

NORTH AMERICAN BUTTERFLY ASSOCIATION

4 Delaware Road, Morristown, NJ 07960

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ANNUAL NABA BUTTERFLY COUNT - INSTRUCTIONS (Mexico)

Please report your count directly to NABA through our online count form at www.naba.org. The online form allows compilers to enter all data for their counts through the Web and also allows the regional editors to review and edit the reports more efficiently. Most importantly, Butterfly Count information will be entered and stored in a database, which in the future will allow it to be available online to NABA members and the public. All compilers are now requested to enter the data for their counts through the online count form. If this presents any difficulty, please contact NABA for assistance.

COUNT PROGRAM OVERVIEW

In order to encourage increased participation in the NABA Butterfly Count Program and to encourage even more monitoring possibilities, the NABA Board of Directors authorized the introduction of Seasonal Butterfly Counts in 2007. Prior to 2007, only one count per count circle per year could be submitted to NABA. With the introduction of Seasonal Butterfly Counts, a group can, if it so wishes submit multiple counts of the same circle; however there can still be only one count conducted in the August 15 – October 15 period. For example, a group could count a circle in May and in Sept., and have the results of both counts flow into the database NABA is creating and also be published in the NABA Butterfly Count Report. A NABA Seasonal Butterfly Count should be submitted only if the compiler believes it is likely that a count of that particular circle at that time of year can be maintained long term.

TIMING OF THE COUNT

16th of September Counts may be held any day from August 15th through October 15th. Seasonal Counts in Mexico may be held any day outside of this period. For each count, participants should select ONE DATE (one calendar day) on which to compile a list of butterflies observed during a period not longer than 24 hours. The date of your count will determine the minimum number of adult observers and party-hours required:

	Timing/Requirements for Mexico Counts
Count Date of August 15 through October 15	NABA 16th of September Butterfly Count: A MINIMUM of four adult observers AND 6 party-hours per count are REQUIRED for all counts started after 2008; and, except in

	extenuating circumstances, ALL counts should expend at least 6 party-hours of effort.
Count Date other than August 15 through October 15	NABA Seasonal Butterfly Count: A MINIMUM of four adult observers AND 6 party-hours per count is REQUIRED.

DATE OF COUNT

Please contact NABA (at address/phone above, or e-mail to naba@naba.org) with the date of your count and information on how to contact the compiler. This information is given to people asking about counts in their area.

Count data must be entered online at <http://www.butterflycounts.org/>

Count forms can be downloaded from www.naba.org/counts.html. The count form can be filled in to use as a guide when submitting count data online.

COUNTERS & COUNT CIRCLES

Unless your count is an existing 16th of September count started before 2008, at least 4 adult observers must participate. One or more groups of counters always produce better results. It is usually desirable to visit several habitats and areas within a count circle, which may be done best by several parties. Since counts are open for public participation, we encourage you to publicize your count plans!

A count is held at one or more selected sites within a 15-mile diameter CIRCLE. Groups starting a new count MUST designate this 15-mile diameter circle. No count circles may overlap—that is, count centers must be a minimum of 15 miles apart. Groups repeating a count held a previous year MUST use the same circle, and count the same sites and habitats as before so far as practical. Up to THREE counts per circle per year (one Spring Seasonal count, one 16th of September count, and one Fall Seasonal count) will be published in the annual Count Report.

The goal of the count is not to compete for the highest numbers, but rather to provide long-term data on trends in butterfly populations. Sites should be chosen for the likelihood that the count can be repeated year after year, not just for richness or rarities. Counts held only one year at distant localities are not as valuable. Most of the interest to counters comes from comparisons of annual results within their own count circle.

Starting in 2009, the category of garden watcher was discontinued. Additionally, children who participate in and contribute to a count are considered field observers.

RULES FOR CONDUCTING THE COUNT

- Count only within an area 7.5 miles in radius from a designated center (making a 15-mile diameter circle).
- For a given count, survey within the same circle every year. If any change is made to the count circle or center, notify NABA Vice President Jim Springer (springer@naba.org).
- Report only adult butterflies actually observed alive in the wild during a single, one-day period. Butterflies seen from cars or other conveyances may be counted.
- Species that are unusual for your location or date should be documented by a detailed written report and/or photographs, which should be submitted online with your other count data.
- You may estimate the number of butterflies you ACTUALLY SEE (e.g. if there are a great number of American Snouts in a tree, you may count the number in a portion of the tree and extrapolate to generate an estimate of the total number you ACTUALLY SEE in the tree), but not the number of butterflies you think you would have seen had you covered more of the same habitat (e.g., do NOT multiply a count of 1 acre by the number of acres of similar habitat nearby or in the circle but not covered; do not estimate the number of butterflies in a field by walking through a portion of the field and estimating how many butterflies might be in the entire field; and do not multiply numbers seen during some time period by the number of similar time periods that you think butterflies would have been flying.). If you estimate numbers of butterflies that you actually saw, please explain your method of estimating in Field Notes. Compilers should explain to all participants the need for reporting an estimation method.
- Keep an accurate record of miles covered on foot (to the nearest 1 mi.) and hours spent (to the nearest 0.5 hr.) by each party of counters, as a measure of census effort. If a party counts together some of the time but separates some of the time (to the point where counters are out of sight of each other), report the minimum and maximum number of parties that counted (e.g., if there were 1-4 parties, report 4), and add in the miles and hours spent by these separated parties to those spent while together.
- Look over the forms carefully BEFORE the count so that you will be able to provide the information required. We recommend that you record count data on the paper form, then refer to that when filling in the online form.
- A MINIMUM of 6 party-hours per COUNT is REQUIRED for all counts started after 2008, and—except in extenuating circumstances—ALL counts should expend AT LEAST 6 party-hours.
- For all counts started after 2008, at least four persons per Count must be adult field observers (over age 12).
- The compiler is the contact person for the count.

REPORTING BUTTERFLIES OBSERVED

- The count form lists the butterflies' scientific and English names as given in NABA's checklist (available for download or for sale at www.naba.org/pubs/checklst.html). The 2nd edition of this checklist was published in spring 2001, and NABA periodically reviews and revises it. Other

butterfly publications may use different species concepts and names.

- Record the total ADULT individuals of each species seen on your count. Do not break totals down by separate sites within the count circle.
- Use Unlisted Species section (at end of paper form, or on separate pages of the online form) to write in species observed but not included on the online list, using the English or scientific names from NABA's checklist.
- Do NOT specify subspecies UNLESS, in the opinion of the compiler more than one subspecies of a particular species occurs within, or close to, the count circle.
- Use the Unidentified Species section of the online form to enter individuals seen but not identified to species, e.g., 9 *Satyrrium* sp., 2 Grass-Skipper sp. Please enter all Unidentified species in the form "Satyrrium sp.," "Fritillary sp.," "Nymphalidae sp.," etc., NOT "Satyrrium," "Fritillaries" or "Nymphalids."
- Record totals of immature forms (eggs, caterpillars, pupas) in the Immature Butterflies section of the online form. These do NOT count in totals for individuals and species..
- Each different ADULT butterfly identified to species counts as a species. If more than one subspecies is reported, count them as only one species.
- A butterfly not identified to species does not count towards your species total UNLESS that is the only entry reported for that type of butterfly (e.g., *Satyrrium* sp. counts as a species ONLY if no other *Satyrrium* hairstreak seen on the count was identified to species.)
- Count only ADULT butterflies in the totals for individuals and species. All unidentified adult individuals should be added to the total of individuals.
- Non-butterflies should be mentioned in the Field Notes section only to the extent that they help illuminate butterfly species occurrence or abundance. For example, "gypsy moth infestation may have affected oak-feeding hairstreak abundance," or "many species nectaring at abundant common milkweed."
- On the Butterfly Review/Unusual Sightings page of the online count form, check off any butterfly species that are noteworthy for your location as to species, number, timing, etc., AND include a brief explanation in the Unusual Sighting Notes field. The species will then be boldfaced in the Count Report, and your explanation will appear as a footnote to your count summary.

FILLING OUT THE PAPER COUNT FORM

While count data must be submitted online, the paper count forms are used for field records. Filling out a paper count form prior to starting online data entry makes the process smoother and faster. Some hints are:

- Please estimate the percentage of time in the AM and PM (during which you actually counted) that the sun was shining, and the temperature range, and the wind speed, during the count.
- Number of field parties: A "party" may consist of 1 person or a group of people who are butterflying together—meaning that while butterflying they remain in visual or auditory contact.
- Party-hours: A party, as defined above, that spends one hour in the field actively butterflying on foot is equivalent

to one party-hour. For example, if you had three groups of butterflyers and group A, consisting of two people, counted butterflies for 3 hours; group B consisting of one person, counted butterflies for 5 hours; and group C, consisting of three people, counted butterflies for 4 hours, the total party-hours would be $3 + 5 + 4 = 12$. **Total party-hours cannot exceed the number of hours of the count x the number of parties.** Parties that temporarily separate to count different butterflies become separate parties with separate party-hours during the time of separation. E.g., if a party of 3 counts for 3 hours as a single party, breaks up into 3 sub-parties for 2 hours to count separate butterflies, then counts together for 2 more hours, you should report 3 parties (the maximum number at one time) totaling 11 party-hours (1 party x 3 hours + 3 parties x 2 hours + 1 party x 2 hours). Exclude time when butterfly counting did not occur.

- Party-miles = The total miles traveled **on foot** observing butterflies by each field party as a whole. E.g., 4 observers in 1 party walking 2 miles in the field = 2 party-miles (**NOT** 8). Add up party-miles of all parties on the count to determine total party-miles. Party-miles for temporarily separated parties are counted in the same manner as described for party-hours above. Butterflies identified from cars or other conveyances may be counted, but the miles are not.
- List first initial and last name of field observers on the count form. It is the compiler's responsibility to obtain the correct names of all participants.
- Imminent threats to habitat, Habitat changes since last year, and Field Notes (such as weather, or explanations of unusual species) should be brief and relevant to the count's butterfly observations. Do **NOT** include weather in Habitat changes. Do **NOT** include organisms other than butterflies in Field Notes, except for a limited mention of plants or animals that may have affected butterflies. If there are no imminent threats or habitat changes, please leave these fields blank.
- **DOUBLE CHECK** paper forms for accuracy and completeness before entering the information online. **After you have entered your data online, check that the count summary that is generated matches the data on your paper form.**

TIPS FOR FIRST-YEAR COUNTS

- Please read instructions and forms carefully **BEFORE** count day.
- All counts are required to submit results online at www.butterflycounts.org
- New counts should pre-register with NABA to ensure that their proposed count circle does not overlap with other count circles. When you pre-register, please submit a map showing the new count circle. Pre-registered counts will also be advertised by NABA. Visit <http://www.naba.org/counts/start.html> for information.
- It's a good idea to practice how to do the count **BEFORE** your first count date.
- It's important that at least one counter in each party can identify all butterflies likely to be found in the count area, and that each party carries at least one butterfly field guide.
- Along with your count form, submit a map showing the new count circle.

- Within your count circle, try to cover as many areas and habitats as possible.
- Consult www.naba.org or last year's Count Report for information on existing count circles.

PUBLIC PARTICIPATION

All counts published in the annual report must be open to public participation. If a person wishes to participate in a count, it must be possible for him/her to find out from the compiler, or other designated contact person, the date of the count, where he/she may go within the circle to count, and how to submit results and fees to the compiler. Compilers and counting parties are not obliged to include anyone in their particular counting activities, although cooperation and assistance to new counters are encouraged. If a compiler does not operate within the spirit of this policy (within constraints of unforeseen weather delays), NABA may, at its discretion, not accept the count.

FEES

- A fee of **U.S. \$3.00** is required for each field observer on each count (whether or not they want their names published in the Count Report) to help defray program costs.
- NABA **WILL NOT** accept your count unless the full fee is paid.
- **It is the compiler's responsibility to inform participants ahead of time that they must pay a fee for participation, and to ensure that all fees are paid upon count submission.**

WHEN, WHERE, & HOW TO SUBMIT COUNTS

- **DEADLINE** for count submission to be received by NABA or completed online: **November 1st**
- Compilers submit count data online at www.butterflycounts.org. Once submitted online, please print the participants list and mail along with full fee payment (in **ONE** check or money order) to NABA, 4 Delaware Road, Morristown, NJ 07960. Do not send NABA copies of counts submitted online, but do send fee payment and participants list.
- It is the responsibility of the count compiler to get an acceptable count submitted with appropriate fee on the correct, complete, and legible forms to NABA by the **DEADLINE**.
- Counts submitted or paid late will be held for publishing in the following year's Count Report.
- Please keep a copy of your count forms or online count summary for your records, **AND** keep details of unusual species sightings, as you may be contacted for confirmatory information by a NABA editor. **Please set your email program to accept messages with NABA in the subject line, so that messages from the editors will reach you.**
- NABA retains full editorial control over the content of the count report, including butterfly species reports.

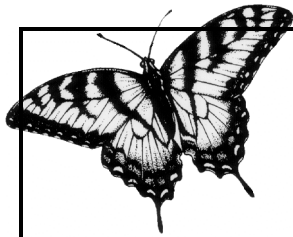
SUBMITTING COUNT PHOTOS

We strongly encourage compilers to submit photographs taken on a count of interesting butterflies or of butterflies whose identification is not 100% certain. Interesting, good-quality photos may be published in the Count Report or on the NABA website, and the NABA staff may be able to help with those uncertain IDs. You may upload photos to your online count

form, along with information including name of photographer, subject, and its significance. **Please, no email attachments.**

VOLUNTEER OPPORTUNITIES

Count publication depends upon many volunteers (editors, artists, etc.). For more information, contact Count Report Editor Mike Cerbone at cerbone@naba.org.



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PRESS RELEASE ANNUAL NABA BUTTERFLY COUNT

Butterflies are one of the most beautiful elements of the natural world, and scientists now recognize that they can also serve as an important indicator of the health of ecosystems. A dedicated group of local naturalists will soon be both enjoying their beauty and contributing to a nationwide program that conducts long-term monitoring of butterfly populations. They welcome public participation, and while knowledge of butterflies is a plus, it is not necessary.

The _____ NABA Butterfly Count will be held on _____
(name of count)
_____, _____, _____. Counters will meet at _____ at _____
(day of week) (date) (time) at _____
_____. The count will last until about _____,
(location) (time)
weather permitting. This butterfly count has been held since _____. For more information please contact
(first year)
_____ at _____ during the: day / evening / weekend
(name of count compiler) (phone number/email) (circle appropriate time)

The NABA Butterfly Count Program has been held annually since 1975, when only 29 counts were held. Volunteers around North America select a count area 15 miles in diameter and conduct a one-day census of all butterflies observed within that circle. In Mexico, Spring Seasonal counts are held prior to August 15th, 16th of September counts are held August 15-October 15, and Fall Seasonal counts are held after October 15. The best timing for butterfly observation in each count circle varies. The count program is intended to promote interest in butterflies and provide results useful for scientific monitoring of this beautiful and fascinating group of insects.

The **North American Butterfly Association (NABA)** organizes the counts and publishes their annual reports. For more information on NABA and the count program, please send a self-addressed, stamped business envelope to: **NABA, 4 Delaware Road, Morristown, New Jersey, USA 07960**. Or check out our website at www.naba.org.

Instructions to Count Compilers:

- Please fill in the above press release. Make as many photocopies as you need to send to the news organizations that serve your area, including newspapers, radio stations, and local-access TV stations.
- You may also follow-up with these media contacts after your count by making your own press release providing interesting results and photos from your butterfly count.

NABA BUTTERFLY COUNT – PARTICIPANTS LIST - MEXICO

PLEASE NOTE: **ALL count submissions MUST include a participants list.** . You may use this form to record the participants on your count prior to entering this information online. THANK YOU!

- This form is for accounting only. PLEASE, NO notes pertaining to butterfly observations or butterfly count form here.
- The count fee is U.S.\$3.00 and is required for EACH field observer, regardless of age on EACH count (regardless of how many counts a participant attends, and whether or not participants want their names published). Each count must have at least one paying participant.
- The cost of a hard copy the Count Report is U.S.\$7.00 for NABA members and U.S.\$11 for non-members.
- For each person buying the report, please list their name AND FULL MAILING ADDRESS to which the report should be sent.
- **Make payment for this count with a single check or money order in U.S. dollars payable to NABA.**
- Make payment, if desired, for annual NABA membership dues with a separate check or money order in U.S. dollars payable to NABA. **NABA ANNUAL DUES:** U.S.\$35 for single, U.S.\$45 for family (U.S.\$70/90 outside U.S., Canada, Mexico).
- An email notice that count forms for 2016 are available for download will be sent to the compiler at the email address listed below.
- Please attach additional sheet(s) if needed.
- Please print the online participants list and mail it with appropriate fee to: **NABA, 4 Delaware Road, Morristown, New Jersey, USA 07960**
- Please do not send your participants list via registered mail, as this can add much delay. Your cancelled check is your receipt.

Count Name, State: _____

Planned date for Count (not binding): _____

NAME/ADDRESS	FEE	Report	Donation	TOTAL
1 Compiler: _____ Address: _____ City: _____ State, Zip Code: _____ email (for NABA use only): _____ phone (for NABA use only): _____ (home or work?)	_____	_____	_____	_____
2 _____ _____	_____	_____	_____	_____
3 _____ _____	_____	_____	_____	_____
4 _____ _____	_____	_____	_____	_____
5 _____ _____	_____	_____	_____	_____
6 _____ _____	_____	_____	_____	_____
7 _____ _____	_____	_____	_____	_____
8 _____ _____	_____	_____	_____	_____
9 _____ _____	_____	_____	_____	_____
TOTALS / SUBTOTALS	_____	_____	_____	_____

Count Name, State: _____

SUBTOTALS FROM PRECEDING PAGE

	FEE	Report	Donation	TOTAL
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
TOTAL				

BUTTERFLY COUNT FORM - MEXICO

***** REQUIRED INFORMATION *****

DEADLINE for complete, readable submission to be received by NABA: **November 1st.**

Changes to butterfly habitats noticed since last year (do NOT include weather/climate). If none, leave blank:

Count Name (as it appears in the Count Report), State:

Year of count (1st, 5th, etc.): _____

DATE held: _____

TIME (military, to nearest 0.5 hr): _____ to _____
(which equals _____ hours)

Weather:

- 1. % sunshine in AM: ≤10% 11-25% 26-50%
 51-75% 76-100% Data not recorded
- 2. % sunshine in PM: ≤10% 11-25% 26-50%
 51-75% 76-100% Data not recorded
- 3. Temperature: _____ to _____ °F Data not recorded
- 4. Wind: _____ to _____ mph Data not recorded

Participants:

- 1. Number of field observers: _____
- 2. Number of field parties (report the maximum number: if 1-4 parties, report 4): _____
- 3. Total number of party-hours by field parties: _____

(Total party-hours cannot exceed the number of hours of the count x the number of parties.)

- 4. Total party-miles on foot by field parties (to nearest 1 mile only): _____

Compiler's name: _____

Address: _____

City: _____

State: _____ **Postal Code:** _____

Email address (please include so that Count Report editors may contact you if necessary. It will **NOT** be published in the Count Report without your permission.):

_____ **OK** to publish **Do NOT** publish

Phone (for NABA use only, will **NOT** be published):

Check here if compiler was NOT also a field observer.

Useful information requested from all counts:

Imminent threats to specific butterfly habitats (new, specific information only; please do not repeat generalities year after year, e.g., development, pesticide spraying). If none, leave blank:

Information required from 1st-year counts only

Center in decimal degrees at (latitude) _____ . _____
(longitude) _____ . _____

For information on reporting and mapping count circle centers please see:
http://www.naba.org/count_center.html

Center at (describe in words, as exactly as possible, e.g., "at intersection of **A** St. and **B** Rd. in Town of **C**, **D** County." This description must match the coordinates above.): _____

Elevation (range that is actually counted): _____ to _____ ft.
Includes (any significant named areas in circle that are counted, e.g., "**X** County Park, **XX** Wildlife Management Area, and **XXX** Preserve"):

Habitats actually covered on the count:

Uses of land within the count circle:

Please submit a map of the count circle to NABA

COUNT NAME, State: _____

*** * * ADULT BUTTERFLIES * * ***

If a species is not listed, write it in at end of form. If subspecies are observed, do NOT include these numbers in the line for the full species.

PAPILIONIDAE - Swallowtails

- ___ *Parides photinus* Pink-spotted Cattleheart
- ___ *Parides montezuma* Montezuma's Cattleheart
- ___ *Parides erithalion* Variable Cattleheart
- ___ *Battus philenor* Pipevine Swallowtail
- ___ *Battus polydamas* Polydamas Swallowtail
- ___ *Battus laodamas* Yellow-spotted Swallowtail
- ___ *Papilio polyxenes* Black Swallowtail
- ___ *Papilio thoas* Thoas Swallowtail
- ___ *Papilio cresphontes* Giant Swallowtail
- ___ *Papilio astyalus* Broad-banded Swallowtail
- ___ *Papilio ornithion* Ornithion Swallowtail
- ___ *Papilio glaucus* Eastern Tiger Swallowtail
- ___ *Papilio multicaudata* Two-tailed Swallowtail
- ___ *Papilio pilumnus* Three-tailed Swallowtail
- ___ *Papilio palamedes* Palamedes Swallowtail
- ___ *Papilio garamas* (incl. *abderas*) Magnificent Swallowtail
- ___ *Papilio victorinus* Victorine Swallowtail
- ___ *Papilio erostratus* Pale-spotted Swallowtail
- ___ *Papilio pharnaces* Pink-spotted Swallowtail
- ___ *Papilio anchisiades* Ruby-spotted Swallowtail
- ___ *Papilio torquatus* Band-gapped Swallowtail

PIERIDAE - Whites

- ___ *Catasticta nimbece* Mexican Dartwhite
- ___ *Melete lycimnia* Common Melwhite
- ___ *Appias drusilla* Florida White
- ___ *Pontia protodice* Checkered White
- ___ *Ascia monuste* Great Southern White
- ___ *Leptophobia aripa* Common Greeneyed-White
- ___ *Pieriballia viardi* Painted White
- ___ *Ganyra josephina* Giant White

PIERIDAE - Sulphurs

- ___ *Colias philodice* Clouded Sulphur
- ___ *Colias eurytheme* Orange Sulphur
- ___ *Colias cesonia* Southern Dogface
- ___ *Anteos clorinde* White Angled-Sulphur
- ___ *Anteos maerula* Yellow Angled-Sulphur
- ___ *Phoebis sennae* Cloudless Sulphur
- ___ *Phoebis philea* Orange-barred Sulphur
- ___ *Phoebis agarithe* Large Orange Sulphur
- ___ *Phoebis neocypris* Tailed Sulphur
- ___ *Phoebis trite* Straight-lined Sulphur
- ___ *Phoebis statira* Statira Sulphur
- ___ *Kricogonia lyside* Lyside Sulphur
- ___ *Eurema daira* Barred Yellow
- ___ *Eurema boisduvaliana* Boisduval's Yellow
- ___ *Eurema mexicana* Mexican Yellow
- ___ *Eurema salome* Salome Yellow
- ___ *Eurema proterpia* Tailed Orange
- ___ *Eurema lisa* Little Yellow
- ___ *Eurema nise* Mimosa Yellow
- ___ *Eurema dina* Dina Yellow
- ___ *Eurema nicippe* Sleepy Orange
- ___ *Nathalis iole* Dainty Sulphur

PIERIDAE - Mimic-Whites

- ___ *Enantia mazai* De la Maza's Mimic-White
- ___ *Enantia jethys* Bold Mimic-White

LYCAENIDAE - Hairstreaks

- ___ *Eumaeus childrenae* Superb Cycadian
- ___ *Paiwarria umbratus* Thick-tailed Hairstreak
- ___ *Pseudolycaena damo* Sky-blue Greatstreak
- ___ *Atlides halesus* Great Purple Hairstreak
- ___ *Atlides gaumeri* White-tipped Greatstreak
- ___ *Atlides polybe* Black-veined Greatstreak
- ___ *Thereus oppia* Oppia Hairstreak
- ___ *Arawacus sito* Fine-lined Stripe-streak
- ___ *Arawacus jada* Creamy Stripe-streak
- ___ *Rekoa palegon* Gold-bordered Hairstreak
- ___ *Rekoa zebina* Zebina Hairstreak
- ___ *Rekoa marius* Marius Hairstreak
- ___ *Rekoa stagira* Smudged Hairstreak
- ___ *Ocaria ocrisia* Black Hairstreak
- ___ *Brangas neora* Common Brangas
- ___ *Cyanophrys herodotus* Tropical Greenstreak
- ___ *Cyanophrys miserabilis* Clench's Greenstreak
- ___ *Cyanophrys longula* Brown-spotted Greenstreak
- ___ *Panthiades bathildis* Zebra Cross-streak
- ___ *Panthiades ochus* Hatched Cross-streak
- ___ *Callophrys xami* Xami Hairstreak
- ___ *Oenomaus ortygnus* Aquamarine Hairstreak
- ___ *Parrhasius polibetes* Broken-M Hairstreak
- ___ *Parrhasius moctezuma* Mexican-M Hairstreak
- ___ *Apuecla maeonis* Lilaceous Hairstreak
- ___ *Strymon melinus* Gray Hairstreak
- ___ *Strymon rufofusca* Red-crescent Scrub-Hairstreak
- ___ *Strymon bebrycia* Red-lined Scrub-Hairstreak
- ___ *Strymon yojoa* Yojoa Scrub-Hairstreak
- ___ *Strymon albata* White Scrub-Hairstreak
- ___ *Strymon alea* Lacey's Scrub-Hairstreak
- ___ *Strymon istapa* Mallow Scrub-Hairstreak
- ___ *Strymon cestri* Tailless Scrub-Hairstreak
- ___ *Strymon bazochii* Lantana Scrub-Hairstreak
- ___ *Lamprospilus sethon* Large Groundstreak
- ___ *Ziegleria guzanta* Orange-crescent Groundstreak
- ___ *Electrostrymon mathewi* Mathew's Groundstreak
- ___ *Electrostrymon sangala* Ruddy Hairstreak
- ___ *Electrostrymon canus* Muted Hairstreak
- ___ *Calycopis clarina* White-striped Groundstreak
- ___ *Calycopis isobea* Dusky-blue Groundstreak
- ___ *Tmolus echion* Red-spotted Hairstreak
- ___ *Nicolaea velina* (= *phobe*) Garnet-patched Hairstreak
- ___ *Ministrymon clytie* Clytie Ministreak
- ___ *Ministrymon phrutus* Red-flocked Ministreak
- ___ *Ministrymon azia* Gray Ministreak
- ___ *Siderus tephraeus* Pearly-gray Hairstreak
- ___ *Hypostrymon critola* Sonoran Hairstreak
- ___ *Erora quaderna* Arizona Hairstreak
- ___ *Erora carla* Black-edged Dreamstreak

LYCAENIDAE - Blues

- ___ *Brephidium exile* Western Pygmy-Blue
- ___ *Leptotes cassius* Cassius Blue
- ___ *Leptotes marina* Marine Blue
- ___ *Zizula cyna* Cyna Blue

COUNT NAME, State: _____

___ *Hemiargus ceraunus* Ceraunus Blue
 ___ *Hemiargus isola* Reakirt's Blue
 ___ *Everes comyntas* Eastern Tailed-Blue
 ___ *Celastrina ladon* Spring Azure
 RIODINIDAE - Metalmarks
 ___ *Euselasia eubule* Dusky Sombermark
 ___ *Eurybia elvina* Blind Sheenmark
 ___ *Mesosemia lamachus* Purple-washed Eyemark
 ___ *Voltinia umbra* Quilted Metalmark
 ___ *Rhetus arcius* Sword-tailed Beautymark
 ___ *Calephelis sinaloenses* Sinaloan Scintillant
 ___ *Calephelis fulmen* Strong-spotted Scintillant
 ___ *Calephelis mexicana* Mexican Scintillant
 ___ *Calephelis montezuma* Montezuma's Scintillant
 ___ *Calephelis nemesis* Fatal Metalmark
 ___ *Calephelis perditalis* Rounded Metalmark
 ___ *Calephelis rawsoni* Rawson's Metalmark
 ___ *Calephelis dreisbachi* Nogales Metalmark
 ___ *Caria ino* Red-bordered Metalmark
 ___ *Caria stillaticia* (=rabata) Mexican Greenmark
 ___ *Baeotis zonata* Square-spotted Yellowmark
 ___ *Lasaia sula* Blue Metalmark
 ___ *Lasaia maria* Gray Bluemark
 ___ *Lasaia agesilas* Black-patched Bluemark
 ___ *Melanis cephe* (includes *acroleuca*) White-rayed Pixie
 ___ *Melanis pixe* Red-bordered Pixie
 ___ *Anteros carausius* Carousing Jewelmark
 ___ *Emesis zela* Zela Metalmark
 ___ *Emesis mandana* Great Tanmark
 ___ *Emesis vulpina* Veracruz Tanmark
 ___ *Emesis regula* Bow-winged Tanmark
 ___ *Emesis emesia* Curve-winged Metalmark
 ___ *Emesis tenedia* Falcate Metalmark
 ___ *Apodemia hypoglauca* Sealpoint Metalmark
 ___ *Apodemia walkeri* Walker's Metalmark
 ___ *Synargis mycone* Sealpoint Metalmark
 ___ *Theope virgilius* Common Theope
 ___ *Theope publius* Bell-banded Theope
 NYMPHALIDAE - Brushfoots
 ___ *Libytheana carinenta* American Snout
 ___ *Agraulis vanillae* Gulf Fritillary
 ___ *Dione moneta* Mexican Silverspot
 ___ *Dione juno* Juno Heliconian
 ___ *Dryadula phaetusa* Banded Orange Heliconian
 ___ *Dryas iulia* Julia Heliconian
 ___ *Heliconius charithonia* Zebra Heliconian
 ___ *Heliconius erato* Erato Heliconian
 ___ *Euptoieta claudia* Variegated Fritillary
 ___ *Euptoieta hegesia* Mexican Fritillary
 ___ *Chlosyne theona* Theona Checkerspot
 ___ *Chlosyne fulvia* Fulvia Checkerspot
 ___ *Chlosyne lacinia* Bordered Patch
 ___ *Chlosyne endeis* Banded Patch
 ___ *Chlosyne hippodrome* Simple Patch
 ___ *Chlosyne janais* Crimson Patch
 ___ *Chlosyne rosita* Rosita Patch
 ___ *C. marina* (incl. *melitaeoides*, *dryope*) Red-spotted Patch
 ___ *Chlosyne ehrenbergii* White-rayed Patch
 ___ *Microtia elva* Elf
 ___ *Castilia griseobasalis* Gray-based Crescent

___ *Texola elada* Elada Checkerspot
 ___ *Phyciodes texana* Texan Crescent
 ___ *Phyciodes tulcis* Pale-banded Crescent
 ___ *Phyciodes ptolyca* Black Crescent
 ___ *Phyciodes argentea* Chestnut Crescent
 ___ *Phyciodes ardys* Ardent Crescent
 ___ *Phyciodes nebulosa* Blurry Crescent
 ___ *Phyciodes vesta* Vesta Crescent
 ___ *Phyciodes phaon* Phaon Crescent
 ___ *Phyciodes tharos* Pearl Crescent
 ___ *Phyciodes campestris* Field Crescent
 ___ *Phyciodes picta* Painted Crescent
 ___ *Phyciodes pallescens* Mexican Crescent
 ___ *Phyciodes mylitta* Mylitta Crescent
 ___ *Polygonia interrogationis* Question Mark
 ___ *Vanessa virginiensis* American Lady
 ___ *Vanessa cardui* Painted Lady
 ___ *Vanessa annabella* West Coast Lady
 ___ *Vanessa atalanta* Red Admiral
 ___ *Hypanartia godmani* Splendid Mapwing
 ___ *Junonia coenia* Common Buckeye
 ___ *Junonia evarete* Mangrove Buckeye
 ___ *Junonia genoveva* Tropical Buckeye
 ___ *Anartia jatrophae* White Peacock
 ___ *Anartia fatima* Banded Peacock
 ___ *Siproeta epaphus* Rusty-tipped Page
 ___ *Siproeta stelenes* Malachite
 ___ *Catonephele cortesi* West-Mexican Catone
 ___ *Pyrrhogyra neaerea* Leading Red-ring
 ___ *Nica flavilla* Little Banner
 ___ *Bolboneura sylphis* Crinkled Banner
 ___ *Limenitis arthemis astyanax* Red-spotted Purple
 ___ *Adelpha paroeca* Eyed Sister
 ___ *Adelpha serpa celerio* Celadon Sister
 ___ *Adelpha paraena massilia* Bates' Sister
 ___ *Adelpha phylaca* Cecropia Sister
 ___ *Adelpha iphiclus* Pointer Sister
 ___ *Adelpha fessonia* Band-celled Sister
 ___ *Adelpha bredowii* California Sister
 ___ *Adelpha basilioides* Spot-celled Sister
 ___ *Epiphile adrasta* Common Banner
 ___ *Temenis laothoe* Orange Banner
 ___ *Myscelia ethusa* Mexican Bluewing
 ___ *Myscelia cyananthe* Blackened Bluewing
 ___ *Eunica monima* Dingy Purplewing
 ___ *Eunica tatila* Florida Purplewing
 ___ *Dynamine postverta* (=mylitta) Four-spotted Sailor
 ___ *Dynamine dyonis* Blue-eyed Sailor
 ___ *Mestra amymone* Common Mestra
 ___ *Biblis hyperia* Red Rim
 ___ *Hamadryas amphinome* Red Cracker
 ___ *Hamadryas februa* Gray Cracker
 ___ *Hamadryas guatemalena* Guatemalan Cracker
 ___ *Historis odius* Orion Cecropian
 ___ *Colobura dirce* Small Beauty
 ___ *Smyrna blomfieldia* Blomfield's Beauty
 ___ *Marpesia chiron* Many-banded Daggerwing
 ___ *Marpesia petreus* Ruddy Daggerwing
 ___ *Archaeoprepona demophon* One-spotted Prepona
 ___ *Archaeoprepona demophon* Two-spotted Prepona
 ___ *Consul electra* Pearly Leafwing

COUNT NAME, State: _____

___ *Consul fabius* Tiger Leafwing
 ___ *Siderone galanthis* Red-and-black Leafwing
 ___ *Zaretis callidryas* Ghost Leafwing
 ___ *Anaea aidea* Tropical Leafwing
 ___ *Anaea andria* Goatweed Leafwing
 ___ *Anaea euryppyle* Pointed Leafwing
 ___ *Anaea glycerium* Angled Leafwing
 ___ *Anaea pithyusa* Pale-spotted Leafwing
 ___ *Asterocampa celtis* Hackberry Emperor
 ___ *Asterocampa leilia* Empress Leilia
 ___ *Asterocampa clyton* Tawny Emperor
 ___ *Doxocopa pavon* Pavon Emperor
 ___ *Doxocopa laure* Silver Emperor
 ___ *Morpho polyphemus* White Morpho
 ___ *Opsiphanes boisduvalii* Orange Owlet
 ___ *Opsiphanes cassina* Split-banded Owlet
 ___ *Opsiphanes invirae* Lowland Owlet
 NYMPHALIDAE - Satyrs
 ___ *Cyllopsis caballeroi* Cowboy Gemmed-Satyr
 ___ *Cyllopsis gemma* Gemmed Satyr
 ___ *Cyllopsis pyracmon* Nabokov's Satyr
 ___ *Euptychia fetna* Spiky Satyr
 ___ *Hermeuptychia sosybius* (=hermes) Carolina Satyr
 ___ *Megisto rubricata* Red Satyr
 ___ *Cercyonis pegala* Common Wood-Nymph
 ___ *Pindis squamistriga* Falcate Satyr
 ___ *Taygetis mermeria* Great Ur-Satyr
 ___ *Taygetis uncinata* Hook-lined Ur-Satyr
 ___ *Taygetis weymeri* Mexican Ur-Satyr
 ___ *Cissia similes* Stormy Satyr
 ___ *Cissia themis* (=undina) Nicaraguan Satyr
 NYMPHALIDAE - Clearwings
 ___ *Greta morgane* Thick-tipped Greta
 ___ *Melinaea lilis imitata* Heliconoid Ticlear
 NYMPHALIDAE - Milkweed Butterflies
 ___ *Danaus plexippus* Monarch
 ___ *Danaus gilippus* Queen
 ___ *Danaus eresimus* Soldier
 ___ *Lycorea cleobaea* Tiger Mimic-Queen
 HESPERIIDAE - Firetips
 ___ *Pyrrhopyge araxes* Dull Firetip
 ___ *Pyrrhopyge chalybea* Orange-rimmed Firetip
 ___ *Elbella scylla* Red-collared Firetip
 ___ *Mysoria amra* Blue-collared Firetip
 HESPERIIDAE – Spread-wing Skippers
 ___ *Phocides belus* Beautiful Beamer
 ___ *Phocides urania* Teal Beamer
 ___ *Phocides polybius* (=palemon) Guava Skipper
 ___ *Udranomonia kikkawai* Nervous Skipper
 ___ *Proteides mercurius* Mercurial Skipper
 ___ *Epargyreus aspina* Spineless Silverdrop
 ___ *Epargyreus clarus* Silver-spotted Skipper
 ___ *Epargyreus socus* (orizaba) Pepper-spotted Silverdrop
 ___ *Epargyreus windi* Wind's Silverdrop
 ___ *Polygonus leo* Hammock Skipper
 ___ *Polygonus manueli* Manuel's Skipper
 ___ *Chioides catillus* White-striped Longtail
 ___ *Chioides zilpa* Zilpa Longtail
 ___ *Aguna asander* Gold-spotted Aguna
 ___ *Aguna metophis* Tailed Aguna

___ *Typhedanus undulatus* Mottled Longtail
 ___ *Typhedanus ampyx* Gold-tufted Skipper
 ___ *Polythrix asine* Dark-spotted Polythrix
 ___ *Polythrix octomaculata* Eight-spotted Longtail
 ___ *Codatractus carlos* Rusty Mottled-Skipper
 ___ *Codatractus alcaeus* White-crescent Longtail
 ___ *Codatractus arizonensis* Arizona Skipper
 ___ *Codatractus melon* Melon Mottled-Skipper
 ___ *Urbanus proteus* Long-tailed Skipper
 ___ *Urbanus viterboana* Cobalt Longtail
 ___ *Urbanus belli* Double-striped Longtail
 ___ *Urbanus pronus* Pronus Longtail
 ___ *Urbanus esmeraldus* Esmeralda Longtail
 ___ *Urbanus dorantes* Dorantes Longtail
 ___ *Urbanus evona* Turquoise Longtail
 ___ *Urbanus esta* Esta Longtail
 ___ *Urbanus teleus* Teleus Longtail
 ___ *Urbanus tanna* Tanna Longtail
 ___ *Urbanus simplicius* Plain Longtail
 ___ *Urbanus procne* Brown Longtail
 ___ *Urbanus doryssus* White-tailed Longtail
 ___ *Urbanus chales* White-tipped Longtail
 ___ *Astraptus fulgurator* Two-barred Flasher
 ___ *Astraptus gilberti* (includes *alector*) Gilbert's Flasher
 ___ *Astraptus anaphus* Yellow-tipped Flasher
 ___ *Narcosius paris helen* Trojan Flasher
 ___ *Autochton cellus* Golden Banded-Skipper
 ___ *Autochton pseudocellus* Sonoran Banded-Skipper
 ___ *Autochton cincta* Chisos Banded-Skipper
 ___ *Autochton neis* Spiky Banded-Skipper
 ___ *Achalarus casica* Desert Cloudywing
 ___ *Achalarus albociliatus* Skinner's Cloudywing
 ___ *Achalarus toxeus* Coyote Cloudywing
 ___ *Achalarus tehuacana* Dark Cloudywing
 ___ *Achalarus jalapus* Jalapus Cloudywing
 ___ *Thorybes pylades* Northern Cloudywing
 ___ *Cabares potrillo* Potrillo Skipper
 ___ *Celaenorrhinus stola* Elegant Flat
 ___ *Celaenorrhinus fritzgaertneri* Fritzgaertner's Flat
 ___ *Celaenorrhinus stallingsi* Stallings' Flat
 ___ *Spathilepia clonius* Falcate Skipper
 ___ *Cogia calchas* Mimosa Skipper
 ___ *Cogia hippalus* Acacia Skipper
 ___ *Cogia caicus* Gold-costa Skipper
 ___ *Telemiades choricus* Mexican Leafhugger
 ___ *Telemiades amphion fides* Costa-spotted Leafhugger
 ___ *Arteurotia tractipennis* Starred Skipper
 ___ *Polyctor enops* Brown Enops
 ___ *Polyctor cleat* White Enops
 ___ *Nisoniades rubescens* Purplish-black Skipper
 ___ *Pellicia arina* (=costimaculata) Glazed Pellicia
 ___ *Pellicia dimidiata* Morning Glory Pellicia
 ___ *Pachyneuria licisca* Obscure Pellicia
 ___ *Noctuana stator* Red-studded Skipper
 ___ *Noctuana lactifera bipuncta* White-haired Skipper
 ___ *Bolla orsines* Godman's Bolla
 ___ *Bolla eusebius* Mauve Bolla
 ___ *Bolla imbras* Rounded Bolla
 ___ *Bolla clytius* Mottled Bolla
 ___ *Staphylus ceos* Golden-headed Scallopwing
 ___ *Staphylus tierra* West-Mexican Scallopwing

COUNT NAME, State: _____

___ *Staphylus azteca* Aztec Scallopwing
 ___ *Staphylus mazans* Mazans Scallopwing
 ___ *Staphylus iguala* Bell's Scallopwing
 ___ *Gorgythion begga* Variegated Skipper
 ___ *Zera hyacinthinus* Bruised Zera
 ___ *Quadrus cerialis* Common Blue-Skipper
 ___ *Quadrus lugubris* Lugubrious Blue-Skipper
 ___ *Sostrata bifasciata* (incl. *nordica*) Blue-studded Skipper
 ___ *Paches polla* Shining Blue-Skipper
 ___ *Atarnes sallei* Orange-spotted Skipper
 ___ *Carrhenes canescens* Hoary Skipper
 ___ *Carrhenes fuscescens* Black-spotted Hoary-Skipper
 ___ *Mylon mainmon* Black-veined Mylon
 ___ *Mylon pelopidas* Dingy Mylon
 ___ *Xenophanes tryxus* Glassy-winged Skipper
 ___ *Antigonus nearchus* Death-mask Spurwing
 ___ *Antigonus erosus* Dusted Spurwing
 ___ *Antigonus funebris* West-Mexican Spurwing
 ___ *Systasea pulverulenta* Texas Powdered-Skipper
 ___ *Zopyrion sandace* Mexican Sandy-Skipper
 ___ *Achlyodes busirus* Giant Sicklewing
 ___ *Achlyodes pallida* (includes *selva*) Pale Sicklewing
 ___ *Achlyodes thraso* (includes *tamenund*) Sickle-winged Sk.
 ___ *Grais stigmatica* Hermit Skipper
 ___ *Timochares trifasciata* Five-banded Skipper
 ___ *Timochares ruptifasciatus* Brown-banded Skipper
 ___ *Anastrus sempiternus* Common Bluevent
 ___ *Anastrus tolimus robigus* 'Mexican' Forest Bluevent
 ___ *Cycloglypha thrasibulus* Aztec Bentwing
 ___ *Ebrietas anacreon* Common Bentwing
 ___ *Aethilla lavochrea* Yellow-rimmed Groundskipper
 ___ *Chiomara mithrax* Slaty Skipper
 ___ *Chiomara asychis* (*georgina*) White-patched Skipper
 ___ *Gesta gesta* (includes *invisus*) False Duskywing
 ___ *Erynnis tristis* Mournful Duskywing
 ___ *Erynnis funeralis* Funereal Duskywing
 ___ *Pyrgus communis* Common Checkered-Skipper
 ___ *Pyrgus albescens* White Checkered-Skipper
 ___ *Pyrgus oileus* Tropical Checkered-Skipper
 ___ *Pyrgus philetas* Desert Checkered-Skipper
 ___ *Heliopetes domicella* Erichson's White-Skipper
 ___ *Heliopetes sublinea* East-Mexican White-Skipper
 ___ *Heliopetes laviana* Laviana White-Skipper
 ___ *Heliopetes macaira* Turk's-cap White-Skipper
 ___ *Heliopetes arsalte* Veined White-Skipper
 ___ *Heliopetes alana* Alana White-Skipper
 ___ *Celotes nessus* Common Streaky-Skipper
 ___ *Pholisora catullus* Common Sootywing
 ___ *Pholisora mejicana* Mexican Sootywing
HESPERIIDAE - Skipperlings
 ___ *Piruna microstictus* Small-spotted Skipperling
 ___ *Piruna haferniki* Chisos Skipperling
 ___ *Piruna penaea* Hour-glass Skipperling
HESPERIIDAE - Grass-Skipppers
 ___ *Anthoptus insignis* Ferruginous Underskipper
 ___ *Synapte syraces* Faceted Skipper
 ___ *Zariaspes mytheucus* Mexican Underskipper
 ___ *Corticea corticea* Redundant Skipper
 ___ *Callimormus saturnus* Common Brown-Skipper
 ___ *Mnasicles hicetaon* Gray Brown-Skipper

___ *Methionopsis ina* Ina Brown-Skipper
 ___ *Methionopsis typhon* Typhon Brown-Skipper
 ___ *Flaccilla aecas* Milky Ruby-eye
 ___ *Phanes aletes* Squiggly Brown-Skipper
 ___ *Mnasilus allubita* Greenish Brown-Skipper
 ___ *Monca tyrtaeus* Violet-patched Skipper
 ___ *Nastra julia* Julia's Skipper
 ___ *Nastra neamathla* Neamathla Skipper
 ___ *Cymaenes odilia* Fawn-spotted Skipper
 ___ *Vehilius inca* Inca Brown-Skipper
 ___ *Remella remus* Whitened Remella
 ___ *Remella rita* Rita's Remella
 ___ *Lerema accius* Clouded Skipper
 ___ *Lerema liris* Liris Skipper
 ___ *Morys valerius valda* Happy Skipper
 ___ *Vettius fantasos* Fantastic Skipper
 ___ *Perichares philetas* Green-backed Ruby-eye
 ___ *Quinta cannae* Mimic Skipper
 ___ *Decinea percossius* Double-dotted Skipper
 ___ *Mucia zygia* Black-dotted Skipper
 ___ *Conga chydrea* Hidden-ray Skipper
 ___ *Ancyloxypha arene* Tropical Least Skipper
 ___ *Copaedes aurantiacus* Orange Skipperling
 ___ *Copaedes minimus* Southern Skipperling
 ___ *Hylephila phyleus* Fiery Skipper
 ___ *Hesperia viridis* Green Skipper
 ___ *Polites subreticulata* Reticulated Skipper
 ___ *Polites vibex* Whirlabout
 ___ *Wallengrenia otho* Southern Broken-Dash
 ___ *Pompeius verna* Little Glassywing
 ___ *Pompeius pompeius* Common Glassywing
 ___ *Atalopedes campestris* Sachem
 ___ *Anatrytone mazaia* Glowing Skipper
 ___ *Poanes zabulon* Zabulon Skipper
 ___ *Poanes melane* Umber Skipper
 ___ *Quasimellana eulogius* Common Mellana
 ___ *Euphyes vestris* Dun Skipper
 ___ *Atrytonopsis edwardsii* Sheep Skipper
 ___ *Amblyscirtes exoteria* Large Roadside-Skipper
 ___ *Amblyscirtes cassus* Cassus Roadside-Skipper
 ___ *Amblyscirtes aenus* Bronze Roadside-Skipper
 ___ *Amblyscirtes oslari* Oslar's Roadside-Skipper
 ___ *Amblyscirtes elissa* Elissa Roadside-Skipper
 ___ *A. tolteca (prenda)* 'Prenda' Toltec Roadside-Skipper
 ___ *Amblyscirtes nysa* Nysa Roadside-Skipper
 ___ *Amblyscirtes celia* Celia's Roadside-Skipper
 ___ *Amblyscirtes phylace* Orange-headed Roadside-Skipper
 ___ *Amblyscirtes fimbriata* Orange-edged Roadside-Skipper
 ___ *Lerodea eufala* Eufala Skipper
 ___ *Lerodea arabus* Violet-clouded Skipper
 ___ *Lerodea dysaules* Olive-clouded Skipper
 ___ *Calpodes ethlius* Brazilian Skipper
 ___ *Panoquina errans* Wandering Skipper
 ___ *Panoquina ocola* Ocola Skipper
 ___ *Panoquina sylvicola* (=leucas) Purple-washed Skipper
 ___ *Panoquina evansi* (includes *fusina*) Evans' Skipper
 ___ *Zenis jebus* (includes *janka*) Purple-stained Skipper
 ___ *Nyctelius nyctelius* Violet-banded Skipper
 ___ *Thespieus macareus* Chestnut-marked Skipper
 ___ *Thespieus dalman* Chocolate-marked Therra
 ___ *Vacerra bonifilius aeas* Common Therra

