

#### Newsletter of the SOUTHWEST ASSOCIATION OF FRESHWATER INVERTEBRATE TAXONOMISTS

Greetings SAFIT members,

Have a job opening that you want to announce, or are looking for a job? Let SAFIT know in the Newsletter! Looking for specimens of a certain species or a literature reference? Need material for research or comparative purposes? Let your colleagues know in the SAFIT Newsletter! Want a workshop on a particular group of organisms? Have books or reprints to share, trade, or sell? Looking for a collecting partner? Put it here in the SAFIT Newsletter! All appropriate requests, queries, advertisements and announcements will be considered, and are free to the SAFIT membership.

Long time readers of this newsletter may have noticed the front page photo has changed over the past couple of issues. Pictured above are two larvae of *Desmona bethula* Denning feeding on grass fully a foot above the water's surface. This photo was taken in July 2006 near Lake Davis, but the adults emerge during the fall months, particularly October and November. My hope is that we can feature a different invertebrate photo in each issue, possibly to match the seasons. In any case, it was pointed out to me after the last issue that the newsletter of late has been, shall we say "beetlecentric". This isn't due to a change in the format so much as a lack of suggestions or submissions from the membership. So if anyone takes issue with "all beetles, all the time!"–

Thanks! Brady Richards, Editor

# **B.O.L.O**.

## Be on the lookout!

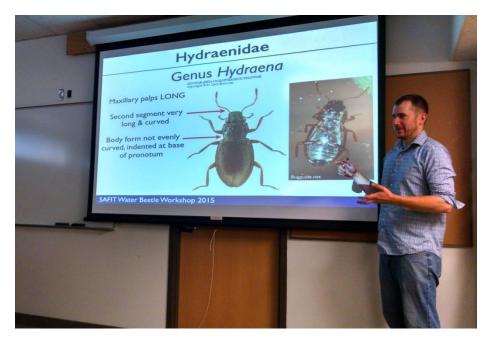
Oreodytes humboldtensis Zimmerman, 1985



This species is known only from the type series collected by H.B. Leech (CA: Humboldt Co., Orick, Redwood Creek at Hwy 101 bridge). If you have seen this beetle, please contact Doug Post (Doug.Post@wildlife.ca.gov). A Workshop on the Taxonomy of Western North America Hydrophiloidea, Hydraenidae and Noteridae Beetles. Instructor, Dr. Andrew Short, University of Kansas. Hosted by The National Aquatic Monitoring Center, Utah State University Logan, UT, August 19-21, 2015. Photos by Joe Slusark and Bill Isham.



SAFITistas working on material brought by instructors.



Instructor Andy Short gave two days of great lectures where we all totally geeked out on hydrophiloid taxonomy, life history and phylogeny.



Joe Kotynek of the BugLab hammering the grasses in a beaver pond.



Doug Post on the Logan River showing Bill Isham how it's done.



John Shay and company using the Rob Roughley method of aquatic beetle collection under the tutelage of Doug Post.



Are we having fun yet? YES!!!



Everyone checking out the Logan River fauna with BBQ and beers.



Another fine workshop!

#### ANNOUNCEMENTS AND NOTICES

The notices, announcements and advertisements in this section do not reflect SAFIT or SAFIT's views, opinions or policy, and do not constitute an endorsement of an advertiser's abilities, skills, or products.

#### SAFIT Meeting Agenda and Minutes 22 October 2015 California Department of Fish and Wildlife Yolo Bypass Wildlife Area Headquarters 9 am to 12 pm

- 1) Welcome & Introductions
- 2) President's update
  - a) Good year for SAFIT workshop activity
  - b) California chapter of SFS What should our role be in this Chapter, or none at all?
  - c) SFS 2016 will be in Sacramento this ties in with part...
  - d) What type of presence to we want to have at this meeting?
    - The ABL crew will be hosting an overnight collecting field trip to Sage Hen with subsequent "workshop" on the taxonomy of specimens collected.
- 3) Treasurer's update
  - a) Revenues and expenditures for 2015
  - b) Current membership dues
    - SAFIT will have approximately \$50,000 after next year's SWAMP contribution (~\$8,000).
    - See #8
- 4) Secretary's update
  - a) Elections update
    - Dan Pickard, Wendy Willis and Joseph Slusark were re-elected as the President, Secretary and Member-at-large (respectively).
  - b) Membership demographics
    - SAFIT has a total of 43 current members
      - o Gained 9 members
      - Lost 25 members
- 5) Workshop Committee
  - a) Workshops this past year
    - Beetlemania 2 (Hydrophilid Adults) in Logan, UT

- Workshop was a success and members seemed to learn a lot from Dr. Andrew Short
- Lower attendance likely due to the timing of the workshop (summer) as many members had fieldwork conflicts
- Many suggested that workshops should be held in the winter/early spring
- b) Future workshops
  - Locations Corvallis, Davis, Long Beach, Logan, UT have all worked well, do we want to expand the places we go, or just rotate through these?
    - Bob Wisseman suggested OSU, Corvallis for location for 2017 workshop
  - \*2016 Workshop will be held March 31<sup>st</sup> April 1<sup>st</sup>, 2016 at CSULB (California State University, Long Beach)
    - Workshop topic will be Aquatic Mites and the instructor will be Dr. Ian M. Smith from Canadian National Collection of Insects and Arachnids in Ottowa, Canada
    - \* Addendum 1/14/2016 There have been a couple changes to the workshop since the fall meeting. The workshop will now be held May 18-19, 2016 and the instructor will be Dr. Heather Proctor, University of Alberta, Edmonton

\*\* Official Workshop Announcement Coming Soon \*\*

- 6) SAFIT STE & STE database
  - a) SAFIT STE database development
    - Brady's wife currently unavailable to assist in database development
    - Will look into other person's to help develop new STE database
      - Will discuss database options at next BOD meeting with the STE committee
  - b) Our STE was presented at SFS Milwaukee by Christopher Rogers
  - c) STE for Depressional wetlands in California?
    - Will revisit topic as need dictates
- 7) Website?
  - SAFIT website has had some minor improvements, but more input from membership is needed for further development
    - John Sandberg will look into helping Alex Smith maintain website and suggest other items to include.

- 8) Revenue deposition
  - a) Student research grants
  - b) Page charges
  - c) Support of workshop attendance
  - d) Support of taxonomic presentations at meetings
    - Student grants and taxonomic workshop attendance fees will be offered to currently enrolled students for SAFIT relevant taxonomic research
    - Page charges for SAFIT relevant taxonomic research can also be applied for by all members
    - Taxonomic presentations were found not to be a good use of funds

#### **EMPLOYMENT OPPORTUNITIES**

Please contact the editor if you would like to post an employment opportunity.

#### **MISCELLANEOUS BUG NOTES**

Anecdotal notes, including distributional records in the SAFIT region, which may be interesting or helpful to SAFIT members. To make contributions or comments, contact the editor: <u>arichards@csuchico.edu</u>.

#### New address for Illiesia

Illiesia, the on-line journal for Plecoptera research, has a new web address. The journal can now be found at URL: <u>http://illiesia.speciesfile.org/.</u> The original webpage is still accessible, but the content is apparently not being updated there.

#### FIELD & LAB

A feature in each newsletter issue exploring an aspect of aquatic macroinvertebrates beyond sample processing that may be beneficial to members. Contact the editor to contribute or comment.

#### **TOUGH CHARACTERS**

Got a TOUGH CHARACTER? The more difficult diagnostic characters and key couplets for those taxa that are tricky to separate are elucidated in this column. Plenty of good grudge matches will be presented in photos, figures and descriptions. Think there are tough characters that are being missed? Submit your tough characters and get them compared with other character states right here.

#### LATEST LITERATURE

If you know of any recent literature or if you yourself have published any papers of interest to the SAFIT membership, please send copies or the citations to Brady Richards (<u>arichards@csuchico.edu</u>) for inclusion in the next issue of the SAFIT Newsletter. Thanks!!

#### Asterisk (\*) indicates author is a SAFIT member.

#### Mollusca

Howard, J. K., \*J. L. Furnish, J. Brim Box, and S. Jepsen. 2015. The decline of native freshwater mussels (Bivalvia: Unionoida) in California as determined from historical and current surveys. California Fish and Game 101:8-23.

#### Crustacea

- \*Rogers, D. C. 2015. A conceptual model for anostracan biogeography. Journal of Crustacean Biology 35:686-699.
- \*Rogers, D. C. and H. R. Lorenz. 2015. A new species of *Branchinecta* (Crustacea: Anostraca) from Uruguay. Zootaxa 4033:280-286.
- \*Rogers, D. C., J. Olesen, and J. W. Martin. 2015. A new possibly parthenogenic species of *Lynceus* from Canada (Crustacea: Branchiopoda: Laevicaudata), with key to the Nearctic female Laevicaudata. Scientific Papers, Natural History Museum, The University of Kansas 47:1-9.
- \*Rogers, D. C., N. Rabet, and S. C. Weeks. 2016. Gondwanalimnadia (Branchiopoda: Spinicaudata), replacement name for Afrolimnadia Rogers, Rabet and Weeks, 2012 (Limnadiidae), junior homonym of Afrolimnadia Tasch, 1987 (Lioestheriidae). Journal of Crustacean Biology 36:105.
- Vesely, L., M. Buric, and A. Kouba. 2015. Hardy exotics species in temperate zone: can "warm water" crayfish invaders establish regardless of low temperatures? Scientific Reports 5:16340; doi: 16310.11038/srep16340.

#### Ephemeroptera

Godunko, R. J., P. Sroka, T. Soldan, and J. Bojkova. 2015. The higher phylogeny of Leptophlebiidae (Insecta: Ephemeroptera), with description of a new species of *Calliarcys* Eaton, 1881. Arthropod Systematics & Phylogeny 73:259-279.

#### Odonata

Carle, F. L., K. M. Kjer, and M. L. May. 2015. A molecular phylogeny and classification of Anisoptera (Odonata). Arthropod Systematics & Phylogeny 73:281-301.

#### Plecoptera

- Bottorff, R. L. and R. W. Baumann. 2015. *Sierracapnia*, a new genus of Capniidae (Plecoptera) from western North America. Illiesia 11:1-41.
- Gill, B. A., \*J. B. Sandberg, and B. C. Kondratieff. 2015. Evaluation of the morphological species concepts of 16 western Nearctic *Isoperla* species (Plecoptera: Perlodidae) and their respective species groups using DNA barcoding. Illiesia 11:130-146.
- Grubbs, S. A., R. W. Baumann, and A. L. Sheldon. 2015. A review of eastern Nearctic *Zapada* (Plecoptera, Nemouridae) with a new species from the Great Smoky Mountains. Freshwater Science 34:1312-1323.
- Stark, B. P., B. C. Kondratieff, and C. J. Verdone. 2015. Kathroperla siskiyou, a new stonefly species from California and Oregon, U.S.A. (Plecoptera: Chloroperlidae). Illiesia 11:82-103.

#### Trichoptera

- Givens, D. R. and D. E. Ruiter. 2015. Clarification of the taxonomic status and distribution of *Arctopsyche inermis* Banks, 1943 and *Arctopsyche ladogensis* (Kolenati, 1859) (Trichoptera: Hydropsychidae: Arctopsychinae). The Pan-Pacific Entomologist 91:192-195.
- Ito, T. and Y. Nagasaka. 2015. The occurrence of slender leaf pieces on the larval cases of *Brachycentrus* Curtis, 1834 (Trichoptera: Brachycentridae). Pan-Pacific Entomologist 91:223-228.
- Munoz-Quesada, F. J. and R. W. Holzenthal. 2015. Revision of the Neotropical species of the caddisfly genus *Wormaldia* McLachlan (Trichoptera: Philopotamidae). Zootaxa 3998:1-138.
- \*Ruiter, D. E. and S. C. Harris. 2015. New *Ochrotrichia* Mosely, 1934 (Trichoptera: Hydroptilidae) from Western North America. The Pan-Pacific Entomologist 91:318-336.
- Shackleton, M. E. and \*J. M. Webb. 2015. Revision of the genus *Caenota* Mosely (Trichoptera: Calocidae), with descriptions of 2 new species and the larva of *C. nemorosa* Neboiss. Zootaxa 3972:451-481.

#### Coleoptera

Arce-Perez, R. and R. Novelo-Gutierrez. 2015. Neoclypeodytes moroni Arce-Perez and Novelo-Gutierrez, new species (Coleoptera: Dytiscidae: Hydroporinae: Bidessini) from Mexico, with notes on the distribution of Neoclypeodytes haroldi Miller. Coleopterists Bulletin 69:297-300.

- Barr, C. B., J. R. Gibson, and P. H. Diaz. 2015. *Typhloelmis* Barr (Coleoptera: Elmidae: Elminae), a new stygobiontic riffle beetle genus with three new species from Texas, USA. The Coleopterists Bulletin 69:531-558.
- Huston, D. C. and J. R. Gibson. 2015. Underwater pupation by the Comal Springs riffle beetle, *Heterelmis comalensis* Bosse, Tuff, and Brown, 1988 (Coleoptera: Elmidae), with an update on culture techniques. The Coleopterists Bulletin 69:521-524.

#### Diptera

- Adler, P. H. and R. W. Crosskey. 2015. Cytotaxonomy of the Simuliidae (Diptera): a systematic and bibliographic conspectus. Zootaxa 3975:1-139.
- Evenhuis, N. L., A. C. Pont, and D. Whitmore. 2015. Nomenclatural studies toward a world list of Diptera genus-group names. Part IV: Charles Henry Tyler Townsend. Zootaxa 3978:1-362.

#### Miscellaneous

- Bybee, S. M., Q. Hansen, S. Busse, H. M. Cahill Wightman, and M. A. Branham. 2015. For consistency's sake: the precise use of larva, nymph and naiad within Insecta. Systematic Entomology 40:667-670.
- Carew, M. E. and A. A. Hoffmann. 2015. Delineating closely related species with DNA barcodes for routine biological monitoring. Freshwater Biology 60:1545-1560.
- Conflitti, I. M., G. F. Shields, R. W. Murphy, and D. C. Currie. 2015. Genetic panmixia within a narrow contact zone between chromosomally and ecologically distinct black fly sibling species (Diptera: Simuliidae). Journal of Evolutionary Biology 28:1625-1640.
- Elbrecht, V. and F. Leese. 2015. Can DNA-based ecosystem assessments quantify species abundance? Testing primer bias and biomass-sequence relationships with an innovative metabarcoding protocol. Plos One 10: e0130324.
- Fortin, M. C., A. S. Medeiros, K. Gajewski, E. M. Barley, I. Larocque-Tobler, D. F. Porinchu, and S. E. Wilson. 2015. Chironomid-environment relations in northern North America. Journal of Paleolimnology 54:223-237.
- Inoda, T., Y. Miyazaki, T. Kitano, and S. Kubota. 2015. Noninvasive sampling of DNA from larval exuvia in diving beetles of the genera *Cybister* and *Dytiscus*. Entomological Science 18:403-406.
- Mitchell, A. 2015. Collecting in collections: a PCR strategy and primer set for DNA barcoding of decades-old dried museum specimens. Molecular Ecology Resources 15:1102-1111.

- Mlynarek, J. J., W. Knee, B. P. Smith, and M. R. Forbes. 2015. Regionally widespread parasitic water mites have relatively broad host-species ranges. Canadian Journal of Zoology 93:741-746.
- Motani, R., D. Y. Jiang, O. Rieppel, Y. F. Xue, and A. Tintori. 2015. Adult sex ratio, sexual dimorphism and sexual selection in a Mesozoic reptile. Proceedings of the Royal Society B-Biological Sciences 282:1-7.
- Shimabukuro, E. M., M. Pepinelli, G. Perbiche-Neves, and S. Trivinho-Strixino. 2015. A new trap for collecting aquatic and semi-aquatic insects from madicolous habitats. Insect Conservation and Diversity 8:578-583.
- Suter, G. W., II and S. M. Cormier. 2015. Why care about aquatic insects: uses, benefits, and services. Integrated Environmental Assessment and Management 11:188-194.

### **THANK YOU FOR YOUR MEMBERSHIP!**

#### **Board of Directors:**

Dan Pickard, President, 530.898.5573 (<u>DPickard@csuchico.edu</u>) Dessie Underwood, Vice President, 562.985.7475 (<u>Dessie.Underwood@csulb.edu</u>) Bill Isham, Treasurer, 760.795.6928 (<u>bill.isham@amecfw.com</u>) Wendy Willis, Secretary, 805.643.5261 (<u>wendy@aquabio.org</u>) Joe Slusark, Member at Large, 530.898.4792 (<u>JSlusark@csuchico.edu</u>)

#### **Editorial Board:**

Brady Richards, Newsletter Editor, 530.898.4792 (<u>arichards@csuchico.edu</u>) D. Christopher Rogers, 785.864.1714 (<u>branchiopod@gmail.com</u>)

#### **SAFIT Newsletter Publication Guidelines**

Submissions and questions about submissions should be directed to the SAFIT Newsletter Editor, at: <u>arichards@csuchico.edu</u>, 530.898.4792. Submissions should be Word files, 12 pt., Times New Roman font, and left justified. Please submit an announcement, as you would like it to appear in the newsletter, preferably in Word format. Images should be high quality.

Deadline for SAFIT newsletter announcements: send to editor one week before publication date.

Issue	Submission Deadline	<b>Publication Date</b>
Ι	24 March	31 March
II	23 June	30 June
III	23 September	30 September
IV	24 December	31 December

Advertisements:

- Employment Opportunity ads should be one page maximum (8.5 x 11), should list the position(s) available, basic qualifications required, and provide contact information.
- Employment Wanted ads may include a brief statement describing the position sought, basic experience, and contact information. For example: "Looking for work as phytoplankton taxonomic. Experience includes M.S. thesis from the University of Malpractice, and working on several long-term bioassessment projects for the state of East Carolina. Resume and references upon request. Please contact Martin E. Serumgaard, <u>mserumgaard@fakeaddress.net</u>, (555) 555-555." Do not include *curriculum vitae* or resume, photos, or political statements.
- General Advertisements should be limited to one page (8.5 x 11) and may include a high quality logo image, and must not include political statements or other potentially offensive material.

The editor, editorial board and the SAFIT Board of Directors reserve the right to reject any or all submissions to the SAFIT Newsletter for any reason. The notices, announcements and advertisements, other than those submitted by the SAFIT Board of Directors, do not reflect SAFIT or SAFIT's views, opinions or policy, and do not constitute and endorsement of an advertiser's abilities, skills or products.