

Bulletin of the **Oregon Entomological Society**

From The Editors . . .

The first paragraph of a letter sent out November 1, 1939 to professional and amateur entomologists in the State of Oregon signed by Don C. Mote, head of the Department of Entomology at the then Oregon State Agricultural College, stated:

“We are contemplating the organization of an Entomology Club in Oregon which will include all individuals who are interested in Entomology, either as a vocation or avocation. By this means professional and amateur entomologists of Oregon can become acquainted with each other and come together for mutual pleasure and cooperation.”

The organizational meeting was held on Saturday November 18, 1939. The first officers were Don D. Mote, President, Mrs. Ruth C. Whitney, Vice President, Kenneth M. Fender, Vice President, and Richard L. Post, Secretary.

The Oregon Entomological Society met and produced a newsletter regularly at least until 1997 (the date of the last newsletter in the OSU Library). Meetings were held at various locations throughout the state as were field trips, with varying numbers attending. From 2004 to 2007, activity was limited to annual meetings. Since then with the organizational efforts of Chris Marshall at the Oregon State Arthropod Collection and others, OES has been listed as a cosponsor of several workshops held at OSU, but has otherwise been inactive.

The organization has always relied on a core group in the Salem–Corvallis area, and it has been difficult to include in a meaningful way the many far-flung people outside that area. There have been repeated efforts to get people more involved, even during its heyday.

We wish to resurrect the Newsletter, at least so the organization’s primary purpose can be fulfilled. It is difficult to get people together in one place these days due to numerous time and financial constraints. However, there is no reason that some communication can’t be maintained, at least so that we are aware of each other’s activities and interests. Newsletters do take some effort to put together but not like the old days. They are certainly easier to edit and correct. They are also easier to distribute. Printing and mailing is not required. With the newsletter forming a core, perhaps meetings and field trips will follow, but whether they do or not, or whether that many people participate, at least we can be aware of each other.

We plan to put the newsletter out quarterly (March, June, September and December), so the next one should appear towards the end of June. If you have any material—articles or article ideas, requests, photos, event notices, etc.—that you would like to include, please send it along by the beginning of June. If you have any suggestions, questions, corrections or comments concerning the newsletter, please send them along too. Thanks.



The OES Logo

At the 22 January 1949 meeting, OES members adopted the Raphidian (snake-fly) as the official logo of the Society. A drawing of the Raphidian by Mrs. A.K. Bruhn (Betty Ellsworth) was added to the heading of the next Bulletin in April 1949.

In the late 60s interest picked up in designating a “state insect”. OES and various members waged an spirited campaign in favor of “Rufus Rainbeetle”, *Pleocoma oregonensis*. The legislative process was aborted several times and Rufus battled stiff competition before his final defeat. During the summer of 1979, the Oregon Swallowtail was selected as the official insect of Oregon.

During the campaign for the state insect, the subject was broached, but apparently never acted on, to replace the Raphidian by Rufus. Some years later in 1992, a couple of different beetles emblazoned with the letters OES showed up on the back cover of the Bulletin, but the Raphidian still held the front.

Eventually, a vote was taken and Rufus replaced the Raphidian as the official OES logo. Fresh from his victory, Rufus proudly took his place on the front and back covers of the Bulletin in November 1993.



Figure 1. The Raphidian.

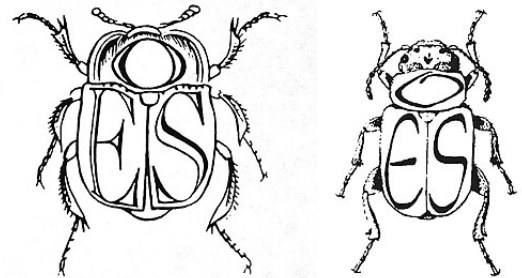


Figure 2. Alternate beetle images appearing on the back cover of the Bulletin 1992–1993.

On the Need for a Bibliography of Oregon Insects and Their Relatives *Ron Lyons*

Questions such as . . .

I found this bug. Is it a native species?

I found this bug. Is it a new record for the state or the county?

What arthropods can I expect to find in this area?

What previous work has been done in this area?

What previous work has been done on this species?

. . . are not trivial. In few cases will the answer fall out easily from a Google search, partly because much of the relevant information is not yet in digital form, and may never be.

Papers/articles are presented in a wide variety of formats—journals, magazines, private publications, government reports, theses, conference proceedings, file reports, file notes, etc. Locality information from specimen collections is just beginning to become available. Unless you are fortunate enough to ask the right person, or the person who knows who knows the right person, or visit the right location, or go to the right meeting, you are likely to miss some highly relevant material. As time goes by, information gathered or presented in the past tends to get overlooked, partly because it becomes harder to find.

With that in mind, I would like to create a bibliography of location specific studies. For example, I know of 2 studies pertaining to the Alvord Desert area. The first by Cobb, Gruber, Heske, Flecker, Lightfoot, Masters, McClintock, Price, Seibert and Smith titled “An Ecological Study of the Alvord Basin Sand Dunes, Southwestern Oregon”, was published in 1981. The other is titled “Hot Springs Insects of Oregon” by Goeden, Lattin and Ver Linden, privately published in 2003. Are there more? I have no references for the coastal dunes. Are there any?

I would also like to create a list of references of the form “XXX of Oregon”. For example, Johnson and Valley published “The Odonata of Oregon” in 2005. While the information in this particular paper has been superceded by Kerst and Gordon’s recent book, “Dragonflies and Damselflies of Oregon”, as far as I know, Fulton’s “Tree Crickets of Oregon” published way back in 1926 has not been. This list should also include references of the form “XXX of the Pacific Northwest” since they may provide the only comprehensive material available.

If you have or know of any material that might fit into these categories, let me know. I will combine the references I have with those I receive and make the bibliography available at a later date. Remember, even though a reference may seem out-of-date, it may be the latest information available or it may provide some information not available in more recent material. If I am “reinventing the wheel”, feel free to let me know that too. Thanks.

Life In Winter Ponds Along The Coast *article and accompanying pictures by Ron Lyons*

On nice winter days, I like to see what is developing in the local winter ponds. For the purposes of this article, winter ponds are temporary ponds that form in low-lying areas during the rainy season and sometimes persist into late spring. I document my findings with photography—my camera is equipped with a macro lens and I carry a small tripod.



Chaoborus larva

I scoop my water sample up using a clear plastic soda cup. If I see anything interesting, I pour the sample into a small, shallow, white porcelain tray, and adjust the water level as necessary to reduce the depth that the organisms can move around in. This restricts the ability of some insects, like mosquito larvae, to hang vertically. (Photographically, this leads to better pictures, since depth of field is often a problem in close-up photography. In addition, it reduces any distortion caused by the water.) Some debris usually remains, and while it can be a nuisance, on occasion it can provide insects with a substrate to rest on, allowing for better pictures. I aim the camera, mounted on a tripod over the pan, directly down into the pan.

I prefer to shoot on bright sunny days. The bright sunlight allows me to use a fast shutter speed (helpful with moving objects) and a small aperture (greater the depth of field), and makes it easier for me to focus the camera. It also produces an important additional element that I like—strong shadows. Depending on the angle of the sunlight, the shadow can help reveal details that are not readily visible, like fine hairs, or it can add a profile view.



Daphnia

Press), is shorter but covers much of the same subject material. While there are various books on aquatic insects that can be consulted for identifications, I prefer R.W. Pennak's "Fresh-water Invertebrates of the United States" as it is a lot more comprehensive.

The white background of the porcelain tray makes it easier to track small organisms than a dark or natural background would. In addition, it makes the internal features of semitransparent organisms stand out.

If you are interested in the biology of these transient aquatic habitats, pick up a copy of "The Biology of Temporary Waters" by D.D. Williams, 2006 (Oxford University Press). His earlier text, "The Ecology of Temporary Waters", 1987 (Blackburn

NPPNW, Spring 2001 Meeting

The Nature Photographers of the Pacific Northwest Spring 2011 meeting will be 2 April in Tacoma, Washington. Laurie Excell is the invited speaker. For more information visit <http://www.nppnw.org/meetings.html>.



caddisfly larva



libellulid (dragonfly) larva

The 2011 North American Forest Insect Work Conference (NAFIWC)

9–12 May 2011, Portland Marriott (Downtown Waterfront)

Convened every five years, this conference provides a forum for the discussion of contemporary issues in forest entomology. The broad-based agenda includes topics relating to research, development, application, management, and education.

NAFIWC draws together people working in forest entomology from diverse organizations across North America. It is the only conference where the full complement of forest entomologists meet to discuss the state of their enterprise. As such, it integrates and unifies the annual regional conferences: the Southern Forest Insect Work Conference, the Western Forest Insect Work Conference, the North Central Forest Pest Workshop, and the Northeastern Forest Pest Council.

For registration and program information see <http://kelab.tamu.edu/nafiw2011/>.



Lepidoptera News

New Population of Tailed Copper (*Lycaena arota*)

A new lowland population of the Tailed Copper (*Lycaena arota*) was recently found by lepidopterist and OSAC volunteer Dana Ross. While not uncommon throughout many parts of its western US range, this butterfly is rare and local in the Willamette Valley. The new site is in Yamhill County at The Nature Conservancy's Yamhill Oaks Preserve. Several years ago, Mr. Ross rediscovered the Tailed Copper in Benton County where it had gone unnoticed for over 100 years after its initial documentation there in 1897.



A Corvallis resident since 1981 and a two-time Oregon State University graduate (1993, 2003), Dana has made other important butterfly discoveries. Funded by The Xerces Society for Invertebrate Conservation and the US Fish and Wildlife Service in 2007, he located the rare Mardon Skipper (*Polites mardon*) on the southern Oregon coast near Gold Beach for the first time in nearly 30 years. The US Forest Service and Bureau of Land Management funded additional work that resulted in the documentation of two more sites. These findings are important since Mardon Skipper sites throughout western Washington, Oregon and northern California are extremely localized and are disappearing due to habitat loss.

33rd Annual Pacific Northwest Lepidopterists' Workshop: 29–30 October 2011

Sponsored by the Oregon State University Zoology Department and the Oregon State Arthropod Collection (OSAC)

Hosted by Paul Hammond and David McCorkle, this weekend meeting, held in Cordley Hall at Oregon State University in Corvallis, provides an opportunity for professionals and non-professionals (of all ages) interested in Lepidoptera of the Pacific Northwest and adjacent states/provinces to get together to share information and socialize. Short informal reports on various research topics, particular species and field trips are part of the program. Groups of emphasis this year will be the butterflies in the genera *Papilio* (Swallowtails) and *Euphilotes* (one of the Blues) and moths in the family Geometridae. A number of specimens from these groups will be on display for inspection and intercomparison. There will also be a session on photography. Participants have the opportunity to display some of their collections. Specimen exchange is encouraged.



Euphilotes battoides, by Dana Ross

There is no charge for this workshop. There is a group dinner on Saturday followed by an evening lecture.

Registration and setup begins at 9:00 AM with proceedings getting underway around 10:00 AM. More details will be available later.

Some Moths New to Oregon

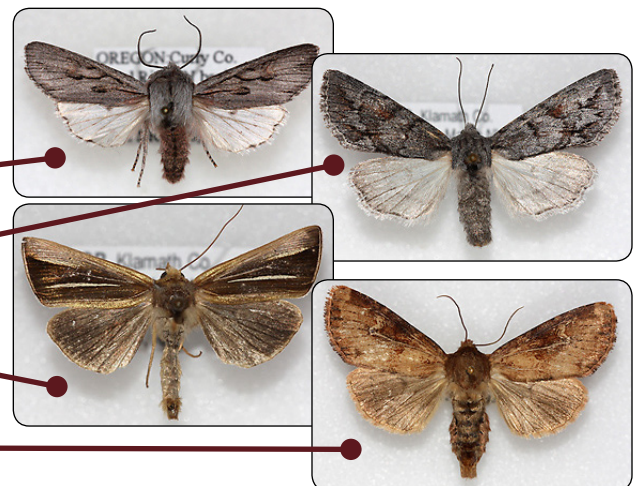
Dana Ross collected three moths that have not been previously reported in Oregon.

Egira vanduzeei was collected near MP 7 on the North Band Road of the Pistol River in Curry County on 2005 March 12.

This undescribed species of *Andropolia* was collected in the Klamath Marsh NWR on 2009 August 27.

Dana also collected this specimen of *Plusia venusta* in the Klamath Marsh NWR on 2009 July 23.

On a visit to OSAC, Lars Crabo identified this misplaced specimen of *Luperina enargia* collected from the Oregon Caves National Monument on 2002 July 29.



In Progress: Pacific Northwest Macromoth Online Database



Jon Shepard (left) and Paul Hammond

Jon Shepard is visiting OSU again this season to database more locality records of moths of the Pacific Northwest held in the Oregon State Arthropod Collection (OSAC). Jon is working on a project funded under NSF grants to Drs. Richard Zack and Lars Crabo at Washington State University and Dr. Merrill Peterson at Western Washington University. The grant title is “Collection enhancement and biodiversity informatics for Pacific Northwest macromoths”.

When completed, or made available, a web-based site will provide information on approximately 1100 macromoths from Washington, Oregon, Idaho, Montana and British Columbia. It will contain species accounts and images of all macromoths with the exception of the Geometridae. For each species the distribution will be shown by a dot map with the specimen data for each locality accessible. The distributions will show the available data from

Whitehorse in the Yukon to Northern California. The records are being compiled from major public and private collections. The web site will also contain identification keys.

Dr. Paul Hammond from Oregon State University is also involved in the project, providing species accounts for Oregon species, and helping with the OSAC specimens.

While the project is going on, many specimens are receiving a careful scrutiny and some species new to Oregon and some undescribed species are being recognized.

Unfortunately, this useful work will not be available for a while. But now you know what is coming!

In the meantime, here are a couple of references you can use:

by **Jeff Miller and Paul Hammond** (all available through http://www.fs.fed.us/foresthealth/technology/pub_titles.shtml)

- *Macromoths of Northwest Forests and Woodlands*. Forest Health Technology Enterprise Team FHTET-98-18. Jun 2000
- *Lepidoptera of the Pacific Northwest: Caterpillars and Adults*. Forest Health Technology Enterprise Team FHTET-2003-03. Dec 2003
- *Butterflies and Moths of Pacific Northwest Forests and Woodlands: Rare, Endangered and Management-Sensitive Species*. Forest Health Technology Enterprise Team FHTET-2006-07. Sept 2007

by **Jerry Powell and Paul Opler**

- *Moths of Western North America*. U.C. Press. 2009

Harold Rice: 1917–2010

Harold, grew up in Eugene and together with his wife, Leona, operated a farm there. Over the years he grew a number of different crops. In 2010 he had 273 acres of filberts.



Harold's interest in butterflies started during his childhood. Over the years, he collected in a number of locations around the world. His extensive collection was donated to the Oregon State Arthropod Collection (OSAC).

The Sand Creek area of Klamath County was one of Harold's favorite collecting spots. In 1995, he and his wife discovered a small blue butterfly there, later described and named by Paul Hammond and David McCorkle, *Philotiella leona* (Leona's Little Blue), after Harold's wife. In 1995, Harold and his wife endowed a chair at OSU, the Harold and Leona Rice Professorship of Systematic Entomology, currently held by David Maddison.

Harold belonged to the OES from its outset in 1939 and served on its first membership committee. He participated regularly in the annual Pacific Northwest Lepidopterists' Workshops. Unable to attend in 2010, he was later presented with a copy of Bob Pyle's latest book “Mariposa Road” signed by Bob and many of the meeting participants.

Harold's work and efforts in entomology will long be appreciated.

Odonata News

A New Odonate for Oregon

Jim Johnson found a new damselfly for Oregon, *Ischnura barberi* (Desert Forktail), while at Borax Lake, Harney County, 18 September 2010. Only a single female was found (pictured at right) so further surveying is needed to determine this species' haunts in the area. This is the northernmost record for this primarily southwestern species which joins such odonates as *Libellula comanche* (Comanche Skimmer), *L. composita* (Bleached Skimmer), and *Paltothemis lineatipes* (Red Rock Skimmer) which also reach their northern limits in the Alvord Basin.

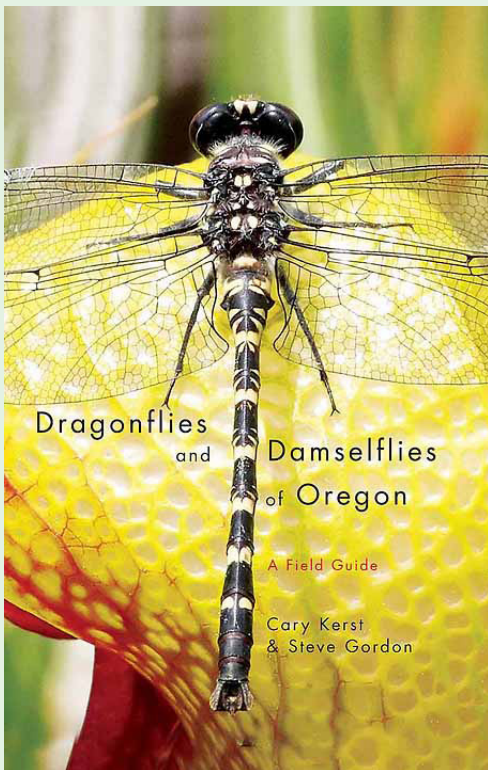
Ischnura barberi is the 92nd odonate recorded in Oregon (and the 29th damselfly).



Ischnura barberi (Desert Forktail), by Jim Johnson

New Book Coming Soon!

The new 300-page book *The Dragonflies and Damselflies of Oregon* by Cary Kerst and Steve Gordon went to the printer recently, and is expected to be available from Oregon State University Press in April. It features 284 photos along with 249 illustrations done by Steve, numerous identification charts, and 96 maps done by Jeff Krueger and Joe Gordon. There is also a section on 30 of the best spots in the state to view odonates.



Updated Checklist of North American Odonata Available Online

The 2011 edition of *A Checklist of North American Odonata* by Dennis R. Paulson and Sidney W. Dunkle is available as a PDF at http://odonatacentral.org/docs/NA_Odonata_Checklist_2011.pdf.

This started out as a publication of the Slater Museum of Natural History, University of Puget Sound, in 1999. It was updated as a PDF online in 2009, and again for 2011.

This edition includes 461 species recorded in the United States and Canada. For each species the original citation, English name, type locality, etymology of both scientific and English names, and approximate distribution are given. Citations for original descriptions of all species are given in an appended list.

A Checklist of North American Odonata

Including English Name, Etymology, Type Locality, and Distribution

Dennis R. Paulson and Sidney W. Dunkle



2011 Edition

Aeshna Blitz at Diamond Lake This Year

The Aeshna Blitz is an informal gathering of odonatists at some Oregon location each summer to see what can be discovered. This year it will be in the Diamond Lake area the weekend of 26 August. All are welcome even if your interest is in non-odonates. For details, contact Jim Johnson at jt_johnson@comcast.net.

Changes At Oregon State Arthropod Collection (OSAC) *Ron Lyons*

In 1977 Jack Lattin and his wife Jo-Anne had a working vacation: they packed much of the entomological collection at the University of Washington and shipped it back down to OSU—an estimated 800,000 specimens. This shipment included the extensive Coleoptera collection built by Melville H. Hatch—at least 12,000 species (estimate in 1949). At the time, Hatch was the premier authority on beetles of the Pacific Northwest and responsible for the five-volume series titled “Beetles of the Pacific Northwest” published between 1953 and 1971. (To learn more about M.H. Hatch see <http://crawford.tardigrade.net/hatch/bio.html>.)

Recently Dr. Stevan Arnold (head of the Zoology Department at OSU) and Dr. Christopher Marshall (Collection Manager and Assistant Curator of the Oregon Arthropod Collection) were awarded a significant NSF grant to improve the collection at OSU, particularly with respect to the beetles (one of the collection’s largest holdings). Their proposal is titled “The Beetles of the Pacific Northwest: The Legacy of Melville Harrison Hatch”.

Over the summer, a number of the old insect cabinets were moved out of the collection room and a number of new pest proof metal cabinets were installed (see Figure 1). The old cabinets each contained 24 drawers and two cabinets were stacked on top of each other. Each new cabinet has space for 62 drawers replacing two of the older cabinets and providing extra room for expansion. However, depending on your height, you might now need a ladder to get a drawer out.

While a lot of the material in the insect collection has been moved about, the updates primarily affect the beetle collection. Over the past couple of years, this collection has been rearranged several times so that it is now in taxonomic order. Specimens in Schmidt boxes have been placed in unit trays, some of the unmounted material from the Hillary Hacker collection has been mounted (there is a lot left to do), and orphan specimens are being gathered into unit trays with their compatriots. A number of specimens have received bar codes. The bar codes for specimens associated with the Hatch collection are on blue paper to distinguish them, so that they can easily be associated with the relevant information in Hatch’s books. The names of the beetles are being updated to comply with current convention. A lot of the initial work on this project was carried out by Vladimir Baicher who, sadly, passed away in 2009. Much of this work is ongoing and a number of students are, and have been, involved.

One of the goals of this grant is the creation of an online resource for the beetles of the Pacific Northwest. To that end, Gracen Brilmyer has been added to the staff, in part to run the digital imaging system that was purchased a couple of years ago. The imaging system allows for the creation of high quality images of insects by automatically taking multiple exposures at different focus points on the subject. The software stacks the images, takes the regions of best focus from each image in the stack, and combines these to produce a high quality well focused image of the subject. Collection Manager Chris Marshall and Clif Johnson from COSINE are creating the beetle database and Gracen is populating it with images of unit trays of beetles in the collection. She is training some of the work study students to take this over and is now acquiring high quality images of representative specimens of Pacific Northwest species (see Figure 2).



Figure 2. Gracen using the digital imaging system to photograph a small beetle



Figure 1. The new cabinets also have a pull out shelf that can be used to hold an insect tray.

OSAC is also working with the OSU Library to provide digital copies of Hatch’s books so that the database images can be linked with the relevant passages in the texts.

There is a lot of activity at OSAC these days. When you visit be sure to check out the new cabinets.

OSU Graduate Students Hold Symposium *Ron Lyons*

On Saturday, 5 March students involved in entomology-related projects at OSU got together with faculty, staff and visitors for the 3rd Annual Student Research in Entomology Symposium. A wide variety of topics were covered.

The oral papers scheduled were:

Kimberly Skyrn: Pollen foraging behavior of native bumble bee colonies in mass flowering resources

Danielle Lightle: You're gluing what to that bug? Using EPG to understand feeding behaviors of the large raspberry aphid, *Amphorophora agathonica*

Kojun Kanda: Molecular data resolves relationships between the three major lineages of Tenebrionidae (Coleoptera)

Kelly Farrell: When the plants change, do the bugs care? Arthropod responses to native versus exotic plant community

Kim Phillips: Foraging preferences of honey bees and bumble bees in Oregon cranberries

Chris Hedstrom: Pheromone mating disruption of filbertworm moth (*Cydia latiferreana*) in commercial hazelnut orchards

Melissa Broussard: Adventures in Bee Vision: What is Attractive to Our Native Bees?

Michael Russell: Seasonal activities and feeding of ground beetles in Western Oregon agricultural landscapes

Kate Boersma: Top predators versus the abiotic environment: what determines community structure in arid-land streams?

The scheduled poster presentations were:

Jess Green: Improving control of field bindweed (*Convolvulus arvensis*) in Willamette Valley caneberries

Danielle Lightle: Seasonal activity and biological control of the large raspberry aphid

Sarah Grubin: Evaluating prey suitability and phenology of two *Leucopis* species (Diptera: Chamaemyiidae), potential biological control agents of the hemlock woolly adelgid, *Adelges tsugae* Annand (Hemiptera: Adelgidae)

Rosalie Bienek: How does risk of native plant *Senecio triangularis* to attack by an introduced weed biological control organism (the cinnabar moth *Tyria jacobaeae*) vary between forest and field habitats?

Danny Dalton: Status of Grape-Feeding Mealybugs and Leafroll Virus in Oregon Vineyards

While I found that all of the presentations made for an interesting morning, particularly as I got an update on one I had helped out on, I was most intrigued with the electronic penetration graph (EPG) technique. In this research, an aphid was wired into an electronic circuit with the plant on which it was feeding. Now that was a delicate job!

The Xerces Society

Pollinator Conservation Resource Center Online

The Xerces Society's Pollinator Conservation Resource Center is now online! Containing a wealth of information, the resource center gives access to all you need to complete a pollinator conservation project in any region of the United States. Visit the Pollinator Conservation Resource Center at <http://www.xerces.org/pollinator-resource-center/>.

Attracting Native Pollinators

The 380-page *Attracting Native Pollinators* provides the recipes for pollinator conservation in any location and features:

- Guidelines on how to select and establish the best nectar-and pollen-rich wildflowers for your region,
- Construction plans for egg-laying or nesting sites,
- Information on how to care for your garden, farm, park, or natural area in a way that creates the greatest benefit for pollinators,
- A guide to common bees of North America,
- Detailed lists of butterfly host plants, and
- Design diagrams for urban gardens, office parks, roadsides, and other landscapes!

For more see <http://www.xerces.org/announcing-the-publication-of-attracting-native-pollinators/>.