



BOREUS

**NEWSLETTER OF THE
ENTOMOLOGICAL SOCIETY
OF BRITISH COLUMBIA**

Volume 25 (1)

June 2005

ENTOMOLOGICAL SOCIETY OF BRITISH COLUMBIA

The Entomological Society of British Columbia is a scientific Society founded in 1902 for the advancement of entomological knowledge in the province.

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Publications of the ESBC

Journal of the Entomological Society of British Columbia

The *Journal of the Entomological Society of BC* is published annually. Papers for the *Journal* need not have been presented at meetings of the Society, nor is it mandatory, although preferable, that authors be members of the Society. The chief condition for publication is that the paper has some regional origin, interest or application. Line drawings or photographs as candidates for the cover are also accepted. Contributions should conform to the standards outlined in the *Journal* and the Website (<http://esbc.harbour.com/>), and should be sent to the Editor, Dr. Ward Strong, BC Ministry of Forests, 3401 Reservoir Road, Vernon BC, Canada V1B 2C7; tel. 250-549-5696; fax 250-542-2230; e-mail Ward.Strong@gems7.gov.bc.ca.

The deadline for submissions to be included in the 2005 issue is **September 1, 2005**.

Boreus

Boreus, the Newsletter of the Society is published in June and December. It contains entomological news, comments, reports, reviews and notices of meetings and other events. While emphasizing the Society's affairs, *Boreus* provides members with a forum for their views and news of British Columbia entomology, as well as informal articles, notes regarding research projects, and anything else that may be of interest to entomologists. Please send correspondence concerning *Boreus* to the Editors, Jennifer Heron (JMHeron@Victoria1.gov.bc.ca) or Suzie Lavallee (slavalle@interchange.ubc.ca).

The deadline for submissions to be included in the June 2005 issue is **May 1, 2005**.

Membership of the Entomological Society of BC is available to anyone interested in entomology. Annual dues are Can\$20.00 (regular member) or Can\$10.00 (student member). Members receive the *Journal*, *Boreus* and *Occasional Papers* (the latter published intermittently).

Inquiries concerning membership and back issues should be sent to the Secretary/Treasurer, Dr. Robb Bennett, BC Ministry of Forests, 7380 Puckle Road, Saanichton, BC, V8M 1W4, Canada; tel. 250-652-6593; fax 250-652-4204; e-mail Robb.Bennett@gems6.gov.BC.ca

Cover: *Boreus elegans* (Mecoptera: Boreidae); one of the more conspicuous snow scorpionflies in BC. Larvae and flightless adults live in, and feed on, moss and clubmoss. Adults appear in the fall and are active on snow on warm winter days.

Editor's Notes

Suzie Lavallee

When it comes to electronic publishing, it seems we are all subject to “keeping up with the Joneses”. Perhaps it is too revealing to admit that I escaped high school without any computer training and only had e-mail when I began graduate school. After a rather slow start in my electronic career, I have had to run to keep up. Library searches that were once conducted on dark and rainy January days, wandering through stacks of smelly old books are now spent in the comfort of my office, coffee in hand. Rather than amassing hundreds of hardcopy papers, photocopied to the limits of legibility to save paper, I file pdf's on my computer where they can be found, searched and deleted within minutes.

While there are some obvious appeals to the highly intensive technological advances in scientific journal referencing, there are some significant downsides as well.

Access to journals and books that fall outside of the major search index engines' criteria is not possible. Particularly in the field of natural history, researchers need to access older publications that have species descriptions, drawings and localities for sightings. Although some indices like BIOSIS are making efforts to bring in older literature, progress is slow and most other indices have not made this aspect of their services a priority. By in large, search engine criteria are dictated by the medical community, which overwhelms any other category of scientific publication.

We cannot underestimate the power conferred to the decision-makers who act as gatekeepers to index engines like the Web of Knowledge. The importance of citation records of authors is vital to funding proposals, job applications, and promotion within universities. Journals themselves may enjoy a heightened level of submission and subscription, if only their journal is approved for listing with a search engine. Publications that deal in more regional issues may find themselves marginalized by journals that only carry broad-scale studies.

We have also seen a proliferation of new scientific journals that are published online, sometimes exclusively. Keeping current in their field of expertise can become a full-time job for researchers. Better filters are needed to help us identify the latest and greatest papers; not all of them are published in Nature! *Faculty of 1000* is a new resource that is worthy to note for those of us who are struggling to keep on top of major developments. An invited group of 1000 of the world's top researchers are asked to post reviews of recent papers, providing a brief synopsis and ranking of the finding's importance. In this edition of *Boreus*, I give a quick summary of a recent paper on fire ants that I found through Faculty of 1000. It was ranked as 9 out of 10, or “critical reading” for of ecology. The website for Faculty of 1000 is: <http://www.facultyof1000.com/browse/8032> and I believe it is accessible without subscription.

However, when it is all said and done, some old habits die hard. Reading and accessing papers may be greatly facilitated by computers, but I find that the creative form of writing happens at its best on a single-sided piece of paper, with a pen in one hand and a good cup of coffee in the other. Such is the way that editorials are composed.

Although it is not likely to ever be listed or reviewed by search engines, I hope you enjoy this hardcopy of *Boreus*, coffee is optional!

Suzie Lavallee

Society Business



ESBC Executive Elections

This year, we have a number of candidates running for positions on the executive. Attached to this edition of Boreus, you will find a list of candidates, a short biography for each, and a ballot to cast your vote with. Please mail your ballots in to Robb Bennett by 2 September 2005



2005 Annual General Meeting

Friday, 21 October 2005 (0930 – 1630 h)

This year, the AGM will be held at the Pacific Forestry Centre, 506 West Burnside Rd., Victoria, BC. Registration will begin at 8:30 and is just \$20 for members and \$10 for students. Remember, there are prizes for best M.Sc. and Ph.D. presentations!

Submit titles and abstracts for oral presentations/ posters to Dave Raworth by
30 September 2005

ABSTRACT: Fifty words, size 12 font, times new roman, please send an electronic copy to
Dave Raworth

Also, the winners of the annual MSc and PhD Graduate Student Travel Scholarships will be announced at the AGM. These awards consist of \$500 each to attend conferences other than the ESBC AGM. See the Funding Opportunities section of this newsletter for more detail.

For more information on the AGM, contact:

Dr. David Raworth
Agriculture and Agri-Food Canada
PO Box 1000, 6947 # 7 Highway

Phone: (604) 796-2221 loc. 213
Fax: (604) 796-0359
Email: raworthd@agr.gc.ca

Upcoming Events



Conferences

Ecological Society of America and International Congress of Ecology (INTECOL),
Joint Annual General Meeting

August 7-12, 2005

Palais des congrès de Montréal; Montréal, Quebec

Website: <http://www.esa.org/program/>

European Congress on Social Insects, Annual meeting of the European Sections of the
IUSSI (International Union for the Study of Social Insects)

August 22-27, 2005

St. Petersburg, Russia.

<http://www.bio.pu.ru/win/entomol/Kipyatkov/iussi/2005/index.shtm>

Entomological Society of British Columbia, Annual General Meeting

October 21, 2005 (9:30-4:30)

Pacific Forestry Centre; Victoria, BC

Registration is a bargain at \$20 for members and only \$10 for students!

Entomological Society of Canada, Annual General Meeting

November 2-5, 2005

Radisson Conference Centre; Canmore, Alberta

“Entomology: a Celebration of Life’s Little Wonders”

Abstracts due July 8, 2005

Website: <http://people.uleth.ca/~dan.johnson/lac2005/esc-canmore.htm>

Note: this year features a special symposium on arachnid diversity

Entomological Society of America, Annual General Meeting

November 6-9, 2005

Greater Fort Lauderdale/Broward County Conference Centre; Fort Lauderdale, Florida

“Sex, Bugs, and Rock ‘n’ Roll” is the theme this year...

Abstracts were due January 31, 2005

Website: http://www.entsoc.org/annual_meeting/overview/index.htm



Lectures

Dr. David Suzuki Thursday October 13th, 2005

7 p.m. (Location T.B.A.)

This talk is the inaugural event in the Beaty Biodiversity Research Centre's new public biodiversity lecture series. Further details will soon be available at:

<http://www.zoology.ubc.ca/biodiversity/upcoming.htm>



Getting out there

Bugs and Beers



Get together with your favorite buggy people! Host a "Bugs and Beers" evening at a local pub and find out what's happening with entomologists in your area.

Send us in some "reports" from your meeting and make every one else green with envy.

Behr's Blitz 2005



The **Behr's hairstreak** is a nationally threatened butterfly that lives in the Antelope-brush ecosystems of the south Okanagan. The butterfly typically starts its flight period in mid June. The Behr's Blitz Butterfly Event was started a few years ago to help survey for this butterfly and raise public awareness for this and other species that depend on Antelope-brush.

This year the Behr's Blitz was scheduled from **Monday, June 13 – Friday, June 17, 2005**.

Mormon metalmark Survey 2005



The Mormon metalmark is another rare and threatened species of butterfly inhabiting the antelope-brush habitats of the South Okanagan. Although individuals have historically been found at Vaseaux Lake and Okanagan Falls, only small colonies are currently extant near Keremeos. Prairie populations, occurring in Saskatchewan, are also listed as threatened.

Adult flight period is typically in August. There is survey planned for the **Mormon metalmark** from **Monday, August 15 – Saturday, August 20, 2005**. Contact Jennifer Heron for more information.

New and Upcoming Publications

Beetle Families of British Columbia website

In April 2005 Dr. Geoffrey Scudder and Robert Cannings posted their account of the beetle families of British Columbia on line. Their web site includes a description of the Order Coleoptera, BC family checklist, key to coleoptera families, and illustrated family descriptions. It is part of a larger project, and will be revised and modified to fit in with other parts of the larger work: **Insect Families of British Columbia**.

Access web site at: <http://www.zoology.ubc.ca/bcbeetles>.

Illustrations and web design by Launi Lucas.

All comments and suggestions welcomed.

Fire ant research burning up the rules on reproduction and selection

In a recent paper by Fournier *et al.* in Nature, (June 30, 2005, 435:1230-4) males were found to reproduce clonally, producing haploid males only. Effectively, this results in a complete separation of the genetic content for males and females of the same colony. This is a major finding in the area of social insects, evolutionary science, and reproductive science. The little fire ant is widespread in its world distribution; researchers examined populations in French Guiana for this study. You can peruse the article online at:
<http://www.nature.com/nature/journal/v435/n7046/full/nature03705.html>.

Notes and News

Beaty Biodiversity Centre to open at UBC

Thanks to the generous donation of \$8 million by UBC alumni Ross and Trish Beaty, University of British Columbia will soon become home to a unique natural history museum and research facility. Scheduled to open in November of 2007, the Beaty Biodiversity Centre will provide housing for the three collections presently at maintained in the Zoology Department: the Spencer Entomological Museum, the Cowan Vertebrate Museum, and the UBC Fish Museum. The building will unite current researchers who work on biodiversity into one facility. Some displays of the collections will be made publicly accessible through educational programs.

Collections around the world

The Maguire Center for Lepidoptera and Biodiversity in Gainesville, Florida is also bucking the world wide trend of downsizing in entomological curation and research. In a recent article by Virginia Smith (News-Journal Online.com), activities at the Florida Museum of Natural History (which houses the Maguire Center) are described. The complete article can be found at: <http://www.msnbc.msn.com/id/8479401/>.

The Center houses a large butterfly vivarium, which is stocked with farmed butterflies every year, and a research facility with 40 entomologists who curate the collections and do research within the facility. Active collecting in poorly-sampled corners of the world is also being supported by the center, with collection grants.

Local Findings

A new population of Propertius duskywing (*Erynnis propertius*) was recorded on Salt Spring Island this spring by Trinity Western University's researchers Patrick Lilley and Karen Steensma. About 20-30 individuals were found on TWU's Crow's Nest Ecological Reserve.

Propertius duskywing is currently a Group 3, or low priority candidate, identified by COSEWIC as potentially being at risk. In British Columbia, it is listed as S3-Blue (Vulnerable).

Although this butterfly is more widespread and common than other species listed for the Garry oak ecosystem, it is certainly exciting to hear of sightings!

Herbicide Use Under Re-examination

After the publication of a recent study by Reylea (*Ecological Applications*: Vol. 15, No. 2, pp. 618–627), one of the most commonly-used herbicides in agriculture and forestry is under re-examination by Environment Canada. The study examined the effects of glyphosates like Roundup© on amphibian populations. Roundup©, which is used to control vegetation in agriculture, is also registered as Vision© by Monsanto, a major purveyor of this product. Both herbicides are widely used in British Columbia and are approved for spraying within 10 meters and over top water bodies.

In his study, Reylea found that the effects of these herbicides on non-target amphibian populations resulted in population declines of two amphibian species and near extirpation of a

third species. In total, four pesticides (two insecticides and two herbicides) were assessed for their effects on zooplankton, predatory insects, amphibians, and snails. The insect predator community diversity and richness were unaffected by the herbicides tested in this study.

Taylor's Checkerspot

A new population of Taylor's checkerspot (*Euphydras editha taylori*) was found on Denman Island this spring. This exciting discovery represents the first confirmed sighting of the endangered Taylor's checkerspot since sightings were made at Helliwell Park on Hornby Island. Proposals for further work on this population are pending.



Denman Island Taylor's Checkerspot
Photo by Jennifer Heron

Funding Opportunities

8th Annual ESBC Graduate Student Scholarships

The Entomological Society of British Columbia announces the eighth annual Graduate Student Scholarship competition. Two \$500.00 Scholarships (one M.Sc., one Ph.D.) are awarded each year at the Annual General Meeting. Scholarships are to be used to defray research paper or poster presentation related costs (including travel) incurred by graduate students for participation in conferences other than the ESBC AGM.

For consideration, applicants must be:

- Graduate students and ESBC members in good standing, and **must submit a Word file containing:**
- name and locality of conference to be attended,
- title and abstract of research to be presented, and
- current CV.

Abstract should be double spaced, 12 font, and a **maximum** of 200-250 words (based on processor electronic word count). Applications will be judged on the basis of scientific importance, quality of the application, and qualifications of the applicant. Applications from M.Sc. and Ph.D. students will be judged in separate categories; a singleton application in either category will be judged with applications in the other.

Deadline for receipt of applications for 2005 Scholarships is **30 September 2005**. This year's scholarships will be awarded during the ESBC Annual General Meeting, 21 October 2005. Send applications to:

Robb Bennett
Secretary/Treasure, ESBC
BC Ministry of Forests
7380 Puckle Road
Saanichton, BC V8M 1W4

or by e-mail to: robb.bennett@gems6.gov.bc.ca

Winners of the H.R. MacCarthy Educational Grants

Six schools were selected for the H.R. MacCarthy Educational Grants. Awards were made to each school for a range of projects. In total, \$1200 was awarded: \$600 from the Entomological Society of British Columbia and \$600 from the Entomological Society of Canada.

2005 winners of the H.R. MacCarthy Educational Grants:

| | | | |
|--------------------------|-----------------|---------------------|---------------------|
| Holly Elementary | Surrey | Moth rearing | \$150 |
| Dog Creek Elementary | Dog Creek | Honey bee hive | \$300 |
| Sherwood Park Elementary | North Vancouver | Insect taxonomy set | \$150 |
| Big Lake Elementary | Big Lake | Butterfly rearing | \$150 |
| Mountview Elementary | Williams Lake | Butterfly rearing | \$200 (two classes) |
| Mountview Elementary | Williams Lake | Ant colonies | \$250 |

This fund was established in honour of the late Dr. H.R. (Mac) MacCarthy, whose unparalleled contributions and commitments to the Entomological Society of British Columbia and to students of entomology across BC will always be remembered. A pioneer of integrated pest management research and education in B.C., Mac's contributions have also been acknowledged through the establishment of the H.R. MacCarthy Lecture in Pest Management, which is held in alternate years at UBC and SFU.

Mountain Pine Beetle Initiative, Research and Development

The Letter of Interest (LOI) call for proposals on mountain pine beetle research is open until **July 22, 2005**. Individuals, organizations or institutions interested in research funding should apply to the program. Letter of Interest submissions will be assessed by specific research needs and strategic objectives. All Mountain Pine Beetle Initiative (MPBI) research is subject to a peer-review process and public reporting via the Canadian Forest Service web site. All research is assessed against the objectives established for the program.

Submissions will be rated according to seven criteria:

1. Relevance to the Mountain Pine Beetle (MPB) Initiative program objectives
2. Consistency with MPB Initiative research needs specified in the Letter of Interest Call.
3. Scientific soundness of methodology and feasibility of project
4. Benefits/Impacts from the proposed deliverables
5. Cost magnitude & cost-efficiency
6. Relevant experience & training of researcher(s)
7. Delivery timeframe

Applicants should consult the CFS website for more information, including forms and research needs.

http://mpb.cfs.nrcan.gc.ca/research/funding/criteria_e.html