

BUTTERFLIES OF MISMALOYA, JALISCO, AND ADJACENT PARTS OF BANDERAS BAY AND SOUTHERN NAYARIT, MEXICO

Andrew D. Warren

Department of Entomology, Oregon State University, Corvallis, Oregon, USA
97331-2907

and

Jorge E. Llorente-Bousquets

Museo de Zoología, Facultad de Ciencias, Universidad Nacional Autónoma de México, Apdo.
Postal 70-399, México 04510 D.F., México

ABSTRACT

The butterfly species occurring in the Banderas Bay region of southern Nayarit and northern Jalisco, México, are listed. Vernacular English names have been included for all species, many of which are proposed here. All species known to occur in Mismaloya, Jalisco, are indicated. It is known as the richest site in Jalisco in terms of overall butterfly diversity, with 315 species recorded to date. Species considered likely to be found in the area in the future are included, mostly being species known from areas to the north or south of Banderas Bay, in similar habitats below 1000m elevation. A total of 505 species are estimated to eventually be found in the Banderas Bay area in the future, while the true butterfly diversity along Mismaloya River could be as great as 430 species. Based on these numbers, despite being the best known site in the state for butterflies, the butterfly fauna in Mismaloya is estimated to be about 75% known.

RESUMEN

Se presenta una lista de mariposas de Bahía de Banderas, ubicada al sur del estado de Nayarit y al norte del estado de Jalisco, México. Se incluyen además los nombres comunes en inglés para todas las especies, muchos de ellos aquí se proponen. En la lista se señalan todas aquellas especies que se sabe se encuentran en Mismaloya, uno de los sitios con mayor riqueza específica para Jalisco: hasta ahora se han registrado 315 especies. Se incluyen también aquellas especies que pueden existir en la zona, esto con base en su distribución en áreas aledañas del sur o norte de la Bahía, cuyos hábitats son similares y se encuentran por debajo de los 1,000 msnm. De las 505 especies que se estima existan en Bahía de Banderas, la diversidad de mariposas en Río Mismaloya puede ser de 430. Con base en estas estimaciones, y a pesar de que Mismaloya es una de las zonas del estado mejor conocidas, la fauna de mariposas de esta región se conoce en un 75%.

This list is based primarily on data reported in the *Butterflies of Jalisco, México*, (see Llorente *et al.*, [1995]; Vargas *et al.*, 1996; Warren *et al.*, 1996), and in the introductory review of Mismaloya butterflies by Warren (1997). This area has received a great deal of attention from butterfly enthusiasts recently due to its accesability from the Puerto Vallarta International Airport, excellent local accomodations, and the growing pool of knowledge about the diversity and distribution of butterflies in the area. This list is intended to be used as a reference for visiting butterfly enthusiasts to facilitate species determinations, and also to focus future searches for additional species. Skipper nomenclature used in this list follows that of Warren (in press). Common names agree with names recognized by the North American Butterfly Association wherever possible, although many modifications have been made when necessary. New common

names coined here are intended to be tentative; better suggestions for names of many taxa will undoubtedly be made in the future.

Additional records for Mismaloya and the Banderas Bay area which were not presented in previous lists have been generated from recently determined specimens and photo-documented sightings, mostly determined by the senior author. In 1996, 258 species of butterflies were reported from Mismaloya (Vargas *et al.*, 1996). Currently, 315 species are known to occur along Mismaloya creek, making it the richest site in Jalisco, in terms of overall known butterfly diversity. Other areas in Jalisco that may actually have a greater diversity of butterfly species than the Mismaloya area are less accesable to butterfly enthusiasts, and therefore less frequently surveyed. Single canyons in the Sierra de Manantlán, mountains shared between Colima and Jalisco, probably host a greater diversity of butterfly species than Mismaloya, but we are still lacking many skipper records from that region. It should be noted, however, that we still lack records for butterflies from the Mismaloya area from the months of May, June, and July. We have very few records from August, and September, when there are surely additional species to be found, and have very few hairstreak records in general.

For the purposes of this listing, Banderas Bay includes all localities in Municipios Puerto Vallarta and El Tuito, Jalisco, under 1000m elevation only, and all localities in Municipio Bahía de Banderas, Nayarit. Unconfirmed species considered likely to eventually be found in the Banderas Bay and Mismaloya areas are mostly species known from under 1000m elevation in tropical forest habitats to the north in Municipios Compostela, Xalisco, San Blas, and Tepic, Nayarit, in addition to being known from south of the Banderas Bay area. (An inventory of the butterflies of Nayarit is in preparation by authors and additional staff from the Museo de Zoología, Facultad de Ciencias, at UNAM.) The fauna directly to the south of the Bay area, in Municipios Tomatlán and Purificación, Jalisco, remain almost totally unknown (much of this area is above 1000m elevation), but the faunas of Municipios Casimiro Castillo, Tuxcacuesco, and Atlán de Navarro (Vargas *et al.*, 1996) and La Huerta (Beutelspacher, 1982) are much better known. In the entire region from Municipio Tepic, Nayarit, in the north to Municipio Casimiro Castillo, Jalisco, in the south above 1000m elevation, up to 80 additional butterfly species can be expected. These species have not been listed herein as they appear to be restricted to higher-elevation forest habitats and apparently tend not to stray.

The listing of hypothetical species that should eventually be found in the bay area enables us to estimate how well we know the overall butterfly diversity of the area. Of course there will certainly be species that are found in the Bay area in the future that are otherwise unknown from all surrounding areas, and unique species to other areas will also be found, so these numbers will always be changing. With 382 butterfly species already known from the Bay area, and 505 predicted, the Bay area (as a whole) is about 75% known in terms of overall probable butterfly diversity. To estimate the number of butterfly species that may eventually be found in the Mismaloya area, we assume that 85% of the species that occur in the Bay area will eventually be found in the Mismaloya area (some species restricted to drier areas in Nayarit may not turn up around Mismaloya). Under this assumption, about 430 species of butterflies should eventually be found in the Mismaloya area. Therefore, despite the fact that 315 species of butterflies are already known from Mismaloya, it is estimated to be only about 75% known. Searches for new species should be concentrated at the higher elevational extremes of the Mismaloya area (around El Eden and beyond), during dry periods

(May, June, July), and in the less accesable parts of every habitat, especially shaded areas. Future surveys hoping to add to our knowledge of the butterflies of the Bay area should concentrate on Hairstreaks (Theclinae) and Skippers (Hesperiidae), where several additional species will undoubtedly be found. In terms of overall Banderas Bay area diversity, the Theclinae are only about 41% known and the Hesperiidae are about 75% known, so there is indeed still much work to be done. The Papilionoidea, excluding the Theclinae, are about 80% known, stressing the need to concentrate on small butterflies.

species recorded from the vicinity of Mismaloya, Chino's Paradise and El Eden, along Mismaloya River. Species known from nearby areas (including Boca de Tomatlan, Chico's Paradise, Rio las Juntas, Puerto Vallarta, Jal. and Nuevo Vallarta, Bucerias and El Guamuchil, Nay.) but not from Mismaloya are not marked.

[] = species not yet recorded from Banderas Bay area, but are considered likely to be found there in the future.

SKIPPERS (141 species known from Mismaloya, 170 species known from Bay area and 223 species possible for Bay area.)

HESPERIIDAE

Firetips

- *Gold-rim Firetip
[Yellow-bottomed Firetip]
- *Steely Firetip
- *Blue-collar Firetip
- Red-collar Firetip
- Common Myscelus

Pyrrhopyginae

- Pyrrhopyge chloris* Evans 1951
[*Pyrrhopyge araxes araxes* (Hewit. 1867)]
- Elbella scylla* (Mén. 1855)
- Mysoria amra* (Hewit. [1871])
- Mysoria affinis* (Herr.-Sch. 1869)
- Myscelus amystis hages* Godm. & Sal. 1893

Spreadwing Skippers

- *Window-winged Skipper
- *Guava Skipper
[Rainbow Skipper]
- *Common Ghost-Skipper
[Austin's Ghost-Skipper]
[Western Ghost-Skipper]
- *Nervous Skipper
- *Mercurial Skipper
Unspined Silverdrop
- *Spined Silverdrop
Suffused Silverdrop
Wind's Silverdrop

Pyrginae

- Phocides belus* Godm. & Sal. 1893
- Phocides palemon lilea* (Reak. [1867])
[*Phocides urania* (Westwood [1852])]
- Phanus marshallii* Kirby 1880
[*Phanus albiapicalis* Austin 1993]
[*Phanus rilma* Evans 1952]
- Udranomia kikkawai* (Weeks 1906)
- Proteides mercurius mercurius* (Fabr. 1787)
- Epargyreus aspina* Evans 1952
- Epargyreus spina* Evans 1952
- Epargyreus spinosa* Evans 1952
- Epargyreus windi* H. A. Freeman 1969

- [Broken Silverdrop] [*Epargyreus exadeus cruza* Evans 1952]
 [*Epargyreus* sp. undescribed]
 *Hammock Skipper *Polygonus leo arizonensis* (Skinner 1911)
 *Manuel's Skipper *Polygonus manueli* Bell & W. P. Comstock 1948
 *White-striped Longtail *Chioides catillus albofasciatus* (Hewit. 1867)
 *Zilpa Longtail *Chioides zilpa* (Butl. 1872)
 *Gold-spotted Aguna *Aguna asander asander* (Hewit. 1867)
 *Tailed Aguna *Aguna metophis* (Latr. 1824)
 *Mottled Longtail *Typhedanus undulatus* (Hewit. 1867)
 *Gold-tufted Skipper *Typhedanus ampyx* (Godm. & Sal. 1893)
 *Eight-spotted Longtail *Polythrix octomaculata* (Sepp 1848)
 *Asine Longtail *Polythrix asine* (Hewit. 1867)
 [Mexican Longtail] [*Polythrix mexicanus* H. A. Freeman 1969]
 *Carlos' Mottled-Skipper *Codatractus carlos* Evans 1952
 *Crescent Mottled-Skipper *Codatractus alcaeus* (Hewit. 1867)
 Common Mottled-Skipper *Codatractus melon* (Godm. & Sal. 1893)
 Sally's Mottled-Skipper *Codatractus sallyae* A. D. Warren 1995
 [Golden Mottled-Skipper] [*Codatractus bryaxis* (Hewit. 1867)]
 [False Mottled-Skipper] ["*Codatractus*" *hyster* (Dyar 1916)]
 *Common Greentail *Urbanus proteus proteus* (L. 1758)
 *Bluish Greentail *Urbanus viterboana* (Ehrm. 1907)
 *Bell's Greentail *Urbanus belli* (Hayward 1935)
 [Spot-banded Greentail] [*Urbanus prouta* Evans 1952]
 *Esmeralda Greentail *Urbanus esmeraldus* (Butl. 1877)
 *Scarce Greentail *Urbanus evona* Evans 1952
 *Montane Greentail *Urbanus prodicus* Bell 1956
 *Tinted Greentail *Urbanus esta* (Evans 1952)
 *Dorantes Longtail *Urbanus dorantes dorantes* (Stoll 1790)
 *Teelus Longtail *Urbanus teleus* (Hübner 1821)
 *Brown Longtail *Urbanus procne* (Plötz 1881)
 *Plain Longtail *Urbanus simplicius* (Stoll 1790)
 *White-tailed Longtail *Urbanus doryssus chales* (Godm. & Sal. 1893)
 *Two-barred Flasher *Astraptes fulgurator azul* (Reak. 1867)
 *Gilbert's Flasher *Astraptes alector hopfferi* (Plötz 1882)
 *Small-spotted Flasher *Astraptes egregius* (Butl. 1870)
 *Yellow-tipped Flasher *Astraptes anaphus annetta* Evans 1952
 [White-spotted Flasher] [*Astraptes enotrus* (Stoll, 1781)]
 [Yellow-edged Flasher] [*Astraptes phalaecus* (Godm. & Sal. 1893)]
 *Steely Flasher *Narcosius parisi helen* (Evans 1952)
 *Broad Banded-Skipper *Autochthon neis* (Geyer 1832)
 [Jalapus Cloudywing] [*Thessia jalapus* (Plötz 1881)]
 *Coyote Cloudywing *Achalarus toxeus* (Plötz 1882)
 *White-edged Cloudywing *Achalarus albociliatus albociliatus* (Mab. 1877)
 *Potrillo Skipper *Cabares potrillo* (Lucas 1857)
 *Tufted Redeye *Ocyba calathana calamus* (Godm. & Sal. 1894)
 *Fritzgaertner's Flat *Celaenorrhinus fritzgaertneri* (Bailey 1880)
 *Stola Flat *Celaenorrhinus stola* Evans 1952
 *Falcate Skipper *Spathilepia clonius* (Cr. 1775)

BUTTERFLIES OF MISMALOYA, BANDERAS BAY AND SOUTHERN NAYARIT

- [Acacia Skipper] *[Cogia hippalus hippalus* (W. H. Edw 1882)]
 *Mimosa Skipper *Cogia calchas* (Herr.-Sch. 1869)
 *Caucus Skipper *Cogia caicus moschus* (W. H. Edw 1882)
 *Choricus Skipper *Telemiades choricus* (Schaus 1902)
 *Fides Skipper *Telemiades fides* Bell 1949
 [Starred Skipper] *[Arteurotia tractipennis* Butl. & Druce 1872]
 *Cleta Tufted-Skipper *Polyctor cleta* Evans 1953
 *Purplish Tufted-Skipper *Nisoniades rubescens* (Möschler 1876)
 *Immaculate Tufted-Skipper *Pachyneuria licisca* (Plötz 1882)
 *Glazed Tufted-Skipper *Pellicia arina* Evans 1953
 *Morning Glory Tufted-Sk. *Pellicia dimidiata* Herr.-Sch. 1870
 Red-studded Skipper *Noctuana stator* (Godm. & Sal. 1899)
 [Cryptic Skipper] *[Noctuana bipuncta* (Plötz 1884)]
 *Hook-tipped Bolla *Bolla orsines* (Godm. & Sal. 1896)
 *Spatulate Bolla *Bolla eusebius* (Plötz 1884)
 Rough-tipped Bolla *Bolla evippe* (Godm. & Sal. 1896)
 [Fin-tipped Bolla] *[Bolla subapicatus* (Schaus 1902)]
 [Mottled Bolla] *[Bolla clythius* (Godm. & Sal. 1897)]
 [Many-spotted Bolla] *[Bolla litus* (Dyar 1912)]
 *Western Scallopwing *Staphylus tierra* Evans 1953
 *Aztec Scallopwing *Staphylus azteca* (Scudder 1872)
 Coastal Scallopwing *Staphylus* sp. undescribed
 [Gold-snout Scallopwing] *[Staphylus vulgata* (Möschler 1879)]
 [Equal Scallopwing] *[Staphylus iguala* (Williams & Bell 1940)]
 *Variegated Skipper *Gorgythion begga pyralina* (Möschler 1876)
 *Bruised Skipper *Zera hyacinthinus hyacinthinus* (Mab. 1877)
 *Ventral Blue-Skipper *Quadrus cerialis* (Stoll 1782)
 *Tanned Blue-Skipper *Quadrus lugubris lugubris* (R. Feld. 1869)
 *Blue-studded Skipper *Sostrata nordica* Evans 1953
 *Shining Blue-Skipper *Paches polla* (Mab. 1888)
 *Orange-spotted Skipper *Atarnes sallei* (C. Feld. & R. Feld. 1867)
 *Hoary Skipper *Carrhenes canescens canescens* (R. Feld. 1869)
 Black-spot Skipper *Carrhenes fuscescens* (Mab. 1891)
 [Northern Mexican-Skipper] *[Zobera marginata* H. A. Freeman 1979]
 *Dark Mylon *Mylon menippus* (Fabr. 1777)
 *Pale Mylon *Mylon pelopidas* (Fabr. 1793)
 [Bold Mylon] *[Mylon lassia* (Hewit. 1868)]
 *Glassy-winged Skipper *Xenophanes tryxus* (Stoll 1780)
 *Clito Skipper *Clito clito* (Fabr. 1787)
 *Large Spurwing *Antigonus nearchus* (Latr. 1813)
 *Common Spurwing *Antigonus erosus* (Hübner 1812)
 *Dark Spurwing *Antigonus funebris* (R. Feld. 1869)
 *Texas Powdered-Skipper *Systasea pulverulenta* (R. Feld. 1869)
 *Sandy Skipper *Zopyrion sandace* Godm. & Sal. 1896
 *Giant Sicklewing *Achlyodes busirus heros* (Ehrm. 1909)
 *Northern Sicklewing *Eantis tamemund* (W. H. Edw. 1871)
 *Hermit Skipper *Grais stigmaticus stigmaticus* (Mab. 1883)
 Brown-banded Skipper *Timochares ruptifasciatus ruptifasciatus* (Plötz 1884)

- *Three-banded Skipper *Timochares trifasciata trifasciata* (Hewit. 1868)
- *Tropical Duskywing *Anastrus sempternus sempternus* (Butl. & Druce 1872)
- *Dark Duskywing *Anastrus robigus* (Plötz 1884)
- *Bent-tip Duskywing *Cycloglypha thrasibulus* (Fabr. 1793)
- *Black-patched Duskywing *Ebrietas anacreon* (Staud. 1876)
- *Black-spotted Duskywing *Chiomara mithrax* (Möschler 1878)
- *White-patched Duskywing *Chiomara georgina georgina* (Reak. 1868)
- *False Duskywing *Gesta invisus* (Butl. & Druce 1872)
- Funereal Duskywing *Erynnis funeralis* (Scudder & Burgess 1870)
- [Juvenal's Duskywing] *[Erynnis juvenalis clitus* (W. H. Edw. 1883)]
- [Mournful Duskywing] *[Erynnis tristis tatius* (W. H. Edw. 1883)]
- *White Checkered-Skipper *Pyrgus albescens* (Plötz 1884)
- *Tropical Checkered-Sk. *Pyrgus oileus* (L. 1767)
- [Desert Checkered-Skipper] *[Pyrgus philetas* W. H. Edw. 1881]
- *Turk's-cap White-Skipper *Heliopetes macaira* (Reak. 1867)
- *Laviana White-Skipper *Heliopetes laviana laviana* (Hewit. 1868)
- *Veined White-Skipper *Heliopetes arsalte* (L. 1758)
- *Alana White-Skipper *Heliopetes alana* (Reak. 1868)
- [Erichson's White-Skipper] *[Heliopetes domicella domicella* (Erichson 1848)]

Skipperlings

- [Hour-glass Skipperling] *[Piruna penaea* (Dyar 1918)]
- [Dardaris Skipperling] *[Dardarina dardaris* (Hewit. 1877)]
- [Faula Skipperling] *[Dalla faula* (Godm. 1900)]
- [Silvered Skipperling] *[Dalla dividuum* (Dyar 1913)]

Grass Skippers

- Bold Faceted-Skipper *Synapte syraces* (Godm. 1901)
- Texas Faceted-Skipper *Synapte pecta* Evans 1955
- [Faded Faceted-Skipper] *[Synapte shiva* Evans 1955]
- [Western Faceted-Skipper] *[Synapte silva* Evans 1955]
- *Golden Skipper *Zariaspes mytheucus* (Godm. 1900)
- *Immaculate Skipper *Anthoptus insignis* (Plötz 1882)
- *Redundant Skipper *Corticea corticea* (Plötz 1883)
- *Ubiquitous Skipper *Callimormus saturnus* (Herr.-Sch. 1869)
- [Gray Skipper] *[Mnasicles hicetaon* Godm. 1901]
- *Ina Skipper *Methionopsis ina* (Plötz 1882)
- [False Roadside-Skipper] *[Repens florus* (Godm. 1900)]
- *Aecas Skipper *Flaccilla aecas* (Stoll 1781)
- *Jeweled Skipper *Phanes aletes* (Geyer 1832)
- [Pale-rayed Skipper] *[Vidius perigenes* (Godm. 1900)]
- *Violet-patched Skipper *Monca tyrtaeus* (Plötz 1883)
- [Julia's Skipper] *[Nastra julia* (H. A. Freeman 1945)]
- *Fawn-spotted Skipper *Cymaenes trebius* (Mab. 1891)
- *Inca Skipper *Vehilius inca* Scudder 1872
- *Butler's Skipper *Mnasilus allubita* (Butl. 1877)

Cyclopedinae

Hesperiinae

BUTTERFLIES OF MISMALOYA, BANDERAS BAY AND SOUTHERN NAYARIT

*Nitra Skipper	<i>Mnasitheus nitra</i> Evans 1955
*Remus Skipper	<i>Remella remus</i> (Fabr. 1798)
	<i>Remella</i> sp. undescribed
[Rita Skipper]	[<i>Remella rita</i> Evans 1955]
	[<i>Parphorus</i> sp. undescribed]
*Clouded Skipper	<i>Lerema accius</i> (J. E. Smith 1797)
*Liris Skipper	<i>Lerema liris</i> Evans 1955
*Valda Skipper	<i>Morys valerius valda</i> Evans 1955
*Simplex Skipper	<i>Tigasis simplex</i> (Bell 1930)
*Fantastic Skipper	<i>Vettius fantasos</i> (Stoll 1780)
[Moody Skipper]	[<i>Thoon modius</i> (Mab. 1889)]
[Argus Skipper]	[<i>Argon argus</i> (Möschler 1879)]
[Smeared Ruby-eye]	[<i>Tromba xanthura</i> (Godm. 1901)]
[White-patched Ruby-eye]	[<i>Carystus phorcus</i> (Cr. [1777])]
*Green-backed Ruby-eye	<i>Perichares philetes adela</i> (Hewit. 1867)
Broad-banded Ruby-eye	<i>Orses cynisca</i> (Swainson 1821)
Silver-studded Ruby-eye	<i>Lycas argentea</i> (Hewit. 1866)
*Joanna's Skipper	<i>Joanna joanna</i> Evans 1955
*Canna Skipper	<i>Quinta cannae</i> (Herr.-Sch. 1869)
[Osca Skipper]	[<i>Rhinthon osca</i> (Plötz 1883)]
Zygia Skipper	<i>Mucia zygia</i> (Plötz 1886)
*Hidden-ray Skipper	<i>Conga chydaea</i> (Butl. 1877)
*Tropical Least Skipper	<i>Ancyloxypha arene</i> (W. H. Edw. 1871)
*Southern Skipper	<i>Copaodes minima</i> (W. H. Edw. 1870)
*Fiery Skipper	<i>Hylephila phyleus phyleus</i> (Drury 1773)
Subreticulate Skipper	<i>Polites subreticulata</i> (Plötz 1883)
*Whirlabout	<i>Polites vibex praeceps</i> (Scudder 1872)
*Southern Broken Dash	<i>Wallengrenia otho otho</i> (J. E. Smith 1797)
*Common Glassywing	<i>Pompeius pompeius</i> (Latr. 1824)
[Golden Glassywing]	[<i>Pompeius dares</i> (Plötz 1883)]
De la Maza's Skipper	<i>Anatrytone mazai</i> (H. A. Freeman 1969)
[Yellow-stained Skipper]	[<i>Poanes inimica</i> (Butl. & Druce 1872)]
*Bright Mellana	<i>Quasimellana aurora</i> (Bell 1942)
*Common Mellana	<i>Quasimellana eulogius</i> (Plötz 1883)
Coastal Mellana	<i>Quasimellana agnesae</i> (Bell 1959)
[Sullied Mellana]	[<i>Quasimellana balsa</i> (Bell 1942)]
[Light-green Mellana]	[<i>Quasimellana myron</i> (Godm. 1900)]
[Nayar Mellana]	[<i>Quasimellana nayana</i> (Bell 1941)]
[Muller's Mellana]	[<i>Quasimellana mulleri</i> (Bell 1942)]
Guardpost Skipper	<i>Euphyes peneia</i> (Godm. 1900)
Creamy-Striped Skipper	<i>Metron chrysogastra</i> (Butl. 1870)
Toltec Roadside-Skipper	<i>Amblyscirtes tolteca tolteca</i> Scudder 1872
[Largest Roadside-Skipper]	[<i>Amblyscirtes raphaëli</i> H. A. Freeman 1973]
[Larger Roadside-Skipper]	[<i>Amblyscirtes folia</i> Godm. 1900]
*Violet-clouded Skipper	<i>Lerodea arabus</i> (W. H. Edw. 1882)
*Eufala Skipper	<i>Lerodea eufala</i> (W. H. Edw. 1869)
*Brazilian Skipper	<i>Calpodex ethlius</i> (Stoll 1782)
*Ocola Skipper	<i>Panoquina ocola</i> (W. H. Edw. 1863)

*Evans' Skipper	<i>Panoquina evansi</i> (H. A. Freeman 1946)
*Purple-washed Skipper	<i>Panoquina leucas</i> (Fab. 1793)
Wandering Skipper	<i>Panoquina errans</i> (Skinner 1892)
[Hecebolus Skipper]	[<i>Panoquina hecebolus</i> (Scudder 1872)]
*Purple-stained skipper	<i>Zenis janka</i> Evans 1955
*Violet-banded Skipper	<i>Nyctelius nyctelius nyctelius</i> (Latr. 1824)
Chalk-marked Skipper	<i>Thespius dalman</i> Dyar 1913
*Steinhauser's Vacerra	<i>Vacerra cervara</i> Steinhauser 1974
*Mexican Vacerra	<i>Vacerra gayra</i> (Dyar 1918)
*Godman's Vacerra	<i>Vacerra "lachares"</i> Godm. 1900
*Common Vacerra	<i>Vacerra litana</i> (Plötz 1882)
*Dyson's False-Silverdrop	<i>Aides dysoni</i> Godm. 1900
*Rica Skipper	<i>Halotus rica</i> (Bell 1942)
*Half-tailed Skipper	<i>Niconiades incomptus</i> (Austin 1997)
*Perching Saliana	<i>Saliana esperi esperi</i> Evans 1955
*Suffused Saliana	<i>Saliana fusta</i> Evans 1955
*Hiding Saliana	<i>Saliana longirostris</i> Sepp 1848
*Common False-Flasher	<i>Thracides phidon</i> (Cr. 1779)
*Green-bottom False-Flasher	<i>Neoxeniades luda</i> (Hewit. 1877)

TRUE BUTTERFLIES 74 species known from Mismaloya, 212 species from Bay area, and 282 species possible for Bay area.)

Swallowtails

PAPILIONIDAE

Triodiniinae

*Pipevine Swallowtail	<i>Battus philenor philenor</i> (L. 1771)
*Polydamas Swallowtail	<i>Battus polydamas polydamas</i> (L. 1758)
*Eracon Swallowtail	<i>Battus eracon</i> (Godm. & Sal. 1897)
*Green-patch Swallowtail	<i>Battus laodamas iopas</i> (Godm. & Sal. 1897)
*Photinus Cattleheart	<i>Parides photinus photinus</i> (Doubleday 1844)
*Montezuma Cattleheart	<i>Parides montezuma montezuma</i> (Westw. 1842)
*Rosy-spotted Cattleheart	<i>Parides erithalion trichopus</i> (Rothschild & Jordan 1906)

Papilioninae

*Long-tailed Kite-Swallowtail	<i>Protographium epidaus tepicus</i> (Rothschild & Jordan 1906)
Dark Kite-Swallowtail	<i>Protographium philolaus philolaus</i> (Boisd. 1836)
[Evasive Kite-Swallowtail]	[<i>Protographium agesilaus fortis</i> (Rothschild & Jordan 1906)]
Red-studded Swallowtail	<i>Mimoides thymbraeus aconophos</i> (Gray 1853)
Ilus Swallowtail	<i>Mimoides ilus occidentus</i> (Vázquez 1957)
*Pink-spotted Swallowtail	<i>Priamides pharnaces</i> (Doubleday 1846)
*Ruby-spotted Swallowtail	<i>Priamides anchisiades idaeus</i> (Fabr. 1793)
*Torquatus Swallowtail	<i>Troilides torquatus mazai</i> (Beutelspacher 1976)
Ornythion Swallowtail	<i>Calaides ornythion</i> ssp.
Broad-banded Swallowtail	<i>Calaides astyalus bajaensis</i> (Brown & Faulkner 1992)
Citrus Swallowtail	<i>Calaides androgeus</i> ssp.

- *Thoas Swallowtail
- *Giant Swallowtail
- [Three-tailed Swallowtail]
- Avacado Swallowtail
- *Victorine Swallowtail

- Heraclides thoas autocles* (Rothschild & Jordan 1906)
- Heraclides crespontes* (Cr. 1777)
- [*Pterourus pilumnus* (Boisd. 1836)]
- Pyrrhosticta garamas garamas* (Geyer 1829)
- Pyrrhosticta victorinus morelius* (Rothschild & Jordan 1906)

Whites & Sulphurs

PIERIDAE

Dismorphiinae

- *Tiger-Striped Mimic-White
- *De la Maza's Mimic-White
- [Dark Mimic-White]

- Dismorphia amphiona lupita* Lamas 1979
- Enantia mazai diazi* Llorente 1984
- [*Lieinix nemesis nayaritensis* Llorente 1984]

Sulphurs

Coliadinae

- *Southern Dogface
- *White Angled-Sulphur
- *Yellow Angled-Sulphur
- *Large Orange Sulphur
- *Apricot Sulphur
- Tailed Sulphur
- *Orange-barrred Sulphur
- *Cloudless Sulphur
- *Trite Sulphur
- *Mealy Sulphur
- *Lyside Sulphur
- *Sleepy Orange
- *Dina Yellow
- *Little Yellow
- *Mimosa Yellow
- *Tailed Orange
- [Little White]
- *Boisduval's Yellow
- *Barred Yellow
- *Mexican Yellow
- *Salome Yellow
- *Dainty Sulphur

- Zerene cesonia cesonia* (Stoll 1791)
- Anteos clorinde nivifera* (Fruhstorfer 1907)
- Anteos maerula lacordairei* (Boisd. 1836)
- Phoebis agarithe agarithe* (Boisd. 1836)
- Phoebis argante argante* (Fabr. 1775)
- Phoebis neocypris virgo* (Butl. 1870)
- Phoebis philea philea* (L. 1763)
- Phoebis sennae marcellina* (Cr. 1777)
- Rhabdodryas trite trite* (L. 1758)
- Aphrissa statira jada* (Butl. 1870)
- Kricogonia lyside* (Godart 1869)
- Eurema nicippe* (Cr. 1780)
- Eurema dina westwoodi* (Boisd. 1836)
- Eurema lisa centralis* (Herr.-Sch. 1864)
- Eurema nise nelphe* (R. Feld. 1869)
- Eurema proterpia proterpia* (Fabr. 1775)
- [*Eurema albula celata* (R. Feld. 1869)]
- Eurema boisduvaliana* (C. Feld. & R. Feld. 1865)
- Eurema दौरa दौरa* (Godart 1819)
- Eurema mexicana mexicana* (Boisd. 1836)
- Eurema salome jamapa* (Reak. 1866)
- Nathalis iole iole* Boisd. 1836

Whites

Pierinae

- *Costa Rican White
- [Gray White]
- *Creamy White
- *Florida White
- Mountain White
- *Viardi White

- Hesperocharis costaricensis pasion* (Reak. 1867)
- [*Pereute charops leonilae* Llorente 1986]
- Melete lycimnia isandra* (Boisd. 1836)
- Glutophrissa drusila tenuis* Lamas 1981
- Leptophobia aripa elodia* (Boisd. 1836)
- Pieriballia viardi laogore* (Godm. & Sal. 1889)

BUTTERFLIES OF MISMALOYA, BANDERAS BAY AND SOUTHERN NAYARIT

[Blackish Crescent]

[*Anthanassa argentea* (Godm. & Sal. 1882)]

[*Anthanassa* sp. undescribed]

*Gray-based Crescent

Castilia griseobasalis (Robert 1914)

[Guatemalan Crescent]

[*Tegosa guatemalena* (Bates 1864)]

Coloburini & Biblidini

*Orion

Historis odius dious (Lamas 1995)

*Blomfield's Beauty

Smyrna blomfieldia datis Fruhstorfer 1908

*Dirce Beauty

Colobura dirce dirce L. 1758

*Red Rim

Biblis hyperia aganisa (Boisd. 1836)

[*Amymone*]

[*Mestra dorcas amymone* (Mén. 1857)]

*Blackened Bluewing

Myscelia cyananthe cyananthe C. Feld. & R. Feld 1867

*Mexican Bluewing

Myscelia ethusa ethusa (Doyere 1840)

*Cyaniris Bluewing

Myscelia cyaniris alvaradia R. G. de la Maza & Diaz 1982

*Cortesi Banner

Catonephele cortesi R. G. de la Maza 1982

*Dingy Purplewing

Eunica monima monima (Cr. 1782)

Florida Purplewing

Eunica tatila tatila (Herr.-Sch. 1855)

*Gray Cracker

Hamadryas februa ferentina (Godart 1824)

*Red Cracker

Hamadryas amphinome mazai Jenkins 1983

*Guatemalan Cracker

Hamadryas guatemalena marmorice (Fruhstorfer 1916)

[Glaucous Cracker]

[*Hamadryas glauconome grisea* Jenkins 1983]

[Black-patched Cracker]

[*Hamadryas atlantis lelaps* Godm. & Sal. 1883]

*Nearea Banner

Pyrrhogyra nearea hypsenor Godm. & Sal. 1884

*Laothoe Banner

Teminis laothoe quilapayunia R. G. de la Maza & Turrent 1985

Common Banner

Epiphile adrasta escalantei Descimon & Mast 1979

Flavilla Banner

Nica flavilla bachiana R. G. de la Maza & J. R. de la Maza 1985

Blue-eyed Greenwing

Dynamine dyonis Geyer 1837

*Mexican Greenwing

Dynamine postverta mexicana D'Almeida 1952

[West-Mexican Eighty-eight]

[*Diaethria asteria* (Godm. & Sal. 1894)]

[Bacchis Eighty-eight]

[*Cyclogramma bacchis* (Doubleday [1849])]

Sisters & Daggerwings

Limnitiidae

*Spot-celled Sister

Adelpha basiloides basiloides Doubleday 1848

*Celerio Sister

Adelpha celerio diademata Fruhstorfer 1913

*Band-celled Sister

Adelpha fessonia fessonia (Hewit. 1847)

*Massilides Sister

Adelpha iphicles massilides Fruhstorfer 1916

*Phylaca Sister

Adelpha phylaca phylaca Bates 1866

*Massilia Sister

Adelpha serpa massilia (C. Feld. & R. Feld. 1867)

[Leucas Sister]

[*Adelpha leucas* Fruhstorfer 1916]

[Paroeca Sister]

[*Adelpha paroeca emathia* (R. Feld. 1869)]

*Ruddy Daggerwing

Marpesia petreus tethys (Fabr. 1777)

*Many-banded Daggerwing

Marpesia chiron marius (Cr. 1780)

DUGESIANA

Leafwings

- *Darkened Blue-Leafwing
- Silvery Blue-Leafwing
- [Two-shaded Blue-Leafwing]
- *Seasonal Leafwing
- *Pale Leafwing
- *Red-striped Leafwing
- [Silver-studded Leafwing]
- *Tropical Leafwing
- *Electra Leafwing
- *Fabulous Leafwing
- *Pointed Leafwing
- Angled Leafwing
- Forrer's Leafwing
- Pale-spotted Leafwing

Emperors

- *Dusky Emperor
- *Silver Emperor
- *Pavon Emperor

Morphos

- *White Morpho

Owl-Butterflies

- *Boisduval's Owl-Butterfly
- *Coastal Owl-Butterfly
- Tamarindi Owl-Butterfly

Milkweed Butterflies

- *Tropic Queen
- *Queen
- *Monarch
- *Tiger Mimic-Queen

Clearwings

- *Morgane Clearwing
- [Red-Banded Clearwing]
- *Tiger-striped Clearwing

Charaxinae

- Archaeoprepona demophon occidentalis* Descimon & Stoffel 1974
- Archaeoprepona demophoon mexicana* Llorente, Descimon & Johnson 1993
- [*Prepona laertes octavia* Fruhstorfer 1905]
- Zaretis ellops anzuleta* Fruhstorfer, 1909
- Zaretis callidryas* (R. Feld. 1869)
- Siderone galanthis* (Cr. [1775])
- [*Hypna clytemnestra mexicana* Hall 1917]
- Anaea aidea* (Guerin 1844)
- Consul electra castanea* Llorente & Luis 1992
- Consul fabius cecrops* (Doubleday 1949)
- Fountainea euryppyle glanzi* (Rotger, Escalante & Coronado 1965)
- Fountainea glycerium glycerium* (Doubleday 1949)
- Memphis forreri* (Godm. & Sal. 1884)
- Memphis pithyusa* (R. Feld. 1869)

Apaturinae

- Asterocampa idylla argus* (Bates 1864)
- Doxocopa laure acca* (C. Feld. & R. Feld. 1867)
- Doxocopa pavon theodora* (Lucas 1857)

Morphinae

- Pessonia polyphemus polyphemus* Westw. 1851

Brassolinae

- Opsiphanes boisduvalii* Doubleday 1849
- Opsiphanes invirae fabricii* (Boisd. 1870)
- Opsiphanes tamarindi sikyon* C. Feld. & R. Feld. 1861

Danainae

- Danaus eresimus montezuma* Talbot 1943
- Danaus gilippus thersippus* (Bates 1863)
- Danaus plexippus plexippus* (L. 1758)
- Lycorea halia atergatis* Doubleday 1847

Ithomiinae

- Greta morgane morgane* (Geyer 1837)
- [*Pteronymia rufocincta* (Sal. 1869)]
- Melinaea ethra flavicans* C. C. Hoffman 1924

BUTTERFLIES OF MISMALOYA, BANDERAS BAY AND SOUTHERN NAYARIT

Snouts

American Snout

Satyrs

*Cowboy Satyr

[Nayarit Satyr]

*[Western Satyr]

*Orange-patched Satyr

*Common Satyr

[Variable Satyr]

*Rosy Satyr

Weymer's Satyr

[Tailed Satyr]

[Giant Satyr]

Two-pupil Satyr

*One-pupil Satyr

Undina Satyr

Libytheinae

Libytheana carinenta mexicana Michener 1943

Satyrinae

Cyllopsis caballeroi Beutelspacher 1982

[*Cyllopsis nayarit* R. Chermock 1947]

[*Cyllopsis suivalenoides* L. Miller 1974]

Euptychia fetna Butl. 1870

Hermeuptychia hermes (Fabr. 1775)

[*Pindis squamistriga* R. Feld. 1869]

Taygetis uncinata Weymer 1907

Taygetis weymeri Draut 1912

[*Taygetis virgilia* (Cr. 1776)]

[*Taygetis mermeria griseomarginata* L. Miller 1978]

Vareuptychia similis (Butl. 1867)

Vareuptychia themis (Butl. 1867)

Vareuptychia undina (Butl. 1870)

Gossamer-wing Butterflies

Metalmarks

*Ebule Metalmark

*Purple-washed Eyemark

*Blinded Metalmark

*White-spot Metalmark

*Arcius Bluetail

*Fulmen Metalmark

*Mather's Metalmark

*Mexican Metalmark

*Montezuma Metalmark

*Rounded Metalmark

*Fatal Metalmark

Red-bordered Metalmark

[Gold-headed Metalmark]

*Bumblebee Metalmark

Shining Metalmark

*Maria Metalmark

[Blue Metalmark]

*White-tipped Pixie

*Red-bordered Pixie

*Brilliant Metalmark

*Curve-winged Metalmark

*Mandana Metalmark

*Falcate Metalmark

*Vulpina Metalmark

LYCAENIDAE

Riodininae

Euselasia eubule (R. Feld 1869)

Mesosemia lamachus (Hewit. 1857)

Eurybia elvina Stichel 1910

Napaea umbra umbra (Boisd. 1870)

Rhetus arcus beutelspacheri Llorente 1987

Calephelis fulmen Stichel 1910

Calephelis matheri McAlpine 1971

Calephelis mexicana McAlpine 1971

Calephelis montezuma McAlpine 1971

Calephelis perditalis perditalis B. & McD. 1918

Calephelis nemesis nemesis (W. H. Edw. 1871)

Caria ino ino Godm. & Sal. 1866

[*Caria stillaticia*, Dyar 1912]

Baeotis zonata simbla (Boisd. 1870)

Lasaia agesilas callaina Clench 1972

Lasaia maria maria Clench 1972

[*Lasaia sula sula* Staud. 1888]

Melanis cephise cephise (Mén. 1855)

Melanis pixe sexpunctata Seitz 1917

Anteros carausius carausius Westw. 1851

Emesis emesia emesia (Hewit. 1867)

Emesis mandana furor Butl. & Druce 1872

Emesis tenedia tenedia C. Feld. & R. Feld. 1861

Emesis vulpina Godm. & Sal. 1886

[Poeas Metalmark]	[<i>Emesis poeas</i> Godm. & Sal. 1901]
[Clearista Metalmark]	[<i>Pseudonymphidia clearista</i> (Butl. 1871)]
*Walker's Metalmark	<i>Apodemia walkeri</i> Godm. & Sal. 1886
[Hypoglaucous Metalmark]	[<i>Apodemia hypoglauca hypoglauca</i> (Godm. & Sal. 1878)]
Tiny Metalmark	<i>Adelotypa eudocia</i> (Godm. & Sal. 1897)
[Lycorias Metalmark]	[<i>Thisbe lycorias</i> (Hewit. 1853)]
[Rusty Metalmark]	[<i>Synargis mycone</i> (Hewit. 1865)]
*Purple-tipped Metalmark	<i>Calospila zeurippa</i> Boisd. 1836
*Eupolis Metalmark	<i>Theope eupolis</i> Schaus 1890
*Publius Metalmark	<i>Theope publius</i> C. Feld. & R. Feld. 1861
Virgilius Metalmark	<i>Theope virgilius virgilius</i> (Fabr. 1793)
Mania Metalmark	<i>Theope mania</i> (Godm. & Sal. 1897)

Hairstreaks

- *Mexican Cycadian
- [Busa Hairstreak]
- *Regal Hairstreak
- [Strophius Hairstreak]
- *Damo Hairstreak
- [Mexican Arcas]
- [White-tipped Hairstreak]
- [Thick-veined Hairstreak]
- *Thick-tailed Hairstreak
- Ligurina Hairstreak
- *Oppia Hairstreak
- *Sito Stripe-Streak
- *Creamy Stripe-Streak
- *Marius Hairstreak
- Roadside Hairstreak
- *Gold-bordered Hairstreak
- Smudged Hairstreak
- *Zebina Hairstreak
- *Black Hairstreak
- [Silver-banded Hairstreak]
- [Telea Hairstreak]
- *Tropical Greenstreak
- *Deep-forest Greenstreak
- [Clench's Greenstreak]
- [Mountain Greenstreak]
- [Brown Greenstreak]
- *Intense-blue Hairstreak
- Bitias Hairstreak
- [Aquamarine Hairstreak]
- [Mexican-M Hairstreak]
- [Polibetes Hairstreak]
- [Hecate Hairstreak]
- *White Scrub-Hairstreak

Theclinae

- Eumaeus toxea* (Godart 1824)
- ["*Thecla*" *busa* (Godm. & Sal. 1887)]
- Evenus regalis* (Cr. 1776)
- [*Allosmaitia strophius* (Godart 1824)]
- Pseudolycaena damo* (Druce 1875)
- [*Arcas cypria* (Geyer 1837)]
- [*Atlides gaumeri* (Godm. 1901)]
- [*Atlides polybe* (L. 1763)]
- "*Thecla*" *umbratus* (Geyer 1837)
- "*Thecla*" *ligurina* (Hewit. 1874)
- Thereus oppia* (Godm. & Sal. 1887)
- Arawacus sito* (Boisd. 1836)
- Arawacus jada* (Hewit. 1867)
- Rekoa marius* (Lucas 1857)
- Rekoa meton* (Cr. 1780)
- Rekoa palegon* (Cr. 1780)
- Rekoa stagira* (Hewit. 1867)
- Rekoa zebina* (Hewit. 1869)
- Ocaria ocrisia* (Hewit. 1868)
- [*Chlorostrymon simaethis* (Drury 1773)]
- [*Chlorostrymon telea* (Hewit. 1868)]
- Cyanophrys herodotus* (Fabr. 1793)
- Cyanophrys amyntor* (Cr. 1776)
- [*Cyanophrys miserabilis* (Clench 1946)]
- [*Cyanophrys longula* (Hewit. 1868)]
- [*Cyanophrys fusius* (Godm. & Sal. 1887)]
- Panthiades bathildis* (C. Feld. & R. Feld. 1865)
- Panthiades bitias* (Cr. 1777)
- [*Oenomaus ortygnus* (Cr. 1780)]
- [*Parrhasius moctezuma* Clench 1971]
- [*Parrhasius polibetes* (Cr. 1782)]
- [*Michaelus hecate* (Godm. & Sal. 1887)]
- Strymon albata* (C. Feld. & R. Feld. 1865)

BUTTERFLIES OF MISMALOYA, BANDERAS BAY AND SOUTHERN NAYARIT

- | | |
|---------------------------------|--|
| *Red-lined Scrub-Hairstreak | <i>Strymon bebrycia</i> (Hewit. 1868) |
| *Tailless Scrub-Hairstreak | <i>Strymon cestri</i> (Reak. 1867) |
| *Istapa Scrub-Hairstreak | <i>Strymon istapa</i> (Reak. 1867) |
| *Megarus Scrub-Hairstreak | <i>Strymon megarus</i> "complex" (Godart 1824) |
| Bromeliad Scrub-Hairstreak | <i>Strymon serapio</i> (Godm. & Sal. 1887) |
| *Yojoa Scrub-Hairstreak | <i>Strymon yojoa</i> (Reak. 1867) |
| [Red-crescent Scrub-Hairstreak] | [<i>Strymon rufofusca</i> (Hewit. 1877)] |
| [Lantana Scrub-Hairstreak] | [<i>Strymon bazochii</i> (Godart 1824)] |
| [Ziba Scrub-Hairstreak] | [<i>Strymon ziba</i> (Hewit. 1868)] |
| [Collucia Hairstreak] | [<i>Lamprospilus collucia</i> (Hewit. 1877)] |
| Ceromia Groundstreak | <i>Kisutam ceromia</i> (Hewit. 1877) |
| False-Hesperitis Groundstreak | <i>Kisutam</i> aff. <i>hesperitis</i> (Butl. & Druce 1872) |
| [Hesperitis Groundstreak] | [<i>Kisutam hesperitis</i> (Butl. & Druce 1872)] |
| [Sky-blue Groundstreak] | [<i>Kisutam syllis</i> (Godm. & Sal. 1887)] |
| [Mountain Groundstreak] | [<i>Kisutam guzanta</i> (Schaus 1902)] |
| *Ruddy Hairstreak | <i>Electrostrymon sangala</i> (Hewit. 1868) |
| [Muted Hairstreak] | [<i>Electrostrymon canus</i> (Druce 1907)] |
| *Dusky-blue Groundstreak | <i>Calycopis isobea</i> (Butl. & Druce 1872) |
| *Striped Groundstreak | <i>Calycopis clarina</i> (Hewit. 1874) |
| [Shining Groundstreak] | [<i>Calycopis demonassa</i> (Hewit. 1868)] |
| *Red-spotted Hairstreak | <i>Tmolus echion</i> (L. 1767) |
| Garnet-washed Hairstreak | " <i>Thecla</i> " <i>phobe</i> (Godm. & Sal. 1887) |
| [Keila Hairstreak] | [" <i>Thecla</i> " <i>keila</i> (Hewit. 1869)] |
| [Velvet-patch Hairstreak] | [" <i>Thecla</i> " <i>mycon</i> (Godm. & Sal. 1887)] |
| *Pearly-gray Hairstreak | <i>Siderous tephraeus</i> (Geyer 1837) |
| [Thoria Hairstreak] | [<i>Siderus thoria</i> (Hewit. 1869)] |
| [Gargophia Hairstreak] | [<i>Siderus gargophia</i> (Hewit. 1877)] |
| *Clytie Ministreak | <i>Ministrymon clytie</i> (W. H. Edw. 1877) |
| *Gray Ministreak | <i>Ministrymon azia</i> (Hewit. 1873) |
| [Purple-webbed Ministreak] | [<i>Ministrymon phrutus</i> (Geyer 1832)] |
| *Slate-gray Hairstreak | <i>Izidecla miadora</i> Dyar 1916 |
| [Neora Hairstreak] | [<i>Brangas neora</i> (Hewit. 1867)] |
| [Green Hairstreak] | [<i>Chalybs hassan</i> (Stoll 1791)] |
| [Sonoran Hairstreak] | [<i>Hypostrymon critola</i> (Hewit. 1874)] |
| *Carla Hairstreak | <i>Erora carla</i> (Schaus 1902) |
| [Tiny Greenstreak] | [<i>Erora subfloreus</i> (Schaus 1913)] |
| Carnica Hairstreak | <i>Caerofethra carnica</i> (Hewit. 1873) |
|
 | |
| Blues | Polyommata |
| *Western Pygmy Blue | <i>Brephidium exilis exilis</i> (Boisd. 1852) |
| *Cassius Blue | <i>Leptotes cassius striata</i> (W. H. Edw. 1877) |
| *Marine Blue | <i>Leptotes marina</i> (Reak. 1868) |
| *Cyna Blue | <i>Zizula cyna cyna</i> (W. H. Edw. 1881) |
| *Ceraunus Blue | <i>Hemiargus ceraunus zachaeina</i> (Butl. & Druce 1872) |
| *Eastern Tailed Blue | <i>Everes comyntas</i> (Godart 1824) |

315 butterfly species recorded from Mismaloya area to date,
382 butterfly species recorded from Banderas Bay area,
about 505 butterfly species possible for Banderas bay area.

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