Butterflies of Colorado

Pieridae (Whites and Sulphurs)





Pieridae: Whites

- Pine White
- Spring White
- Checkered White
- Western White
- Cabbage White
- Mustard White
- Large Marble
- Olympia Marble
- Julia Orangetip
- Great Southern White





Pine White (*Neophasia menapia*)

• Above, forewing tip is **bold black with several white ovals**; lower half of the forewing is black curving upward into a rounded hook. Below, forewings are similar to the upper surface; hindwings show **black veining with a black submarginal line**.

- Wingspan: Medium; 1 3/4 to 2 1/4 inches.
- <u>Habitat:</u> Coniferous forests (ponderosa pine and possibly lodgepole pine); foothills, montane.
- <u>Flight Times:</u> July to mid-September; one brood. Egg overwinters on needles of various conifers.
- <u>Larval Foodplant</u>: Needles of ponderosa pine, lodgepole pine and douglas fir.



Distribution Map (Neophasia menapia)



Spring White (*Pontia sisymbrii*)

• Prominent black cell end bar at the end of a large white cell along leading edge of forewings, and black or gray checkered pattern along trailing edge. From above, hindwing is white with black veining. Below, hindwing shows heavy gray scaling along yellow veins.

- Wingspan: Small; 1 1/4 to 1 3/4 inches.
- <u>Habitat:</u> Dry canyons, rocky outcrops, open coniferous forests; plains, foothills, montane.
- <u>Flight times:</u> April to mid-June; one brood. Chrysalis overwinters.
- Larval Foodplant: Plants in the mustard family.



Distribution Map (Pontia sisymbrii)



Checkered White (*Pontia protodice*)

• White above with checkered gray (black) pattern on trailing edge of both wings both darker on forewing and on females. Also notice central black bar on leading edge of forewing. Hindwing below can show yellow-brown veining.

- Wingspan: Medium; 1 1/2 to 2 1/2 inches.
- <u>Habitat:</u> Wide variety of sites: open areas, fields and clearings in forests; plains, foothills, montane.
- <u>Flight Times:</u> March through August. Chrysalis overwinters.
- Larval Foodplant: Native and exotic plants in the mustard family.
- Shows considerable variability of appearance between sexes and seasonal flights.



Distribution Map (*Pontia protodice*)



Western White (*Pontia occidentalis*)

• White above with a **central black bar** on **leading edge of forewing**. Marginal **chevrons** tend to be gray while submarginal spots tend to be darker. Males generally more lightly marked than females. Below, **yellow- green veining on forewing apex and hindwing**.

- Wingspan: Small; 1 1/2 to 2 1/8 inches.
- <u>Habitat:</u> Forest openings, grasslands, and meadows; plains, foothills, montane.

• <u>Flight Times:</u> March to August; two broods, one at higher elevations. Chrysalis overwinters.

- Larval Foodplant: Native mustards.
- Very similar to and difficult to separate from Checkered White.



Distribution Map (Pontia occidentalis)



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Cabbage White (*Pieris rapae*)

• White above with gray patches at wingtips and either one (male) or two (female) black spots in middle of forewing. Below, a white forewing and a hindwing unmarked and mostly gray-white or pale yellow.

• <u>Wingspan:</u> Medium; 1 1/2 to 2 inches.

• <u>Habitat:</u> Common in open weedy areas, mountain meadows, stream sides and gardens; plains, foothills, montane.

• <u>Flight Times:</u> March through September; three or more broods. Chrysalis of last brood overwinters.

• <u>Larval Foodplant:</u> Wild and cultivated Mustard family plants including parsley and cress species.

• The Cabbage White is one of the most common and widespread butterflies around the world.





Distribution Map (*Pieris rapae*)



Mustard White (*Pieris marginalis*)

• Above, white to dusted gray. Possible black patch at wingtip and can show one or two round spots centered. Below, white to pale yellow with gray veins. Ventral veins may show through on males.

- <u>Wingspan:</u> Medium, 1 1/4 to 2 1/4 inches.
- <u>Habitat:</u> Moist areas in forests, meadows, streamsides; foothills, montane.
- <u>Flight Times:</u> April to August; two broods. Chrysalis overwinters.
- Larval Foodplant: Various native plants in the mustard family.



Distribution Map (*Pieris marginalis*)



Large Marble (*Euchloe ausonides*)

• Hindwing underneath white with yellow veins and dark green marbling cutting across the veins. Tip of white forewing beneath similarly patterned. Above, forewing has white with black patterning at tip and black cell end bar. White antennae.

• <u>Wingspan:</u> Medium; 1 1/4 to 2 inches. Can be smaller.

• <u>Habitat:</u> Frequents wide variety of open habitats, meadows and forest openings; flies low along streams sides and trails; foothills, montane, alpine.

- Flight Times: April to late July. Chrysalis overwinters.
- Larval Foodplant: Mustard family plants.



Distribution Map (*Euchloe ausonides*)





Olympia Marble (*Euchloe olympia*)

• Above, white with **black forewing cell bar** and **black shadowing** at tips of forewing. White antennae. Below, **sparse yellow-green marbling** on hindwing (much less than on Large Marble).

- <u>Wingspan:</u> Medium; 1 1/16 to 1 3/8 inches.
- <u>Habitat:</u> Prairies, grasslands, open woodlands; plains, foothills.
- <u>Flight Times:</u> April to August; one brood. Females lay single egg on flower bud of host plant; chrysalis overwinters.
- Larval Foodplant: Rockcress and other mustards.



Distribution Map (*Euchloe olympia*)



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Julia Orangetip (*Anthocharis julia*)

• Male white above (female, pale yellow) with **bright orange wingtips on forewings**. Below, the hindwing has **yellow veins and patchy yellow green marbling** (sometimes orange on forewing tip shows through when backlit). Usually shows a **white ray in middle of hindwing**.

• Wingspan: Small; 1 to 1 1/4 inches.

• <u>Habitat:</u> Mountain meadows and along stream sides in canyons; foothills, montane.

- <u>Flight Times:</u> April to late June; one brood. Overwinters as chrysalis.
- Larval Foodplant: Rockcress.





Distribution Map (Anthocharis julia)



Great Southern White (*Ascia monuste*)

• Upper surface of male forewing white with **black zigzag pattern** on outer margin. Dry season female form resembles male with heavier black zigzag pattern and a **small black spot** in the wing cell. Wet-season female is darkened with black scales above and below.

- Wing Span: 2 1/2 3 3/8 inches
- <u>Flight:</u> All year in South Texas, peninsular Florida, and along the Gulf Coast.
- <u>Habitat:</u> Salt marshes, coastal dunes, open fields, and gardens.

• <u>Larval Foodplant:</u> Mustard family plants including beach cabbage, cultivated cabbage and radish, peppergrass; and plants in the caper family including nasturtium.



Distribution Map (Ascia monuste)



Side-by-Side Pieridae: Whites



Pine White Spring White Checkered White Western White

Great Southern



Cabbage White

Mustard White

Large Marble

Olympia Marble

Julia Orangetip



Pieridae: Sulphurs

- Clouded Sulphur
- Orange Sulphur
- Queen Alexandra's Sulphur
- Southern Dogface
- Sleepy Orange
- Mexican Yellow
- Mead's Sulphur
- Dainty Sulphur



Clouded Sulphur (*Colias philodice*)

• Above, males are **bright yellow** with a **broad black band** along trailing edges of both wings and a **black spot** on each forewing. Below, both sexes **yellow with some pink on edges**, **hindwing spot** usually double, ringed with orange-pink. Forewing has a **black or light ringed spot**.

- Wingspan: Medium; 1 1/2 to 2 1/2 inches.
- <u>Habitat:</u> Open habitats like cultivated fields, meadows, mountain parks, roadsides and alfalfa fields; plains, foothills, montane.
- <u>Flight Times:</u> March through October, one to three broods.
- Larval Foodplant: Legumes white clover, alfalfa, vetches and golden banners.
- Female has two forms yellow with black edging enclosing yellow spots on the forewing, and a greenish-white. Their flight is direct, but erratic.





Distribution Map (Colias philodice)



Orange Sulphur (*Colias eurytheme*)

• Yellow with orange tinge on trailing edge of forewing; female has an orange flush on forewing, may be more greenish-white or white. Both have wide black wing borders; solid in male, female black border surrounds light spots. Dark median cell spot toward the leading edge of the forewing. Below, greenish-yellow with a silver or white hindwing spot trimmed with dark concentric rings, sometimes with a smaller "satellite" spot above. Highly variable appearance.

- <u>Wingspan:</u> Medium; 1 1/2 to 2 3/4 inches.
- <u>Habitat:</u> Widespread in clover and alfalfa fields, meadows, parks, road edges; plains, foothills, montane, alpine.
- <u>Flight Times:</u> April through October; multiple broods.
- <u>Larval Foodplant:</u> Legumes, including alfalfa, clovers and vetches.





Distribution Map (Colias eurytheme)



Queen Alexandra's Sulphur (*Colias alexandra*)

• Above, **bright yellow with narrow black border** on both wings and **small cell spot**; **female lighter yellow**, sometimes white, with forewing border faded or absent. Below, hindwing a **uniform pale green-gray** with a **central white spot** without colored rim. Underside of the forewing is somewhat more yellow. There is a **small black bar** near mid-point of the leading edge of the forewing.

- <u>Wingspan:</u> Medium; 1 1/2 to 2 inches.
- <u>Habitat:</u> A variety of habitats including grasslands, clearings, wet meadows in woodlands and forest edges; foothills, montane to treeline.
- <u>Flight Times:</u> May to September; one brood. Late-stage caterpillars overwinter.
- <u>Larval Foodplant:</u> Golden banner, milk vetches, clovers, lupines, and other legumes.



Distribution Map (Colias alexandra)



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Southern Dogface (*Zerene cesonia*)

• Forewing tips pointed. Above, yellow and black forewing with the outline of yellow dogface pointed at trailing edge of the forewing. Yellow hindwing on the female; male has narrow black markings on hindwing margin. Below, bright to pale yellow. When backlit, dogface may show through.

- <u>Wingspan:</u> Medium; 2 1/8 to 3 inches.
- <u>Habitat</u>: Dry, open habitats such as weedy pastures, dry hillsides, and short grass prairies; plains.
- <u>Flight Times:</u> May to August; one brood.
- <u>Larval Foodplant:</u> Small-leaved plants in the pea family; clovers, indigo, alfalfa.





Distribution Map (Zerene cesonia)



Sleepy Orange (*Eurema* nicippe)

• Above, orange in both male and female with a wide black border (male) and small black cell spot on forewing; female borders not as well defined. Below, orange-yellow with rust or light brown smudges on the hindwing; black cell spot on forewing.

- Wingspan: Medium; 1 3/8 to 2 1/4 inches.
- <u>Habitat:</u> Many open habitats such as disturbed or fallow fields, gardens and roadsides; plains, foothills.
- <u>Flight Times:</u> Mid-summer into fall.
- Larval Foodplant: Sennas; flowering plants in the legume family.



Distribution Map (Eurema nicippe)



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Mexican Yellow (*Eurema mexicana*)

• Above, pale yellow with uneven black forewing margin which outlines a "dogface" pattern. Below, pale yellow with scattered reddish-brown markings. Hindwing sharply angled and has a tail like projection at the rear margin.

- <u>Wingspan:</u> Medium; 1 3/4 to 2 1/2 inches.
- <u>Habitat:</u> Open habitats, prairies and canyons; foothills, montane.
- Flight Times: Late summer into fall; 1 brood? (see below)
- Larval Foodplant: Acacia, locust and other legumes.





Distribution Map (*Eurema mexicana*)



Mead's Sulphur (*Colias meadii*)

• Below, male and female primarily green with orange disk on forewing and a median white spot, circled in pink on hindwing. Wing fringes are pink. Above, males bright orange; females a subdued orange; both with dark borders. White females are rare.

- Wingspan: Small; 1 1/4 to 1 5/8 inches.
- <u>Habitat:</u> Rocky slopes and meadows near treeline and alpine tundra; subalpine, alpine.
- Flight Times: July to August; one brood. Third-instar caterpillar overwinters.
- <u>Larval Foodplant</u>: Plants in the pea family, including clovers, alpine milk vetch, and subalpine locoweed.



Colias meadii male



Distribution Map (Colias meadii)



Dainty Sulphur (*Nathalis iole*)

• The smallest sulphur. Upper side **yellow with black markings**; female blacker than male. **Elongated forewing** below has **submarginal black spots** and a **yellowish basal area**. **Hindwing below varies from pale yellow to gray-green**.

• Wingspan: Small; 3/4 to 1 1/4 inch.

• <u>Habitat:</u> Open, dry places, fields, grasslands, meadows and hillsides; plains, foothills, montane. Flies close to the ground.

- Flight Times: May through September.
- <u>Larval Foodplant:</u> Aster family, such as fetid and marsh marigold, dogwood, cosmos, and sneezeweeds.



Distribution Map (*Nathalis iole*)



Side-by-Side Pieridae: Sulphurs



Clouded

Orange

Queen Alexandra's







Mead's

Sleepy Orange

Mexican Yellow