordii</i> (Harford's Sulphur) HHH	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) HH	3				
<i>Ochlodes agricola</i> (Rural Skipper)					
Lycaenidae (Hairstreaks)					
<i>Artides 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) HH	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 (Shanley) 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.