Butterflies in Idell Weydemeyer's Garden, 2007

<u>Time of Year</u> column: see full references at end (T) Tilden's *Butterflies of the San Francisco Bay Region*, (D) *Butterfly List Mt Diablo*; (BA) *Local Butterflies of the San Francisco Bay Area*; (USGS) website; California Butterflies (G & T), Butterflies & Moths of North America (NA) and (El Sob) when my garden has a different time. Experts don't always agree on larval plants or distribution and time of year (which can vary annually).

Family/ Butterfly	Size	Description/ distinctive features	Distribution & Adult Food (BA = Bay Area)	Time of Year	Caterpillar & Food
Nymphalidae American Painted Lady or Virginia Lady (Vanessa virginiensis)	1.75- 2.1"	Orange with black edgings on front wings, white bar on front edge, two large eye spots underneath hind wing	Widely distributed in temperate Americas; Eats flower nectar	Mar-Nov (D); Year round (BA)	Yellow green stripes and red & white spots on black bands; spiny, makes leaf shelter; several broods; Everlasting, other composites. Now known to eat gazania.
Nymphalidae Buckeye (<i>Junonia coenia</i>)	2-2.5"	Brown, rounded wings, bright and large eyespots, orange bars on front wings	Southern U.S.& both coasts into Mexico & Cuba; Common in most of BA; old neglected fields, open areas with low vegetation and bare ground; Eats nectar	Feb-Dec (D; Year round (BA); Spring- fall (T)	Black, often with two yellowish stripes, very spiny; Plantain, owls clover, monkey flower, toadflax, snapdragons, stonecrops, penstemon, lippia
Nymphalidae Callippe Silverspot or Callippe Fritillary (Speyeria callippe)	2-2.3"	Soft brownish gold rather than orange, outer black edge wings has large whitish dots, bright silver underspots	British Columbia to Dakotas, to Colorado; Most common BA fritillary, likes hilltops, chaparral; Adult food unknown	May to August (USGS)	Wild pansy or Johnny-jump-up
Nymphalidae Common Checkerspot (Chalcedon Checkerspot) or Variable Checkerspot (Euphydryas chalcedona)	1.3-2.2"	Mostly black with yellowish checker spots, red spots on trim upper wings. Smaller & narrower than Callippe; A variable butterfly	Alaska to Dakotas to Baja; Abundant in BA in hills & chaparral, prairie, open forests; Tame; Eats flower nectar	March-July (D)	Black & spiny; living in colonies; one brood a year, over-winters; Figworts (Scrophularia), monkey flower, snowberry, plantain, honeysuckle, penstemon
Nymphalidae Gulf Fritillary (Agraulis vanillae)	2.5-3.1"	Bright orange, black edging on lower wings only, large silver spots under wings; Flies fast	From tropical group; Gone from El Sob after the 1990s freeze but back; Cultivated gardens in BA; Eats nectar	Aug-Nov (D); Spring, summer, fall (BA)	Slender, black with reddish stripes and widely spaced spines, several broods; Passion vines (no native plant food source)
Nymphalidae Lorquins' Admiral (<i>Limenitis lorquni</i>) iw saw only 3 times in '05 & 4 in '06	2.25- 3.75"	Black with bands of white patches on wings, orange wing tips	Common in Bay Area in moist areas especially along streams and wet meadows	Sp-Fall (BA)	Brown larvae, horns behind head, bump on back; Willow, popular, chokecherry & orchard trees

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Nymphalidae Monarch (<i>Danaus plexippus</i>)	3.5-4.6" Large	Bright orange with black edging & veins	Widely distributed; largely tropical so migrates; Open areas, fields, meadows, marshes, weedy areas, roadsides; Eats flower nectar	Feb-Nov (D); All yr (BA) El Sob-more common in fall, see some in March/April.	Dull green with bands of yellow & black, several broods; Milkweeds
Nymphalidae Mylitta Crescent (Phyioides mylitta)	1.1-1.4" Small	Orange with fine black lines, blackish center section, pale yellow crescent along edge of hind wing	Rockies to Pacific Coast through California; Almost everywhere in BA, fields, mountains, meadows, parks, weedy areas; Eats nectar	Feb-Dec (D); Spring, summer, fall (BA); Early spring-fall (T)	Black with yellow hairs on some segments, several broods; Thistles (Cirsium) and Milk Thistles (Silybum)
Nymphalidae Painted Lady or Thistle Butterfly or Cosmopolitan (Vanessa cardui) migrated through by thousands in 2005	2-2.75"	Orange with black tips & edging around upper wings; distinguish from other "ladies" by white bars near wing tip ,four black spots across lower wing	From all over world except Australia; Migrates, also hibernates in mild winter areas; In open and disturbed areas where thistles grow; Prefers nectar from 3-6 ft high composites, especially thistles	Feb-Dec (migrates north in Spring, south in fall) D; Year round (BA)	
Nymphalidae Red Admiral (Vanessa atalanta) Saw once in 2005 and once in 2006 at iw's	1.75- 2.3"	Black with reddish bands crossing upper wings, reddish edging on lower wings, white spots on wing tips; erratic rapid flyer	In N. America, Europe & Asia; Not common in BA, found in riparian areas, moist yards, woods; Eat sap flows on trees, fermenting fruit, bird droppings, visit flowers only when these not available	All yr (D & BA); Adults overwinter in BA and sometimes are active on warm winter days; cannot survive a lot of cold	Black & spiny, draws edges of leaves together & lives inside, three or more broods; Nettles,baby tears, hops and some say thistle (circum). Prefers tree sap.

			Distribution & Adult		
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Nymphalidae West Coast Lady (Vanessa annabella)	1.75-2"	Orange with black tips and edging, orange bar on front edge of upper front wing, four blue spots across lower wings; looks like smaller, more rusty Painted Lady	Only <i>Vanessa</i> restricted to West but goes south to Guatemala; In BA in disturbed areas, foothills, chaparral, gardens, fields; Eats nectar	All year (D & BA)	Tan through brown to black with yellow lines, spiny, makes shelter from a leaf; caterpillars may be found all year including winter; Mallows (incl. sidalcea), lupines, nettles
Lycaenidae Acmon Blue (Plebejus acmon)	.75-1" Small	Male lavender-blue, hind wing has orange-pink edge; female very dark brown with orange edge of hind wing; both with large orange spots under hind wing	California west of Sierra Nevadas to Baja; Most common blue in BA, found almost everywhere; fields, hills, weedy areas, bare ground; Eats flower nectar	All year (D); Feb-Oct (T)	Yellowish with greenish sides and black back streak; caterpillars are tended by ants. Various legumes (lotus, lupines, astralagus), buckwheat (Eriogonums)
Lycaenidae Bramble Hairstreak or Coastal Green Hairstreak (Callophrys dumetorum)	1-1.2" Small	Male gray; female brown-yellowish; both greenish below, gray lower forewing	In BA, general distribution & common in wastelands, rocky hills, and chaparral; Eats nectar	March-Ap (D); Early spring (T)	Buckwheat (Eriogonum), lotus
Lycaenidae Common Hairstreak or Gray Hairstreak (Strymon melinus)	1-1.2" Small	Gray above, red spots at base of tail	Throughout continental US south to Venezuela; General distribution in BA in open, disturbed, weedy areas; Scarce early in season, more common later; Eats nectar	Feb-Oct (D); March-Oct (T)	Caterpillars feed on flowers & fruit, older ones on leaves; Mallows, lupine, hops, buckwheat, coyote bush, clovers, coffeeberry
Lycaenidae Echo Blue or Spring Azure (Celastrina ladon echo)	1-1.1" Small	Male azure blue above; female duller with dusky gray on forewings; both whitish below with tiny dark specks	Alaska south to mountains of Columbia; General BA distribution, found almost everywhere but more common in wooded areas and canyons; Eats flower nectar	Feb-July (D); Spring, summer, fall (BA); March- July (T)	Slug-like small, greenish whitish or rose colored with a small head; ants tend for honeydew; Two-three broods; Dogwood, buckeye, California Lilac, oak, lupine, coffeeberry, toyon, blueberry

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Lycaenidae Purplish Copper (maybe) (Lycaena helloides)	1-1.25" Small	Male copper brown with purplish tint; female spotted; both with orange brown under wings and black spots	Great Lakes to British Columbia to Baja; Found almost everywhere in BA, most common copper; disturbed areas, open fields, wet meadows, roadsides; Flower nectar	June-Oct (D); Spring, summer, fall (BA), March- Oct (T)	Slug like, green covered with short white hairs; Dock, knotweed, cinquefoils
Lycaenidae Icarioides Blue, Boisduval's Blue (Plebejus icarioides)	1.0-1.2" Small	Males bright blue with dark rim on wings, female brown or blue, both with black spots on wing edge	British Columbia to edge of Great Plains, south into New Mexico, Artizona & Baja.	April-June (T),	Caterpillars produce a sweet secretion eaten by ants that then protect them. Males avid puddlers. Lupines.
Hesperiidae Common Checkered Skipper (Pygus communis)	.75-1.25" Small	White checkered pattern on bluish- gray wings, male light gray; female darker	Most of temperate U.S. into Mexico; Found almost anywhere in BA; roadsides, old fields, waste lots, bare soil, gardens, trails in woods; Eats flower nectar	Mar-Nov (D); Spring, summer, fall (BA);	Fully grown caterpillars hibernate (USGS); Many kinds of mallows
Hesperiidae Mournful or Sad Dusky Wing (Erynnis tristis)	1.2-1.8"	Deep blackish brown, light brown pattern on wings, hind wings fringed wings white	Northern California south through central Arizona, southern New Mexico, the mountains of Mexico, and Central America to Colombia.; oak woodlands, clearings, roadsides	April, June & September in BA; sometimes common, often scarce	Larvae is grayish green with yellow lateral stripe, has mushroom-like white dots; Coastal Live Oaks, Valley Oaks and Blue Oaks.
Hesperiidae Woodland Skipper (Ochlodes sylvanoides)	.9-1.1" Small	Bright red-brown upper wings, under-wings red-brown to dark, may have a pale band on hind wing. Can have considerable variation.	British Columbia to S. California, east to Montana; Almost everywhere in B A, probably most common skipper; roadsides, openings in forests, chaparral, gardens, riparian areas; Eats nectar	July-Oct (D); Summer to fall (BA)	First-stage caterpillars hibernate, then feed in spring, diapause in the summer as full grown caterpillars, then pupate and come out as adults in the fall. Grasses, both native and cultivated

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Pieridae Cabbage Butterfly or Imported Cabbage Worm (Pieris rapae)	1.25-1.9"	Dull white with grey-black tips of forewings and one-two spots on upper wing	From Europe, All over US, widely distributed; Nectar for food	Feb-June (D); Spring, summer, fall (BA)	Bright green with tiny black specks, dark line down back, yellow dots on side; many broods, including in winter; Mustard family, cabbage, cauliflower, related vegetables and nasturtiums
Pieridae Common White or Checkered White (Pontia protodice)	1.5-2.2"	Male-glossy white, dark markings mostly on front wings; female-dull white with brown checkered marks	Native to S. U.S & N. Mexico, migrates into Canada; Grassland species; Very common; Eats nectar	Ap-Nov (D)	Slender, light green to deep bluish green, four yellowish stripes & many black dots, many broods per year; Many species of Mustard family
Papilionidae Anise Swallowtail or Western Parsley Swallowtail (Papilo zelicaon)	2.5-3" Large	Smaller than Western and deeper yellow, much more black (including all around wings) than other yellow swallowtails	British Columbia to Mexico; Widely distributed in BA, vacant lots, roadsides, hills, fields; Adult food not reported	Mar-Oct (D); Spring- summer (BA); Mar-Oct (T) at iw's occasionally in February	Black with orange spots when young, green with black bands when mature; young larvae eat leaves, adults eat flowers; Native parsley-like plants incl lomatium, tauschia, angelica; now introduced anise; fennel, poison hemlock
Papilionidae Pale Swallowtail (Papilio eurymedon)	3.0-3.5" Large	Like Western Tiger Swallowtail but cream color instead of yellow	British Columbia to Montana, south to Baja; in BA, widely distributed on hills & in canyons, chaparral, plays around summit of hills, attracted to water	Mar-Aug (D); Year round (BA)	Soft green with "eyes" reduced to a few dark markings, at least two broods; Coffeeberry, California Lilac
Papilionidae Pipevine Swallowtail (Battus philenor) BA one is B. philenor hirsutus	2.75-3.5 Large	Black on upper wings, deep iridescent blue on lower, orange spots underneath; flies very fast	Central and S U.S. into S. Mexico. Alameda, Contra Costa & N. Bay; moist areas; Nectar for food	Ap-Oct (D); Spring-summer (BA); Around much of day & also in winter (El Sob)	Black with bright red spots, long filaments on body, two-three broods a year then some stragglers; bright orange eggs; Pipevine (Aristolochia)

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Papilionidae	2.75-3.9"	Yellow with wide black wing edges,	Western North America,	Mar-Sept (D);	Bright green with big "false" eyes
Western Tiger		four black vertical stripes on upper	widely distributed in most	Spring-summer	on fourth segment and a black &
Swallowtail (Papilo	Large	wing; (Two-tailed Swallowtail very	of California; In BA,	(BA); March to	yellow bar just back of these;
rutulus)		similar but for double tail and found	streamsides, wooded areas,	fall (T)	Willow, cottonwood, sycamore,
		more in Inner Coast Ranges)	canyons, roadsides; Eat		elm, ash, wild cherry, apples,
		_	flower nectar		privet, lilac

Hope to attract these butterflies by including larval plants:

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Nymphalidae California Silvespot or Crown Fritillary or Coronis Fritillary (Speyeria coronis)	2-3.3"	Pale orange with black checkers and edges of wings, silver underneath	Great Basin to South Dakota to Baja; in BA in canyons and woodland clearings including oak areas and grasslands; Eats flower nectar	June (D); Mid June-Sept (USGS)	Wild violets, and some say ocean spray, chokecherry and others
Nymphalidae Satyr Anglewing or Satyr Comma (Polygonia satyrus) this one is scarce to rare	1.75-2.5"	wings have jagged edges, looks like	Yukon south to Baja, Great Lakes to Nova Scotia; Most common BA Anglewing; in valley bottoms, riparian areas; live a long time as adults, come out in winter and fly around; Eats tree sap, rotting fruit, flower nectar	Al yr (D & BA)	Nettles

Lately many more gardens, nurseries and websites include butterfly data.

Hard Copy Sources:

Butterflies and Moths, A Golden Guide, Golden Press, 1962
Butterflies of the San Francisco Bay Region, J.W. Tilden, UC Press 1965
Butterfly List Mt Diablo flyer compiled by Rich Kelson, Entomologist, 1994 (lists larval foods).
California Butterflies by John S. Garth & J.W. Tilden UC Press, Berkeley, 1986
Local Butterflies of the San Francisco Bay Area, Local Guides to Natural Science, Woodside, 1999
Peterson First Guide to Caterpillars by Wright Houghton Mifflin 1993

The Habitat Garden Book Wildlife Landscaping for the San Francisco Bay Region, Nancy Bauer, Coyote Ridge Press, 2001

Online sources

List of Bay area nectar and larvae plants (by experts Sally Levinson and Barbara Deutsch) http://www.naba.org/ftp/baca.pdf

Natives Here nursery list of butterfly plants they carry. http://www.ebcnps.org/nativehere.html . This nursery carries only East Bay Area plants.

Extensive list of butterfly plants grown by this local nursery. http://www.yerbabuenanursery.com/Butterfly List.htm

Lists and photos of butterflies, plants for butterfly larvae and nectar. http://www.laspilitas.com/

Butterfly photos, larval food plants, time of occurrence in Orange county. http://mamba.bio.uci.edu/~pjbryant/biodiv/bflyplnt.htm

Some plants for butterflies http://www.theodorepayne.org/. Theodore Payne is in the Los Angeles area.

Huge new butterfly database posted in March 2007 http://butterfly.ucdavis.edu/

Extensive details on North American butterflies at http://www.butterfliesandmoths.org/. Checklists are published here for counties within states.

Butterfly hosts database http://www.nhm.ac.uk/research-curation/projects/hostplants/

Butterfly plant photo gallery. http://www.cnps.org/gallery/callahan/index.htm.

Southern California butterfly photo gallery http://www.naba.org/chapters/nabala/index.htm

North American butterfly images. http://www.naba.org/images/index.html