

A Guide to Common Butterflies at El Rojo Grande Ranch



By
Amber Fields
Claire Fuller
Dave Huffman

Table of Contents

Brush-footed Butterflies (Family Nymphalidae)	1
Gossamer-wing Butterflies (Family Lycaenidae)	9
Skippers (Family Hesperidae)	11
Swallowtails (Family Papilionidae)	14
Sulphurs and Whites (Family Pieridae)	16
Photo Credits	21
References	22

Brush-footed Butterflies

(Family Nymphalidae)

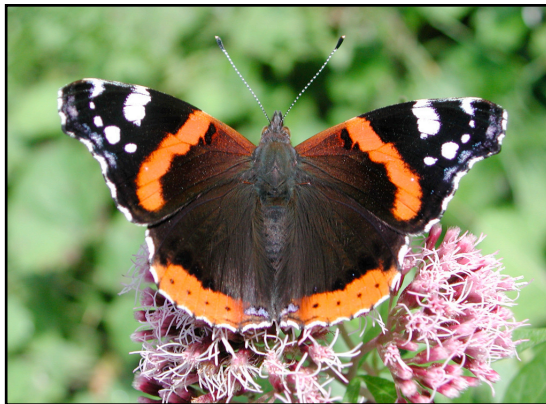
This large group of common butterflies can be found worldwide. "Brush-footed" refers to the front pair of legs on adult butterflies which have many short hairs causing them to resemble a brush. The brush-footed butterflies are part an extremely diverse family that vary in species size, color, and food preferences. We will describe the fritillary, monarch, emperor, and the true brush-foot subfamilies.

Red Admiral (Subfamily Nymphalinae, *Vanessa atalanta*)

Life history:

Approximately 1³/₄ to 2¹/₄ inches from wing tip to wing tip. Males look out for females from ridge tops in the afternoon. Females lay eggs on topside of host plant leaves.

Caterpillars create a shelter of leaves.



Older caterpillars make nests of leaves using silk. Adults have a long flight season and are known to overwinter in the desert, moving to higher elevations during the warmer months. Males are especially aggressive sometimes rushing at anything in their path.

Caterpillar Host Plants: They prefer plants in the nettle family (*Urticaceae*), pellitory (*Parietoria pennsylvanica*), and maybe hops (*Humulus sp.*).

Adult Food Source: Oddly, the Red Admiral feeds on sap flows from trees, fermenting fruit, and bird droppings. They will visit flowers only if necessary. Some flowers visited include common milkweed (*Asclepias sp.*), red clover (*Trifolium sp.*), asters (*Aster sp.*), and alfalfa (*Medicago sp.*) to name a few.

Habitat: Forests, streamsides, yards, parks, and other open areas. The red admiral utilizes many habitats. Adults often travel far from their origin.

Migration: Winters from October to March in southern Texas.

Distribution: Canada, United States, Hawaii, Guatemala, Mexico, Caribbean Islands, New Zealand, Europe, northern Africa, and Asia. Its range covers most of Arizona, excluding the most southwest part of the state.

Common Buckeye (Subfamily Nymphalinae, *Junonia coenia*)

Life history: The common buckeye is usually $1\frac{5}{8}$ to $2\frac{3}{8}$ inches across. Territorial males search for females from low-lying plants or the ground. Eggs are laid one by one on leaf buds or the tops of leaves. Caterpillars and adults overwinter. The common buckeye can be aggressive; chasing other butterflies. Adults fly all year during more mild winters in Arizona.



Caterpillar Host Plants: Plants in the snapdragon family (Scrophulariaceae) such as butter and eggs (*Dalmation toadflax*), plantains (*Plantago sp.*), monkey flowers (*Mimulus sp.*), and plants in the acanthus (*Acanthus*) family.

Adult Food Source: Asters (*Asteraceae*) such as knapweed (*Centaurea sp.*) and sunflowers (*Geraea sp.*). Other plants that may be frequented include dogbanes (*Apocynum sp.*) and peppermints (*Lamiaceae sp.*).

Habitat: Fields, clearings, streamsides, gardens, and roadsides. The common buckeye prefers fairly open, high sun areas with prostrate vegetation and bare ground.

Migration: Two to three flights from May through October.

Distribution: Southern United States and along the U.S. coastlines, as well as Bermuda, Cuba, Isle of Pines, and southern Mexico. The common buckeye is distributed throughout all of Arizona.

Fulvia Checkerspot (Subfamily Nymphalinae, *Thessalia fulvia*)

Life history: Approximately 1¹/₄ to 1¹/₂ inch wing span. Males often cruise higher areas, such as ridges and hilltops, for receptive females. Females lay groups of eggs on the lower side of leaves. Young caterpillars live communally in a loose web.

Caterpillar Host Plants:

Flowers in the figwort family (*Scrophulariaceae*) such as the paintbrushes (*Castilleja integra* and *C. lanata*), as well as bird's beak (*Cordylanthus sp.*).

Adult Food Source: Nectar from flowers.

Habitat: Areas such as rocky ridge tops, desert hills, canyons, damp roadsides, and lowland prairies.

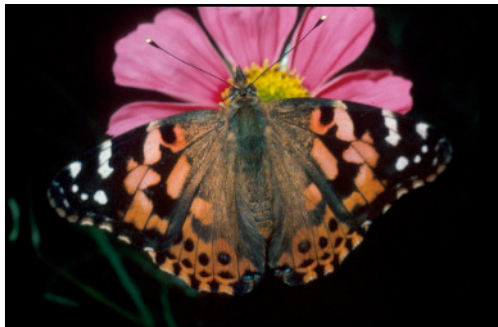
Migration: Three flights in April through October.

Distribution: Central Mexico, southern Utah, Colorado, Kansas, and most of Arizona, excluding the extreme southwest.



Painted Lady (Subfamily Nymphalinae, *Vanessa cardui*)

Life history: Also known as the thistle butterfly, the painted lady ranges from 2 to 2½ inches. Females lay eggs on the leaves of host plants. In the afternoon, males cruise for females, perching on shrubs along ridges and hilltops. The flight of the painted lady is fast and erratic. Caterpillars can leave behind silk nests. Chrysalids, the stage between a larva and an adult, hibernate during the winter months. Adults fly all year, weather permitting.



Caterpillar Host Plants: Many host plants, but especially thistles (*Asteraceae*), mallows (*Malvaceae*), hollyhocks (*Malvaceae*), and legumes (*Fabaceae*).

Adult Food Source: Painted lady enjoys nectar from 3 to 6 ft high asters (*Asteraceae*) such as thistles (*Cirsium sp.*), cosmos (*Cosmos sp.*), and other various sunflower species. Host plants also encompass red clover (*Trifolium sp.*), buttonbush (*Rubiaceae sp.*), privet (*Oleaceae sp.*), and milkweeds (*Asclepias sp.*).

Habitat: Not a habitat specialist, the painted lady can be found in a large array of open areas from deserts to high mountains.

Migration: Three to four journeys from October to April.

Distribution: Widely distributed all over the world, except Australia, New Zealand, and Antarctica. The painted lady is found throughout all of Arizona.

Note: Due to difficulty identifying differences between species, there were possibly two additional species found that look quite similar to the painted lady. These additional species which may have been present are the west coast lady (*Vanessa annabella*) and the American lady (*Vanessa virginiensis*).

Empress Leilia (Subfamily Apaturinae, *Asterocampa leilia*)

Life history: Approximately 1½ to 2 inches in size. The male empress leilia will watch for females while remaining perched for much of the day. Females lay eggs on the tops of host plant leaves in clusters of 10 to 15 eggs. Butterflies often perch on rocks or bare earth. Adults fly late February to mid-December.

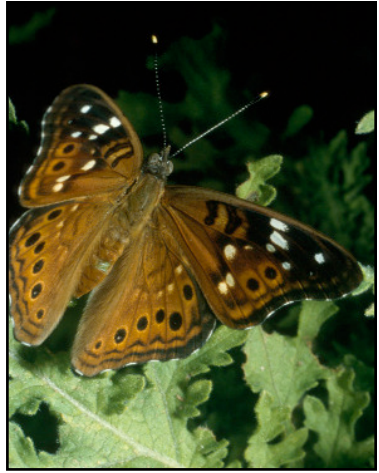
Caterpillar Host Plants: *Celtis pallida*, an elm (*Ulmaceae*) tree and the spiny hackberry (*Celtis pallida*).

Adult Food Source: Animal droppings, sap, and sometimes nectar.

Habitat: Chaparral ecosystems, thorn forests, streambeds, canyons, and washes. The empress leilia especially prefers lowlands.

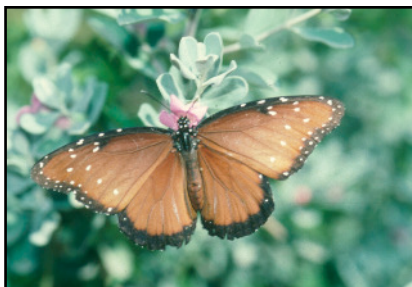
Migration: April through November in Arizona.

Distribution: Southern Texas, northern and central Mexico, and southern Arizona.



Queen (Subfamily Danainae, *Danaus gilippus*)

Life history: Size ranges from approximately $2\frac{5}{8}$ to $3\frac{3}{8}$ inches. Adult butterflies roost together. Females lay single eggs on the buds, leaves, and stems of host plants which later feed caterpillars. Males are quite explicit in seeking out certain flower types, such as whiteweed (*Ageratum sp.*), to acquire specific alkaloids needed for breeding.



Caterpillar Host Plants: Milkweeds (*Asclepias sp.*) help to make *Danaus gilippus* less tasty for predators due to a chemical called cardiac glycosides that the butterflies and caterpillars store in their bodies once eaten.

Adult Food Source: Nectar from the milkweeds.

Habitat: Fairly generalist butterflies preferring streambeds, washes, road corridors, fields, deserts, and other open, sunny places.

Migration: The queens fly all year within their southern range.

Distribution: Inhabitant in the most southern part of the United States, the lower elevations in the West Indies and Central America to Argentina. Found all throughout Arizona.

Variegated Fritillary (Subfamily Heliconiinae, *Euptoietia claudia*)

Life history: Size varies from about 1³/₄ to 2¹/₂ inches from wing tip to wing tip. Males hang out in xeric (dry), open areas while cruising small distances looking for female butterflies. Females lay eggs one by one on the stems and leaves of host plants, and then the caterpillars eat the leaves and flowers.



Caterpillar Host Plants: A number of different plants in several families such as the purslane family (*Portulacaceae*) with the purslanes (*Portulaca sp.*), the passion flower (*Passiflora sp.*), the spiderling (*Boerhavia sp.*), and the swallow-wort (*Cynanchum sp.*).

Adult Food Source: Nectar from plants such as common milkweed (*Asclepias syriaca*), dogbane (*Apocynum sp.*), and red clover (*Trifolium pratense*).

Habitat: Road corridors, landfills, gardens, fencerows, washes, fields, prairies, and other open, sunny areas.

Migration: In the variegated fritillary's southern range it usually migrates from March through November or December.

Distribution: Most of the United States excluding the Pacific Northwest. Also found in Cuba, Jamaica, Mexico, Central America, and the higher elevations in Argentina. Its range includes all of Arizona.

Gossamer-wing Butterflies

(Family Lycaenidae)

Found worldwide, these butterflies are generally quite small. This family was once made up of four separate families, but now consists of four subfamilies including the hairstreaks (subfamily Theclinae), the harvesters (subfamily Miletinae), the coppers (subfamily Lycaeninae), and the blues (subfamily Polyomattinae). Gossamer-wing caterpillars are slug-shaped and some have an unusual relationship with ants in which the ants care for and protect the caterpillar in exchange for their sugary discharge.

Reakirt's Blue (Subfamily Polyommatainae, *Hemiargus isola*)

Life history: About $\frac{3}{4}$ to 1 inch across. Males cruise for females with quite erratic flight patterns. Females lay eggs one by one on flower buds. In an unusual relationship, ants care for caterpillars in return for their sugary discharge.

Caterpillar Host Plants: The flowers and buds of various plants in the pea family (*Fabaceae*) such as yellow sweetclover (*Melilotus officinalis*), rattleweed (*Crotalaria refusa*), mesquite (*Prosopis*), and Gentry's indigobush (*Dalea tentaculoides*).

Adult Food Source: Flower nectar from a variety of herbaceous species such as spearmint (*Mentha spicata*) and white sweet clover (*Melilotus alba*).

Habitat: Open areas including streambeds, thorn scrub, deserts, meadows, fields, and grasslands. The Reakirt's blue butterfly is most common within the lower elevations within its range.

Migration: Flights from March through November. Reakirt's blue butterflies take one flight north after hibernating in the south.

Distribution: The southwest United States, Texas, south to Mexico and Central America. Found throughout all of Arizona.



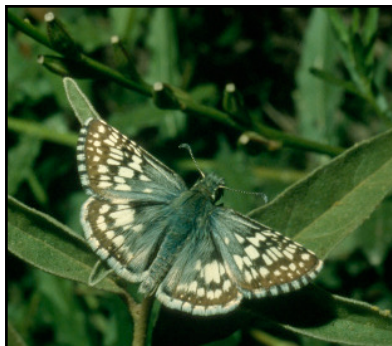
Skippers

(Family Hesperiidae)

Spread throughout the world, about one-third of all butterfly species in North America are within this family. Many skippers fly extremely fast, despite their generally small wings, stout bodies, and broad heads. Members of the skipper family are often quite difficult to identify due to subtle changes in identifying characteristics between species.

Common Checkered-Skipper (Subfamily Pyrginae, *Pyrgus communis*)

Life history: Usually 1 to 1¼ inches in size. The common-checkered skipper often mates in the afternoon. Females leave eggs on the upper side of leaves and leaf buds one by one. Caterpillars take shelter in folded leaf nests and hibernate in the winter. The common checkered-skipper cannot survive extremely harsh winters.



Caterpillar Host Plants: Various plants in the mallow family (*Malvaceae*) such as hollyhock (*Alcea rosea*), globemallows (*Sphaeralcea*), and the poppy mallow (*Callirhoe*).

Adult Food Source: Nectar of plants in the composite family (*Asteraceae*) such as fleabanes (*Erigeron sp.*), as well as aster flowers such as knapweed (*Centaurea sp.*), and red clover (*Trifolium pratense*).

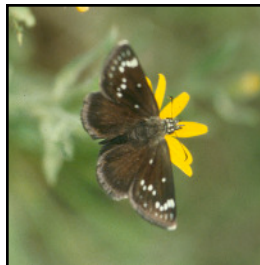
Habitat: Fields, road corridors, gardens, pastures, trails, and various other open, sunny habitats. The common checkered-skipper is quite general in its habitat requirements.

Migration: February through October in its southern limits and March through September in its northern range.

Distribution: Texas, California, northern Mexico, as well as southern New England and parts of southern Canada. Found in the northern, central, and eastern parts of Arizona.

Common Sootywing (Subfamily Pyrginae, *Pholisora catullus*)

Life history: About 1 to 1¹/₈ inch wing span. Mature butterflies enjoy basking in the sun. Males look for females while cruising near the ground, especially in sunny places. Adult common sootywing butterflies often mate in the morning or afternoon. Females lay single eggs on the upper side of leaves on host plants.



Caterpillar Host Plants: Amaranths (*Amaranthus sp.*) such as tumbleweed (*Amaranthus graecizans*) and plants from the chenopod family (*Chenopodiaceae*) including lamb's quarters (*Chenopodium album*).

Adult Food Source: The nectar from flowers such as dogbane (*Apocynum sp.*), woodsorrel (*Oxalis sp.*), white clover (*Trifolium repens*), common milkweed (*Asclepias sp.*), and peppermint (*Lamiaceae sp.*).

Habitat: Road corridors, weedy fields, gardens, riparian areas, pastures and other open, disturbed areas.

Migration: March through November in Arizona.

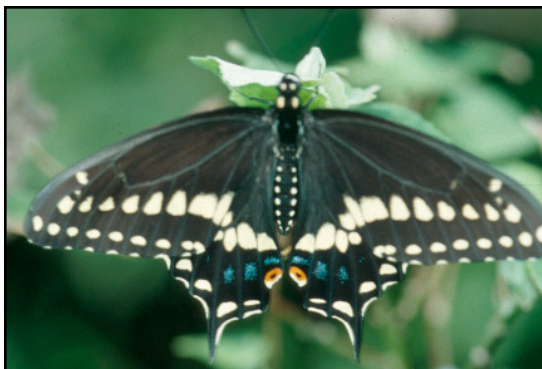
Distribution: Southern British Columbia south to the central United States, and further south to central Mexico. There are sparse populations of common sootywing butterflies found in some areas within its range. Found in most of Arizona excluding some westerly parts of the state.

Swallowtails (Family Papilionidae)

The largest butterflies in North America, swallowtails are among the most well-known butterflies in the world. Their name originates from the tail-like structures found on their rear wings, although with some species this tail is absent or hardly noticeable. Many caterpillars of swallowtails look like bird droppings.

Black Swallowtail (Subfamily Papilioninae, *Papilio polyxenes*)

Life history: A garden butterfly, generally about 2½ to 3½ inches wide across the wings. The black swallowtail is typically considered to be widespread in the deserts of the southwest. Females lay single eggs on host



plant's leaves and flowers. Chrysalids hibernate over the winter months. Adults live from May to November depending on the region.

Caterpillar Host Plants: Caterpillars favor the leaves of plants in the parsley family (*Apiaceae*), such as, Queen Anne's Lace (*Daucus carota*), celery (*Apium sp.*), dill (*Anethum sp.*), parsnip (*Pastinaca sp.*), and plants in the citrus family (*Rutaceae*).

Adult Food Source: Red clover (*Trifolium sp.*), milkweed (*Asclepias sp.*), and thistle (*Cirsium sp.*) nectar.

Habitat: Expansive areas consisting of fields, marshes, deserts, roadways, and suburbs. The black swallowtail is a habitat generalist in a great deal of its range, meaning it's not too particular about where it lives.

Migration: Three flights during the months from April to October.

Distribution: Colorado and southeastern California, northern part of South America, much of the eastern United States, and north into Canada. The black swallowtail can be found throughout Arizona except for the extreme southwestern part of the state.

Sulphurs and Whites

(Family Pieridae)

Present from coastal ranges all the way up to mountain tops, the whites and sulphurs are some of the most abundant butterflies in North America. Excluding the orangetips and the marbles, most species in this family are relatively plain looking. These butterflies can usually be found fluttering about in gardens, fields, and other open areas.

Dainty Sulphur (Subfamily Coliadinae, *Nathalis iole*)

Life history: Approximately $\frac{3}{4}$ to $1\frac{1}{8}$ inch wing span. Males typically cruise fairly close to the ground looking for females. Host plant seedlings are used by females to lay eggs one at a time on the leaves. Multiple broods produced when conditions are favorable. Adults present from March to November depending upon conditions. These butterflies fly most of the year in their southern extent.

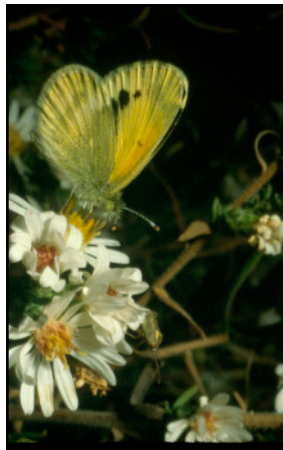
Caterpillar Host Plants: Caterpillars prefer plants growing in a prostrate form in the aster (*Asteraceae*) family including shepherd's needle (*Bidens pilosa*), sneezeweed (*Helenium sp.*), fetid marigold (*Dyssodia papposa*), and cultivated marigold (*Tagetes sp.*).

Adult Food Source: Flower nectar from asters (*Asteraceae*) such as marigold, dogweed (*Adenophyllum sp.*), and rabbitbrush (*Ericameria nauseosa*) to name a few.

Habitat: A wide variety of xeric, open areas such as hillsides, fields, grasslands, road corridors, and meadows. The dainty sulphur can be found up to treeline in the mountainous west during summer months.

Migration: Overwinter in the southern states and migrating north in spring and summer.

Distribution: Guatemala north to Florida and the Southwest for winter. Great Plains to southeast Washington, southeast Idaho, Wyoming, and Minnesota. It ranges throughout Arizona.



Orange Sulphur (Subfamily Coliadinae, *Colias eurytheme*)

Life history: Typically the first brood is smaller ranging from $1\frac{3}{8}$ to $2\frac{1}{4}$ inches, while the second brood is often larger being about $1\frac{3}{4}$ to $2\frac{1}{4}$ inches in size. Very widespread and common in North America. *Colias eurytheme* is the most prevalent orange sulphur butterfly. Females lay eggs individually on the upper side of leaves on host plants. The orange sulphur has slightly erratic flight characteristics. Adults mainly feed at night. Adults fly all year in warmer regions of Arizona. Chrysalids lie dormant all winter.



Caterpillar Host Plants: Members of the pea family (*Fabaceae*) such as white clover (*Trifolium repens*) and alfalfa (*Medicago sativa*); vetch family (*Astragalus*); lupines (*Lupinus*); and white sweet clover (*Melilotus alba*). Larva especially prefer alfalfa.

Adult Food Source: Orange sulfurs utilize the nectar from a variety of plants within the sunflower family (*Asteraceae*), for instance, dandelions, milkweeds, goldenrods, and asters.

Habitat: Butterflies prefer open areas including mowed lawns, meadows, and road corridors. The orange sulphur is frequently very tolerant of various habitats.

Migration: Two to three flights from March to November.

Distribution: From the Pacific to the Atlantic coast in the continental United States (excluding the Florida peninsula) and southern Canada to central Mexico. Found all throughout Arizona.

Southwestern Orangetip (Subfamily Pierinae, *Anthocharis thoosa*)

Life history: Wing span of 1 to 1½ inches. The southwestern orangetip is becoming quite rare in parts of its range near the periphery. Management should include preservation of host plants and habitats.



Caterpillar Host Plants: Plants in the mustard family (*Brassicaceae*).

Adult Food Source: Nectar from flowers of plants in the mustard family such as tansy-mustard (*Descurainia sp.*) and hedge mustard (*Sisymbrium sp.*).

Habitat: Desert hills and juniper (*Juniperus sp.*) and/or pinyon (*Pinus edulis*)-juniper forests.

Migration: Flight from April through to late February.

Distribution: Southeast California, New Mexico, western Colorado, southern and western Texas, Utah, and northern Nevada. Found all over Arizona.

Western White (Subfamily Pierinae, *Pontia occidentalis*)

Life history: Wing span usually 1½ to 2 inches. Female butterflies lay eggs one by one on host plants. Males search for females along hilltops. Caterpillars prefer to feed on buds, flowers, and fruits, but will eat leaves as well. Pupa will hibernate in cocoon. Adults present from May to September depending on latitude and elevation. The



western white is common in mostly upper elevations, but frequents mid elevations during warmer months.

Caterpillar Host Plants: Fruit and flowers of native plants in the mustard family (*Brassicaceae*).

Adult Food Source: Blossom nectar.

Habitat: Mountainous regions, as well as open fields and roadsides. The western white especially favors hilltops.

Migration: Two flights during summer months.

Distribution: North Dakota, central Ontario, northern Arizona, northern New Mexico, and central California north to Alaska.

Note: Due to difficulty identifying differences between species, there were possibly two additional species found that look quite similar to the western white. These two additional species which may have been present are the checkered white (*Pontia protodice*) and the spring white (*Pontia sisymbrii*).

Photo Credits

Cover photo : Mark Daniels, taken at El Rojo Grande Ranch

Red Admiral:

www.graviton.demon.co.uk/butterflies.htm

Common Buckeye: Paul Opler

Fulvia Checkerspot: Paul Opler

Painted Lady: Paul Opler

Empress Leilia: Paul Opler

Queen: Paul Opler

Variegated Fritillary: [www.duhons.net/ butterflies.htm](http://www.duhons.net/butterflies.htm)

Reakirt's Blue: Paul Opler

Common Checkered-Skipper: Paul Opler

Common Sootywing: Paul Opler

Black Swallowtail: Paul Opler

Dainty Sulphur: Paul Opler

Orange Sulphur: Paul Opler

Southwestern Orangetip: www.nearctica.com

Western White: Paul Opler

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