



**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.

Pictured above is South Fork Calf Creek, a tributary of Deer Creek in Tehama County, CA. I figured with all the fires raging through the state, we could use a nice, peaceful stream photo. A lot of interesting insects inhabit this stream including *Namamyia*, *Neothremma*, and *Himalopsyche*, to name just a few.

Thanks!

Brady Richards, Editor

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.

2017 Southwest Association of Freshwater Invertebrate Taxonomists (SAFIT) Taxonomic Workshop.

October 21st -22nd, 2017

University of California-Davis, Bohart Museum, Briggs Hall, Room 122.



SAFIT will hold the 2017 taxonomic workshop at Briggs Hall, Bohart Museum, UC Davis on the weekend of October 21st - 22nd, 2017, prior to the SAFIT annual board meeting on October 23rd at the Yolo Bypass Wildlife Area near Davis, and the 24th annual California Aquatic Bioassessment Workgroup (CABW) meetings at the ARC on the UC Davis campus on October 24th - 25th.

Anchoring the workshop will be Jeff Webb of Rhithron Associates presentation and distribution of a fully illustrated key and diagnostic atlas for the western North American Baetidae.

Updates and recent literature on a variety of other taxonomic groups in the works are:

Ephemeroptera (non-Baetidae): Jeff Webb, Rhithron Associates

Plecoptera: Jon Lee, Jon Lee Consulting & John Sandberg, Aquatic Bioassessment Laboratory, Chico

Trichoptera: Robert Wisseman, Aquatic Biology Associates

Megaloptera: Matt Cover, California State University, Stanislaus

Elmidae: Sean Sullivan, Rhithron Associates

Mollusks: John Pfeiffer, EcoAnalysts

Folks are encouraged to volunteer to provide updates on other taxonomic groups. Please contact Robert Wisseman bob@aquaticbio.com with your ideas.

Cost to Attend: SAFIT Members: \$300

Non-members: \$400

***You must be an active member of SAFIT for 2016 at the time of registration
to register for the workshop at the reduced fee***

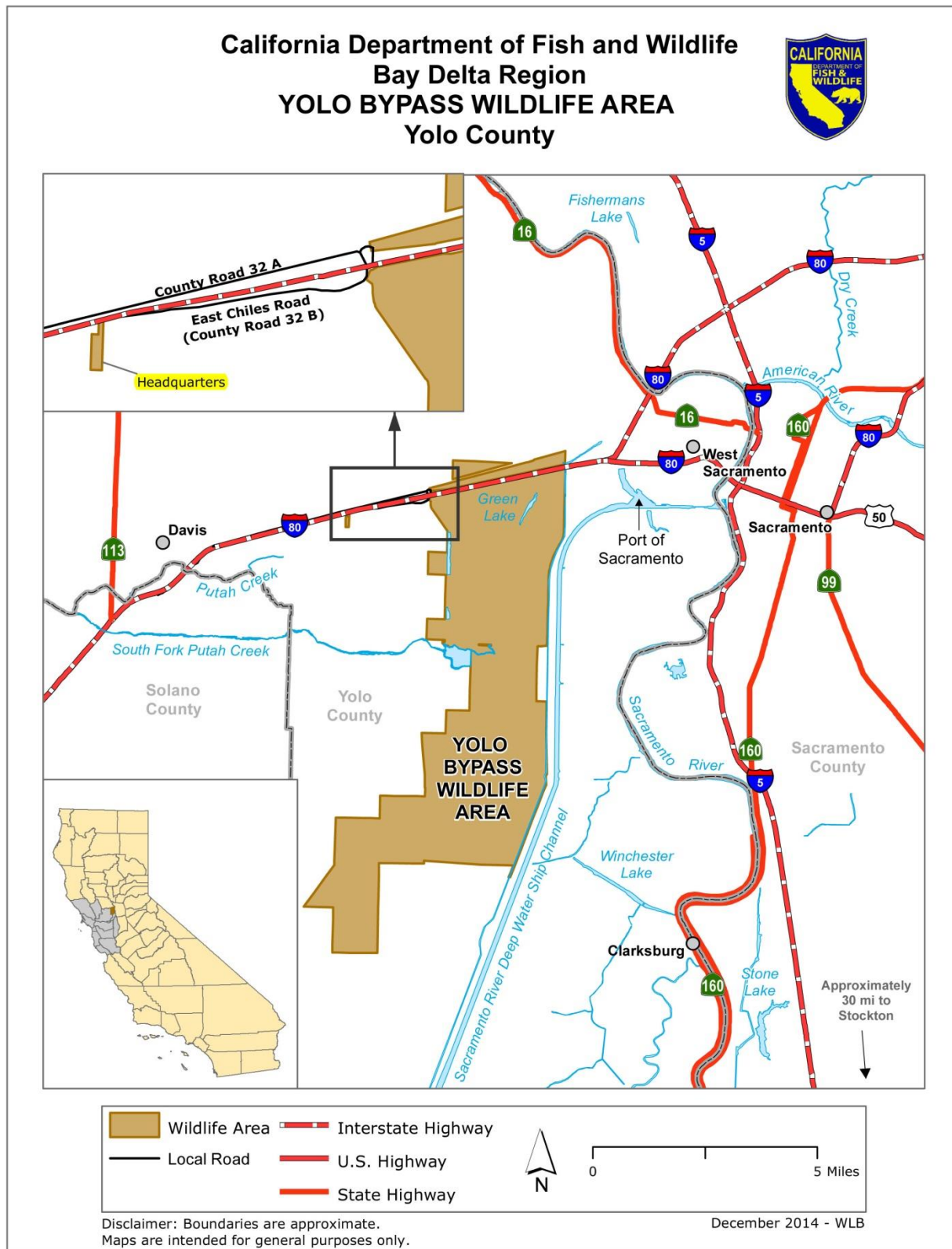
We have room for 40 participants in this workshop and these seats will be filled on a first come first serve basis. We will accept participants up to the day of the workshop or until all seats are filled. **Please make checks/money orders payable to “SAFIT” in US dollars**

If you have any questions about this workshop, please contact Wendy Willis at wendy@aquabio.org

SAFIT Annual Meeting

We will be having our annual meeting on Monday, October 23rd at 9am at the Yolo Bypass Wildlife Area headquarters. Please see the attached map for directions. Elections will be held at the meeting for the positions of President, Secretary and Member-at-Large. You may vote at the meeting or if voting via mail or email, please get your ballot to Wendy Willis (wendy@aquaticbioassay.com) no later than **October 19th**.

The CABW Meetings will be held directly afterwards in Davis on October 24th and 25th. See attached flyer.





24th Annual Meeting
California Aquatic Bioassessment Workgroup
5th Annual California Chapter Society of Freshwater Science (CalSFS)

October 24 and 25, 2017
9 am – 4 pm

The Ballroom
Activities and Recreation Center Conference Facility
University of California
Davis, CA

REGISTRATION

There is no fee to attend the CABW, but registration is required. The registration process will start in August and will be open to everyone interested in attending.

Waterboard Employees – Follow established procedures to register online through the academy registration system. See <http://waternet.waterboards.ca.gov/training/> for instructions and access to the online registration system.

Non-waterboard Employees – Email your contact information to academy@waterboards.ca.gov to request registration. You may not request registration on another's behalf. Each individual must email the academy separately to request registration.

Directions: Interstate 80 to Hwy 113 north toward Woodland. Take Russell Boulevard exit and turn right on Russell Boulevard. Turn right on La Rue Road. Turn left on Orchard Road and drive directly into Visitor Parking Lot 25.

Parking: Permits are required and cost \$9.00 per day. Parking permit dispensers accept quarters, one-dollar bills, five-dollar bills, or VISA and MasterCard.

Online campus map: <http://facts.ucdavis.edu/map.lasso>

**For more information,
registering contact:**

Toni Marshall
 Water Boards'
 SWAMP Program
 (916) 322-2518
tmarshall@waterboards.ca.gov

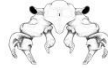


www.waterboards.ca.gov/swamp

Entomological Etymology

from D. Christopher Rogers

A “canopy” of course is a fixed covering over a bed, stage, dais, or carried on poles over some celebrity. It comes from the late Middle English, originally from the medieval Latin “canopeum”, which is an alteration of the Latin “conopeum”, literally a “mosquito net over a bed”, from the Greek “kōnōpeion” (“couch with mosquito curtains”) which breaks down into kōnōps “gnat” or “mosquito”. Earliest documented usage is 1382.



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: arichards@csuchico.edu.

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 (arichards@csuchico.edu) for inclusion in the next issue of the SAFIT Newsletter. Thanks!!

Asterisk (*) indicates author is a SAFIT member.

Crustacea

Aguilar, A., A. M. Maeda-Martínez, G. Murugan, H. Obregón-Barboza, *D. C. Rogers, K. McClintock, and J. L. Krumm. 2017. High intraspecific genetic divergence in the versatile fairy shrimp *Branchinecta lindahli* with a comment on cryptic species in the genus *Branchinecta* (Crustacea: Anostraca). *Hydrobiologia* 801:59-69.

Marrone, F., *D. C. Rogers, P. Zarattini, and L. Naselli-Flores. 2017. New challenges in anostracan research, a tribute to Graziella Mura. *Hydrobiologia* 801:1-4.

Marrone, F., *D. C. Rogers, P. Zarattini, and L. Naselli-Flores. 2017. New challenges in anostracan research: old issues, new perspectives and hot topics. *Hydrobiologia* 801:179-185.

*Rogers, D. C., T. C. Chang, and Y.-C. Wang. 2017. A new *Eocyclus* (Branchiopoda: Spinicaudata) from Taiwan, with a review of the genus. *Zootaxa* 4318:254-270.

Ephemeroptera

Cruz, P. V., F. F. Salles, and N. Hamada. 2017. Phylogeny of *Callibaetis* (Ephemeroptera: Baetidae) based on morphology of nymphs and adults. *Zoologica Scripta* 46:138-149.

Cruz, P. V., A. K. Usher, and L. M. Jacobus. 2017. Review of continental North and Central American *Paracloeodes* Day 1955 (Ephemeroptera: Baetidae), including description of a new species from Minnesota, USA. *Zootaxa* 4263:333-346.

Odonata

Garrison, R. W. and N. Von Ellenrieder. 2017. New species of the damselfly genus *Argia* from Mexico, Central America and Ecuador with an emphasis on Costa Rica (Insecta: Odonata: Coenagrionidae). *Zootaxa* 4235:1-93.

Torres-Pachon, M., R. Novelo-Gutierrez, and A. E. de los Monteros. 2017. Phylogenetic analysis of the genus *Argia* Rambur, 1842 (Odonata: Coenagrionidae), based on morphological characters of larvae and mitochondrial DNA sequences. *Organisms Diversity & Evolution* 17:409-420.

Ware, J. L., E. Pilgrim, M. L. May, T. W. Donnelly, and K. Tennessen. 2017. Phylogenetic relationships of North American Gomphidae and their close relatives. *Systematic Entomology* 42:347-358.

Plecoptera

Baumann, R. W., A. L. Sheldon, and R. L. Bottorff. 2017. Stoneflies (Plecoptera) of Nevada. *Monographs of the Western North American Naturalist* 10:1-138.

Baumann, R. W. and B. P. Stark. 2017. Variation in the epiproct of *Arsapnia decepta* Banks, 1897 (Plecoptera: Capniidae), with comments on *Arsapnia coyote* (Nelson & Baumann 1987). *Illiesia* 13:1-21.

Fairchild, M. P., T. P. Belcher, III, R. E. Zuellig, N. Vieira, M. K., and B. C. Kondratieff. 2017. A rare and cryptic endemic of the Central Rocky Mountains, U.S.A: The distribution of the Arapahoe snowfly, *Arsapnia arapahoe* (Nelson & Kondratieff, 1988) (Plecoptera: Capniidae). *Illiesia* 13:50-58.

Heteroptera

Epler, J. H. and D. R. Denson. 2017. New records of Corixidae and Micronectidae (Insecta: Heteroptera: Corixoidea) from Florida, with a checklist of all species known from the state. *Entomological News* 126:410-414.

Trichoptera

Johanson, K. A., T. Malm, and M. Espeland. 2017. Molecular phylogeny of Sericostomatoidea (Trichoptera) with the establishment of three new families. *Systematic Entomology* 42:240-266.

Coleoptera

Baca, S. M., E. F. A. Toussaint, K. B. Miller, and A. E. Z. Short. 2017. Molecular phylogeny of the aquatic beetle family Noteridae (Coleoptera: Adephegidae) with an emphasis on data partitioning strategies. *Molecular Phylogenetics and Evolution* 107:282-292.

Balke, M., J. Hajek, and L. Hendrich. 2017. Generic reclassification of species formerly included in *Rhantus* Dejean (Coleoptera, Dytiscidae, Colymbetinae). *Zootaxa* 4258:91-100.

Kundrata, R., M. A. Jäch, and L. Bocak. 2017. Molecular phylogeny of the Byrrhoidea-Buprestoidea complex (Coleoptera, Elateriformia). *Zoologica Scripta* 46:150-164.

Minoshima, Y. N., Y. Iwata, M. Fikáček, and H. Masakazu. 2017. Description of immature stages of *Laccobius kunashiricus*, with a key to genera of the Laccobiini based on larval characters (Coleoptera: Hydrophilidae). *Acta Entomologica Musei Nationalis Pragae* 57:97-119.

*Richards, A. B. and W. D. Shepard. 2017. A review of *Stenocolus scutellaris* LeConte, 1853 (Coleoptera: Eulichadidae), with notes on distribution, morphology and life history. *The Pan-Pacific Entomologist* 93:127-140.

Short, A. E. Z., *D. Post, and E. F. A. Toussaint. 2017. Biology, distribution, and phylogenetic placement of the California endemic water scavenger beetle *Hydrochara rickseckeri* (Horn) (Coleoptera: Hydrophilidae). *The Coleopterists Bulletin* 71:461-467.

Diptera

Puchalski, M. and W. Gilka. 2017. *Cladotanytarsus* Kieffer (Diptera: Chironomidae): several distinctive species reviewed on the basis of records from Canada and USA. *Zootaxa* 4242:344-358.

Miscellaneous

Gerth, W. J., J. Li, and G. R. Giannico. 2017. Agricultural land use and macroinvertebrate assemblages in lowland temporary streams of the Willamette Valley, Oregon, USA. *Agriculture Ecosystems & Environment* 236:154-165.

Giersch, J. J., S. Hotaling, R. P. Kovach, L. A. Jones, and C. C. Muhlfield. 2017. Climate-induced glacier and snow loss imperils alpine stream insects. *Global Change Biology* 23:2577-2589.

*Rogers, D. C., S. T. Ahyong, C. B. Boyko, and C. D. u. D'Acoz. 2017. Images are not and should not ever be type specimens: a rebuttal to Garraffoni & Freitas. *Zootaxa* 4269:455-459.

THANK YOU FOR YOUR MEMBERSHIP!

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D. Christopher Rogers, 785.864.1714 (branchiopod@gmail.com)

SAFIT Newsletter Publication Guidelines

Submissions and questions about submissions should be directed to the SAFIT Newsletter Editor, at: arichards@csuchico.edu, 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	Publication Date
I	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, mserumgaard@fakeaddress.net, (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.