This checklist comprises 74 species of butterflies that have been recorded at the Big Morongo Canyon Preserve. The preserve's 31,000+ acres contain a wide variety of habitats – Sonoran and Mojave Desert ecosystems, riparian woodlands, a community park, former cultivated lands, stands of Joshua trees and Mojave yuccas, and pinyon, oak, and juniper woodlands. Its proximity to the higher San Bernardino and San Jacinto Mountains and to northwest Mexico adds potential for rare strays. A Hypotheticals list at the end includes species that have been found close to the preserve as well as those that are likely to be found but whose occurrence at the preserve has not been documented.

Common names of butterflies used in the checklist can be found in most popular field guides currently available. Scientific names generally follow *Butterflies and Moths of North America* (https://www.butterfliesandmoths.org). For some butterflies knowing which geographic population, or subspecies, is present can be important in correctly identifying a butterfly. Subspecies are given for many local butterflies.

Species listed here were compiled from data collected by field researchers, through field observations of volunteers and preserve visitors, from reports of butterflies published in the scientific literature, and from a variety of citizen science websites. Visitors are encouraged to submit observations of butterflies and other Big Morongo Canyon Preserve wildlife through websites such as: *iNaturalist*: www.inaturalist.org, *eButterfly*: http://www.e-butterfly.org, and the *North American Butterfly Association*: https://www.nababis.org. The submission of digital photos for verification is encouraged.

Bob Cullen (2011), Joe Zarki (2019).

Abundance

C- Common. Species observed frequently in proper habitat, sometimes in large numbers.

U– Uncommon. Species may only occur in some of the proper habitat in low to moderate numbers.

R– Rare. Species occurs regularly but in small numbers. Requires careful searching of proper habitat. Typically hard to find.

Cas– Casual. Presence is documented by only a few records.

Irr- Irregular. A stray, or wanderer. May be common in some years but entirely absent in many others.

of Flights/Seasons

The number of annual flights of adult butterflies is given followed by the months in which they can be seen. Months are numbered sequentially; 1 = January, and 12 = December.

Habitat and Butterfly Plant Preferences

Geographic features hosting particular plant associations able to support certain butterfly species. Some butterflies are strongly attracted to hilltops whereas others favor washes or canyon bottoms. Butterflies are dependent on native plants for their survival. During their larval life stage, caterpillars feed on specific host plants as they grow and mature. In the adult phase, butterflies may use many other food plants to obtain nectar. Knowing butterfly plant preferences can help determine good locations where they are likely to be found.

Swallowtails, Family Papilionidae

- O Western Tiger Swallowtail, Papilio rutulus...... C
- O Pale Swallowtail, Papilio eurymedon..... R

White and Sulphurs, Family Pieridae

0	Desert Orangetip, Anthocharis cethura cethuraU
0	Sara Orangetip, Anthocharis sara sara C
0	Desert Marble, <i>Euchloe lotta</i> U
0	Cabbage White, Pieris rapae U
0	Becker's White, Pontia beckerii C
0	Checkered White, Pontia protodice C
0	Spring White, Pontia sisymbrii sisymbrii
0	Orange Sulphur, Colias eurythemeC
0	Southern Dogface, Zerene cesoniaU
0	California Dogface, Zerene eurydice R
0	Cloudless Sulphur, Phoebis sennae marcellina
0	Large Orange Sulphur, Phoebis agarithe agaritheR
0	Mexican Yellow, Eurema mexicana Irr
0	Little Yellow, Pyrsitia lisa Cas
0	Sleepy Orange, Abaeis nicippe C
0	Dainty Sulphur. Nathalis iole C

Gossamer-winged Butterflies, Family Lycaenidae

	···· · · · · · · · · · · · · · · · · ·
0	Gorgon Copper, Lycaena gorgonCas
0	Great Purple Hairstreak, Atlides halesusC
0	Bramble Hairstreak, Callophrys dumetorum viridis U
0	' Loki' Juniper Hairstreak, <i>Callophrys gryneus loki</i> U
0	Sylvan Hairstreak, Satyrium sylvinus desertorum U
0	Gray Hairstreak, Strymon melinus pudica C
0	Mallow-Scrub Hairstreak, Strymon istapa clenchi R
0	Leda Ministreak, <i>Ministrymon leda</i> Irr
0	Marine Blue, <i>Leptotes marina</i> C
0	Western Pygmy-Blue, <i>Brephidium exilis</i> C
0	Western Tailed-Blue, <i>Everes amyntula</i> R
0	Silvery Blue, Glaucopsyche lygdamus australis U
0	Bernardino Blue, Euphilotes bernardinoC
0	'Dammer's' Dotted-Blue, Euphilotes enoptes dammersi U
0	Mojave Dotted-Blue, Euphilotes mojaveU
0	Ceraunus Blue, Hemiargus ceraunus gyas C
0	Reakirt's Blue, Echinargus isola U
0	Acmon Blue, Plebejus acmon C

Metalmarks, Family Riodinidae

0	Wright's Metalmark, Calephelis wrighti
О	Sonoran Metalmark, Apodemia mejicanus deserti C
0	Palmer's Metalmark, Apodemia palmeri

Brush-footed Butterflies, Family Nymphalidae

О	Amer	ican Snou	t, Libytheana carinenta.	Irr
\sim				

• Monarch, Danaus plexippus...... U

Of Flights: Seasons Habitats

multiple: 5-10
one or two: 2-10
two to three: 3-10
two to three: 3-10

one: 2-5
one or two: 2-6
one: 2-6
multiple: 1-12
two to three: 1-12
multiple: 1-12
one: 2-6
multiple: 1-12
two to three: 3-10
one to three: 2-10
one or two: 2-10
migrant: 3-4, 9-11
migrant: 3-5, 9-11
one prior record: 3-5?
multiple: 1-12
multiple: 1-12

one: 5-7
multiple: 2-10
one: 2-5
two to three: 2-10
one: 4-8
multiple: 2-11
one or two: 3-10
two to three: 4-10
multiple: 1-12
multiple: 1-12
two: 3-9
two: 3-7
one: 2-6
one: 8-10
one: 3-5
multiple: 3-10
multiple: 3-11
multiple: 3-10

open habitats, gardens, hilltops open habitats, hilltops riparian woodlands, gardens chaparral, canvons, hilltops

open habitats, hilltops canyon bottoms, washes desert washes, alluvial fans parks, gardens, riparian woodlands desert washes, alluvial fans open desert, hilltops, widespread open habitats, hilltops open habitats, washes open habitats, washes mountain habitats, foothills desert washes, alluvial fans gardens, desert washes desert washes, alluvial fans open woods, fields, roadsides desert washes, alluvial fans desert washes, alluvial fans

canyons, foothills, chaparral canyons, washes, hillsides canyons, washes, hilltops canyons, washes, hillsides riparian areas, washes, foothills many habitats, widespread canyons, washes, hillsides desert washes, alluvial fans desert washes, alluvial fans desert washes, alluvial fans canyon bottoms, riparian areas canyons, washes, riparian areas canyons, alluvial fans, hillsides canyons, alluvial fans, hillsides canyons, washes, hillsides desert washes, alluvial fans desert washes, alluvial fans canyons, washes, hillsides

multiple: 3-10	canyons, washes, hillsides
multiple: 2-11	canyons, washes, hillsides
two to three: 4-11	canyon bottoms, desert washes

two to three: 4-5(R), 9-11	canyons, pine-oak woods, hillsides
multiple: 1-12	many habitats, milkweeds

Brush-footed Butterflies, Family Nymphalidae

Brush-looled Butternies, Family Nymphanade		
О	Queen, Danaus gilippusC	
0	Gulf Fritillary, Agraulis vanillae R	
0	Variegated Fritillary, <i>Euptoieta claudia</i> R	
0	Lorquin's Admiral, <i>Limenitis lorquini</i> C	
0	California Sister, Adelpha californicaU	
О	California Patch, Chlosyne californica C	
О	Sagebrush Checkerspot, Chlosyne acastus neumoegeni C	
О	Mylitta Crescent, Phyciodes mylitta U	
О	Variable Checkerspot, Euphydryas chalcedona corralensis U	
О	Common Buckeye, Junonia coenia U	
О	Satyr Comma, <i>Polygonia satyrus</i> U	
О	Mourning Cloak, Nymphalis antiopaC	
О	California Tortoiseshell, Nymphalis californicaIrr	
О	Red Admiral, <i>Vanessa atalanta</i> U	
О	Painted Lady, Vanessa carduiC	
О	West Coast Lady, Vanessa annabellaU	
О	American Lady, Vanessa virginiensis R	

Skippers, Family Hesperiidae

О	Arizona Powdered-Skipper, Systasea zampa R
О	Sleepy Duskywing, Erynnis brizo lacustra
О	Funereal Duskywing, Erynnis funeralisC
О	Propertius Duskywing, <i>Erynnis propertius</i> R
О	Mournful Duskywing, Erynnis tristis
О	Small Checkered-Skipper, Pyrgus scriptura apertorumU
О	White Checkered-Skipper, <i>Pyrgus albescens</i> C
О	Northern White Skipper, <i>Heliopetes ericetorum</i> C
О	Orange Skipperling, Copaeodes aurantiaca
0	Fiery Skipper, Hylephila phyleus R
О	Sandhill Skipper, Polites sabuleti chusca U
О	Umber Skipper, <i>Poanes melane</i> U
О	Eufala Skipper, Lerodea eufala R
О	Yucca Giant-Skipper, <i>Megathymus yuccae</i> U

Hypotheticals

Anise Swallowtail, Papilio zelicaon Indra Swallowtail, Papilio indra fordi Giant Swallowtail, Papilio cresphontes Gray Marble, Anthocharis lanceolata australis Harford's Sulphur. Colias harfordii Behr's Hairstreak, Satyrium behrii Gold-hunter's Hairstreak, Satyrium auretorum spadix Mountain Mahogany Hairstreak, Satyrium tetra Hedgerow Hairstreak, Satyrium saepium chalcis

Notes

Of Flights: Seasons Habitats

multiple: 3-10 one: 3-6 multiple: 2-11 one: 3-6 two: 3-10 multiple: 3-10 multiple: 3-11 two: 3-11 multiple: 3-10 multiple: 2-11 multiple: 4-10 two: 4-9 multiple: 4-10 one: 3-5 open habitats, washes, milkweeds gardens, desert washes, canyons desert washes, alluvial fans canyons, riparian woodlands foothills, canyons, oak woodlands canyons, washes, hillsides canyons, washes, hillsides canyons, foothills, mountains canyons, washes, chaparral canyons, washes, hillsides canyons, foothills, woodlands canyons, washes, riparian woods canyons, foothills, hilltops canyons, riparian areas, woodlands many habitats, widespread many habitats, mallows many habitats, hilltops

canyons, washes, alluvial fans canyons, hillsides, hilltops, oaks canyons, washes, alluvial fans canyons, foothills, mountains canyons, foothills, oak woodlands alluvial fans, washes, hillsides canyons, washes, open habitats canyons, washes, often at wet spots canyons, washes gardens, parks, lawns open habitats, alkali flats canyons, foothills, riparian woods open habitats, washes, alluvial fans canyons, alluvial fans, yuccas

Hypotheticals

'Southwestern' Echo Azure, Celestrina echo cinerea Pallid Dotted-Blue, Euphilotes pallescens elvirae Lupine Blue, Plebejus lupini monticola Mormon Metalmark, Apodemia mormo Behr's Metalmark, Apodemia virgulti mojavelimbus 'Hennei' Variable Checkerspot, Euphydryas chalcedona hennei Bordered Patch, Chlosyne lacinia Silver-spotted Skipper, Epargyreus clarus Mojave Sootywing, Hesperopsis libya

The internationally recognized Big Morongo Canyon Preserve, part of Sand to Snow National Monument, is an important wildlife corridor between San Bernardino National Forest and Joshua Tree National Park. The 31,000-acre preserve encompasses riparian and arid desert ecosystems essential to the survival of a wide variety of rare and unusual birds, wildlife, and plants. Significant cultural resources are also found here.

Butterflies



Lorquin's Admiral, Limenitis lorquini

of Big Morongo Canyon Preserve

