

American Arachnology

Newsletter of the American Arachnological Society

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American Arachnological Society Annual Meeting

Mark your calendars! The 2019 annual meeting of the American Arachnological Society will be June 16 – 20 at Washington and Lee University in Lexington, Virginia. The meeting will be hosted by Nadia Ayoub. Registration is now open (https://aas2019.academic.wlu.edu/). Abstracts are due May 10th; on campus housing can be reserved up through May 15th. Registration closes June 9th. Visit the meeting website or http://www.americanarachnology.org/meetings/meetings.html for more information or to register.

AAS Travel Grants

The AAS offers travel grants to the annual meeting to all student presenters and to non-student presenters who lack institutional support. The deadline for travel grants is April 30, 2019. Go to http://www.americanarachnology.org/grants and awards/travel grant.html for application material and information.

Through the Lens – Macrophotography Course

June 23 – 29, 2019 Kefyn Catley will be teaching a photography workshop focused on insects and spiders at the Eagle Hill Institute on the coast of Maine just east of Acadia National Park. This hands-on seminar provides a unique opportunity to learn more about insect and spider biology and ecology using your own images as a point of entry into the engrossing world of arthropods. It

addresses the biology behind the photograph for photographers and the art behind the image for those with a biology background. The class is largely taught in the field with lectures, post-production work and group image critiques when the light and/or weather do not cooperate. Participants will gain much deeper insights into the biology, ecology, behavior, and conservation of their subjects as well as the skills required to produce high quality photographs of them in their natural habitats.

Information about this amazing opportunity, including registration information and costs, can be found at https://www.eaglehill.us/programs/nhs/nhs-calendar.shtml. You can also email Kefyn directly for more information at kcatley@email.wcu.edu.

Biology of Spiders at Highlands Biological Station

July 15 – 26, 2019 Kefyn Catley from Western Carolina University and Sarah Stellwagen from the University of Maryland will be teaching Biology of Spiders at Highlands Biological Station in the incredible Blue Ridge mountains of North Carolina. This course will present a comprehensive introduction to spider systematics, morphology, behavior, physiology, and ecology. Afternoons are devoted to fieldwork, with the objective of assembling a significant collection of the extraordinarily rich local spider fauna while studying spider ecology and behavior. Most evenings will be available for students to work on identification. Working in small groups, students will be required to undertake a short, supervised self-selected research project investigating some aspect of spider biology, the results of which will be shared at the end of the course.

For more information, application materials, and costs, visit https://highlandsbiological.org/2019/01/01/summer-2019/ or email kcatley@wcu.edu or sstellw@umbc.edu.

Spider Biodiversity Inventory for Los Tuxtlas, Mexico

Fernando Alvarez Padilla from the Ciudad Universitaria, México D.F. announces the Spider Biodiversity Inventory website for Los Tuxtlas, Mexico and information about this inventory at:

Los Tuxtlas Inventory website: http://www.unamfcaracnolab.com/WPGS TUXV/tuxv.html

Main Lab website: http://www.unamfcaracnolab.com

Inventory Comparative Search website: http://www.unamfcaracnolab.com/comp.html

This inventory recorded 244 species of 39 Araneomorphae families. Fernando says that his research group plans to publish the inventory but are requesting help with identifications. On the website, they make 100x and 200X images available. Please visit the website to view the images. His lab used inexpensive equipment to take these photos and he is willing to share information about his process. He also offered to loan specimens or legs for DNA. Contact him at fap@ciencias.unam.mx.

Request for Specimens

Marc Milne, professor at the University of Indianapolis (<u>milnem@uindy.edu</u>) requests recently caught specimens (caught within the last 10 years) and preserved in at least 70% ethanol representing the taxa below. The specimens will be destroyed upon DNA extraction.

Any species of the genus *Goneatara* (Linyphiidae) Neodietrichia hesperia (Linyphiidae) Any species of the genus Floricomus (Linyphiidae) Any species of the genus Liocranoides (Zoropsidae)

Symbiota Collections of Arthropods Network

By Sandra Brantley

The SCAN specimen database: not just for insects

Symbiota Collections of Arthropods Network, http://scan-bugs.org/portal/

Background

The SCAN network began as an NSF Thematic Collections Network (TCN) in 2012 to database ground-dwelling arthropods in the southwestern United States from 16 US entomology collections. Arachnids were a key focal taxa for this continuing effort. SCAN expects to sponsor Partners to Existing Networks (PEN) grants through 2020, so any collection with spiders and other ground-dwelling arthropods groups can apply for a NSF PEN grant. The network has expanded and now contains specimen records from over 110 collections, mostly in North America, and efforts are underway to obtain more records from other parts of the world. SCAN can easily accommodate collections or data outside of North America. Yes, Paula Cushing's records from her Colorado Spider Survey are in SCAN!

Symbiota is the underlying programming platform for records and their management, hence the full name for SCAN: Symbiota Collections of Arthropods Network. The data are stored on servers at the University of Florida, as part of the iDigBio (Integrated Digitized Biocollections) grant to support digitization efforts. Local institutions may use their own databases and upload records to SCAN.

Features for Searching

Searches can be done on any combination of regions or collections you choose; results are returned as specimen records, species lists, or as basic distribution maps in Google Earth or KML files. Taxon searches can be done at any level. Names are based on the WSC (World Spider Catalog), with periodic updates; synonymies are not complete yet. A member institution does not have to agree with the names given in SCAN; there are places for notes to say how a given taxon is handled within a collection.

The new Spatial Data module allows you to refine habitat variables with specimen records for a clearer view of distribution patterns.

Specimen records cover current studies and legacy holdings, depending on what the contributing institution submits.

There are images for some taxa, but imaging specimens in alcohol is harder to do than herbarium sheets, which lead the way in specimen imaging. If you have spider images you'd like to upload, contact Neil Cobb (address below) for more information.

Exporting search results is easy as csv (comma separated values) or Excel files.

Features for data management

Data entry is web-based; records can be entered anywhere there is an Internet connection, so updating is continuous. Records can be entered singly or batch uploaded as csv files. Some collections upload records only occasionally (the "snapshot" method). In my collection, we moved from an outdated in-house database to SCAN, and I use single-record entry and batch upload.

Georeferencing (providing latitude and longitude coordinates) for records has been a priority, so that they can be used in mapping and in developing future questions about distributions, such as niche modeling.

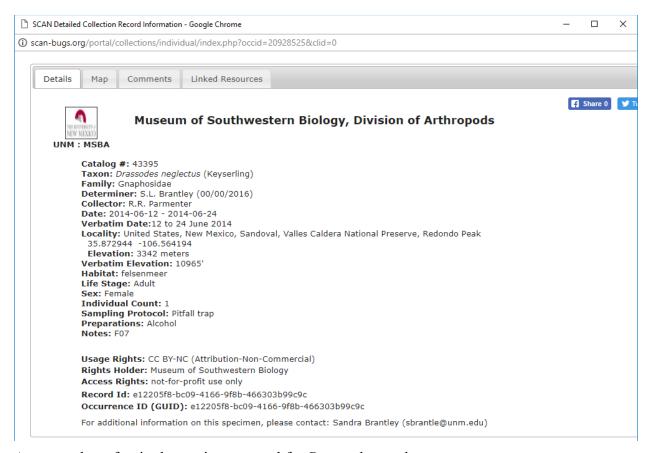
SCAN works with both iDigBio and GBIF (Global Biodiversity Information Facility) to ensure that collection data is fully available to other researchers and educators around the world and data providers are attributed. SCAN has modules to manage loans, to track species determination history, and to add species profiles (which can then be used to create field guides). Printing labels has not received the attention that other aspects of specimen management have; but with alcohol specimens the labeling process is a little more difficult than for pinned specimens.

More publishers are requiring authors to report specimen catalog numbers in publications; having those records in SCAN makes it easier for others to find the label information and also gives credit to the institutions whose materials you've used. Records in SCAN can reduce loan requests if all you need are label data, or can increase loan requests if you find new collections with taxa of interest to you

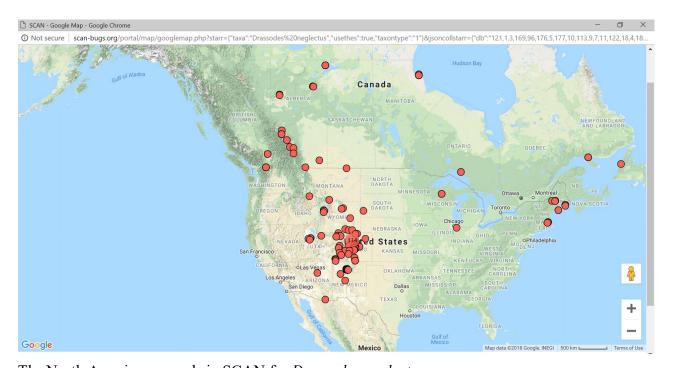
As I was writing this introduction to SCAN, a new feature appeared on the home page: Get a free 1-on-1 demo through Skype or a phone call. SCAN is actively growing and improving.

If you have spider specimen records, consider entering them in SCAN; the program was started to encourage small collections (like mine) to publish their data for a wider audience. Whether you have an in-house database or not, switching or exporting to SCAN gets you the benefits of mapping and web-based data entry, upgrades are made by the programming staff, and you can export and back up your files to your computers anytime. We know you're out there, wondering how to make better use of your specimen collections. Increase the impact of your collecting and identification efforts by adding your records to SCAN; it raises the profile of your institution as well. Let Neil Cobb know if you have collections data you'd like to contribute (neil.cobb@nau.edu). The more records we have, the better we'll understand spider diversity.

On the next page are screen shots showing some of the search and mapping capabilities of SCAN.



A screen shot of a single specimen record for *Drassodes neglectus*



The North American records in SCAN for Drassodes neglectus

Journal of Arachnology News of Note

The *Journal of Arachnology* has become the premier publication for peer reviewed articles about arachnids. As of April 2018, the *Journal* had achieved an Impact Factor of 1.236!

The AAS encourages members to submit original research to the *JoA*. Submission is now done online. Instructions to Authors can be found by following this same hyperlink.

The Editors also welcome ideas for Review articles, which can be submitted to the Editor in Chief, Deb Smith.

Current issues of the *JoA* are accessible online to AAS members. Issues more than one year old are made freely accessible to members and non-members via the AAS website.

The society Secretary with the *JoA* editors choose upcoming articles of general interest to highlight via a Press Release sent to various online and print publications.

Other AAS News for Members

AAS members receive a greatly reduced price for <u>Spiders of North America</u>: an identification <u>manual</u>. Member's price is \$50 per copy. No online retailer can provide such a reduced discount! Buy your copies of SNAIM for your next Invertebrate Zoology, Spider Biology, or General Arachnology class.

Please send information, announcements, short articles for the Fall *American Arachnology* newsletter to Paula. Cushing@dmns.org no later than October 15, 2019.