

Common Butterflies
- of the -
Niobrara Valley Preserve

By Neil Dankert

*Layout and design
by Jonathan Nikkila*



*This field guide is the result of 33 years of butterfly research on the Niobrara Valley Preserve. It is hoped that this field guide will enhance the visitor experience at the Preserve and illustrate the great diversity of the Niobrara River area. **All butterfly specimen photos are life size to aid with identifications.***

Five years after The Nature Conservancy's purchase of the Preserve in 1980, Dr. Harold Nagel (professor Kearney State College) and Neil Dankert (B.S. Biology, Kearney State College) undertook a two year survey to document the occurrence and population status of butterfly species found on the Preserve.

After this survey, annual butterfly counts were begun (held on or around July 4th every year) which Mr. Dankert continued after Dr. Nagel's retirement. 2018 marked the 31st year of counts. This research greatly enhanced knowledge of the butterfly fauna in the area. At the time of the Preserve's purchase Brown County had 49 recorded butterfly species while Keya Paha had 53. Currently these totals are at 85 and 83 species.

Special thanks to the staff, past and present, of the Niobrara Valley Preserve and the Nature Conservancy for considerations afforded us over the past 33 years and to the count participants – too numerous to mention – for their time, efforts and support.

Table of Contents

Page 4...	Large Black/Yellow Butterflies Giant Swallowtail
Page 6...	Large Yellow/Black Butterflies Two Tailed and Eastern Tiger Swallowtail
Page 8...	Large Blue/Black Butterflies (dorsal) Black Swallowtail, Red Spotted Purple
Page 10...	Large Blue/Black Butterflies (ventral) Black Swallowtail, Red Spotted Purple
Page 12...	Large Orange/Black Butterflies Monarch and Viceroy
Page 14...	Large Orange/Black Butterflies Regal, Great Spangled and Edwards' Fritillaries
Page 16...	Large Orange/Black Butterflies Mourning Cloak and Goatweed
Page 18...	Medium Orange/Brown Butterflies Painted Ladies and Red Admiral
Page 20...	Variegated Fritillary, Hackberry, Buckeye
Page 22...	Anglewings Question Mark, Hop Merchant, Comma
Page 24...	Medium to Small Orange/Black Butterflies

Table of Contents

Page 26...	Brown Butterflies Nymphs and Satyrs
Page 28...	Yellow Butterflies
Page 30...	White Butterflies
Page 32...	Coppers and Hairstreaks
Page 34...	Blues and Hairstreaks
Page 36...	Large Black/Brown Skippers
Page 38...	Small Black/Brown Skippers
Page 40...	Small Yellow Skippers
Page 42...	Miscellaneous Skippers
Page 44...	Species not pictured / Hypotheticals

Glossary

Forewing - Top wing

Hindwing - Bottom wing

Dorsal - Top view

Ventral - Bottom view

Margin - Outer portion of the wing

Morph - A color variation of a species

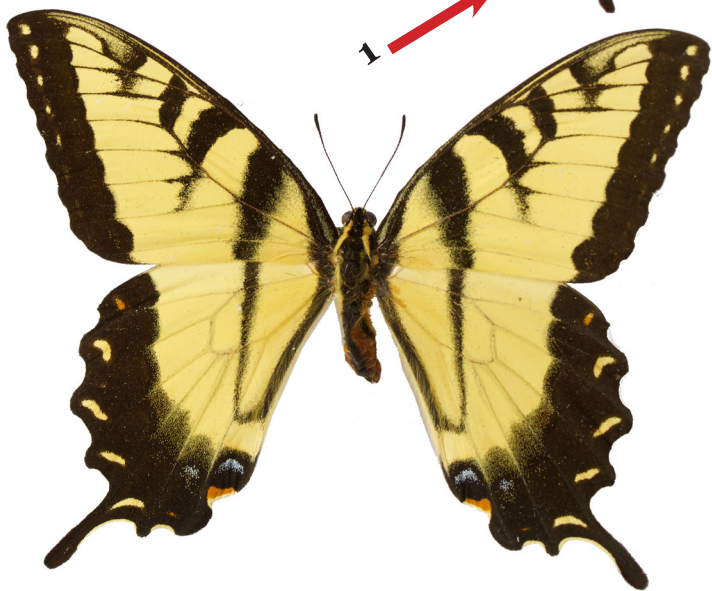
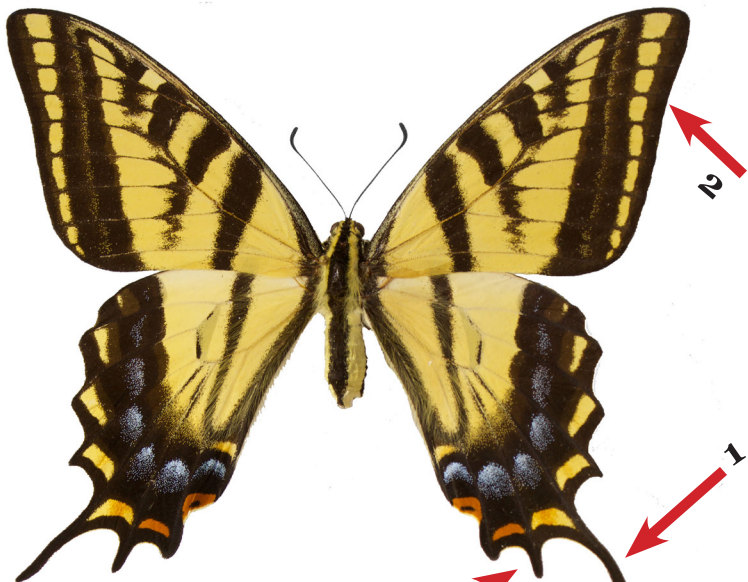
Brood - A single generation of butterflies



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Giant Swallowtail
Herclides cressphontes

Woodland margins, May to Sept, occasional



Two-tailed Swallowtail

Pterourus multicaudata

General distribution, May to Sept,
uncommon

Two tails on hindwing¹, yellow spots on
forewing margins rectangular,² yellow
color may be slightly darker than that of
the Tiger Swallowtail

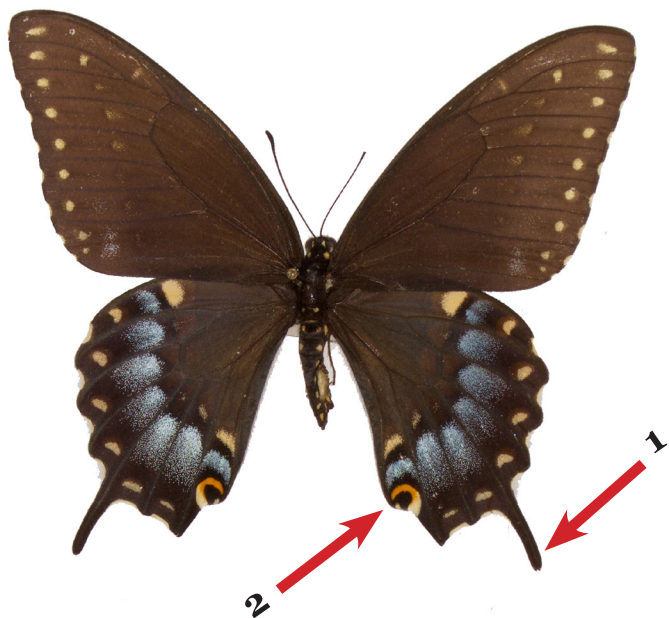
Tiger Swallowtail

Pterourus glaucus

General distribution, May to Sept,
occasional

Similar to Two-tailed Swallowtail (above)

Dark forms of females occasionally
occur resembling black swallowtails
or red-spotted purples (see pages 9 and
11) however the dark morphs are more
common in southern portions of their
range and have not been found on the
Preserve



Black Swallowtail

Papilio polyxenes

Widely distributed, May to Sept, rare on the Preserve

Hindwing with a tail¹ and eyespot², profile slightly more elongated than the Red-spotted Purple (below)

Red-spotted Purple

Limenitis arthemis astyanax

Mostly woodland margins, June to Early July, when they can be common

Occasional sightings in late August/early September



Black Swallowtail

Papilio polyxenes

Widely distributed, May to Sept, rare on the Preserve

Hindwing with a tail and eyespot, profile slightly more elongated than the Red-spotted Purple (below)

Red-spotted Purple

Limenitis arthemis astyanax

Mostly woodland margins, June to Early July, when they can be common

Occasional sightings in late August/early September



Viceroy

Limenitis archippus

Riparian areas - often in association with willows, June to Sept, can be locally common

Similar to Monarch (below) but somewhat smaller with a black band across the hindwing¹

Monarch

Danaus plexippus

Generally distributed, migration peaks in May and Sept, uncommon to abundant

Similar to Viceroy (above)



Regal Fritillary

Speyeria idalia

Prairies/wetlands, mid-June to mid-July,
females to early September, occasional

Great Spangled Fritillary

Speyeria cybele

Prairies, wetlands and woodland margins,
mid-June to late July, common

Fore and hindwings both bright golden orange

Edwards' Fritillary

Speyeria edwardsii

Upland prairies, often on ridgetops, late
May to mid-June, rare

Somewhat paler than Great Spangled Fritillary
(above), also flying earlier



Mourning Cloak

Nymphalis antiopa

Generally distributed, May to Sept, occasional

Uniformly dark with light yellow margin

Mourning Cloak

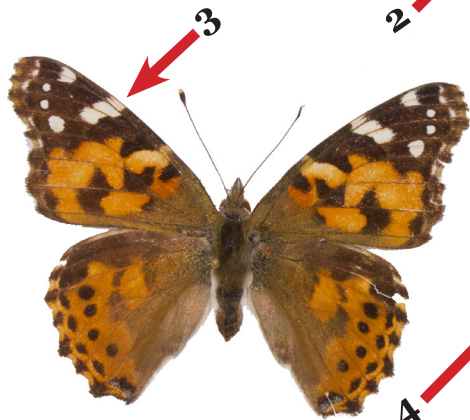
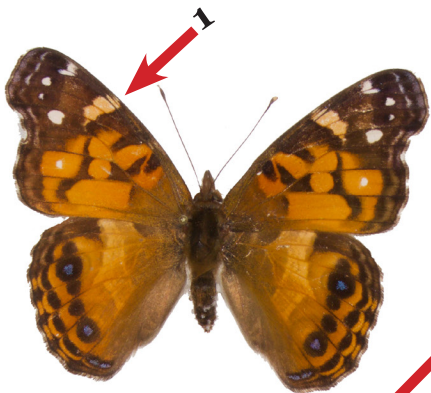
Nymphalis antiopa

Goatweed Butterfly

Anaea andria

Generally distributed, May to Sept, occasional

Orange, hooked wingtip, dead leaf mimic when at rest



American Painted Lady

Vanessa virginiensis

Generally distributed, May to Sept, uncommon

Similar to Painted Lady (below), but bar on forewing pink¹ and two eye spots on the ventral hindwing²

Painted Lady

Vanessa cardui

Generally distributed, May to Sept, occasional to abundant

Similar to American Painted Lady (above), but bar on forewing white³ and four smaller eye spots on the ventral hindwing⁴

Red Admiral

Vanessa atalanta

Generally distributed, May to Sept, occasional to abundant

Easily identified by the red bar on the forewing



Variegated Fritillary

Euptoieta claudia

Generally distributed, May to Sept, can be common

Hackberry Butterfly

Asterocampa celtis

Woodland margins, May to Sept, uncommon to abundant

Buckeye

Junonia coenia

Open areas when not on flowers, May to Sept, uncommon



Question Mark (dorsal,ventral)

Polygonia interrogationis

Generally distributed, May to Sept, occasional

Forewing with black “dash” absent in other *Polygonia* species¹

Silver mark on ventral hindwing curved with “broken” terminus forming a “?”



Hop Merchant (dorsal,ventral)

Polygonia comma

Generally distributed, May to Sept, uncommon

Silver mark on ventral hindwing curved and continuous forming a “,”



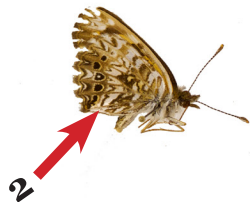
Gray Comma (dorsal,ventral)

Polygonia progne

Generally distributed, May to Sept, rare

Silver mark on ventral hindwing consisting of a straight line angled in the middle





Silver-bordered Fritillary

Boloria selene

Wet meadows and streamsides, May to Sept, rare

Intermediate size, with bright silver markings ventrally

Silvery Checkerspot

Chlosyne nycteis

Woodland margins, often at mud, mid-June to mid-July, occasional

Ventral hindwings with band of larger ovals¹

Gorgone Checkerspot

Chlosyne gorgone

Prairies/roadsides, May to Sept, occasional to common

Ventral hindwings with several white arrowhead shaped markings²



Pearl Crescent (male, female)

Phyciodes tharos

General distribution May to Sept, common to abundant

Ventral hindwings indistinctly marked³



Common Wood Nymph

Cercyonis pegala

Grasslands, common late June to early July, worn individuals into August

Darkest of the nymphs/satyrs

Eyed Brown

Lethe eurydice

Marshes and streamsides, late June to early July, occasional

Lighter in coloration than Common Wood Nymph (above), largely unicolored ventrally with smaller eye spots than Northern Pearly Eye (below)¹

Northern Pearly Eye

Lethe anthedon

Woodland understory/margins, June to July, rare

Adults often perch on tree trunks where they become difficult to find

Two-toned ventrally with larger eyespots than Eyed Brown (above)²

Little Wood Satyr

Megisto cymela

Open woodlands, woodland margins, mid-June to early July, common to abundant

Smaller size, light brown



Alfalfa Butterfly (male, female)

Colias eurytheme

Widely distributed, May to Sept, common

Forewing with orange hue, black margin with yellow spots on females

Clouded Sulphur (male, female)

Colias philodice

Widely distributed, May to Sept, uncommon

Forewing yellow with no orange hue

Yellow spots on black margin indicate females

Dainty Sulphur

Nathalis iole

Open areas, June to frost, numbers vary



Cabbage Butterfly

Pieris rapae

Wide range of habitats, May to Sept, can be common

Nearly completely white with black markings as shown

Checkered White (female, male)

Pontia protodice

Widely distributed, May to Sept, occasional

More heavily marked than Cabbage Butterfly (above), especially females

Olympia Marblewing

Euchloe olympia

Ridgetops/weedy areas, May, uncommon

Hindwing underneath with green marbling

Alfalfa Butterfly (albinic female)

Colias eurytheme

Widespread, May to Sept, common

All albinic *eurytheme* are female and have white spots on the black forewing margins



Dione Copper

Lycaena dione

Weedy/waste areas near Dock species (*Rumex* sp.),
mid-June to early July, uncommon

Bronze Copper

Lycaena hyllus

Marshy areas, multiple broods, May to Sept,
occasional

Coral Hairstreak

Satyrium titus

Various habitats, but often at nectar, mid-June to
mid-July, rare

Acadian Hairstreak (dorsal, ventral)

Satyrium acadicum

Riparian areas, mid-June to mid-July, occasional

Banded Hairstreak (dorsal, ventral)

Satyrium calanus

On or near oaks, mid-June to mid-July,
locally common

Ventral hindwing banding a series of
white edged “dashes”



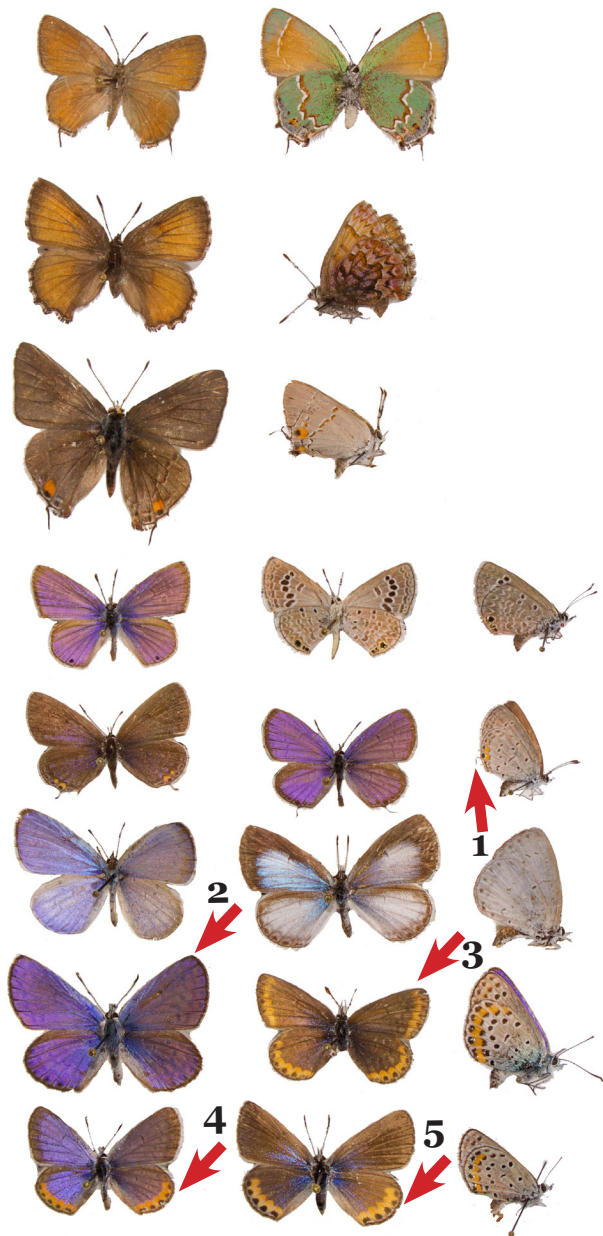
Striped Hairstreak (dorsal, side, ventral)

Satyrium liparops

Generally distributed, mid-June to
mid-July, rare

Ventral hindwing banding bordered by
thin white borders forming “stripes”





Juniper Hairstreak (dorsal, ventral)

Callophrys gryneus siva

On/near cedars, May and July, rare to occasional

Western Pine Elfin

Callophrys eryphon

On/near pines, May, uncommon

Gray Hairstreak

Strymon melinus

General distribution, May to Sept, occasional

Reakirt's Blue (dorsal male, ventral)

Echinargus isola

Southern stray to Sept, uncommon to absent

Eastern Tailed Blue (female, male)

Cupido comyntas

General distribution, May to Sept, can be abundant

Ventral hindwing with small tail adjacent to orange spot¹

Spring Azure (male, female)

Celastrina neglecta

Open wooded areas, June to July, uncommon

Melissa Blue (male, female)

Plebejus melissa

Open meadows, May to Sept, uncommon

Dorsally males blue with no orange margin,² females darker with orange margins on both wings³

Acmon Blue (male, female)

Plebejus lupini

Open meadows, mud, May to Sept, rare

Dorsally both sexes have orange wing margins on hindwing only^{4,5}



Silver Spotted Skipper

Epargyreus clarus

Prairies/woodland margins, May to Sept, can be common

Bold silver spot on ventral hindwing

Northern Cloudywing

Thorybes pylades

Woodland margins, prairies, late May to early June, occasional, ventral hindwings with several discernable darker bands

Slightly more rounded in appearance than *Erynnis* species

Adults fond of nectaring on false gromwell

Juvenal's Duskywing (dorsal, ventral)

Erynnis juvenalis

Oak woodland margins, one flight May to early June, occasional, ventral hindwing with two light spots on leading edge,¹ which may be difficult to see in worn specimens

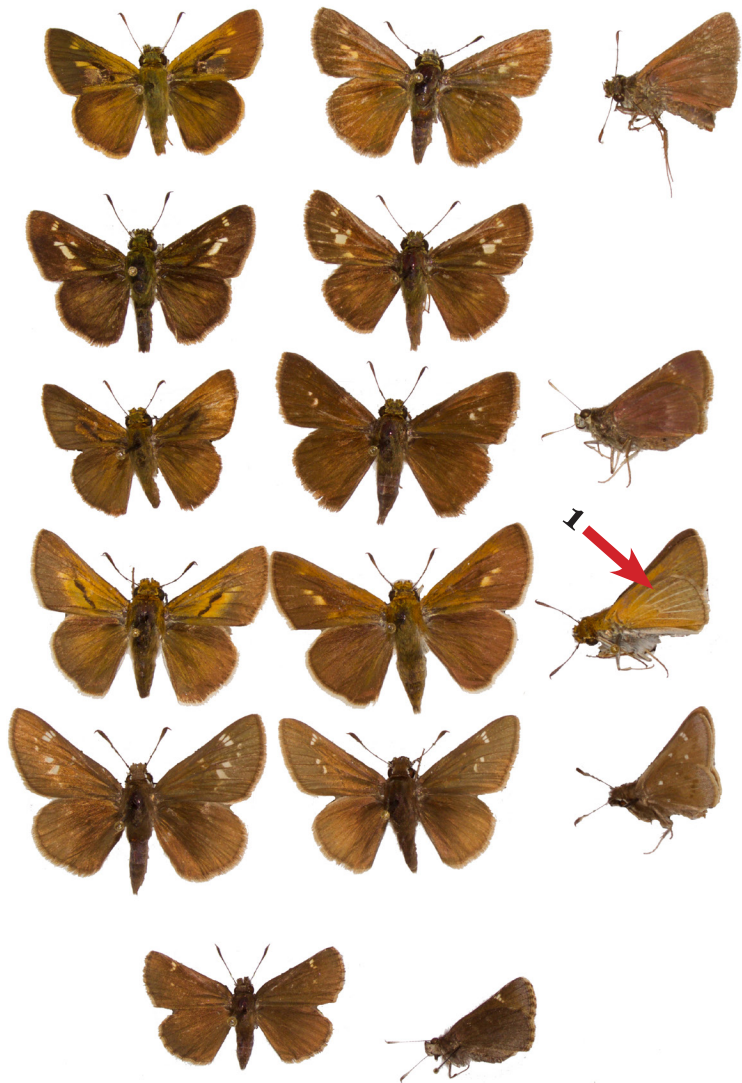
Horace's Duskywing

Erynnis horatius

Oak woodland margins, several flights, May and July, occasional, most common Duskywing on the Preserve

Second flight often frequents smooth sumac flowers

Similar to Juvenal's Duskywing (above) but lacking the ventral hindwing spots and flying in multiple broods



Northern Broken-Dash (male, female)

Wallengrenia egeremet

Lowland woodland margins, seeps, late June to July, occasional to abundant

Flies with and nearly indecipherable from Little Glasswing (below) and Dun Skipper (below) in the field

Little Glassywing (male, female)

Pompeis verna

Habitats and flight period similar to Northern Broken-Dash (above) and Dun Skipper (below), but the least abundant of the three

Dun Skipper (male, female)

Euphyes vestris

Habitats and flight period similar to Northern Broken Dash (above) and Dun Skipper (above), and the most abundant of the three

Two-spotted Skipper (male, female)

Euphyes bimacula

Marshes, wet areas, late June to mid July, uncommon, veins on the ventral hindwings are white¹

Dusted Skipper (male, female)

Atrytonopsis hianna

Prairies, one spring flight, May (rarely to mid-June), occasional

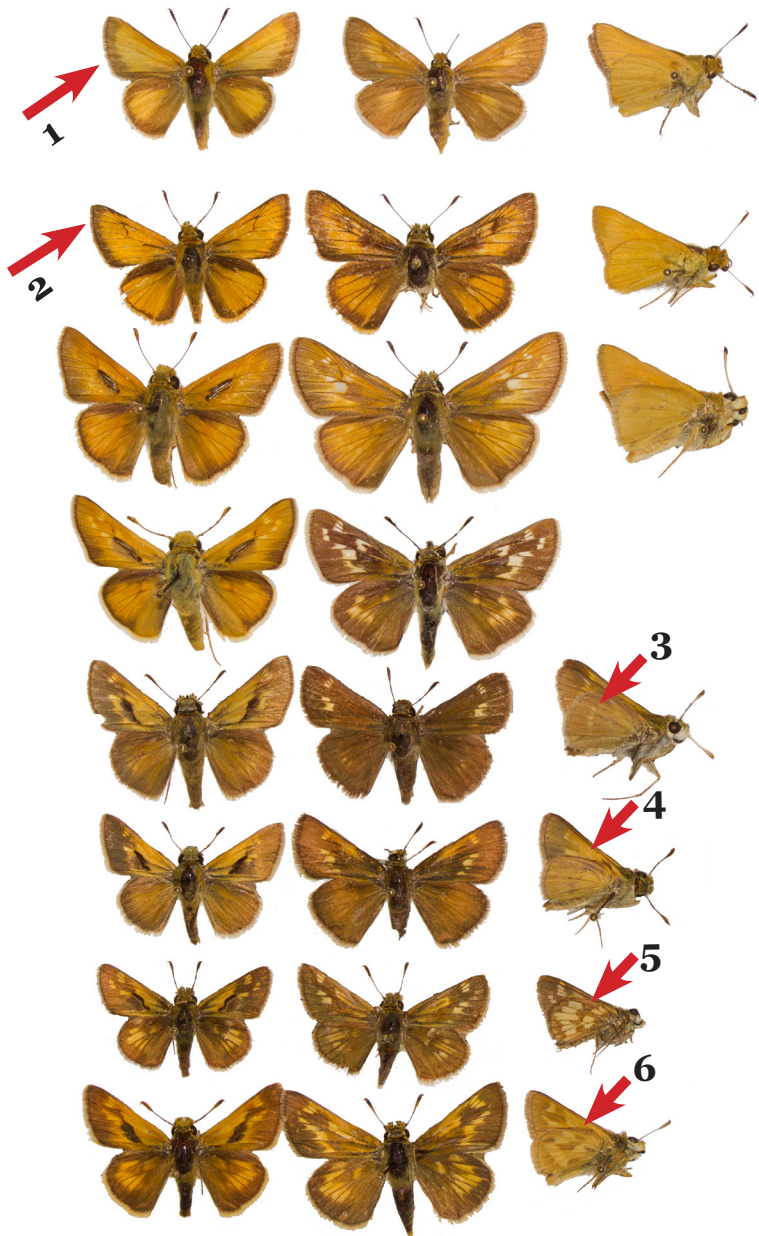
Some light markings dorsally, a dark band on the ventral hindwing, easily separated from similar species by early flight time and habitat

Roadside Skipper

Amblyscirtes vialis

Open areas/roadsides, mainly May to early June, occasional July specimens

Small, black, with white spots near the tip of forewing



Arogos Skipper (male, female)

Anatrytone arogos

Upland prairies, May to August, rare

Dorsally wings with wide poorly defined brown margins¹

Delaware Skipper (male, female)

Atrytone logan

Upland prairies, May to August, can be common

Dorsally wings with narrow black margins,² veins black

Ottoo Skipper (male, female)

Hesperia ottoe

Upland prairies, late June to mid-July, uncommon

Similar to Leonard's Skipper (below) but separated by time

Leonard's Skipper (male, female)

Hesperia leonardus

Upland prairies, mid-August to early Sept, can be abundant

Similar to Ottoo Skipper (above) but separated by time

Crossline Skipper (male, female)

Polites origenes

General distribution, late June to July, uncommon

Hindwing with poorly defined light spot³

Tawny-edged Skipper (male, female)

Polites themistocles

General distribution, May to Sept, can be common

Hindwing with no markings, dirty brown⁴

Peck's Skipper (male, female)

Polites peckius

More common near wetlands, May to Sept, can be abundant

Smaller with well-defined hindwing markings⁵

Long Dash (male, female)

Polites mystic

Marshy riparian areas, late June to early July, common

Hindwing markings present but poorly defined⁶



Common Checkered-Skipper

(female, male)

Pyrgus communis

Open weedy areas, a stray found until frost, can be common

Least Skipper

Ancyloxypha numitor

Adjacent to rivers and streams, occasional, June to Sept, often overlooked due to small size and habit of flying through vegetation

Common Sootywing

Pholisora catullus

Open areas, often roadways, can be abundant at mud

Most common mid-May to early June, additional broods to Sept

**Butterflies found on the
Niobrara Valley Preserve
but not pictured**

- Mottled Duskywing - *Erynnis martialis*
Uncas Skipper - *Hesperia uncas*
Western Branded Skipper - *Hesperia colorado*
Hobomok Skipper - *Poanes hobomok*
Taxiles Skipper - *Poanes taxiles*
Broad-winged Skipper - *Poanes viator*
Osler's Roadside Skipper - *Amblyscirtes oslari*
Strecker's Giant Skipper - *Megathymus streckeri*
Dogface - *Zerene cesonia*
Mexican Sulphur - *Eurema mexicanum*
Little Sulphur - *Eurema lisa*
Snout Butterfly - *Libytheana bachmanii*
Fulvia Checkerspots - *Chlosyne fulvia*
Compton Tortoise Shell - *Nymphalis l-album*
Weidemeyer's Admiral - *Limenitis weidemeyerii*
Inornate Ringlet - *Coenonympha tullia inornata*

**Hypotheticals based on range
but not yet seen on site**

- Hayhurst's Scallopwing - *Staphylus hayhurstii*
Dion Skipper - *Euphyes dion*
Yucca Skipper - *Megathymus coloradensis*
Little Copper - *Lycaena phlaeas*
Ruddy Copper - *Lycaena rubida*
Purplish Copper - *Lycaena helloides*
Aphrodite Fritillary - *Speyeria aphrodite*
Tawny Emperor - *Asterocampa clyton*



Photo by Chris Helzer

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