

Winter 2005



Painted Ladies 2005

by John Acorn

I first noticed them on the tarmac of the Dallas airport, in February as the painted ladies (*Vanessa cardui*) headed north. Sure enough, a generation or two later they arrived in Alberta. In mid June they were thick

actually counted, so my record stands.

Oddly, in July, many of us noticed a southward movement of these butterflies. There had not been enough time for an ensuing generation, so the same butterflies that had immigrated to Alberta seemed to be heading back south. Between Lacombe and Gull Lake, the southward movement was strongest around July 3 and 4. By July 9, there were roughly equal numbers moving south and north, but the overall numbers were quite low by comparison

to earlier in the week. To keep things confusing, I saw a huge flight of ladies headed north on July 19, near Bentley.

During late July and early August, my son Jesse had a wonderful time catching painted lady caterpillars in their thistle leaf-nests, and most of them hatched out in his rearing cages without any sign of disease or parasitism. We did get one ichneumon, but it was never clear which of Jesse's many caterpillars and pupae it came from.



Painted Lady nectaring at Canada Thistle (photo by Nora Roberts).

And now, as I write in early October, the occasional lady still appears on warm days. Isn't it odd that during a big year for this species, it is often the last butterfly we see in the fall, flying at times when it is apparently too cold for other species? Who would guess that Alberta winters are the reason we can enjoy this wonderful butterfly only every ten years or so...

in the south of the province, and I was absolutely amazed by the numbers I saw on a drive to Montana. I estimated that roughly 100 butterflies crossed the north-south highways around of Cardston every minute along every kilometer. That may not seem like as many as some people remember, but I may be the only person who

Painted Lady larvae feeding on Canada Thistle (photo by Ted Pike).

ALG NEWS

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Mini - Underwings: Alberta's Arches Moths by Chris Schmidt

Some of the brighter-colored Arches moths, or *Drasteria* (Noctuidae), give a due their evolutionary history: closely related to the fabled underwings, these critters are just as beautiful, and you don't have to wait until late summer to go looking for them - June is the prime *Drasteria* month. At least seven species of *Drasteria* (at one time *Synedoida*) occur in Alberta, some of which are familiar to both butterfly and moth enthusiasts alike; some species fly during the day, and can look like skippers in flight (eg. *D. petricola*), others are only nocturnal (most species), while several species are active both during daylight hours and are also attracted to light (*D. adumbrata saxeae*, *D. hudsonica*). *D. petricola* is probably the most commonly encountered species, fond of nectaring at flowers and also "puddling"; I've had these probing for salt on sweaty arms or legs on a few occasions in the mountains. The accompanying image shows all our species and subspecies, plus two possible future additions that call nearby southeastern B.C. home: *D. sabulodes* and *D. ochracea*. For more info on Alberta's *Drasteria*, check out the Strickland Entomologi-

cal Museum species pages at www.entomology.ualberta.ca). This year's additions to Alberta's *Drasteria* are *howlandi*, discovered by Gary Anweiler at Lost River in late May, and *D. divergens* from Waterton National Park as a result of this year's BioBlitz (two old specimens in the Parks collection, and one caught by myself the very next day!).

The taxonomy of some of the supposed subspecies in Alberta will likely see some changes in the fu-

"At least seven species of *Drasteria* occur in Alberta"

ture. Both *D. hudsonica* and *D. adumbrata* include subspecies that show enough ecological, phenotypical and genetic differences to warrant recognition of more than one species. *D. hudsonica* has been treated as subspecies *hudsonica* in the boreal and mountain regions, while the prairie populations have been referred to subspecies *heathi*. A similar situation occurs with *D. petricola*, with the mountain populations slightly larger and more yellowish (ssp. *athabascaae*) than the



A salt-sucking *D. petricola* (Brule, AB).

small, pale prairie populations. *D. adumbrata* populations in western-most Canada have been called subspecies *saxeae*, while the eastern boreal taxon that sneaks into the easternmost part of the province is subspecies *alleni*; the Peace River canyon *adumbrata* seems to be distinct from both, and may be an undescribed subspecies. Clearly, someone needs to take a closer look at these little critters – the juxtaposition of eastern and western moth faunas in Alberta presents the ideal geography to sort out some of these fascinating problems; don't pass these up, whether they're in your light trap or tempting your net!

ALG in Arizona by John Acorn

The annual meeting of the Lepidopterists' Society was held this year in Sierra Vista, Arizona, within sight of the Mexican border in an area teeming with odd and exotic butterflies and moths. And like leps to the ultraviolet light, the Albertans were drawn southward. Some came by car, some by plane, and we met under the blistering Arizona sun for a week of talks, field trips, collecting, and camaraderie with our fellow lepidopterists from the south.

I think we made an impact. First-rate talks were presented by Dave Lawrie, Vazrick Nazari, Chris Schmidt, Amanda Roe, Thomas



ALG in Arizona!

Simonsen, and Felix Sperling. I didn't give a paper, but I did have the pleasure of providing after-barbecue entertainment, and sang some lepidopterophilic songs, one of which involved harmonica accompaniment by the great Bob Pyle.

I also told stories, mostly about Dave Lawrie, oddly enough. Dave, it seems, managed to puncture his gas tank on a rock while maneuvering up a steep mountain road. So, naturally, he then lay on the ground and plugged the hole with his finger until the others with him were able to flag down another car, and beg a pack of chewing

gum off the driver. Gum, apparently, really can plug leaks in cars. Dave was off to a bad start, but it got worse when he and Vazrick managed to puncture a can of bear-spray tucked under the seat of the car. The scent plume from the pepper spray even managed to partly incapacitate Amanda, who was a block or so away trying to get to her hotel room, unaware of what was happening in the car.

For all of us, however, the finest moment at the meeting was seeing Felix Sperling assume the presidency of the Society. When the ceremonial antennae were placed on his head I know that I was moved, and I think that every ALGer's heart in the room was beating just a bit stronger, and a bit more proudly.



1. *D. divergens* (Waterton N.P.) 2a. *D. adumbrata alleni* (Dilberry Lake P.P.) 2b. *D. adumbrata* ssp. (Dunvegan) 2c. *D. adumbrata saxea* (Waterton N.P.) 3. *D. howlandi* (Washington, USA) 4a,b. *D. h. hudsonica* (Lake Minnewanka) 4c,d. *D. hudsonica heathi* male (Jenner) 4e. *D. hudsonica heathi* female (Jenner) 4f. *D. h. hudsonica* underside (Lake Minnewanka) 4g. *D. hudsonica heathi* underside (Jenner) 5a. *D. p. petricola* male (Jenner) 5b. *D. p. petricola* female (Jenner) 5c. *D. petricola at habascae* female (Pink Mtn., B.C.) 5d. *D. petricola at habascae* underside (Cadomin) 6a,b. *D. pallens* (Sandy Point) 7. *D. perplexa* (Jenner) 8. *D. sabulodes* (Creston, B.C.) 9. *D. ochracea* (Creston, B.C.)

Copromorphidae Rediscovered in Alberta

- ugly name for a pretty moth

by Greg Pohl

Copromorphids are medium-sized (20mm wingspan) micromoths with elongate oval wings, similar in shape to some depressariid moths such as *Semioscopis*. However, the forewings have unusual patches of raised scales, which are seen only in a few groups of moths. They are allied with the carposinids, another small group of micromoths. Arnett (1993) chickens out and gives them the common name "copromorphid moths".

The family Copromorphidae is represented in Alberta by a single species, *Elabella editha*, which was reported from Waterton by Bowman (1951). This species is known from southern British Columbia to western Texas (Heppner 1984). *Mahonia repens*, its suspected host plant, occurs in Alberta only in Waterton and the Crowsnest Pass area. Three other species of copromorphids are known from North America, all from the western USA (Heppner 1984).

On 11 July 2005, David Langor and I spent a glorious evening netting micromoths at dusk, in a forb meadow along the Red Rock Parkway in Waterton Lakes National Park. Some time that evening one of us netted a specimen of *E. editha* (Figure 1). As far as we know, this is the first specimen collected in Alberta in at least 50 years. Bowman (1951) reports this species from Waterton in June, but no specimens of his

are known. Three specimens collected in July 1923 by J.H. MacDunnough, in the Canadian National Collection in Ottawa, are the last confirmed Alberta records of this species.



Figure 1: *Elabella editha*, Waterton Lakes National Park, 11 July

References:

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Bowman, K. 1951. An Annotated list of the Lepidoptera of Alberta. Can. J. Zool. 29:121-65.

Heppner, J.B. 1984. Revision of the Oriental and Nearctic genus *Elabella* (Lepidoptera: Copromorphidae). Journal Of Research On The Lepidoptera 23(1):50-73.

2006 Wolley-Dod Award by Gary Anweiler

Each year the Alberta Lepidopterists' Guild presents an award for the most noteworthy moth capture of the year. This year's Wolley-Dod winner is that indefatigable moth killer B. Christian Schmidt. He achieved this Lepidopterological pinnacle by capturing a new and rather attractive noctuid moth. New not only for Alberta but for Canada as well. This deed was done in Waterton National Park on the last day of August, 2005.

The bug that Schmidt captured is



Hydroeciodes serrata

a *Papaipema* look-alike known as *Hydroeciodes serrata*. The specimen looked like it had flown all the way from Colorado or to put it bluntly, it was a bit of a rag. Very unphotogenic!

A fellow lepidopterist in Colorado was kind enough to provide me with several specimens of this moth in better condition (see above image).

Please join me in a smattering of applause for Herr Schmidt.

Way to go Schmidt!

Acanthopteroctetidae in Alberta

- a very big name for some very small moths

by Greg Pohl and Charles Bird

Acanthopteroctetids are small primitive moths that hold their wings tentlike over their bodies, similar to other primitive moths such as eriocraniids. They look superficially like caddisflies, but microscopical examination reveals that their hindwings are covered with very narrow hairlike scales, their forewings, however, are covered with wide scales.

The family Acanthopteroctetidae was formally recognised only recently (Davis 1978). This primitive family was allied with the Eriocraniids, but is now considered to comprise its own superfamily (Kristensen 1999). This is a very small group of small moths; 4 species are known in North America, and one is known from Europe. Besides being small and not very speciose, these moths are extremely rare; in North America a grand total of 9 specimens had been previously known, assigned to four described and one undescribed species (Davis 1969, 1978, 1984). All are from the western USA.

This family has only recently been added to the Canadian and Albertan fauna. Pohl et al. (in press) report a single specimen of *Acanthopteroctetes bimaculata* collected from a UV trap in an old aspen forest near Lac La Biche, on 1 June 1995. This species was previously known only from Oregon and California (Davis 1978). More recently, Charley Bird collected a specimen at Buffalo Lake Conservation Area (Figure 1), on 20 May 2005, from a UV

trap placed in buckbrush / aspen/ saskatoon scrub. The senior author also has collected specimens recently from Big

“in North America a grand total of 9 specimens had been previously known”

River, Saskatchewan and Aweme, Manitoba. Thus it appears that this species is widely distributed across western North America. Another species, *A. tripunctata*, is known from Glacier National Park in Montana, and likely occurs in Waterton Park as well.

References:

Davis DR. 1969. A review of the genus *Acanthopteroctetes* with description of a new species (Eriocraniidae). J. Lepid. Soc. 23:137-47.

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Pohl, G.R., Langor, D.W., Landry, J.-F., and Spence, J.R. 2005. Lepidoptera of the Boreal Mixedwood Forest near Lac La Biche, Alberta, Including New Provincial Records. The Canadian Field-Naturalist, *in press*.



Acanthopteroctetes 9534, wingspan 11 mm; ALBERTA, Buffalo Lake, 20-V-2005, leg. C.D. Bird, BIRD9534, C.D. Bird image

“Nothing” in the Peace by Doug Macaulay

Last spring I took a new job up in the Peace Country. It was a bit of a surprise to me since I had just been married and now was moving further away from my bride, Sherri. But with every



Sherri Macaulay & Jimmy at Peace Point!

new challenge in a relationship you must focus on the positive and that's just what Sherri, Jimmy and I did. We went “nothing” in the Peace.

The summer was delightful as the three of us explored this wonderful new landscape full of

grassy meadows that reminded us of Drumheller. We trapped at Dunvegan, Peace Point, Strong Creek and even had a chance to visit the magnificent Kleskun Hills. It was fantastic!

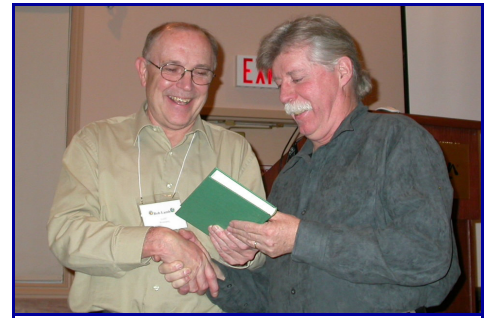
To our delight many of the specimens collected represent many new range extensions for species only known from areas such as Drumheller, Manyberries and other southern spots. We just can't wait until next summer to see what we find.

Anyone wishing to travel up this way should visit a couple of these spots, they are breathtaking. If

you have any questions or would like directions to any of these spots send me a line at zelicaon@telus.net.

Chief Editor: Doug Macaulay

Additional Editors: Chris Schmidt & Greg Pohl



Gary receiving the Norman Criddle Award!

Last November Gary Anweiler received the “Norman Criddle Award” for his outstanding entomological contributions throughout Alberta and Canada. In the above picture Bob Lamb (past president) hands Gary this prestigious award at the 2006 Joint Meeting of the Entomological Society of Canada and the Entomological Society of Alberta held in Canmore, Alberta.

Upcoming Events

Feralia Festival

-February 18, 2006

ALG Jenner Field Trip

June 2006 (Date TBA)

Kakwa Biophysical Trip

This June & July 2006 (Date TBA)

Dry Island Buffalo Jump Butterfly Count

July 9, 2006

(contact Charlie Bird for details)

What is the ALG?

The Alberta Lepidopterists' Guild (ALG) is a non-profit society made up of amateur and professional Lepidopterists. Our objective is to support and encourage the study and appreciation of Alberta Lepidoptera (butterflies and moths). We coordinate research projects, facilitate the exchange of information among members, and host events where people can collect and look at Lepidoptera and exchange information and ideas. We have an elected executive, and hold at least one annual general meeting to handle society business. We also host a members-only electronic bulletin board, and numerous scientific and social events throughout the province.

Alberta is a province in western Canada which includes a diverse range of habitats, including mountains, boreal forest, and prairie. Over 3000 species of butterflies and moths are thought to live here; so far about three-quarters of these are known.

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