

A Survey of the Butterflies of the John Day Fossil Beds National Monument

Conducted Summer 2003, and Spring 2004

A report prepared by Sue Anderson
(supersedes report submitted October 2003)



*Lazily flying
Over the flower-decked prairies, West:
Basking in sunshine till daylight is dying,
And resting all night on Asclepias breast;
Joyously dancing,
Merrily prancing,
Chasing his lady-love high in the air,
Fluttering gaily,
Frolicking daily,
Free from anxiety, sorrow, and care!
C.V. Riley*

(From The Butterfly Book by W.J. Holland)



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**Introduction:**

In 2003, the John Day Fossil Beds National Monument undertook an inventory of its faunal resources. Tom Rodhouse did the mammals and birds, Al St. John did the reptile and amphibians, and I was contracted to do a butterfly survey. I often visited all three units on each of the 15 trips that I took, which included the summer of 2003 and the spring of 2004. I sampled more than 39 locations using catch and release with a net and observing with binoculars. My daughter Miriam accompanied me much of the time and staff members and friends also assisted. I photographed many of the butterfly species as well as wildflowers, other wildlife, and scenics. I was also able to view the Monument insect collection.

Synopsis:

Of the 95 species I proposed might be found on the monument, I discovered 55 of them. The ranges of several species were extended, and new county records were submitted. A list of flight periods was started. I've revised the potential list and commented on species not yet found.

Acknowledgements:

I'd like to thank Ken Hyde for cleverly manipulating financial resources, enabling me to join the survey team. Long armed netter Matt Smith and sharp eyed Sarah Herve helped me find species I would have missed on my own. Tom Rodhouse made the initial suggestion that insects should not be left out of any faunal survey, plus Tom and Maureen provided nightly entertainment by catching bats for me to photograph. Mark Berry introduced me to the Pine Creek area and Jen Zahorchak provided comfortable lodgings at the Hancock Field Station. Ranger Jenny at the Painted Hills Unit pointed me in good directions and accompanied me on several forays. Ted Fremd and Scott Foss made the Monument butterfly and moth collection available to me. My daughter Miriam was a wonderful companion, and shares my enthusiasm for wild flying things. My computer wizard son, Reuben, performed feats of magic in the design and engineering of the document; he also did the cover. And I thank Bob Pyle, author of *Butterflies of Cascadia*, for his expertise, for mentoring me all these years, and for his friendship. For last minute help with butterfly identification and potential species issues, I thank Andy Warren from OSU who, with his deep bi-county knowledge of the local species, saved me from some embarrassment. Last but not least, I thank my husband Jim for holding down the fort while I was gone, which was not easy.

- Notes :
1. The photographs (not to scale) were taken by me except where noted.
 2. Common names used are taken from the book, **The Butterflies of Cascadia** by Robert Michael Pyle.
 3. This report replaces one submitted in October, 2003 which was for the summer of 2003 only.



Butterfly Potential List for the John Day Fossil Beds National Monument (subject to revision)

Skippers

- Silver-spotted Skipper
- Persius Duskywing
- Two-banded Checkered Skipper
- Common Checkered Skipper
- Northern White Skipper
- Common Sootywing
- Juba Skipper
- Western Branded Skipper
- Nevada Skipper
- Sandhill Skipper
- Woodland Skipper
- Yuma Skipper
- Roadside Skipper

Swallowtails

- Oregon Swallowtail
- Anise Swallowtail
- Indra Swallowtail
- Western Tiger Swallowtail
- Two-tailed Tiger Swallowtail
- Pale Tiger Swallowtail

Whites

- Becker's White
- Spring White
- Checkered White
- Western White
- Cabbage White
- Large Marble
- Desert Marble
- Sara's Orangetip

Sulphur's

- Clouded Sulphur
- Orange Sulphur
- Queen Alexandra's Sulphur

Coppers

- Edith's Copper
- Ruddy Copper
- Blue Copper
- Purplish Copper
- Lilac Bordered Copper

Hairstreaks & Elfins

- Coral Hairstreak
- Behr's Hairstreak
- Sooty Hairstreak
- California Hairstreak
- Sylvan Hairstreak
- Western Green Hairstreak
- Sheridan's Green Hairstreak
- Thicket Hairstreak
- Cedar Hairstreak
- Moss's Elfin
- Gray Hairstreak

Blues

- Pygmy Blue
- Western Tailed Blue
- Spring Azure
- Square Spotted Blue
- Dotted Blue
- Silvery Blue
- Arrowhead Blue
- Melissa Blue
- Greenish Blue
- Boisduval's Blue
- Shasta Blue
- Acmon Blue
- Lupine Blue

Metalmarks

- Mormon Metalmark

Fritillaries

- Great Spangled Fritillary
- Coronis Fritillary
- Zerene Fritillary
- Callippe Fritillary
- Hydapse Fritillary

Checkerspots & Crescents

- Northern Checkerspot
- Northern Crescent
- Field Crescent
- Barnes Pale Crescent
- Mylitta Crescent
- Edith's Checkerspot

Other Brushfoots

- Satyr Anglewing
- Hoary Comma
- California Tortoiseshell
- Mourning Cloak
- Milbert's Tortoiseshell
- American Lady
- West Coast Lady
- Painted Lady
- Red Admirable
- Common Buckeye
- Lorquin's Admiral
- Viceroy

Wood Nymphs, Ringlets & Alpines

- Ochre Ringlet
- Common Wood Nymph
- Gt. Basin Wood Nymph
- Dark Wood Nymph

Milkweed Butterflies

- Monarch

• = found during survey



MAP



MAP



MAP



MAP



BUTTERFLY SURVEY SITES
JOHN DAY FOSSIL BEDS NATIONAL MONUMENT
GPS LOCATIONS

(Note: All locations are inside, or within 1/2 mi. of NPS boundary, except for Windy Point.)

SITE #	UNIT	LATITUDE	LONGITUDE	COMMENTS
001	PH	44° 38.178'	-120° 17.520'	dry creek wash area, W. boundary
002	PH	44° 38.153'	-120° 16.695'	open dry field south of the cattle guard, W. boundary
003	PH	44° 39.776'	-120° 16.910'	between the road and the reservoir, N. boundary
004	PH	44° 39.246'	-120° 15.104'	picnic area and along Bridge creek
005	CL	44° 55.485'	-120° 25.207'	lower & upper stock ponds & trail between, HFS
006	SR	44° 39.131'	-119° 38.446'	Foree picnic area and trails
007	SR	44° 38.937'	-119° 38.607'	McCarty Spring and along access road
008	SR	44° 35.605'	-119° 37.700'	Blue Basin trails
009	SR	44° 33.303'	-119° 39.210'	Chicory Spring (my name), west of Cant Ranch
010	SR	44° 32.904'	-119° 38.241'	Bathtub Spring (my name), SW of Cant Ranch
011	SR	44° 33.167'	-119° 39.228'	between Bathtub and Chicory Springs
012	SR	44° 30.929'	-119° 39.127'	field just SW of the western entrance sign
013	PH	44° 39.307'	-120° 16.084'	trail to and top of Carroll Rim
014	CL	44° 55.489'	-120° 25.330'	Western slopes above stock ponds at Hancock
015	CL	44° 54.873'	-120° 24.584'	Palisades picnic area and dry wash
016	CL	44° 54.626'	-120° 24.971'	Pine Creek near Ranger Station
017	CL	44° 54.536'	-120° 26.241'	beaver pond area of Pine Creek
018	SR	44° 33.335'	-119° 38.672'	Cant Ranch area
019	SR	44° 34.817'	-119° 38.472'	Deer Gulch drainage
020	SR	44° 38.620'	-119° 38.928'	Milkweed patch along E side of road S of Foree
021	SR	44° 33.732'	-119° 36.009	Windy Point area
022	PH	44° 39.579'	-120° 15.249'	on both sides of the entrance road
023	CL	44° 54.690'	-120° 26.721'	East side of the entrance road to Hancock
024	PH	44° 35.271'	-120° 17.729'	Willow Creek drainage
025	CL	44° 55.064'	-120° 25.281'	Leaf Canyon East of Hancock
026	SR	44° 37.100'	-119° 38.215'	along the John Day River just NE of Cathedral Rock
027	PH	44° 38.150'	-120° 14.680'	spring in SE corner of unit
028	PH	44° 39.140'	-120° 14.940'	along Bridge Creek on the east boundary
029	SR	44° 35.830'	-119° 36.690'	Sue Porter property along Dick Creek
030	SR	44° 36.140	-119° 36.070'	where Dick Creek goes under the highway
031	SR	44° 30.63	-119° 37.47	Rattlesnake Pond, south end of Picture Gorge
032	SR	44° 31.68	-119° 38.09	lower end of Rock Creek
033	CL	44° 55.18	-120° 25.53	Hancock Field Station, in camp
034	CL	44° 54.80	-120° 26.67	Waterfall Canyon and base area
035	PH	44° 38.15	-120° 17.25	1/4 mi. S. of Leaf Beds pullout, both sides of road
036	PH	44° 38.45	-120° 55.55	road to view point and walking trail
037	SR	44° 30.11	-119° 36.43	Mascall overlook
038	SR	44° 37.50	-119° 38.26	Along the John Day near Cathedral Rock
039	CL	44° 55.13	-120° 27.03	Just NW of the boys' cabins at Camp Hancock



Trip 1 Field Notes

May 19, 2003

Painted Hills Unit

Site 004 3:30-4:00; Painted Lady, Ochre Ringlet, Western White (p)

Site 001 4:15-4:45; Ringlet, Cedar Hairstreak (p)

Site 002 5:00; lots of Ochre Ringlets (p)

Site 003 5:30; Ochre Ringlets(p), Cedar Hairstreaks

May 20, 2003

Clarno Unit

Site 005 9-11:30; Ringlets, Queen Alexandra's Sulphur, Barnes Pale Crescent (p), Greenish Blue, Acmon Blue, Melissa Blue

Blooming: Purple Prairie Clover(p), Purple Sage(p), Phlox, Sunflowers, Borage, Mallow(p), Evening Primrose(p), Cleome, Balsam Root, Penstemon, Chenactis, Buckwheat(p), Salsify, White Paintbrush, Yarrow, Blepharipappus, Fiddleneck(p), Lomatium(p), Astragalus, Bitterbrush, Mustards, Brodiaea

Sheep Rock Unit

Site 006 2:15-4:15; Anise Swallowtail, Ringlet. Some sun; blooming: Lupine, Paintbrush(p), Mustard, Penstemon(p), Potentilla (p), Buckwheat(p)

Site 007 4:30-5:30; lots of Ringlets. Overcast, cool breeze; blooming: Mustard, Paintbrush, Phacelia

May 21, 2003

Site 008 9:30-10; went 1/4 mile only; lots of Ringlets

Site 009 10:30-11:30; Anise Swallowtail(p), Ringlets, Silvery Blues(p), Boisduval's Blue(p), Juba Skipper, Red Admirable, Mylitta Crescent, White sp.

Site 010 12:15-12:35; Silvery Blue, Ringlets

Site 011 12:45; lots of Ringlets, Juba Skipper

Site 012 2:00-3:00; Indra Swallowtail, Ringlets, Juba Skipper, Mylitta Crescent, Red Admirable, Anise Swallowtail, Sulphur sp., White sp., Milbert's Tortoiseshell larvae(p) on thistle (p), Brodiaea(p)

(p) = photographed



Trip 2 Field Notes

June 2, 2003

Painted Hills Unit

Arrived Painted Hills 2:10, met Sarah Herve

Site 004 2:20-3:00; Lorquin's Admiral, Western White, Ringlet, Unidentified Tiger Swallowtail in Russian Olive, Milbert's Tortoiseshell, borage sp.(p)

Site 001 3:00-4:00; went to north end and walked the drainage: lots of Cedar Hairstreaks on Buckwheat, Ringlets, Acmon Blue, several Juba Skippers

4:15 Took Sarah back to picnic area, looked for Swallowtail, couldn't find it.

Site 013 4:30-6:00; walked up Carroll Rim: Ringlet on top, 2 worn out Painted Ladies, 1 fresh West Coast Lady, Gopher Snake on trail(p)

Site 001 6:15-7:00 back to photograph hairstreaks, not many still nectaring; Cryptanth blooming(p), penstemon in rock outcropping near cattleguard(p)

June 3, 2003

Clarno Unit

Site 005 9:00-12:00; Acmon Blue, Becker's White, Northern Checkerspot, Queen Alexandra's Sulphur, Cedar Hairstreak, Ringlet, Red Admirable, Barnes Pale Crescent(p), Purple Prairie Clover(p), Linear-leaf Daisy(?)(p)

Site 015 1:30-3:30; Barnes Pale Crescent (p), Becker's White, Acmon Blue, Melissa Blue(p), Ringlet, Juba Skipper, Gray Hairstreak

Site 016 3:30-4:00; Viceroy, Ringlet, Swallowtail sp., Red Admirable, Blue sp., Mourning Cloak, Cedar Hairstreak, Lorquin's Admiral

Site 017 4:00-5:00; Viceroy, Cabbage White, Indra Swallowtail, Western Tiger Swallowtail, Ringlet(p), one of the ladies

June 4, 2003

Sheep Rock Unit

Site 031 10:00; Ringlets, White sp., Swallowtail sp.

Site 032 11:00-11:15; Ringlets, Swallowtail sp.

Site 018 11:30-12:15; Milbert's Tortoiseshell, Common Checkered Skipper, Cabbage White, Swallowtail sp., Sulphur sp., Greenish Blue

(p) = photographed



Site 009 1:00-2:00; Ringlet, Square-spotted Blue(p), Painted Lady, Juba Skipper, Cedar Hairstreak, Red Admirable

Site 019 2:30-4:30; Western White, Northern Checkerspot, Barnes Pale Crescent(p), Acmon Blue, Square Spotted Blue, Lorquin's Admiral, Sara's Orangetip, Ringlet

Site 012 5:30-6:15; Sandhill Skipper (p), Ringlets, Milbert's Tortoiseshell adult and larvae on Nettle(p)

Trip Three Field Notes

June 19, 2003

Painted Hills Unit

Site 004 2:30-5:00; cool, cloudy, windy. Saw Swallowtail sp., Viceroy, CabbageWhite, Becker's White, Great Basin Wood Nymph, Ringlet, Western White(p). Got colder and windier. Ran into Al St. John. Left at 5 pm for Hancock.

Blooming along the way: Chokecherries almost done, Mock Orange, Elderberries, Lupine, and a stunning blue penstemon.

9-11 pm at Hancock-Watched Tom and Maureen net Pallid bats at the upper stock pond. Two groups came up including the Salmon Camp kids. Took pictures.

June 20, 2003

Clarno Unit

Site 025 11:00-3:00; Took Salmon Camp kids on hike up Leaf Canyon, across the top, and down Waterfall Canyon. Cold, windy and cloudy. Found a few Dark Wood Nymphs to start off with (p). Found a nighthawk nesting on top (p). Sun finally came out on the way down. Saw Becker's White, Alexandra Sulfur, more Dark Wood Nymphs, Acmon Blues, Great Basin Wood Nymphs, and Mylitta Crescent. Miriam found an Alligator Lizard (p). Also found a lizard on a dead fallen tree at the entrance to Waterfall Canyon; looks like an Eastern Fence Lizard, but Easterns only get as close as Nevada. Took a picture for Al. Lots of Mariposa Lilies blooming(p).

Site 017 4:00-5:00; Tried the beaver pond for butterflies, but too cool and cloudy. Got a good look at a Yellow Breasted Chat though.

(p) = photographed



June 21, 2003

Sheep Rock Unit

Site 006 Left Hancock at 7:30 am. Got to Foree at 9 AM. Cold, cloudy, and windy. Ate breakfast in the car.

Site 009 10:00-12:00; weather still the same - sun going in and out. Saw two Cabbage Whites, one Becker's White, one Wood Nymph sp.. Chicory in bloom.

Site 018 12:30-3:15; sun still in and out; Saw Orange Sulphur(p), Clouded Sulphur(p), Mylitta Crescent(p), Red Admirable, Cabbage White(p), Becker's White, Lorquin's Admiral, Wood Nymph sp.

Painted Hills Unit

Site 004 4pm; Some sun. Saw a Gray Hairstreak at the picnic area(p).

Trip Four Field Notes

June 30, 2003

Painted Hills Unit

Site 004 4:00-4:45; Windy, sunny, warm, clear. Saw W. White, Cabbage White, Mylitta Crescent, Queen Alexandra Sulphur, Clouded Sulphur, Mourning Cloak, family of Belted Kingfishers, Orange Sulphur. Blooming: Balsam Root, Yarrow mostly done, Mallow still blooming, Buckwheat is done.

Site 002 5:00-6:00; Becker's White(p), Juba Skipper, Red -tailed Hawk carrying snake; lots of knapweed blooming. Cheat grass was horrible.

6 pm-Left and drove to Hancock

July 1, 2003

Clarno Unit

Site 033 9:00-9:30; walked around camp and saw Common Checkered Skipper, Queen Alexandra Sulphur, Western Branded Skipper, Roadside Skipper.

Site 025 9:30-10:45; Queen Alexandra Sulphur, Great Basin Wood Nymph, Dark Wood Nymph, Acmon Blue(p), Western Branded Skipper, Becker's White, baby Nighthawks (p), rattlesnake.

Site 005 11:00-12:00; Western Branded Skipper, both Wood Nymphs, Queen Alexandra Sulphur, Acmon Blue, Killdeer nest, Lark Sparrow singing,

Site 033 12 pm-Walked back to Camp. Saw Gray Hairstreak on Horehound(p) and Cedar Hairstreak. Thick clouds now; left for Sheep Rock at 1 pm.



Sheep Rock Unit

Site 020 2:45; stopped just past Foree. Saw a female Monarch laying her eggs on the milkweed.

Site 018 3:30-4:30; some sun; Cabbage White, Becker's White, Orange Sulphur, Mylitta Crescent, Painted Lady, Mourning Cloak, Red Admirable(p), Lorquin's Admiral, W. White.

5-9 pm-Photographed and catalogued the butterfly collection.

9 pm-1 am-Worked with Tom and Maureen on bats at Rock Creek

July 2, 2003

Site 018 10:45-11:30 (Miriam and I slept in until 9 am. Met Tom and Maureen at Matt's house at 10:30 am. Drove down to Cant Ranch). Saw Mourning Cloak, Mylitta Crescent, W. Tiger Swallowtail, and a Cabbage White.

Site 021 1:00-5:30; tom, Maureen, Al, Miriam and I started off from Windy Point and hiked down through Waterspout canyon and over to the river. Saw Sooty Hairstreak(p), Square Spotted Blue(p), Cedar Hairstreak, Painted Lady, and a Dark Wood Nymph at the top on buckwheat. On the way down saw Western Branded Skipper, Queen Alexandra Sulphur, Hedgehog Cactus (p). Arduous hike down; fell and dropped my camera.

Trip Five Field Notes

July 14, 2003

Painted Hills Unit

Site 022 2:30-3:30; sunny, hot and clear. Stopped along entry road where knapweed was blooming; W. Whites (lots of them), Orange Sulphur, Purplish Copper(p), Western Branded Skipper, Common Wood Nymph, Common Checkered Skipper, Acmon Blue, Gt. Basin Wood Nymph, Painted Lady(p), Queen Alexandra Sulphur

Site 004 3:30-4:30; Mylitta Crescent, Red Admirable, Mourning Cloak, W. White, Becker's White, Gt. Basin Wood Nymph, Cabbage White.

Site 002 4:30-5:00; Roadside Skipper, Western Branded Skipper(p), Gt. Basin Wood Nymph, Dark Wood Nymph (?), Acmon Blue(p), Melissa Blue(p). Little thistles blooming.

Site 003 5:00-5:30; Gt. Basin Wood Nymph, W. White. Killdeer nest and small shorebirds. Left for Hancock. Did bats with Tom and Rene; took pictures of Pallid and Hoary bats.

(p) = photographed



July 15, 2003

Clarno Unit

Site 025 9:30-12:00; Gt. Basin Wood Nymph (No Dark Wood Nymphs), W. White, Queen Alexandra Sulphur, Acmon Blue, Western Branded Skipper.

Site 023 11:30-12:00; Acmon Blue, Gray Hairstreak, Gt. Basin Wood Nymph, Queen Alexandra Sulphur, Cabbage White, Clouded Sulphur.

Site 005 1:00-2:30; Gt. Basin Wood Nymph, Acmon Blue, Western Branded Skipper, W. White, Queen Alexandra Sulphur, Gray Hairstreak.

Site 015 2:30-3:30; Queen A. Sulphur, W. White, Acmon Blue, Gt. B. Wood Nymph.

Site 016 3:30-4:30; Gt. Basin Wood Nymph, Cabbage White, Acmon Blue, Pale Tiger Swallowtail, W. Tiger Swallowtail, Painted Lady

4:30-6:00pm -Cooled off in the John Day River, then drove to Sheep Rock.

July 16, 2003

Sheep Rock Unit

Site 007 10:00-11:00; Common Wood Nymph, Gt. Basin Wood Nymph, Cabbage White, Becker's White, Queen A. Sulphur, W. Tiger Swallowtail, W. Whiptail Lizard (p).

Site 020 11:15 am -Stopped at the Milkweed patch. Saw one female Monarch laying eggs (p), no larvae.

Site 018 12:45-1:30; Queen Alexandra Sulphur(p), Orange Sulphur, Cabbage White, Becker's White, W. White, Two-Tailed Tiger Swallowtail, Gray Hairstreak, Western Branded Skipper, Common Wood Nymph, Gt. Basin Wood Nymph, dragonfly(p). Talked to Scott and Matt about collection.

Site 009 2pm Matt took us up to the two springs across from the Cant Ranch. Chicory: Common Wood Nymph, Cabbage White, racer caught by Miriam (p)

Site 010 3pm; Gt. Basin Wood Nymph, Cabbage White, Red Admirable, Queen Alex. Sulphur

Site 032 4:40-5:00; Cabbage White, Acmon Blue, W. Tiger Swallowtail, Gray Hairstreak(p), Painted Lady, Western Branded Skipper.

Site 012 5:00-6:00; Gt. Basin Wood Nymph(p), Dark Wood Nymph(p), Western Branded Skipper, Juba Skipper, Becker's White, Two Tailed Tiger Swallowtail, Painted Lady, Queen Alexandra Sulphur, Cabbage White, Gray Hairstreak, Acmon Blue, Mylitta Crescent, Callippe Fritillary (p)



Trip Six Field Notes

August 5, 2003

Painted Hills Unit

Site 022 10:00-11:00; Cabbage White, Acmon Blue, Orange Sulphur, Clouded Sulphur, very worn Common Wood Nymph, Melissa Blue, Ringlet, Purplish Copper, Viceroy.

Site 004 11-11:35; Viceroy, Cabbage White, Mylitta Crescent, Common Wood Nymph, Ringlet.

Site 002 11:40-12:00; getting cloudy, cooler; Common Branded Skipper(p), Gray Hairstreak.

Site 024 12:15-1:00; Matchweed blooming, found cattails, grasses, asters, teasel, thistles; Hydaspe Fritillary, Western Branded Skipper, Mylitta Crescent, Common Wood Nymph, Queen Alexandra Sulphur, Gray Hairstreak, Ringlet.

1 -3 pm-Drove to Clarno

Clarno Unit

Site 016 3:00-4:00; Woodland Skipper, Cabbage White, Gt. Basin Wood Nymph, Common Wood Nymph, Monarch, dragonfly(p)

Site 023 4:00-4:30; Gray Hairstreak, Western Branded Skipper.

Site 025 4:30-5:00; Western Branded Skipper, Sulphur sp., Ringlet.

August 6, 2003

Sheep Rock Unit

Site 007 11:00-12:00; Common Wood Nymph, Gt. Basin Wood Nymph, Ringlet, Cabbage White, Sulphur sp.

Site 020 12:15-12:35; Went to the milkweed patch, didn't see any adults, eggs, or larvae. Walked across the road to a alfalfa field, saw: Orange Sulphur, Cabbage White, Gray Hairstreak, Common Checkered Skipper, Ringlet, Clouded Sulphur.

Site 026 12:45-2:15; Cabbage White, Orange Sulphur, Clouded Sulphur, Queen Alex., Sulphur, Gray Hairstreak, Western Branded Skipper, Viceroy, one dead Monarch, Woodland Skipper.

Site 009 2:30-2:45; new Acmon Blue, Western Branded Skipper, Ringlet, Cabbage White, Gopher Snake.

Site 029 3:15-4:45; Gt. Basin Wood Nymph, Cabbage White, Ringlet, Western Branded Skipper, Sulphur sp., Western Fence Lizard(p)

Site 012 5:00-6:00; Acmon Blue(p), Gray Hairstreak, Gt. Basin Wood Nymph, Sandhill Skipper (they're back!), Cabbage White, Anise Swallowtail, Melissa Blue, Western Branded Skipper, Monarch, Sulphur sp., Mylitta Crescent(p)

(p) = photographed



Trip Seven Field Notes

August 27, 2003

Clarno Unit

Site 017 2:30-3:30; Praying Mantis (p), Woodland Skipper, Viceroy, Cabbage White, Gt. Basin Wood Nymph, Ringlet, Mylitta Crescent, Western Branded Skipper. Met Mark Berry and discussed Mormon Metalmarks.

Site 016 3:30-4:00; Cabbage White, Woodland Skipper, Ringlet, Mylitta Crescent, tree frog(p)

Site 023 4-4:30; checked the area at the end of the Hancock driveway looking for the Metalmark in the Slenderbush Buckwheat, and the Snow Buckwheat, but saw nothing.

Site 025 5:30-6:00; light was fading, smoke from the fire in Sisters in the air: Common Checkered Skipper (p), Acmon Blue, mating Gray Hairstreaks(p), Ringlet.

9:15 -11:00pm -Went with Tom and Maureen to photograph bats at Pine Creek.

1:15 am-1:45 AM-Tom woke me up-he and Maureen had caught a Spotted Bat! Took photos in Jen's bathroom and kitchen.

August 28, 2003

Painted Hills Unit

Site 027 10:30-1:30; hiked to spring; Woodland Skipper(p), Ringlet.

Site 028 Came back along Bridge Creek, saw: Ringlet, Cabbage White, Juba Skipper, Mylitta Crescent, Purplish Copper, Orange Sulphur, Viceroy.

Site 004 1:30-3:15; Ringlet, Painted Lady, Cabbage White, Common Checkered Skipper(p), Mylitta Crescent, Common Wood Nymph.

Site 024 3:30-5:00; Juba Skippers mating on rabbitbrush(p), asters blooming, Western Branded Skipper, Mylitta Crescent, Acmon Blue, Orange Sulphur, Cabbage White, Common Wood Nymph, Gray Hairstreak, Ringlet. Monkeyflowers blooming in 001 dry wash(p). Drove to Sheep Rock.

(p) = photographed



August 29, 2003

Sheep Rock Unit

Site 026 9:30-11:15; W. White, Cabbage White, Orange Sulphur, Clouded Sulphur, fresh Purplish Copper (p), Gray Hairstreak, Acmon Blue, Mylitta Crescent, Gt. Basin Wood Nymph, Common Wood Nymph, Common Checkered Skipper, Woodland Skippers mating, Western Branded Skipper, Juba Skipper, Ringlet.

Site 009 11:30-12:00; Cabbage White, Ringlet, Gray Hairstreak, Rattlesnake.

Site 018 12:15-1:00; Ringlet, Woodland Skipper, Juba Skipper, Queen Alexandra Sulphur, Cabbage White, Becker's White, Common Checkered Skipper, Fritillary sp., Mylitta Crescent.
1:30 -3:00 pm -Visited Sarah Herve at her place.

Site 012 3:30-4:30; Sandhill Skipper, Juba Skipper, Woodland Skipper, Ringlet, Cabbage White, Acmon Blue, Gray Hairstreak, Mormon Metalmark(p), Mylitta Crescent(p).

Trip Eight Field Notes

September 23, 2003

Painted Hills Unit

Site 004 10:00-11:15; Viceroy, Juba Skipper, Cabbage White, Orange Sulphur, Purplish Copper, Mylitta Crescent, Ringlet. Some thistle still blooming.

Site 002 11:30 -12:00; Ringlet, Juba Skipper, Orange Sulphur, lots of rabbit brush blooming, matchweed still flowering.

Sheep Rock Unit

Site 018 1:30-2:00; with Sarah: Orange Sulphur, Common Checkered Skipper, Cabbage White, Ringlet, Milbert's Tortoiseshell.

Site 026 2:15-3:20; Woodland Skipper, Orange Sulphur, Cabbage White, Juba Skipper. Sarah found a Buckeye(!) in the alfalfa field(p), Western Branded Skipper.

Site 030 3:30-4:15; Juba Skipper, Western Branded Skipper, Orange Sulphur, Cabbage White, Purplish Copper, Gray Hairstreak, Common Checkered Skipper.

Site 012 4:30-5:15; Acmon Blue, Sandhill Skipper(p), Cabbage White, Ringlet, Juba Skipper.

(p) = photographed



Trip Nine Field Notes

March 23, 2004

Painted Hills Unit

Site 004 10:15 - 10:45; cool, breezy, scattered clouds; Cabbage Whites nectaring on dandelions in picnic area.

Site 028 10:45 - 11:30; walked upstream and found fresh Mourning cloak (p), new Mylitta, Milbert's Tortoiseshell, and a blue that escaped me. Meadowlark singing, Killdeer calling; spooked Great Horned Owl in dead trees and watched male Marsh Hawk and pair of Kestrels pursue him; Red-tail flying overhead.

Site 036 11:45 - 12:15; small lomatiums(p) blooming on hillside just past the Ranger's house but nothing nectaring; Prairie Starflower (p) blooming also; Yellow Bells on the other side of the road; walked out to the viewpoint and saw several Cabbage Whites, very windy; Fiddleneck just coming on.

Site 024 12:30 - 1:30; walked down the draw and back and saw several Sara's Orangetips, a Spring White, and one Mourning Cloak.

Site 001 1:45 - 2:15; hiked up and down the dry wash and found Sara's Orangetip only.

Site 003 2:30 - 2:45; drove down to the reservoir - water up to the road but no butterflies.

Site 027 3:00 - 4:30; drove back to the picnic area, parked the car, and hiked up to the spring; (wind howling so decided not to do Carroll Rim); found Sara's Orangetips and Spring Whites where the water was

Trip Ten Field Notes

March 29, 2004

Clarno Unit

Had a quick lunch with Greg, Jen, and Wren and found out that they have seen several species of butterflies for a couple of weeks. Jen remembers the Sara's Orangetip and a large black and orange species as well as a swallowtail there at the house. 65 - 70 degrees.

Site 014 12:30 - 1:15; Saw a Gray Hairstreak first, then a Cedar Hairstreak nectaring on buckwheat (p) just west of the lower stock pond; the Cedar had lighter silvery scaling along the outer margin of the hindwing underside.

Site 005 1:15 - 2:00; walked up the draws to the west and found one Sheridan's Green Hairstreak (p), Sara's Orangetips, and one white I couldn't catch - probably a Spring White; lots of Fiddleneck (p).

Site 014 2:00 - 3:00; along trail to upper stock pond found some more Sara's and a Mourning Cloak.

Site 025 3:30 - 4:15; cloudy, cool and breezy now; found only a Sara's and a crescent sp. I couldn't catch.



Site 033 4:15 - 4:30; Gray Hairstreaks in camp near the cabins.

Site 016 4:30 - 5:00; Mourning Cloak (p), Mylitta, Sara's, and an Oregon or Anise Swallowtail I couldn't get but looked very yellow on the wing.

Trip Eleven Field Notes

April 8, 2004

Painted Hills Unit

Site 004 12:45 - 1:15; Jenny, Sarah, and Maggie (artist) there at Painted Hills when I arrived; Mylitta, Sara's, Mourning Cloak, Cabbage White, and Spring Whites in picnic area.

Site 028 1:15 - 2:00; walked upstream for awhile and found one sulphur sp. we couldn't catch and a few more Spring Whites.

Site 013 2:15 - 4:00; walked up the Carroll Rim trail - lots of little flowers blooming : Ray-less Daisy (or Chaenactis?) (p), tiny 5-petal purple flower (p), two species of tiny white flowers with multiple florets (p), a few Prairie Starflowers still blooming, and Fiddleneck; saw Sara's and Spring Whites on the way up; many Anise Swallowtails hilltopping and one Gray Hairstreak; Larkspur blooming on the scree slopes including one albino (p); two Painted Ladies on top; pretty breezy but warm.

Site 024 4:00 - 4:30; Sarah and Maggie left for Sheep Rock and Jenny and I walked the Willow Creek draw; saw Spring Whites, Mylitta's, and one Painted Lady; Locoweed blooming (p); photographed the Cleome on the hillsides near the Leaf Beds trail on the way back.

April 9, 2004

Sheep Rock Unit

Site 012 12:00 - 12:30: very cool in the morning so got a late start; Matt and Sarah came along to help; Gray Hairstreak, Mylitta Crescent, Spring White (p), Satyr Anglewing, Becker's White (p), Anise Swallowtail (p), Indra Swallowtail, Cabbage White, Mourning Cloak, Sara's Orangetip.

Site 032 12:45 - 1:00; Gray's Hairstreak, Spring White, Sara's Orangetip, Cedar Hairstreak.

Site 018 1:00 - 1:45; Sara and Matt still helping me at the Cant Ranch : Spring White, Cabbage White, Sara's Orangetip (p), Milbert's Tortoiseshell, California Tortoiseshell, Cedar Hairstreak, Mourning Cloak (p), Mylitta Crescent, Common Checkered Skipper, Satyr Anglewing, Painted Lady.

Site 018 2:00 - 3:30; Sarah walked Blue Basin with me ; Anise Swallowtail, Sara's Orangetip, Mylitta Crescent, Spring White, Blue sp.

Site 007 4:00 - 4:30; cool and windy now - one each of Anise Swallowtail, Mourning Cloak, and Spring White.

Site 006 4:30 - 4:45; very windy and about 65 degrees; one Anise Swallowtail only.



April 10, 2004

Clarno Unit

Site 033 10:00 - 11:30; Gray Hairstreak, Acmon Blue, Sheridan's Green Hairstreak (p), Cedar Hairstreak, Spring White.

Site 014 11:30 - 12:30; Cedar Hairstreak, Acmon Blue, Gray Hairstreak, Mylitta Crescent, Becker's White, Mourning Cloak, Sara's Orangetip.

Site Upper Pond to Indian Canyon: 12:30 - 3:30 (no GPS) ; Cedar Hairstreak, Acmon Blue, Mylitta Crescent, Gray Hairstreak, Sara's Orangetip, Becker's White, Anise Swallowtail.

Site 015 3:30 - 4:30; Acmon Blue, Sara's Orangetip, Becker's White, Spring White, Painted Lady, Mylitta Crescent (not pale), Gray Hairstreak, Anise Swallowtail, Silvery Blue, Tiger Swallowtail species, Cedar Hairstreak.

Site 016 4:30 - 5:00; Mourning Cloak, Acmon Blue, Becker's White, Spring White, Mylitta Crescent, Gray Hairstreak, Common Checkered Skipper, Sara's Orangetip.

Trip Twelve Field Notes

April 26, 2004

Sheep Rock Unit

Site 009 10:00 - 11:00; hot and sunny; Ringlet, Anise Swallowtail, Cedar Hairstreak, Cabbage White, Sara's Orangetip, Spring White (p), Juba Skipper(p), Milbert's Tortoiseshell larvae on nettle (p), Milbert's Tortoiseshell adult, Desert Marble (p), Mylitta Crescent, Boisduval's Blue, Square Spotted Blue, Acmon Blue.

Site 018 11:30 - 12:30; Mourning Cloak, lilacs in bloom, Anise Swallowtail, Milbert's Tortoiseshell, Red Admirable, Indra Swallowtail. On the trail: Satyr Anglewing, Cedar Hairstreak, Cabbage White, Ringlet, Orange Sulphur, Silvery Blue, Common Checkered Skipper.

Site 037: 12:45 - 1:15; Becker's White (p), photographed cleome, Anise Swallowtail, Cedar Hairstreak, Spring White, Indra Swallowtail, Ringlet, Desert Marble.

Site 012 1:30 - 2:30; Sara's Orangetip, Juba Skipper (fresh), Ringlet, Cabbage White, Acmon Blue (p), dandelions all fluff, Anise Swallowtail, Mourning Cloak.

Site 008 3:00 - 3:25; Ringlet, Sara's Orangetip, Anise Swallowtail, Indra Swallowtail.

Site 006 3:30 - 3:55; Ringlet, Juba Skipper(p).

Site 026 4:00 - 4:50; Lilacs in bloom; California Tortoiseshell, Juba Skipper, Anise Swallowtail (p), Oregon Swallowtail (p), Cabbage White, Red Admiable.

Site 038 5:00 - 5:55; Acmon Blue, Cabbage White, Ringlet, Large Marble, Gray Hairstreak, Mylitta Crescent, Desert Marble, Spring White, Mourning Cloak, Cedar Hairstreak, Common Checkered Skipper.



April 27, 2004

Painted Hills Unit

Site 022 10:00 - 10:45; Mourning Cloak, Cabbage White, Ringlet, Mylitta Crescent, water in the ditch.

Site 004 10:50 - 11:45; Cabbage White, Mylitta Crescent, 5 Mourning Cloaks, Satyr Anglewing on chokecherry, Ringlet, Anise Swallowtail; almost overcast with some breaks. Took some more pictures of cleome, and then left because it was too windy and cold.

Trip Thirteen Field Notes

May 14, 2004

Clarno Unit

Site 039 10:00 - 11:30; Cedar Hairstreak, Barnes Pale Crescent (p), Ringlet, Acmon Blue, Square Spotted Blue, Juba Skipper, Alexandra Sulphur.

Site 033 11:30 - 12:30; Ringlet, Common Checkered Skipper, Acmon Blue, Mourning Cloak larvae (p), Becker's White.

Site 014 1:00 - 3:00; Western White(p), Cedar Hairstreak (p), Ringlet, Northern Checkerspot, Acmon Blue, Square Spotted Blue, Juba Skipper, Milbert's Tortoiseshell, Becker's White, Melissa Blues mating (p), Painted Lady, Boisduval's Blue (p), Mylitta Crescent, Crescent sp..

Site 025 3:30 - 4:45; Ringlet, Northern Checkerspot, Gray Hairstreak, Becker's White (p).

Site 016 5:00 - 5:45; Acmon Blue, Square Spotted Blue, Ringlet.

Trip Fourteen Field Notes

May 20, 2004

Sheep Rock Unit

Site 012 9:00 - 10:15; everything soaking wet; sun in and out; Ringlet, Greenish Blues, Cabbage White, Acmon's mating (p), Milbert's (p), Juba Skipper

Site 009 11:00 - 12:30; sun mostly out; Ringlet, Acmon Blue, Boisduval's Blue, Spring White, Cabbage, Juba, Alex. Sulphur, Mylitta, Sara's, Common Check. Skipper, Cedar Hairstreak

Site 018 12:45 - 1:30; Purplish Copper, Ringlet, Cabbages, two Lorquin's feeding on aphid dew (p), Milbert's, Common Check. Skipper; (rained from 1:30 - 2:00 and I got soaked...)

Site 038 4:30 - 5:30; cloudy with rain showers; Acmon, Melissa, Ringlet, Cabbages, Mylitta.



May 21, 2004

Painted Hills Unit

Site 022 11:30 - 11:45; partly cloudy & cool; Western Whites, Cabbages.

Site 004 12:00 - 12:30; Western Whites, Cabbages, Common Checkered Skipper, Ringlet, Mylitta, Clouded Sulphur.

Site 028 12:30 - 1:00; Western Whites mating (p), Common Check. Skipper, Ringlet, Melissa Blue; Bridge Creek high and muddy.

Site 013 1:15 - 2:30; Western Whites and a few Ringlets; Mallow near beginning of trail (p).

Site 035 2:45 - 3:30; buckwheat blooming on both sides of road; Acmon Blue, Jubas (p), Ringlet, Cedar Hairstreak, Barnes Pale Crescent (p), Greenish Blue, penstamen sp. (p), Cryptanth.

Site 001 3:30 - 4:30; lots of Cedar Hairstreaks on the Cryptanth, Acmon Blue, Juba Skippers; Bullock's Orioles, penstamen sp. (p), Fence lizard (p).

Trip Fifteen Field Notes

June 11, 2004

Painted Hills Unit*

Site 004 10:00 - 10:30; Jenny and additional photographer helped me survey the picnic area - Western Whites, Cabbages, Acmon Blue, Mourning Cloak.

Site 028 10:30 - 11:00; robber fly consuming a damselfly (p), Western Whites (p), Cabbages.

Site 022 11:00 - 11:30; found very bright Purplish Copper nectaring on mustard (p), Western Whites, Cabbages, Alexandra Sulphurs, Becker's Whites; not very warm.

Site 035 12:00 - 2:00; photographed Prickly Pear Cactus along the road near the base of Carroll Rim (past the viewpoint road); buckwheat still blooming on both sides of road at site 035; lots of Cedar Hairstreaks (p), Acmon Blue, Juba Skippers, Arctiidae sp. moth laying eggs (p), cicada casing on clover head (p); chrysalis on twig ? sp, (p); photographed the mallow and clover together (beautiful!).

* The field notes from this day were lost. However, I was able to reconstruct most of the day from memory and the photos I took. No new species or range extensions were recorded this day.

(p) = photographed



June 12, 2004

Sheep Rock Unit

Site 008 11:00 - 11:50; with Sarah; female Northern Checkerspot (p), moth caterpillar (p), Becker's White, Northern White Skipper, Alexandra Sulphur, Cabbage White, Western White, Mourning Cloak.

Site 018 12:00 - 12:55; Ringlet, Cabbage White, Monarch, Tiger Swallowtail species, Viceroy.

Site 009 1:00 - 2:45; Acmon Blue, Northern Checkerspot (p), Ringlet, Boisduval's Blue, Monarch, Cedar Hairstreak, Northern White Skipper

Site 039 2:45 - 4:00; mostly cloudy; Cabbage White, Monarchs (p), Tiger Swallowtail species, Acmon Blue, Ringlet, Viceroy (p).

Site 012 4:30 - 4:40; ten minutes of sun; Ringlet, Cabbage White, Acmon Blue(p), Sandhill Skippers.

**Additional sightings by Park Rangers :**

9/29/03

Hi Sue,

I had the great pleasure of meeting your husband Jim this morning. What a nice man! Any way, I sent with him, a butterfly I collected at the Clarno but was unable to identify. I know it's pretty beat up but I thought you might still be able to figure out who it is. I still feel bad that it died after I netted it. I tried to keep it alive but, it wasn't to be. I found that one nectaring on some buckwheat just off the side of the arch trail. Let me know what you think. The rest of the day was fairly exciting though I didn't see a lot of things flying. I picked up 1 mylitta crescent (*Phyciodes mylitta*) at the top of the arch trail, the specimen I passed along with Jim and 1 woodland skipper (*Ochlodes sylvanoides*) off trail closer to the road. Nobody was flying around the picnic area. Along the river, behind John Langes office, I saw a lot of activity surrounding the mint, which was still in bloom. There I saw 1 gray hairstreak (*Strymon melinus*), 3 orange sulphurs (*Colias eurytheme*), 2 purplish coppers (*Lycaena helloides*) (I was very excited to see these), 3 woodland skippers, and several cabbage whites (*Pieris rapae*). I also saw but was unable to catch a different looking white, that looked to be completely white, no spots, but who knows. At Hancock between 2 and 3 PM I saw 2 more purplish coppers hanging around a damp spot near the first dried up pond, I saw several ringlets in this area and woodland skippers at both ponds. Only ringlets were seen inside the camp. At the cat tail pull out west of Hancock, I saw 1 lonely cabbage white. I spent the whole day out there and it was well into the 90's, I would have liked to stay out when things began to cool off, especially along the river, but I had to get back to the Cant Ranch. I think the buckwheats around the arch trail have a lot of potential; next year I will know where to look. Totals : 4 Purplish Coppers, 1 Gray Hairstreak, 6 Woodland Skippers, 1 Mylitta Crescent, 3 Orange Sulphurs, Cabbage Whites, Ringlets, 1 unknown

Sarah.

10/02/03

Hello again -

I am so glad you wrote me right back Sarah - I looked at the specimen again and found the antennae in the envelope and decided we had a Mormon Metalmark after all! Now, it looks much smaller than the one I saw earlier but after checking the book, I discovered that it's exactly the 1.25 inches (wingspan) Bob says they usually are. So, either the one I saw in the field was larger than normal or I misjudged its size (probably the latter...)

Sue

10/02/03

Woohoo! I am absolutely thrilled! Thank you for checking and giving me the great news. This morning I found a slightly chilled California Tortoiseshell in the parking lot . I picked it up and moved it to a sunny spot, so I got a really good look. Still no Angle wings though. I'll be looking. Lots of black and reddish-brown caterpillars hanging out in the grass as well. Should I collect any?

Talk to you soon,

Sarah



10/05/03

Sue,

Well, I was worried that it seemed too good to be true when I got your last email, so I went out to the spot where I had placed the tortoiseshell on the off chance it might have died and was still there. I wanted to be sure I had properly identified it since it will add a new one to the list, and guess what? It was still there! I collected it, and yes it is a California. It was in the middle of a parking space so it could have been transported but...I did find it in the park, and a couple of weeks ago my co-worker Lia said she saw one on the flag pole (I had her look at images in the book until she pointed to the California).

Today I was out at the painted hills doing a back country hike and I saw one Mylitta crescent, a few orange sulphurs, possibly a lorquins admiral (it flew away too fast for me to get my binocs on it) and a bunch of cabbage whites. Just thought I should let you know about those too. Pretty quiet out there now. Well, I'm so glad we got another one for the list. I'm still watching.

Talk to you soon,

Sarah

4/15/04

Hi Sue,

I was up at the Mascall overlook today, taking some photographs, and sure enough, even though the air was a little chilled, I saw some butterflies hilltopping. I saw at least 2 spring whites, one other white that I was unable to get close to, and a swallowtail, probably an anise, not an indra, but fairly good size. Also, there is a lot of mustard and some cleome blooming up there, so we should probably put that spot on the list for a warm day.

Sarah

4/22/04

Hi Sue,

I went out to look for butterflies this morning, the first sunny morning in days. I walked around the Cant house, and down to the river trail. I saw mostly whites, but one swallowtail was seen flying above the alfalfa field, and I saw a very bright and fresh ringlet along the river trail.

Sarah

5/31/04

Hi Sue,

That's great about the binoculars. I can't wait to get them. Yesterday was so busy at the park that I did not get much butterflying done after all. I did see 1 Melissa blue, 3 crescents sp., 1 Becker's, 2 cedar hairstreaks, and at least 6 ringlets. I will go back out today with my net, and no distractions.

Sarah



6/1/04

Hi Sue,

I looked around the visitor center and the Cant ranch yesterday 5/ 31/04 and saw a few good butterflies, even as the wind was picking up. In the parking lot of the TCPC, I saw 1 Indra swallowtail, and 1 Milbert's tortoise shell. At the ranch and the river trail I saw 2 sulphurs sp. 10 ringlets, 3 blues (they wouldn't stay still) 1 purplish copper, 1 dead Lorquins admiral (collected) and 3 whites sp. At the Sheep Rock overlook I saw 1 cedar hairstreak, 2 Beckers whites, and 1 cabbage white.

Sarah

6/12/04

Hi Sue,

Went up the gulch across from the PArk today and didn't find much. Lots of cedar hairstreaks, one painted lady and one mylitta. That's all.

Thanks for a great day yesterday. I learned alot.

Look forward to hearing about the copper!

Ranger Jenny

6/15/04

Hi Sue,

Just thought I should give you a butterfly update. Things have been surprisingly quiet around here despite the nice weather, but I did see a beautiful female monarch hanging around some milk weed just south of the Foree picnic area on Sunday June 13th. Also at that spot I found a small swallowtail which I collected and assumed was an annise. Then yesterday, as I was walking across the parking lot at the visitor center I saw a dying pale swallowtail and an already dead viceroy on the asphalt (sniffle). I collected both and put the swallowtail out of its misery. What a beauty! Full of eggs too. I just hate cars sometimes. Any way, when I was looking today at both of my recently collected swallowtails side by side I decided they are both pales but one is much, much smaller. Is this a common occurrence?

Sarah

8/4/04

Hi Sue,











I thought I would send over some sightings and dates from the last few times I have been out (not as much as I would like). On July 11 2004 at the SRU I saw 7 cabbage whites, 4 Becker's 1 Alexandra sulphur, 2 common wood nymphs, 1 spring white, 2 great basin wood nymphs, 1 mylitta crescent, and 1 acmon blue. On August 3rd 2004 along pine creek at the clarno unit I saw, 2 ringlets, 4 juba Skippers, 4 gray hairstreaks, 1 viceroy, at least 20 cabbage whites, and 1 pale crescent (I think). At the trail area I saw only a sulphur I was unable to catch. At the cat tail pull out I saw only a few cabbage whites flying in the distance. I thought these might be useful for the record. See you tomorrow.

Sarah



	<p>Species Common Checkered Skipper; <i>Pyrgus communis</i> Wingspan < 1.5" Abundance Common Units PH, CL, SR Host Plants mallows</p> <p>Comments rarely sat still</p>		<p>Species Sandhill Skipper; <i>Polites sabuleti</i> Wingspan < 1.2" Abundance Common Units SR Host Plants grasses</p> <p>Comments double brooded at the boundary field</p>
	<p>Species Northern White Skipper; <i>Heliopetes ericetorum</i> Wingspan < 2" Abundance few Units SR Host Plants mallows</p> <p>Comments none other like them; file photo</p>		<p>Species Roadside Skipper; <i>Amblyscirtes vialis</i> Wingspan < 1" Abundance few Units PH, CL Host Plants grasses</p> <p>Comments only saw two individuals at Hancock; file photo</p>
	<p>Species Juba Skipper; <i>Hesperia juba</i> Wingspan < 1.5" Abundance Common Units PH, SR, CL Host Plants bunchgrasses</p> <p>Comments rabbit brush specialists ; file photo</p>		<p>Species Oregon Swallowtail; <i>Papilio oregonius</i> Wingspan < 4" Abundance few Units SR Host Plants tarragon sage Comments lilac lover</p>
	<p>Species Western Branded Skipper; <i>Hesperia colorado</i> Wingspan < 1.25" Abundance abundant Units PH, CL, SR Host Plants grasses</p> <p>Comments also called the Comma Skipper</p>		<p>Species Anise Swallowtail; <i>Papilio zelicaon</i> Wingspan < 3.5" Abundance common Units SR, PH, CL Host Plants wide range of umbelliferous plants Comments hilltopper; photo by Sharon Hrdlicka</p>
	<p>Species Woodland Skipper; <i>Ochlodes sylvanoides</i> Wingspan < 1" Abundance common Units PH, CL, SR Host Plants grasses</p> <p>Comments never found them in the woods</p>		<p>Species Indra Swallowtail; <i>Papilio indra</i> Wingspan < 2.5" Abundance few Units CL, SR Host Plants lomatiums</p> <p>Comments a dark lady; file photo</p>



	<p>Species Western Tiger Swallowtail; <i>Papilio rutulus</i> Wingspan < 3.5" Abundance few Units CL, SR Host Plants broad-leaved trees Comments fewer than I expected along riparian; artwork by Reuben Anderson</p>		<p>Species Western White; <i>Pontia occidentalis</i> Wingspan < 2" Abundance common Units PH, CL, SR Host Plants crucifers Comments plentiful at Painted Hills; file photo</p>
	<p>Species Two-tailed Tiger Swallowtail; <i>Papilio multicaudatus</i> Wingspan < 5" Abundance few Units SR Host Plants chokecherry Comments never actually saw one land</p>		<p>Species Cabbage White; <i>Pieris rapae</i> Wingspan < 2" Abundance abundant Units CL, PH, SR Host Plants crucifers Comments ubiquitous</p>
	<p>Species Pale Tiger Swallowtail; <i>Papilio eurymedon</i> Wingspan < 3" Abundance few Units CL Host Plants Ceanothus Comments probably flitting down from a higher elevation; file photo</p>		<p>Species Large Marble; <i>Euchloe ausonides</i> Wingspan < 1.75" Abundance few Units SR Host Plants crucifers Comments unusual at lower elevation ; file photo</p>
	<p>Species Becker's White; <i>Pontia beckerii</i> Wingspan < 2" Abundance Common Units PH, CL, SR Host Plants mustards Comments gorgeously green underneath</p>		<p>Species Desert Marble; <i>Euchloe lotta</i> Wingspan < 1.5" Abundance common Units SR Host Plants crucifers Comments all over Mascall Point in spring</p>
	<p>Species Spring White; <i>Pontia sisymbrii</i> Wingspan < 1.5" Abundance abundant Units CL, PH, SR Host Plants crucifers Comments ubiquitous</p>		<p>Species Sara's Orangetip; <i>Anthocharis sara</i> Wingspan < 1.5" Abundance common Units SR, CL, PH Host Plants crucifers Comments early flyers; file photo</p>



	<p>Species Clouded Sulphur; <i>Colius philodice</i> Wingspan < 2.5" Abundance common Units PH, CL, SR Host Plants pea family plants Comments often found in alfalfa fields</p>		<p>Species Sheridan's Green Hairstreak; <i>Callophrys sheridanii</i> Wingspan < 1" Abundance few Units CL Host Plants buckwheats Comments found only near the Hancock Field Station in the draws</p>
	<p>Species Orange Sulphur; <i>Colius eurytheme</i> Wingspan < 2" Abundance common Units PH, SR Host Plants pea family plants Comments flying with Clouded's in alfalfa fields</p>		<p>Species Cedar Hairstreak; <i>Mitoura grynea</i> Wingspan < 1.25" Abundance abundant Units PH, CL, SR Host Plants junipers Comments intensely colored in this area</p>
	<p>Species Queen Alexandra's Sulphur; <i>Colius alexandra</i> Wingspan < 2.5" Abundance common Units PH, CL, SR Host Plants milkvetches Comments often showing a little pink like Westerns</p>		<p>Species Gray Hairstreak; <i>Strymon melinus</i> Wingspan < 1.5" Abundance common Units PH, CL, SR Host Plants legumes, roses, mallows, Russian thistle Comments loves to nectar on horehound</p>
	<p>Species Purplish Copper; <i>Lycaena helloides</i> Wingspan < 1.25" Abundance common Units PH, SR Host Plants herbaceous docks and knotweed/smartweeds Comments true to their name</p>		<p>Species Square-spotted Blue; <i>Euphilotes battoides</i> Wingspan < 1" Abundance few Units SR, CL Host Plants buckwheats Comments found on mud</p>
	<p>Species Sooty Hairstreak; <i>Satyrrium fuliginosum</i> Wingspan < 1.25" Abundance few Units SR Host Plants lupine Comments seen only at Windy Point, SR Unit</p>		<p>Species Silvery Blue; <i>Glaucopsyche lygdamus</i> Wingspan < 1.2" Abundance few Units SR, CL Host Plants lupines Comments true to its name</p>



	<p>Species Melissa Blue; <i>Lycaeides melissa</i> Wingspan < 1.25" Abundance few Units PH, CL, SR Host Plants legumes</p> <p>Comments not very abundant</p>		<p>Species Hydapse Fritillary; <i>Speyeria hydapse</i> Wingspan < 2.25" Abundance few Units PH Host Plants violets</p> <p>Comments saw only one at Willow Creek; file photo</p>
	<p>Species Greenish Blue; <i>Plebejus saepiolus</i> Wingspan < 1.25" Abundance few Units CL, SR, PH Host Plants clovers</p> <p>Comments saw only males; file photo</p>		<p>Species Callippe Fritillary; <i>Speyeria callippe</i> Wingspan < 2.5" Abundance few Units SR Host Plants violets</p> <p>Comments just one found at the Boundary field</p>
	<p>Species Boisduval's Blue; <i>Icaricia icarioides</i> Wingspan < 1.5" Abundance few Units SR, CL Host Plants lupines</p> <p>Comments never far from hostplant</p>		<p>Species Northern Checkerspot; <i>Chlosyne palla (sterope)</i> Wingspan < 1.75" Abundance few Units CL, SR Host Plants composites</p> <p>Comments I believe all I saw were palla sterope</p>
	<p>Species Acmon Blue; <i>Icaricia acmon</i> Wingspan < 1.2" Abundance common Units PH, CL, SR Host Plants buckwheats and legumes</p> <p>Comments most often saw them resing, not nectaring</p>		<p>Species Pale Crescent; <i>Phyciodes pallidus</i> Wingspan < 2" Abundance few Units CL, SR Host Plants thistles</p> <p>Comments found at Deer Gulch, SR Unit, and Painted Hills which extends their range considerably</p>
	<p>Species Mormon Metalmark; <i>Apodemia mormo</i> Wingspan < 1.25" Abundance few Units SR, CL Host Plants buckwheats</p> <p>Comments rare in Grant County</p>		<p>Species Mylitta Crescent; <i>Phyciodes mylitta</i> Wingspan < 1.5" Abundance common Units PH, CL, SR Host Plants thistles</p> <p>Comments just about everywhere</p>



	<p>Species Satyr Anglewing; <i>Polygonia satyrus</i> Wingspan < 2.25" Abundance few Units PH, SR Host Plants willows, aspen, alders</p> <p>Comments easily disappears when lands; file photo</p>		<p>Species Painted Lady; <i>Vanessa cardui</i> Wingspan < 3" Abundance few Units PH, CL, SR Host Plants thistles</p> <p>Comments patrolling territory on top of Carroll Rim, PH Unit</p>
	<p>Species California Tortoiseshell; <i>Nymphalis californica</i> Wingspan < 2.5" Abundance few Units SR Host Plants ceonothus</p> <p>Comments undoubtedly wandered in from higher elevation; file photo</p>		<p>Species Red Admirable; <i>Vanessa atalanta</i> Wingspan < 2.5" Abundance few Units PH, CL, SR Host Plants nettles</p> <p>Comments curious; will land on your shoulder</p>
	<p>Species Mourning Cloak; <i>Nymphalis antiopa</i> Wingspan < 3" Abundance few Units PH, CL, SR Host Plants willows and other deciduous trees and shrubs</p> <p>Comments riparian lovers; file photo</p>		<p>Species Common Buckeye; <i>Junonia coenia</i> Wingspan < 2.5" Abundance few Units SR Host Plants plattains, pentstemons, monkeyflowers, paintbrush, veronica</p> <p>Comments saw only one near Cathedral Rock, SR Unit</p>
	<p>Species Milbert's Tortoiseshell; <i>Nymphalis milberti</i> Wingspan < 2" Abundance few Units PH, SR, CL Host Plants nettle</p> <p>Comments never far from water</p>		<p>Species Lorquin's Admiral; <i>Limnitis lorquini</i> Wingspan < 3" Abundance few Units PH, SR Host Plants willows, other deciduous trees and shrub</p> <p>Comments riparian resident</p>
	<p>Species West Coast Lady; <i>Vanessa annabella</i> Wingspan < 2" Abundance few Units PH Host Plants mallows and nettle</p> <p>Comments found just one hilltopping at Painted Hills; file photo</p>		<p>Species Viceroy; <i>Limnitis archippus</i> Wingspan < 3.25" Abundance few Units PH, CL, SR Host Plants willows, apples, cherries, and poplars</p> <p>Comments always near water</p>



Species Ochre Ringlet;
Coenonympha tullia
Wingspan < 1.5"
Abundance abundant
Units PH, CL, SR
Host Plants grasses

Comments always in view
at knee level



Species Monarch;
Danaus plexipus
Wingspan < 3"
Abundance few
Units CL, SR
Host Plants milkweed

Comments 2004 a good
year



Species Common Wood
Nymph; *Cercyonis pegala*
Wingspan < 2"
Abundance common
Units PH, CL, SR
Host Plants grasses

Comments sap-suckers at
the Cant Ranch, SR Unit



Species Great Basin Wood
Nymph; *Cercyonis sthenela*
Wingspan < 2"
Abundance common
Units PH, CL, SR
Host Plants grasses

Comments loved the thistle
at Hancock, CL Unit



Species Dark Wood Nymph;
Cercyonis oetus
Wingspan < 1.75"
Abundance few
Units CL, SR
Host Plants grasses

Comments nearly impos-
sible to see on a dark trunk



Survey Highlights and Other Notes

1. Range extensions and county records.

From: warrena@science.oregonstate.edu
Hi Sue,

All your butterflies are correctly determined- there is a shadow of a doubt about your smaller of the two *Phyciodes* (a male), that one could be *mylitta*. But your larger ***Phyciodes*** is clearly a female ***pallida***. And your dates are perfect for *pallida*. That is a new Grant Co. record... Someone beat you to the Grant Co. record on *mormo* (don't have the details here)- Ray has it recorded from Grant Co. The ***coenia*** is also new for Grant Co.-they had a great year this year! It is also needed from Wheeler Co., and would be a state record in WA state. They don't make it so far north every year...

Cheers,
Andy

Phyciodes pallida (Pale Crescent) was also found at the Painted Hills which suggests a much larger southern extension than previously known.

I found one specimen of ***Euchloe lotta*** (Desert Marble) in the Monument collection which established a Grant county record. However, I subsequently found them flying at Mascall Overlook, Chicory Spring, and Cathedral Rock which implies continuity between the north Central Oregon population and the SE Oregon group.

My discovery of ***Callophrys sheridanii*** (Sheridan's Green Hairstreak) at the Hancock Field Station will, I believe, help build the bridge between the north Central and SE Oregon populations.

The current range map for ***Limenitis archippus*** (Viceroy) could be redrawn to include more of Wheeler and Grant County as I found them along Bridge Creek and the John Day.

2. Monarchs.

I was disappointed not to see more Monarchs on the Monument in 2003. The milkweed was there but very few adults were observed. Matt Smith saw a few larvae at his place. I looked for migrating individuals on the late August and September trips but found none. This seems unusual since the John Day River has been known to be a Monarch migration corridor.

In 2004, however, the resident Monarchs were back. Many larvae and adults were observed at site 026 on the milkweed along the river.

Further research should be done to determine the factors that affect the Monument population. Possible causes could be Spring weather, status of the California overwintering population, a new or widespread larva predator, or not enough observations.



3. Comments about butterflies that were on the potential list but not found. NCR = New County Record if found.

Silver-spotted Skipper (*Epargyreus clarus*); NCR; larvae feed on legumes, wild licorice, black locust trees; possible along the the John Day River in late May or June.

Persius Duskywing (*Erynnis persius*); feeds on lupine, golden banner, buckbean, astragalus, and lotus species; will hilltop.

Two-banded Checkered Skipper (*Pyrgus ruralis*); usually in montane habitats above 4,000'; flies late April to early June; feeds on rosaceous shrubs such as potentilla and fragaria, also strawberry; adults like to nectar on dandelions. NCR for Wheeler County.

Common Sootywing (*Pholisora catullus*); likes disturbed habitats, roadsides, etc.; feeds on lamb's quarters, goosefoot, pigweed, tumbleweed, and the like; two broods peaking in May and August. Can be confused with the Common Roadside Skipper except the sootywing is darker, has a white head, and does not have checkered fringes.

Nevada Skipper (*Hesperia nevada*); NCR; feeds on western needlegrass; usually found flying on grassy hilltops in June, esp. 4,000' - 6,000'; often flies with Western Green Hairstreak; looks like Juba and Western Branded Skipper except it is brighter and the basal spot nearest the ventral hindwing trailing edge is dramatically offset inwards.

Yuma Skipper (*Ochlodes yuma*); NCR; feeds on phragmites reeds (along the river or in ponds - looks like corn, grows in clumps); now known at the mouth of the Deschutes along the Columbia - could have already worked its way up the John Day River; much larger than the Woodland Skipper; flies in late July and early August.

Checkered White (*Pontia protodice*); not always present; usually in lower, drier areas; feeds on crucifers; difficult to tell from Western White so voucher specimen should be collected. Try sites that have recently been burned.

Margined White (*Pieris marginalis*); removed from list because of habitat constraints.

Edith's Copper (*Lycaena editha*); purportedly widespread and common although I never found one; perhaps they're more common above 3500'; feeds on rumex.

Ruddy Copper (*Lycaena rubida*); like Edith's Copper, I should have found it least one but this bright flash of orange escaped me; widespread but local and usually uncommon; also feeds on rumex (dock) species; flies mid-May to late August; look along the riverbanks.

Blue Copper (*Lycaena heteronea*); supposedly widespread and common wherever its hostplant, *Eriogonum heracleoides*, (a buckwheat) is found. Same host and habitat as Sheridan's Green Hairstreak so look for them together.

Lilac-bordered Copper (*Lycaena nivalis*); look for in mid to late June; usually higher but they could drift down to lower elevations; feeds on Douglas knotweed; likes dry gravelly areas as well as meadows.

Coral Hairstreak (*Satyrium titus*); NCR for Wheeler County; chiefly associated with chokecherry, its main hostplant; these hairstreaks are loners and uncommon; a likely location would be the canyon along Rock Creek in the Sheep Rock Unit.

Behr's Hairstreak (*Satyrium behrii*); NCR for Wheeler County; a bitterbrush feeder, this hairstreak shouldn't be among the missing. Not always common, but certainly a resident of Grant county.

California Hairstreak (*Satyrium californicum*); another bitterbrush feeder; should be found in both counties in chaparral habitat.

Sylvan Hairstreak (*Satyrium sylvinum*); similar looking to the California Hairstreak but always associated with willows; should be in riparian habitats in both counties.



Western Green Hairstreak (*Callophrys affinis*); NCR for Wheeler county; a long shot, but could be found on sage covered hilltops with *Eriogonum heracleoides* in late May and June; perhaps the higher ridges in the Clarno Unit.

Thicket Hairstreak (*Mitoura spinetorum*); widespread but not very common; feeds on dwarf mistletoe in pine forests but could drift down to the Monument, esp. the Sheep rock Unit. Look for near mud.

Moss' Elfin (*Incisalia mossii*); should be searched for in the early Spring where *Sedum lanceolatum* grows. Small canyons and gullies are favorite locales.

Western Pygmy Blue (*Brephidium exile*); rare stray at low elevations but feeds on saltbrush, pigweed, and russian thistle in late summer so I would bet it will be found first at the Painted Hills Unit.

Western Tailed Blue (*Everes amyntula*); found at higher elevations near the Sheep Rock Unit, it could show up at seeps such as Chicory Spring (my name) above the visitor center.

Spring Azure (*Celestrina echo*); a flowering shrub feeder, I think azures could be in the Rock Creek Canyon area in early spring.

Dotted Blue (*Euphilotes columbiae*); NCR for Grant county; should be looked for in mid-May on bluffs where *Eriogonum compositum* grows; voucher specimens needed to distinguish from Square-spotted Blue.

Arrowhead Blue (*Glaucopsyche piasus*); widespread but not very common; should be found (sometimes only in singles) where lupines grow.

Shasta Blue (*Icaricia shasta*); could show up on higher windblown ridges; hosts are pea family plants. May breed as low as 3000'.

Lupine Blue (*Icaricia lupini*); So similar to an Acmon Blue that they are often confused; Lupines emerge in late June when Acmon's are on the wane

between broods; feeds on buckwheat (not lupines!); usually at higher altitudes; voucher specimens should be secured.

Great Spangled (*Speyeria cybele*), **Coronis** (*Speyeria coronis*), and **Zerene** (*Speyeria zerene*) **Fritillaries** could show up on any of the units at any time but are usually associated with higher montane meadows; all feed on violets; sometimes difficult to distinguish so voucher specimens should be taken.

Northern Crescent (*Phyciodes cocyta*); should eventually be found in the Monument where stands of *Aster frondosus* occur along riparian areas.

Field Crescent (*Phyciodes pulchallus*); usually above 3500' but could occur at seeps or moist roadsides at lower elevations; feeds on asters; along Pine Creek near the Clarno Unit would seem a possible locale.

Edith's Checkerspot (*Euphydryas editha*); NCR for Wheeler County; prefers higher ridges and hillsides as well as sage-steppe habitats where paintbrush, its hostplant, is growing; most likely to fly in early May through June.

Hoary Comma (*Polygonia gracilis*); although usually flying at elevations above 3000', wanderers could be found at lower elevations along watercourses. Look for in Sept. and Oct.

American Lady (*Vanessa virginiensis*); NCR for Grant County; more likely to wander into, rather than breed in, the Monument. Hostplants can be Pearly Everlasting, Pussytoes, and some composites, lupines, mallows, and nettles. Look for later in the summer.



Collection Box 1 (top)



Male Monarch (CR)



Western Tiger Swallowtail



Two-tailed Tiger Swallowtail (CR)



Two-tailed Tiger Swallowtail



Two-tailed Tiger Swallowtail (CR)



Female Monarch (CR)



Western Tiger Swallowtail

CR = Cant Ranch



Collection Box 1 (bottom)



Pale Tiger Swallowtail



Indra Swallowtail



Anise Swallowtail



Collection Box 2



Milbert's Tortoiseshell



Lorquin's Admiral (CR)



Lorquin's Admiral (CR)



Lorquin's Admiral (CR)



Milbert's Tortoiseshell



Hydapse Fritillary



Hydapse Fritillary



Hydapse Fritillary



Zerene Fritillary



Egleis Fritillary



Egleis Fritillary



Satyr Anglewing (CR)



Satyr Anglewing (CR)



Mourning Cloak (CR)



California Tortoiseshell



Chalcedon Checkerspot



Dark Wood Nymph



Common Wood Nymph



Common Wood Nymph



Dark Wood Nymph (CR)



Chalcedon Checkerspot

CR = Cant Ranch



Collection Box 3



CR = Cant Ranch



Collection Box 4



Monarch (CR)



Western Tiger Swallowtail (Fossil Beds)



Painted Lady

Lorquin's Admiral (CR)



Anise Swallowtail



Western Tiger Swallowtail



Indra Swallowtail



Pale Tiger Swallowtail

CR = Cant Ranch



Monarch (CR)



Two-tailed Tiger Swallowtail



Painted Lady



Red Admirable



Collection Box 5



Persius Duskywing



Cedar Hairstreak



Cedar Hairstreak



Poplar Moth



Five-spotted Moth



Cossid Moth



Blue Copper



Silvery Blue



Margined White



Riding's Forester (moth)





Collection Box 6



Arctonotus lucidus



Juba Skipper



Common Sootywing (CR)



Common Checkered Skipper



Common Checkered Skipper



Common Sootywing



Sonoran Skipper



Polyphemus Moth



Paonias myopis



Sphinx perelegans



Eyed Sphinx Moth (Smerinthus cersyi)



White-lined Sphinx Moth



Synedra Moth



Ceonothus Silk Moth



Hera's Sheep Moth



Catocala Moth



Synedra Moth



Tiger Moth



Tiger Moth



Cossid Moth

CR = Cant Ranch



Checklist



2003 Photo Captions

D8400.JPG	5/20 005 CL Jen, Mark, & Sue birdwatching, photo by Sharon Hrdlicka	D8429.JPG	5/20 005 CL Buckwheat sp. photo by Sharon Hrdlicka
D8401.JPG	6/4 019 SR Sarah Herve with Pale Crescent	D8431.JPG	5/20 005 CL Desert Evening Primrose, photo by Sharon Hrdlicka
D8402.JPG	6/4 019 SR Sarah Herve with Pale Crescent	D8432.JPG	5/20 005 CL Desert Evening Primrose, photo by Sharon Hrdlicka
D8403.JPG	6/20 025 CL Hancock Camper with scorpion	D8433.JPG	5/20 005 CL Desert Evening Primrose, photo by Sharon Hrdlicka
D8404.JPG	6/20 025 CL Hancock Camper with sulphur	D8434.JPG	5/20 005 CL Purple Sage, from above Hancock Field Station, photo by Sharon Hrdlicka
D8405.JPG	6/20 025 CL Hancock Campers above Leaf Canyon	D8435.JPG	5/20 005 CL Purple Sage, butterflies, from above Hancock Field Station, photo by Sharon Hrdlicka
D8406.JPG	6/20 025 CL Hancock Campers above Leaf Canyon	D8436.JPG	5/20 006 SR Pentstemon sp., photo by Sharon Hrdlicka
D8407.JPG	6/20 025 CL Hancock Camper above Palisades	D8437.JPG	5/20 006 SR Indian Paintbrush, photo by Sharon Hrdlicka
D8408.JPG	6/20 034 CL Hancock Camp leader with butterfly	D8438.JPG	5/20 006 SR Indian Paintbrush, Photo by Sharon Hrdlicka
D8409.JPG	6/20 034 CL Hancock Campers with Alligator lizard	D8439.JPG	5/20 006 SR Potentilla, photo by Sharon Hrdlicka
D8410.JPG	6/20 034 CL Hancock Campers with Alligator lizard	D8441.JPG	5/20 006 SR Buckwheat sp., photo by Sharon Hrdlicka
D8411.JPG	6/20 034 CL Hancock Camper with Alligator lizard	D8442.JPG	5/20 006 SR Indian Paintbrush, photo by Sharon Hrdlicka
D8412.JPG	6/20 034 CL Hancock Camper with Alligator lizard	D8443.JPG	5/20 007 SR Butter & Eggs, photo by Sharon Hrdlicka
D8413.JPG	6/20 034 CL Hancock Camper w/ Alexandra sulphur butterfly	D8444.JPG	5/20 007 SR Indian Paintbrush, photo by Sharon Hrdlicka
D8414.JPG	7/2 021 SR Maureen, Al, & Tom near Windy Point	D8445.JPG	5/20 007 SR Indian Paintbrush, photo by Sharon Hrdlicka
D8415.JPG	7/2 021 SR Tom Rodhouse looking for falcons	D8446.JPG	6/2 024 PH Pentstemon sp.
D8416.JPG	7/2 021 SR Miriam Anderson looking for butterflies	D8447.JPG	6/2 024 PH Pentstemon sp. closeup
D8417.JPG	7/16 009 SR Miriam Anderson with racer	D8448.JPG	6/3 005 CL Purple Prairie Clover
D8418.JPG	5/19 001 PH sunflower	D8449.JPG	6/3 005 CL Purple Prairie Clover
D8419.JPG	5/20 005 CL Purple Sage photo by Sharon Hrdlicka	D8451.JPG	6/3 005 CL Purple Prairie Clover with bee
D8420.JPG	5/20 005 CL Purple Sage photo by Sharon Hrdlicka	D8452.JPG	6/3 005 CL Purple Prairie Clover with bee
D8421.JPG	5/20 005 CL Purple Sage photo by Sharon Hrdlicka	D8453.JPG	6/3 005 CL Purple Prairie Clover with bee
D8422.JPG	5/20 005 /CL Globe Mallow, photo by Sharon Hrdlicka	D8454.JPG	6/3 005 CL Purple Prairie Clover
D8423.JPG	5/20 005 CL Globe Mallow photo by Sharon Hrdlicka	D8455.JPG	6/3 005 CL Purple Prairie Clover
D8424.JPG	5/20 005 CL Globe Mallow photo by Sharon Hrdlicka	D8456.JPG	6/3 005 CL Linear-leaf Daisy?
D8425.JPG	5/20 005 CL Fiddleneck photo by Sharon Hrdlicka	D8457.JPG	6/3 005 CL Linear-leaf Daisy?
D8426.JPG	5/20 005 CL Purple Sage photo by Sharon Hrdlicka	D8458.JPG	6/3 005 CL Linear-leaf Daisy?
D8427.JPG	5/20 005 CL False Dandelion? photo by Sharon Hrdlicka	D8459.JPG	6/20 034 CL Mariposa Lily with bee
D8428.JPG	5/20 005 CL buckwheat sp. photo by Sharon Hrdlicka	D8460.JPG	6/20 034 CL Mariposa Lily
		D8461.JPG	8/28 001 PH Monkeyflower
		D8462.JPG	8/28 001 PH Monkeyflower
		D8463.JPG	8/28 001 PH Monkeyflower
		D8465.JPG	5/20 016 CL Teasel, photo by Sharon Hrdlicka
		D8467.JPG	5/21 009 SR Phlox, photo by Sharon Hrdlicka



2003 Photo Captions

D8468.JPG	5/21 012 SR thistle, photo by Sharon Hrdlicka	D8511.JPG	8/28 018 SR Sheep Rock from Cant Ranch
D8469.JPG	5/21 012 SR Brodiaea, photo by Sharon Hrdlicka	D8512.JPG	8/28 018 SR Sheep Rock from Cant Ranch
D8470.JPG	5/21 012 SR Brodiaea, photo by Sharon Hrdlicka	D8513.JPG	8/28 018 SR Sheep Rock from Cant Ranch
D8471.JPG	5/21 012 SR Brodiaea, photo by Sharon Hrdlicka	D8514.JPG	6/4 018 SR Redwing Blackbird nest
D8472.JPG	6/2 004 PH Borage sp. next to Bridge Creek	D8515.JPG	6/4 018 SR Redwing Blackbird nest
D8473.JPG	6/2 004 PH Borage sp. next to Bridge Creek	D8516.JPG	6/20 017 CL pair of Redwing Blackbirds
D8474.JPG	5/21 005 CL Lomatium	D8517.JPG	6/20 025 CL Nighthawk nest
D8475.JPG	6/2 001 PH Cryptanth	D8518.JPG	6/20 025 CL Nighthawk nest
D8476.JPG	7/2 021 SR Hedgehog Cactus	D8519.JPG	6/20 025 CL female Nighthawk near nest
D8477.JPG	7/2 021 SR Hedgehog Cactus	D8520.JPG	7/1 025 CL Nighthawk chicks in nest
D8478.JPG	7/2 021 SR Hedgehog Cactus	D8521.JPG	7/1 025 CL female Nighthawk near nest
D8479.JPG	5/19 002 PH Painted Hills Scenic, photo by Sharon Hrdlicka	D8522.JPG	7/1 014 CL Killdeer nest
D8480.JPG	6/2 001 PH Painted Hills Scenic	D8523.JPG	6/20 034 CL Alligator lizard
D8481.JPG	6/2 001 PH Painted Hills Scenic	D8524.JPG	6/20 034 CL Alligator lizard
D8482.JPG	8/5 PH Painted Hills Scenic	D8525.JPG	6/20 034 CL Alligator lizard
D8483.JPG	6/2 013 PH Painted Hills Scenic	D8526.JPG	8/6 029 SR Western Fence lizard
D8484.JPG	6/2 013 PH Painted Hills Scenic	D8527.JPG	7/16 007 SR Western Whiptail lizard
D8486.JPG	6/2 013 PH Painted Hills Scenic	D8528.JPG	6/20 034 CL Western Fence lizard
D8487.JPG	6/2 013 PH Painted Hills Scenic	D8529.JPG	7/1 025 CL young rattlesnake
D8489.JPG	6/2 013 PH Painted Hills Scenic	D8530.JPG	7/1 025 CL young rattlesnake
D8490.JPG	6/2 013 PH Painted Hills Scenic	D8531.JPG	7/1 025 CL young rattlesnake
D8491.JPG	6/2 013 PH Painted Hills Scenic	D8532.JPG	6/2 013 PH Gopher Snake
D8492.JPG	6/2 Painted Hills Scenic	D8533.JPG	6/2 013 PH Gopher Snake on Carroll Rim Trail
D8493.JPG	6/2 Painted Hills Scenic	D8534.JPG	8/27 016 CL Tree Frog near Pine Creek
D8494.JPG	6/2 Painted Hills Scenic	D8535.JPG	7/16 018 SR Dragonfly at Cant Ranch
D8495.JPG	8/5 016 CL Palisades from Pine Creek	D8536.JPG	8/29 026 SR Dragonfly eating fly
D8496.JPG	8/5 016 CL Palisades from Pine Creek	D8538.JPG	8/5 016 CL Dragonfly at Pine Creek
D8497.JPG	5/20 025 CL old fencepost near Hancock F.S., photo by Sharon Hrdlicka	D8539.JPG	8/5 016 CL Dragonfly near Pine Creek
D8498.JPG	5/20 006 SR Old tree at Foree, photo by Sharon Hrdlicka	D8540.JPG	8/29 026 SR Beetles mating
D8499.JPG	5/21 026 SR Cathedral Rock, photo by Sharon Hrdlicka	D8541.JPG	8/27 017CL Praying Mantis
D8500.JPG	5/21 026 SR Cathedral Rock photo by Sharon Hrdlicka	D8542.JPG	8/27 017 CL Praying Mantis
D8501.JPG	5/21 006 SR tree near Foree	D8543.JPG	8/27 017 CL Praying Mantis
D8502.JPG	8/6 018 SR Sheep Rock near Cant Ranch	D8544.JPG	6/3 014 CL Miner Bee 'chimney'
D8503.JPG	8/6 018 SR Sheep Rock near Cant Ranch	D8545.JPG	6/3 014 CL Miner Bee entering 'chimney'
D8504.JPG	7/16 John Day River just south of Kimberly	D8547.JPG	7/2 021 SR Grasshoppers mating
D8505.JPG	7/16 John Day River just south of Kimberly	D8548.JPG	7/16 012 SR Grasshopper
D8506.JPG	7/16 John Day River just south of Kimberly	D8549.JPG	6/2 013 PH spider along Carroll Rim Trail
D8507.JPG	8/6 018 SR Sheep Rock near Cant Ranch	D8550.JPG	7/16 SR Sphinx Moth
D8508.JPG	8/28 018 SR Sheep Rock from Cant Ranch	D8551.JPG	5/21 009 SR Male Juba Skipper
D8509.JPG	8/28 018 SR Sheep Rock from Cant Ranch	D8555.JPG	7/14 002 PH Western Branded Skipper
D8510.JPG	8/28 018 SR Sheep Rock from Cant Ranch	D8556.JPG	8/27 025 CL Common Checkered Skipper
		D8557.JPG	8/29 004 Common Checkered Skipper
		D8558.JPG	8/5 002 PH Western Branded Skipper
		D8559.JPG	8/28 024 PH Western Branded Skippers mating
		D8560.JPG	9/23 012 SR Juba Skipper



2003 Photo Captions

D8561.JPG	7/14 PH 002 Western Branded Skipper	D8605.JPG	7/14 002 PH Acmon Blue
D8562.JPG	6/3 015 CL Juba Skipper	D8606.JPG	7/14 002 PH Acmon Blue
D8563.JPG	8/6 012 SR Sandhill Skipper	D8607.JPG	7/1 025 CL Acmon Blue
D8564.JPG	8/6 012 SR Sandhill Skipper	D8608.JPG	8/29 012 SR Mormon Metalmark
D8565.JPG	8/6 012 SR Sandhill Skipper	D8609.JPG	8/29 012 SR Mormon Metalmark
D8566.JPG	8/28 027 PH Woodland Skipper	D8610.JPG	8/29 012 SR Mormon Metalmark
D8567.JPG	8/28 027 PH Woodland Skipper	D8611.JPG	8/29 012 SR Mormon Metalmark
D8568.JPG	8/29 012 SR Woodland Skippers mating	D8612.JPG	7/16 012 SR Callippe Fritillary
D8569.JPG	5/21 009 SR Anise Swallowtail	D8613.JPG	7/16 012 SR Callippe Fritillary
D8570.JPG	5/21 009 SR Anise Swallowtail	D8614.JPG	6/3 005 CL Northern Checkerspot
D8571.JPG	6/30 002 PH Becker's White	D8615.JPG	5/20 005 CL Barnes Pale Crescent
D8572.JPG	6/3 015 CL Becker's White	D8616.JPG	6/3 005 CL Barnes Pale Crescent
D8573.JPG	6/30 002 PH Becker's White	D8617.JPG	6/3 005 CL Barnes Pale Crescent
D8574.JPG	6/19 004 PH Western White	D8618.JPG	6/3 005 CL Northern Checkerspot
D8575.JPG	6/21 018 SR Cabbage White	D8619.JPG	6/3 005 CL Northern Checkerspot
D8576.JPG	6/21 018 SR Cabbage White	D8620.JPG	6/3 015 CL Barnes Pale Crescent
D8577.JPG	6/21 018 SR Clouded Sulphur	D8621.JPG	6/3 015 CL Barnes Pale Crescent
D8578.JPG	6/21 018 SR Clouded Sulphur	D8625.JPG	6/4 019 SR Barnes Pale Crescent
D8579.JPG	6/21 018 SR Orange Sulphur	D8626.JPG	6/21 018 SR Mylitta Crescent
D8580.JPG	7/16 018 SR Quenn Alexandra's Sulphur	D8627.JPG	8/6 012 SR Mylitta Crescent
D8581.JPG	7/16 012 SR Queen Alexandra's Sulphur	D8628.JPG	8/29 012 SR Mylitta Crescent
D8582.JPG	7/14 022 PH Purplish Copper	D8629.JPG	6/4 012 SR Milbert's Tortoiseshell
D8583.JPG	7/14 022 PH Purplish Copper	D8630.JPG	6/4 012 SR Milbert's Tortoiseshell
D8584.JPG	8/29 026 SR Purplish Copper	D8631.JPG	5/21 012 SR Milbert's Tortoiseshell larvae
D8585.JPG	7/2 021 SR Sooty Hairstreak	D8632.JPG	5/21 012 SR Milbert's Tortoiseshell larvae
D8586.JPG	5/19 001 PH Cedar Hairstreak	D8633.JPG	5/21 012 SR Milbert's Tortoiseshell larvae
D8587.JPG	6/2 001 PH Cedar Hairstreak	D8634.JPG	7/14 022 PH Painted Lady
D8588.JPG	6/2 001 PH Cedar Hairstreak	D8635.JPG	7/14 022 PH Painted Lady
D8589.JPG	7/16 032 SR Gray Hairstreak	D8636.JPG	7/1 018 SR Red Admiral
D8590.JPG	7/1 033 CL Gray Hairstreak	D8637.JPG	9/23 026 SR Buckeye, photo by Sarah Herve
D8591.JPG	7/1 033 CL Gray Hairstreak	D8638.JPG	6/2 004 PH Lorquin's Admiral
D8592.JPG	7/1 033 CL Gray Hairstreak	D8639.JPG	6/3 016 CL Viceroy
D8593.JPG	8/27 025 CL Gray Hairstreaks mating	D8640.JPG	8/6 026 SR Viceroy
D8594.JPG	6/21 004 PH Gray Hairstreak	D8641.JPG	8/6 026 SR Viceroy
D8595.JPG	6/4 009 SR Square-spotted Blue	D8642.JPG	6/3 017 CL Ochre Ringlet
D8596.JPG	7/2 021 SR Square-spotted Blue	D8643.JPG	6/4 012 SR Ochre Ringlets mating
D8597.JPG	5/21 009 SR Silvery Blue	D8644.JPG	5/19 003 PH Ochre Ringlet
D8598.JPG	5/21 009 SR Silvery Blue	D8645.JPG	7/16 018 SR Common Wood Nymph
D8599.JPG	7/14 002 PH Melissa Blue	D8646.JPG	7/1 025 CL Gt. Basin Wood Nymph
D8600.JPG	7/14 002 PH Melissa Blue	D8647.JPG	7/1 025 CL Gt. Basin Wood Nymph
D8601.JPG	6/3 015 CL Melissa Blue	D8648.JPG	7/16 012 SR Dark Wood Nymph
D8602.JPG	5/21 009 SR Boisduval's Blue	D8649.JPG	7/16 020 SR Monarch egg on Milkweed
D8603.JPG	7/1 025 CL Acmon Blue		
D8604.JPG	8/6 012 SR Acmon Blue		



2004 Photo Captions

D9450.JPG	5/21 032 SR Rock Creek swollen with rain water	D9496.JPG	5/14 014 CL Globe Mallow
D9451.JPG	5/21 032 SR John Day River swollen with rain	D9497.JPG	5/14 014 CL Globe Mallow
D9452.JPG	5/21 013 PH View from Carroll Rim	D9498.JPG	5/20 026 SR Wild Rose, photo by Sarah Herve
D9453.JPG	5/21 013 PH View from Carroll Rim	D9499.JPG	4/26 037 SR Cleome blooming at Mascall Pt.
D9454.JPG	5/21 013 PH View from Carroll Rim	D9500.JPG	4/26 037 SR Cleome blooming at Mascall Pt.
D9455.JPG	4/8 PH Cleome blooming on side hill	D9501.JPG	4/26 037 SR Cleome blooming at Mascall Pt.
D9456.JPG	4/27 PH Cleome blooming near Carroll rim	D9502.JPG	4/26 037 SR Cleome blooming at Mascall Pt.
D9457.JPG	4/27 PH Cleome blooming near Carroll Rim	D9503.JPG	4/26 037 SR Cleome blooming at Mascall Pt.
D9458.JPG	4/27 PH Cleome blooming near Carroll Rim	D9504.JPG	6/12 018 SR Young badgers at the Cant Ranch
D9459.JPG	5/21 PH Globe Mallow & Carroll Rim	D9505.JPG	6/12 018 SR Young badgers at the Cant Ranch
D9460.JPG	4/8 013 PH Larkspur	D9506.JPG	5/21 001 PH Young Fence lizard
D9461.JPG	4/8 013 PH Larkspur & Painted Hills	D9507.JPG	6/11 035 PH Robberfly consuming damselfly
D9462.JPG	4/8 013 PH Larkspur & Painted Hills	D9508.JPG	6/11 035 PH Cicada shell on clover
D9463.JPG	4/8 013 PH Larkspur	D9509.JPG	6/11 001 PH Arctiidae moth sp. laying eggs
D9464.JPG	4/8 013 PH Larkspur	D9510.JPG	5/14 033 CL Mourning Cloak larvae
D9465.JPG	4/8 013 PH Larkspur	D9511.JPG	5/14 033 CL Mourning Cloak larvae
D9466.JPG	4/8 013 PH Albino Larkspur	D9512.JPG	4/26 009 SR Milbert's Tortoiseshell larvae
D9467.JPG	4/8 013 PH Albino & Nomal Larkspur	D9513.JPG	6/12 008 SR Hemileuca hera (moth) larva
D9468.JPG	3/23 PH Lomatium sp. along main road	D9514.JPG	5/14 014 CL Malacosoma californicum (moth)
D9469.JPG	3/23 PH Prairie Starflower blooming everywhere	D9515.JPG	6/11 035 PH unknown chrysalis
D9470.JPG	4/8 013 PH unknown wildflower, top view	D9516.JPG	4/26 009 SR Juba Skipper
D9471.JPG	4/8 013 PH unknown wildflower, side view	D9517.JPG	4/26 006 SR Juba Skipper
D9472.JPG	4/8 013 PH unknown wildflower, base	D9518.JPG	5/21 035 PH Juba Skipper
D9473.JPG	4/8 013 PH unknown wildflower	D9519.JPG	4/26 026 SR Anise Swallowtail
D9474.JPG	4/8 013 PH unknown wildflower	D9520.JPG	4/26 026 SR Anise Swallowtail
D9475.JPG	4/8 013 PH Ray-less Daisy	D9521.JPG	4/26 026 SR Oregon Swallowtail
D9476.JPG	4/8 013 PH Ray-less Daisy	D9522.JPG	4/26 009 SR Spring White
D9477.JPG	4/8 024 PH Astragalus sp.	D9523.JPG	5/14 014 CL Western White
D9478.JPG	4/8 024 PH Astragalus sp.	D9524.JPG	5/21 004 PH Western White
D9479.JPG	6/11 PH Prickly Pear Cactus in bloom	D9525.JPG	4/26 037 SR Becker's White
D9480.JPG	6/11 PH Prickly Pear Cactus in bloom	D9526.JPG	4/26 037 SR Becker's White
D9481.JPG	6/11 PH Prickly Pear Cactus in bloom	D9527.JPG	5/14 014 CL Western White
D9482.JPG	6/11 PH Globe Mallow & Purple Prairie Clover	D9528.JPG	4/26 009 SR Desert Marble
D9483.JPG	6/11 PH Globe Mallow & Purple Prairie Clover	D9529.JPG	4/26 009 SR Desert Marble
D9484.JPG	6/11 PH Globe Mallow & Purple Prairie Clover	D9530.JPG	6/11 022 PH Purplish Copper, fresh
D9485.JPG	6/11 PH Commercial Pea crop along entrance rd	D9531.JPG	3/29 005 CL Sheridan's Hairstreak
D9486.JPG	5/21 PH 004 Borage sp.	D9532.JPG	3/29 014 CL Cedar Hairstreak
D9487.JPG	5/21 035 PH Penstemon sp.	D9533.JPG	3/29 014 CL Cedar Hairstreak
D9488.JPG	5/21 001 PH Penstemon sp.	D9534.JPG	5/14 014 CL Cedar Hairstreak
D9489.JPG	6/11 022 PH Ranger Jenny capturing a copper	D9535.JPG	5/14 014 CL Cedar Hairstreak
D9490.JPG	3/29 014 CL Lomatium sp.	D9536.JPG	6/11 035 PH Cedar Hairstreak
D9491.JPG	3/29 005 CL Fiddleneck	D9537.JPG	6/11 035 PH Cedar Hairsreaks on buckwheat
D9492.JPG	3/29 005 CL Fiddleneck	D9538.JPG	4/26 012 SR Acmon Blue
D9493.JPG	3/29 005 CL Fiddleneck	D9539.JPG	5/14 014 CL Melissa Blue's mating
D9494.JPG	3/29 005 CL Fiddleneck	D9540.JPG	5/14 014 CL Melissa Blue's mating
D9495.JPG	3/29 005 CL Fiddleneck	D9541.JPG	5/14 014 CL Melissa blue's mating



Conclusion and Recommendations

Not many places can boast of such rich diversity of habitat as the John Day Fossil Beds. Because the plant species are many and varied, so too are the associated insects, especially the butterflies.

Although I discovered a little more than half of the proposed 95 species, I feel certain many others are waiting to be found. Trip length, weather, timing, and the fact that the Monument is spread out over three units, all contributed to keeping some species hidden from view. Also, I continually added more survey sites as I discovered them so that by the end of the survey I had doubled my original locations. Many butterflies have short flight periods specifically associated with their host plants, and I know I missed many of these peak periods. In spite of these handicaps, three new county records were established and known ranges of several species were extended significantly.

Since butterflies are sensitive indicators of environmental health, it would be prudent for the Monument to continue this inventory until it is more complete, then monitor populations in the future; monitoring can be done every summer by trained staff members where verification can be secured by high quality photographs or collected specimens.

There are many areas of the Monument where butterfly enthusiasts have not yet ventured and the potential for new discoveries and the redrawing of known ranges is high. In conjunction with the other surveys, the butterfly inventory will bring an added dimension to the biological database, increasing awareness and understanding of the Monument's natural treasures.

Respectfully submitted,

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(after a hard day in the field...)