A PRELIMINARY CHECKLIST OF THE SKIPPERS AND BUTTERFLIES OF OKLAHOMA

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An initial checklist of butterflies and skippers (Rhopalocera) of Oklahoma is presented. A total of 149 species and subspecies, compiled from published records, institutional collections, and personal collections and observations are included in the list.

INTRODUCTION

Because of the wide appeal of butterflies to young collectors, as well as their esthetic value to the general public, the butterfly fauna of any area is usually among the first and best known of all the invertebrate groups. However, as pointed out by Field, dos Passos, and Masters (1), there is a paucity of published records from the state of Oklahoma. It is unfortunate that the butterflies have been overlooked for so long. The influence of man on the ecology and climate of Oklahoma has no doubt largely affected both butterfly populations and distribution.

Both the geographic location of the state and its array of ecological communities indicate that a considerable diversity of species will be found here. Many of the species listed here are present in all counties in the state, but others are probably limited to a few counties along the eastern or northeastern edge, while others will likely be limited to the southwestern or panhandle region. Two or three examples of such limited distribution will suffice. Speyeria diana, a typical woodland butterfly, is found only in the eastern counties where the Ozark Plateau just extends into the state. In the same genus, the regal fritillary, Speyeria idalia, appears to be limited to the most northeastern area of the state. The western pygmy blue, Brephidium exilis, and the bronze roadside skipper, Amblyscirtes aenus, seem to be limited to the western section of Oklahoma.

During the past few years, I have been collecting in the state, and more recently, examining collections in state institutions and soliciting records from other collectors, primarily members of the Lepidopterists' Society. This list is a result of those endeavors. Because county records are so incomplete, they are not given at this time. It is intended that a more detailed account will be presented in future years to include dates of capture, county records, species abundance, food plants, and other ecological data. It is hoped that this initial list will accelerate and facilitate the study of butterflies and skippers in the state. Readers are encouraged to furnish additional data and I will be glad to identify any specimens from the state or examine any collections available.

While it is too early to determine the abundance of most species in the state, the number of records listed for each species below is probably an indication of its commonness. Exceptions to this might be those species which fly only three or four weeks during the year, and those butterflies that are small and/or nondescript in appearance, which tend to be overlooked by the general collector.

A total of 149 species and subspecies are presented. Based on lists of other states, and the published range of various species, it is estimated that these represent about 90-95% of the state's fauna. In this list, the family classification of dos Passos (2) has been followed, but the lower taxonomic names (genus and species) are those given in Howe (3). Some species, designated by an asterisk, are best considered strays at this time since the locations where the specimens were taken represent a considerable extension of the known range. It is also possible that one or two species may be misidentified or incorrectly labeled. Further collecting may demonstrate the residency of some of these species in the state, however. Letters following the species name refer to persons or institutions listed in the acknowledgments from which rec-
ords were obtained. Numbers in parentheses refer to published records, given in the bibliography.

Family **MEGATHYMIDAE**

*(Giant Skippers)*

*Megathymus yuccae* (Boisduval & Le Conte) — Yucca Skipper. OU

*Megathymus streckeri texanus* Barnes & McDunnough — Giant Texas Skipper. (4)

Family **HESPERIIDAE**

*(True Skippers)*

*Panoquina ocola* (Edwards) — Ocola Skipper. (5)

*Lerodea eufala* (Edwards) — Eufala Skipper. LR, MT, (5)

*Amblyscirtes aenus* Edwards — Bronze Roadside Skipper. (3)

*Amblyscirtes linda* Freeman — Linda's Roadside Skipper. MT, (3)

*Amblyscirtes oslari* (Skinner) — Oslar's Roadside Skipper. (3), (6)

*Amblyscirtes erna* Freeman — Erna's Roadside Skipper. (3)

*Amblyscirtes nysa* Edwards — Nysa Roadside Skipper. LR, MT, ORU, PL, (5)

*Amblyscirtes vialis* (Edwards) — Roadside Skipper. JPF, LR, MT, ORU, PL

*Amblyscirtes belli* Freeman — Bell's Roadside Skipper. LR. (3), (5), (7)

*Atrytonopsis turneri* Freeman — Turner's Skipper. (3), (8)

*Atrytonopsis vierecki* (Skinner) — Viereck's Skipper. (9)

*Atrytonopsis ovina edwardsi* Barnes & McDunnough — Edwards' Atrytonopsis. OSU

*Euphyes conspicua* (Edwards) — Black Dash. LR

*Euphyes dion* (Edwards) — Dion Skipper. LR

*Euphyes vestris metacomet* (Harris) — Dun Skipper. JPF, LR, ORU, (5)

*Poanes zabulon* (Boisduval & Le Conte) — Zabulon Skipper. LR, ORU, PL

*Poanes viator* Edwards — Broad Winged Skipper. LR

*Atrytone arogos* (Boisduval & Le Conte) — Arogos Skipper. LR, MT, (3), (5), (10)

*Atrytone delaware* (Edwards) — Delaware Skipper. LR, MT, ORU, OSU, OUBS, PL, (5)

*Atalopedes campestris* (Boisduval) — The Sachem. ECOSU, JPF, LR, MSU, MT, ORU, OSU, OUBS, PL

*Wallengrenia otho* (Smith) — Broken Dash. JPF, LR, PL, (5)

*Wallengrenia egeremet* (Scudder) — Broken Dash. JPF, LR, MT, ORU

*Polites themistocles* (Latreille) — Tawny Edged Skipper. LR, MT, ORU, PL, (5)

*Polites origenes* (Fabricius) — Cross Line Skipper. LR, (5)

*Hesperia metea* Scudder — Cobweb Skipper. JPF, PL

*Hesperia viridis* (Edwards) — Green Skipper. (3), (6)

*Hesperia ottoe* Edwards — Ottoe Skipper. (6), (9)

*Hesperia attalus* (Edwards) — Dotted Skipper. JPF, (5), (6)

*Hesperia leonardus* Harris — Leonard's Skipper. OSU

*Hylephila phyleus* (Drury) — Fiery Skipper. MT, ORU, OU, PL, (5)

*Copaeodes aurantiaca* (Hewitson) — Orange Skipperling. MT

*Copaeodes minima* (Edwards) — Southern Skipperling. OU

*Ancyloxypha numitor* (Fabricius) — Least Skipper. JPF, LR, ORU, OSU, PL

*Lerema accius* Abbot & Smith — Clouded Skipper. LR, ORU

*Nastra lherminier* (Latreille) — Swarthy Skipper. LR, PL (5)

*Pholisora catullus* (Fabricius) — Common Sooty Wing. LR, MT, ORU, OSU, PL, RL, (5)

*Pyrgus communis* (Grote) — Checkered Skipper. JPF, LR, MT, MSU, ORU, ORU, OU, PL, SWOSU, (5)

*Erynnis brizo* (Boisduval & Le Conte) — Sleepy Dusky Wing. JPF, MSU, ORU, OU, PL

*Erynnis persius* (Scudder) — Perseus' Dusky Wing. LR, ORU

*Erynnis lucilius* (Scudder & Burgess) — Columbine Dusky Wing. LR

*Erynnis baptisiae* (Forbes) — Wild Indigo Dusky Wing. JPF, (5)

*Erynnis zarucco* (Lucas) — Zarucco Dusky Wing. OSU

*Erynnis funeralis* (Scudder & Burgess) — Funereal Dusky Wing. LR, ORU, JPF

*Erynnis martialis* (Scudder) — Mottled Dusky Wing. LR

*Erynnis horatius* (Scudder & Burgess) — Horace's Dusky Wing. LR, MT, ORU, OSU, PL, (5)

*Erynnis juvenalis* (Fabricius) — Juvenal's Dusky Wing. JPF, LR, ORU, OSU, (5)
Staphylus hayhurstii (Edwards) — Southern Sooty Wing. JPF, LR, MT, ORU, OSU, PL, SWOSU, (5)
Cogia outis (Skinner) — Outis Skipper. ORU
Thorybes bathylus (Smith) — Southern Cloudy Wing. JPF, LR, MT, ORU, OSU, OU, OUBS, PL, (5)
Thorybes pylades (Scudder) — Northern Cloudy Wing. JPF, LR, MT, ORU, (5)
Thorybes confusis Bell — Confused Cloudy Wing. MSC, MSU, ORU, OUBS
Achalarus lyciades (Geyer) — Hoary Edge. JPF, LR, MT, ORU, OSU, PL
Epargyreus clarus (Cramer) — Silver Spotted Skipper. ECOSU, JPF, LR, MSC, MT, ORU, OSU, OU, OUBS, PL, SWOSU

**Family PAPILIONIDAE**
(Swallowtails)
Battus philenor (Linnaeus) — Pipevine Swallowtail. ECOSU, LR, MSC, MT, ORU, OSU, OU, OUBS, PL, SWOSU
Papilio polyxenes asterius Stoll — Black Swallowtail. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OU, OUBS, PL, RL, SWOSU
Papilio thoas autocolis Rothschild & Jordan Thoas Swallowtail. ORU, OU
Papilio cresphontes Cramer — Giant Swallowtail. ECOSU, LR, MSC, MSU, OSU, OU, OUBS, SWOSU, (1)
Papilio glaucus Linnaeus — Tiger Swallowtail. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (5)
Papilio multicaudatus Kirby — Three-Tailed Swallowtail. JF
Papilio troilus Linnaeus — Spicebush Swallowtail. ECOSU, LR, MSU, ORU, OSU, OU, OUBS, PL, SWOSU, (5), (10)
*Papilio palamedes Drury — Palamedes Swallowtail. OU
Graphium marcellus (Cramer) — Zebra Swallowtail. LR, OSU, PL, (12)

**Family PIERIDAE**
(Whites and Sulphurs)
Pieris protodice Boisduval & Le Conte — Checkered White. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU
Pieris rapae (Linnaeus) — European Cabbage Butterfly. ECOSU, JPF, LR, MSC, MT, ORU, OSU, OUBS, PL, RL, SWOSU
Colias eurytheme Boisduval — Alfalfa Butterfly. ECOSU, JPF, LR, MSC, SMU, MT, ORU, OSU, OU, OUBS, PL, RL, SWOSU, (5), (12)
Colias philodice Godart — Common Sulphur. LR, MSU, ORU, OSU, PL, SWOSU
Colias cesonia (Stoll) — Dog Face. JPF, LR, MT, OSU, OU, PL, SWOSU
*Anteos clorinde (Godart) — Clorinde. OSU
Phoebis sennae eubule (Linnaeus) — Cloudless Sulphur. ECOSU, JPF, LR, MSC, ORU, OSU, OU, OUBS, PL, SWOSU
Phoebis agarithe (Boisduval) — Large Orange Sulphur. OSU, PL
*Kricogonia castalia (Fabricius) — Castalia. OSU
Eurema daira (Godart) — Barred Sulphur. OU, SWOSU
Eurema mexicana (Boisduval) — Mexican Sulphur. ECOSU, JPF, LR, OSU, OU, OUBS, PL, SWOSU, (3), (13)
Eurema lisa Boisduval & Le Conte — Little Sulphur. ECOSU, JPF, LR, MT, ORU, OSU, OUBS, PL, SWOSU
Eurema nicippe (Cramer) — Sleepy Orange. JPF, LR, MT, OSU, PL
Nathalis iole Boisduval — Dainty Sulphur. ECOSU, JPF, LR, MSU, MT, ORU, OSU, OU, PL, SWOSU
Anthocaris midea Hübner — Falcate Orange Tip. JPF, LR, MSC, ORU, OSU, OU, OUBS, PL, (12), (13)
Euchloe olympia rosa (Edwards) — Olympia. JPF, LR, MSU, ORU, OU, PL, (13)

**Family LYCAENIDAE**
(Gossamer-Winged Butterflies)
Phaeostrymon alcestis (Edwards) — Alcestis Hairstreak. OSU, (3), (14)
Harkensclerus titus mopsus (Hübner) — Coral Hairstreak. LR, (5), (13)
Harkensclerus titus watsoni (Barnes & Benjamin) — Coral Hairstreak. (3)
Styrium calamus falacer (Godart) — Banded Hairstreak. JPF, LR, MT, ORU, (5), (14)
Styrium edwardsi (Saunders) — Edwards' Hairstreak. LR, MT, (13)
Calycopis cecrops (Fabricius) — Red-Banded Hairstreak. LR, MT, ORU, OSU, PL, (5)
Callophrys henrici turneri Clench — Henry's Elfin. LR, ORU, PL
Callophrys niphon (Hübner) — Pine Elfin. PL, (12)

Callophrys gryneus gryneus (Hübner) — Olive Hairstreak. JPF, LR, PL, (12)

Callophrys gryneus castalis (Edwards) — Olive Hairstreak. (3)

*Callophrys irus hadros Cook & Watson — Frosted Elfin. LR

Callophrys siva (Edwards) — Juniper Hairstreak. (12), (21)

Atlides halesus corcorani Clench — Great Purple Hairstreak. ECOSU, MSC, ORU, OSU, (5), (13)

Eurystrymon ontario autolycus (Edwards) — Northern Hairstreak. JPF, LR, MSU, MT, PL, (3), (13), (14)

Panthiades m-album, (Boisduval & Le Conte) — White "M" Hairstreak. LR, (13)

Strymon melinus franki Field – Gray Hairstreak. ECOSU, JPF, LR, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (3), (13), (15)

Feniseca tarquinius (Fabricius) — The Harvester. JPF, PL, (5), (12)

Lycaena hyllus (Cramer) — Bronze Copper. LR, (10)

Lycaena xanthoides dione Scudder — Great Copper. LR, ORU, OSU, PL, (3), (5), (10), (13)

Brephidium exilis (Boisduval) — Western Pygmy Blue. SWOSU

Leptotes cassius striata (Edwards) — Cassius' Blue. SWOSU

Leptotes marina (Reakirt) — Marine Blue. MT, ORU, SWOSU

Hemiargus isola (Reakirt) — Reakirt's Blue. LR, MT, ORU, OSU, OUBS, PL, SWOSU, (5)

Everes comynatas (Godart) — Eastern Tailed Blue. ECOSU, JPF, LR, MSU, MT, ORU, OSU, OU, OUBS, PL, RL, SWOSU, (5)

Glaucopsyche lygdamus jacki Stallings & Turner — Silvery Blue. (3), (16)

Celastrina argiolus pseudargiolus (Boisduval & Le Conte) — Spring Azure. JPF, LR, MT, ORU, OU, PL, (5)

Family **LIBYTHEIDAE**

(Snout Butterflies)

Libytheana bachmanii (Kirtland) — Snout Butterfly. ECOSU, JPF, LR, MT, ORU, OUBS, PL, (5)

*Libytheana carinenta* (Cramer) — Mexican Snout Butterfly. OSU

Family **NYMPHALIDAE**

(Brush-Footed Butterflies)

Anaea andria Scudder — Goatweed Butterfly. ECOSU, JPF, LR, MT, ORU, OSU, OUBS, PL, (5)

Asterocampa celtis (Boisduval & Le Conte) — Hackberry Butterfly. ECOSU, LR, MT, ORU, OSU, OU, OUBS, PL, (12)

Asterocampa antonia (Edwards) — Empress Antonia. JPF, MT, (3)

Asterocampa clyton (Boisduval & Le Conte) — Tawny Emperor. ECOSU, JPF, LR, MSU, MT, ORU, OSU, OU, OUBS, PL

* Asterocampa flora (Edwards) — Empress Flora. OSU

Asterocampa texana (Skinner) — Skinner's Hackberry Butterfly. MT

*Mestra amymone* (Ménétrisés) — Amymone. (17)

Limenitis astyanax (Fabricius) — Red-Spotted Purple. ECOSU, JPF, LR, MSC, MT, ORU, OSU, OU, PL, SWOSU

Limenitis archippus (Cramer) — Viceroy. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OUBS, PL, SWOSU

*Limenitis weidemeyerii* Edwards — Weidemeyer's Admiral. ECOSU

Vanessa atalanta (Linnaeus) — Red Admiral. ECOSU, JPF, LR, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (5)

Vanessa virginensis (Drury) — American Painted Lady. ECOSU, JPF, LR, MSC, MT, ORU, OSU, OU, OUBS, PL, (5)

Vanessa cardui (Linnaeus) — Painted Lady. ECOSU, LR, MSC, ORU, OSU, OU, OUBS, PL, SWOSU

Precis coenia (Hübner) — The Buckeye. ECOSU, JPF, LR, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (5)

*Nymphalis antiopa* (Linnaeus) — Mourning Cloak. ECOSU, JPF, LR, ORU, OU, PL, SWOSU, (12)

Polygonia interrogationis (Fabricius) — Question Mark. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (5)

Polygonia comma (Harris) — Hop Merchant. LR, ORU, OSU, PL

Chlosyne nycteis (Doubleday) — Silvery Checkerspot. JPF, LR, ORU, OU, PL

Chlosyne gorgone (Hübner) — Gorgone Checkerspot. JPF, LR, MT, ORU, OSU, OUBS, PL, RL, SWOSU, (5)
Chlosyne lacinia adjutrix Scudder — Scudder's Patched Butterfly. OSU, OU, SWOSU
Chlosyne fulvia (Edwards) — Fulvia Checkerspot. (9)
Phyciodes texana (Edwards) — Texan Crescent. ECOSU, MT, OU, SWOSU
Phyciodes tharos (Drury) — Pearl Crescent. ECOSU, JPF, LR, MSC, MT, ORU, OSU, OUBS, PL, RL, SWOSU
Phyciodes phaon (Edwards) — Phaon Crescent. ECOSU, JPF, LR, MSC, MT, ORU, OSU, OUBS, PL, RL, (5)
Phyciodes picta Edwards — Painted Crescent. (3)
Euphydryas phaeton ozarki Masters — Ozark Baltimore. (18)
*Euphydryas anicia (Doubleday) — Anicia Checkerspot. (19)
Speyeria edwardsii (Reakirt) — Edward's Fritillary. JF
Speyeria idalia (Drury) — Regal Fritillary. LR, PL, (3), (10), (12), (13)
Speyeria diana (Cramer) — Diana. ECOSU, JF
Speyeria cybele (Fabricius) — Great Spangled Fritillary. JF, PL, (3), (20)
Euptoieta claudia (Cramer) — Variegated Fritillary. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (5)

Family HELICONIIDAE
(Heliconians)
Agraulis vanillae incarnata (Riley) — Gulf Fritillary. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU

Family DANAIDAE
(Monarchs)
Danaus plexippus (Linnaeus) — Monarch or Milkweed Butterfly. ECOSU, JPF, LR, MSC, MSU, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (5)

Danaus gilippus strigosus Bates — The Queen. ECOSU, LR, OSU, OU, OUBS, PL, SWOSU, (5), (13)

Family SATYRIDAE
(Satyrs and Wood Nymphs)
Lethe portlandia anthedon (Clark) — Pearly Eye. JPF, LR, PL
Cylliposis gemma (Hübner) — Gemmed Satyr. ECOSU, JPF, LR, MSC, ORU, PL, (12)
Megisto cymela (Cramer) — Little Wood Satyr. JPR, LR, MSU, MT, ORU, OU, PL, (9)
Euptychia hermes sosybius (Fabricius) — Carolina Satyr. LR, ORU, OSU, PL, (12)
Euptychia rubricata Edwards — Red Satyr. MT, (3), (9)
Cercyonis pegala texana (Edwards) — Texas Wood Nymph. DH, ECOSU, JPF, LR, MSC, MT, ORU, OSU, OU, OUBS, PL, SWOSU, (5)

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REFERENCES