Northwest Lichenologists Newsletter <u>March 2008</u>

Compiled by Katherine Glew, Ph.D. University of Washington Herbarium, Burke Museum Associate Editor: Dana Ericson

2008 BRYOPHYTE IDENTIFICATION WORKSHOPS David H. Wagner, Ph.D. Eugene, Oregon email: davidwagner@mac.com 541-344-3327

I will teach two intensive, 4-day bryophyte workshops in April, 2008. They will take place on the University of Oregon campus. Both workshops combine handson experience with detailed lectures. Practice material and copious handouts provided.

Bryophytes I: All the Basics. April 6-7-8-9. The first day is Sunday, so we can start with a field trip. The idea is to get direct experience with the common species in their natural habitat and talk about bryophyte ecology. Then three subsequent classroom days will provide coverage of about 70 important species. Emphasis in this workshop is on sight

recognition of the species studied, their habitat characteristics, learning the basic terminology to describe them, and characteristics of the major families.

Bryophytes II: Advanced Techniques. April 23-24-25-26. Three days of classroom work and one field day; the second day of the workshop will be spent in the field. Inserting the field day into the classroom period permits close integration of field and lab. This workshop emphasizes developing microscope skills and mastering the specialized terminology necessary to use technical keys to identify bryophytes. It is designed

for people who have had Bryophytes I or similar training. Keying liverworts will focus on Doyle and Stotler's 2006 keys to California liverworts. Norris and Shevock's 2004 keys will be emphasized for mosses.

Travel and lodging are the responsibility of the participants; I'll offer suggestions. Sandwich lunches are provided during the classroom days. Participants are responsible for lunches and transportation on field days; carpools encouraged.

Fee: \$400.00 for each workshop. Class size is limited. To reserve a space, send \$25 deposit (non-refundable processing fee). The \$375 balance is due twenty days before the workshop. Cancellations after the balance due deadline will be refunded only if waiting list alternates can be substituted.

Please send check or money order (payable to Northwest Botanical Institute) to NW Botanical Institute, P.O. Box 30064, Eugene OR 97403-1064. Note that credit cards cannot be processed. A receipt will be provided at the workshop. An invoice can be provided upon request ahead of time, if needed. Agency purchase orders should include my tax ID Number (200714276) and may use my DUNS Number for electronic payment (DUNS 045324790).

2008 WILLAMETTE VALLEY NATURE CALENDAR David Wagner, Eugene, Oregon

Filled with nature notes and gardening hints, "Wagner's 2008 Willamette Valley Nature Calendar" will be informative to anybody living west of the Cascade Mountains in the Pacific Northwest. A long time feature is the listing of a wide array of religious events and celebrations from around the world, plus a few festivals developed just for our bioregion. Every year I prepare a set of pen and ink drawings just for the calendar. This year's can be seen at this web address:

http://web.mac.com/davidwagner/Site/2008_drawings.html

These drawings are posted with the note the y may be freely downloaded for noncommercial, educational purposes.

They are available in Eugene at Down-to-Earth, The Museum of Natural and Cultural History, and the UO Bookstore; in Corvallis at Grassroots Bookstore and First Alternatives Coop. To obtain a personal copy, send a check for \$15 (includes shipping) to:

Northwest Botanical Institute PO BOX 30064 EUGENE 0R 97403-1064

And for orders in quantity, the price for 5-9 is \$10 each, plus \$4 shipping for the lot. For 10 or more, the price is \$8 each and shipping is free.

For quantity discounts or other information, email me at <u>davidwagner@mac.com</u> or call 541-344-3327.

Kelli Van Norman, Kelli_VanNorman@blm.gov

<u>Regional Forest Service and BLM Lichen Efforts in Oregon and Washington</u> Interagency Special Status / Sensitive Species Program – www.fs.fed.us/r6/sfpnw/issssp Forest Service (FS) Region 6 and Oregon/Washington Bureau of Land Management (BLM) have 35 lichen species on our sensitive and special status species lists. In addition, we have almost 30 lichen species on our "strategic" list, which are species that are only suspected on FS and BLM lands, have some taxonomic question, are undescribed, or are Oregon Heritage List 3 or Washington Heritage Review 1 or 2. Our species lists are posted on the ISSSSP web site (http://www.fs.fed.us/r6/sfpnw/issssp/agency-policy). And this winter we will have updated lists for both the FS and BLM.

If you find any of these species on FS, BLM or even state lands such as State Parks, please collect a voucher (only if there is sufficient material) and write down your survey information such as date, observer, habitat, substrate, and accurate location information, which is key to relocating the site, as well as identification notes. The Oregon and the Washington Natural Heritage programs track species locations and their data. Consider donating the collected voucher to a regional herbarium where it will be available to others for further research. Some of these species are so rarely seen that there are few people who can identify them. Having vouchers for ID verification and future study is critical.

For our FS and BLM botanists, our regional interagency program provides "identification services." Lichens, as well as bryophytes, fungi, and mollusks are cryptic species about which little is known and identification can be difficult. It is regional policy for agency botanists to make collections of these species so we can follow-up with expert verification and curate the collections at regional herbaria. We have expert identification contracts with several lichenologists certified through the NW Lichenologist certification program.

Since the 2005 initiation of our regional Interagency Special Status / Sensitive Species Program (ISSSSP) for Oregon and Washington BLM and Forest Service, a number of conservation planning tools and inventories have been completed and more are underway. The conservation planning tools include products such as species fact sheets and conservation assessments that help the agency field botanists conserve and manage their special Status and sensitive species (see <u>http://www.fs.fed.us/r6/sfpnw/issssp/planning-</u> <u>documents/</u>). Since many lichen inventories were conducted in the Northwest Forest Plan during the last decade, we have been focusing many of our lichen inventory efforts on the "Eastside" to gain a better understanding of our lichen biodiversity, to survey high potential habitat, and to better document sensitive lichen species distribution. So far, inventories have been conducted on portions of the Colville, Okanogan, Ochoco, Umatilla, Wallowa-Whitman, and Fremont National Forests.

Our regional program has offered opportunities for field botanists to propose inventory and conservation types of projects through an annual proposal process. Independent lichenologists have worked with agency botanists in several cases to propose projects. Andrea Ruchty from the Gifford Pinchot National Forest, for example, worked with Daphne Stone to evaluate the taxonomy of *Leptogium cyanescens*. Coos Bay BLM submitted a 2008 funding proposal to support Bruce McCune and Linda Geiser's update of their field guide "Macrolichens of the Pacific Northwest." Since the field guide is widely used by our agency botanists and few of our sensitive species were included in the first edition, we are contributing a small amount toward publication costs of the new edition. All proposals must come through an agency botanist. Proposals must be for projects identified by the agency botanist(s) as a high priority species and information need. Proposals are generally for amounts of \$20,000 or less. If you are an independent lichenologist, also be sure to continually check the FedBizOpps web page (www.fbo.gov/) for contracting opportunities with the federal government.

Contacts for the Interagency Special Status / Sensitive Species Program (ISSSSP)

- 1 Kelli Van Norman, Inventory Coordinator (kelli_vannorman@blm.gov)
- 2 Rob Huff, Conservation Planning Coordinator (rob_huff@blm.gov)
- 3 Carol Hughes, ISSSSP Specialist (cshughes@fs.fed.us)
- 4 Russ Holmes, Forest Service Regional Botanist (russellholmes@fs.fed.us)
- 5 Joan Seevers, BLM State Botanist (joan_seevers@blm.gov)

Northwest Lichenologists Annual Foray:

Slate Peak, in the North Cascades, Washington State. The trip was organized by Katherine Glew. Slate Peak and Tatie Peak were two sites from Katherine's 1998 dissertation on alpine lichens.

http://www.nwlichens.org/ Click on North Cascades field trip, Sept. 2007

Web site contains images of participants and lichens found on the trip, along with description of foray and area.

Elroy Burnett – Lichenologist extraordinaire

As most are already aware, Elroy Burnett, botanist, lichen enthusiast, and Caliciales specialist passed away on February 1, 2008. Elroy first started attending lichen meetings with the Seattle Lichen Guild in the 1994. He would drive from Index, WA to join in our group and work on his various collections. Elroy always seemed to find those specimens that did not fit the "species concept" and wanted to know the taxonomic placement. Elroy and his hiking companion, Mildred Arnot, would take excursions into the wilderness to botanize. In the 1900s, both became fascinated with lichens and started building monumental collections.

Not to be a lichen generalist, Elroy soon started collecting "pin" lichens, those from what was the taxonomic order Caliciales. He had an incredible eye for finding them and seeing the differences between genera and species. Even in the field he was able to find them on branches, snags and the trunks of trees without a hand lens.

It is a great lost to the Pacific Northwest lichen community to lose Elroy. His collections will be highly valued, especially his collection of caliciod lichens. Elroy's lichen collections will be housed at the WTU Herbarium, University of Washington.

Roger Rosentreter, <u>Roger_Rosentreter@blm.gov</u>

Roger has a Chicago botanical garden intern, Kara Theis, working with him for five months on his lichen herbarium.

Upcoming workshop:

The Bureau of Land Management is conducting two workshops one on "<u>The</u> <u>Ecology and management of Biological soil crusts</u>" April 29-30, 2008 in Moab, UT, and the other one on <u>"The Ecology and Management of alpine Biological soil</u> <u>crusts</u>" in Gunnison,

Colorado Sept. 9-1, 2008 cost for non-Bureau employees is approx. \$250, contact Mark Phillips at the National BLM training center if interested. (Mark Phillips 602-906-5500).

Recent Publications:

Aspen Indicator Species in Lichen Communities in the Bear River Range of Idaho and Utah. 2007. *The Bryologist* 110(2), pp. 254–265 Paul C. Rogers Roger Rosentreter Ronald J. Ryel

Macrolichen diversity in subtropical forests of north-central Florida. 2007. *Evansia* Vol. 24(2): 34-41 Ann M. DeBolt Roger Rosentreter Erin Martin

Also of interest: **Roger Rosentreter** published an article on zonation of mosses and lichen on the Salmon river in Northwest Science, several years ago (1984)

and referenced some other studies that might be good references for Parmeliod lichen growth rates.

R. Rosentreter. 1984. The Zonation of Mosses and Lichens along the Salmon River in Idaho. Northwest Science. Vol. 58(2): 108-117

The best for Parmeliod growth rates: Gregory, K. L. 1976. Lichen and determination of River Channel capacity. *Earth Surface Processes Journal.* 273-285.

others on the topic: Hale, M. E. 1974. *The Biology of Lichens.* 2nd ed. American Elsevier Publishing Company, Inc. New York. pp. 181

Craw, R. C. 1976. Streamside bryophyte zonations. *New Zealand Journal of Botany* Vol. 14, pp. 19-28.

Roger Rosentreter Botanist Bureau of Land Management 1387 S. Vinnell Way Boise, ID 83709 roger_rosentreter@blm.gov 208-373-3824

Dave Kofranek pilott@ecomail.org

Recent Publication:

Umbilicaria hirsuta (lichenized Ascomycetes) new to Oregon.

http://www.pnwfungi.org/index.htm

Eric Peterson, eric@theothersideofthenet.com

Eric has returned to the southern PNW, living in the Klamath Region town of Weaverville, CA. Moving closer to family during the child-raising years will hopefully provide a little more time for lichens. Still working for the Nevada Natural Heritage Program for now, but some career changes are expected in the near future.

Jim Riley, <u>dalife@juno.com</u>

We did take a three week trip through Alberta and BC where I collected a few lichens. Still working on the identifications. I also fit in three backpack trips this summer but didn't do any collecting. I have been busy lately with the contract to do the FIA Identifications again this year. Over fifty plots from southeast Alaska. I've also been doing a few collection verifications for the USFS regional office in Portland, OR. My lichen photographs have been added to the University of Washington web site at:

http://biology.burke.washington.edu/herbarium/imagecollection.php

Peter Nelson, gringo57702@yahoo.com

<u>Peter Nelson</u> spent the summer working, once again, as a lichen and moss specialist at Denali National Park on the long term vegetation monitoring program. He was also fortunate to participate in the first field season of the nonvascular plant inventory in Denali. This entailed a week of helicopter travel within the remote south side of the Park on the flanks of the Alaska Range to collect lichens, mosses and liverworts. Many new taxa were added to the Park list, especially epiphytes such as *Usnea longissima*, *Pseudocyphellaria anomala* and the *Platismatia glauca*. A more complete list of the new taxa will be forthcoming as identification slowly proceeds.

Peter, along with Tim Wheeler, are still working on the numerous Chilean lichen specimens they collected in 2005. Peter wrote a preliminary report detailing their activities, which was submitted to the Chilean forest service (CONAF), but is available in English upon request (email him at rosspeternelson@yahoo.com). Tim and Peter plan to wrap up the initial identifications from their first field season this fall and winter and head back to Chile for another round of field work in 2008. See some of Tim's photographs and Peter's descriptions of common lichens in Chile at www.chilebosque.cl.

Lichen Certification Program

Northwest Lichenologists began a certification program in 2000, in order to create a professional standard for lichenologists, and to make available a pool of competent surveyors and consultants. Our program continues to grow: our fifth exam was held on the slopes of Mt. Rainier, near Eatonville, WA, in September 2007, certifying two more lichenologists. We now have 24 certified people, spread throughout the Northwest! See our website, <u>nwlichens.org</u>, for the list.

The lichen exam is held in a different location each year. We look for a location with a large room for setting up an identification lab and rooms for spending two nights, and some interesting lichens nearby. We make an effort to make the lodging free or inexpensive. If readers have or know of a facility that fits this description, please let someone on the board of NWL know.

Now that the program is established and growing, there are several areas where we need to make new effort. First, in spite of our effort to standardize and to make a pool of professional lichenologists available, government agencies are not using the exam routinely as a qualification for contractors bidding on contracts. My hope is to continue to certify people so that the pool of qualified contractors is even larger, so that government agencies are no longer able to ignore this qualification tool.

Also, I hope we now can begin to offer workshops to help interested people prepare for the exam. These workshops help develop public interest in lichens as well as in the certification program. Northwest Lichenologists is committed to providing instructors, and we hope that workshops and learning plots can be offered to government groups as well as to the public. So far we have held one workshop at Opal Creek in OR, that offered expert help in identification and practice plot collection, and one practice plot in Idaho.

Now that our certification program been established for seven years, other groups are noticing and beginning to talk of certification in other areas, including vascular plants and mosses. This is a great development. If certification is provided in more fields, the interest in using certified workers should spread as well.

Daphne Stone, President, <u>stone_daphne@hotmail.com</u> Northwest Lichenologists

B.C.'S EPIPHYTIC CRUSTOSE LICHENS: CONNECTING THE DOTS, ONE YEAR LATER

In January 2007, Toby Spribille, Curtis Björk, Trevor Goward and Tor Tønsberg announced the project "Connecting the Dots: the British Columbia epiphytic crustose lichen flora project." The announcement was carried on various ListServs, on Botanical Electronic News, and of course it also appeared here, in this newsletter, and it generated a lot of positive feedback. Much has transpired since then, so we thought it might be appropriate, one year later, to post an update.

A few months into our project, we were delighted to be joined by Irwin (Ernie) Brodo whose many decades of experience with the lichens of western Canada will be a tremendous asset. Welcome Ernie! Also joining our project is lichen photographer extraordinaire, Tim Wheeler, of Arlee, Montana. In the years ahead, Tim has agreed to avail us of his photographic prowess (to say nothing of his keen eye for interesting lichens): an important contribution, as will soon become evident. Welcome aboard, Tim!

2007 was a productive and rewarding year for the crust flora project in many other respects as well. The rich yield of new species for science from moist inland rainforests in British Columbia, Idaho and NW Montana featured as a front page article on the March 29, 2007 edition of the Vancouver Sun ("B.C.'s claim to fame: it's a lichen hotbed"), and was subsequently carried on local and national media networks in Canada including the CBC. In the course of the year we submitted eleven papers dealing with epiphytic crust lichens in British Columbia and surrounding states and provinces. Seven of these were accepted and appeared in 2007 already or are in press, including descriptions of four new species: Bellemerella ritae (a lichenicolous fungus: B.C., MT), Enterographa oregonensis (B.C., OR), Lecidea rubrocastanea (B.C., ID, MT, OR, WA), and Santessoniella saximontana (B.C.). And many more are in the works! We are indebted to the fantastic cooperation we have received from friends in Northwest Lichenologists from California to Canada, who have provided specimens and data to help round off our picture of the distribution and variability of these new species, as well as the help and endorsement of the following lichenologists from outside our region during 2007: Teuvo Ahti, Stefan Ekman, Jack Elix, Martin Grube, Per Magnus Jørgensen, Thorsten Lumbsch, Helmut Mayrhofer, Sergio Pérez-Ortega, Christian Printzen, Rikke Reese-Naesborg, Jouko Rikkinen, Matthias Schultz, Laurens Sparrius, and Leif Tibell. Here's to hoping we haven't forgotten anybody!

The past year has also been productive in terms of field work. Collectively we spent about four months in the field, working the dry forests of the southern interior, the rainforests of the central coast, and the boreal forests of northern B.C. In total we collected and reviewed more than 10,000 specimens since last year at this time. As ever, we continue to be astonished by the richness of B.C.'s epiphytic crustose lichen flora, having in 2007 encountered scores of additional species for which we can find no names.

Looking ahead

The year 2008 is already set to be a busy year for the flora project, with field work planned throughout the flora region and regional taxonomic revisions underway for *Cliostomum* and *Xylographa*. Also in the works is an epiphytic crustose flora for the Wells Gray Park area: one of the lichenologically better known portions of inland British Columbia. Farther afield, we're looking forward this year to herbarium visits to Ottawa, Vancouver, Bergen (Norway) and other significant repositories of Pacific Northwest lichens. And of course there's IAL6, in Asilomar, where we're hoping to hold an informal information meeting on our

project. Our objective for this meeting is simple: we'd like to invite more collaborative taxonomic research on B.C.'s epiphytic crusts with lichenologists from around the world. See you there!

Recent Publications from Toby Spribille, toby.spribille@gmx.de

Mycoblastus marginatus, a new synonym for *M. affinis*(*Mycoblastaceae*, lichenized *Ascomycota*). *Mycotaxon*, Vol. 100, April-June 2007, pp. 105-107.

T. Spribille and C. Printzen. 2007. *Lecidea rubrocastanea*, a new lichen species from conifer bark and wood in interior western North America (*Lecanorales*, lichenized ascomycetes) *The Lichenologist* 39(4): 339–347

Katherine Glew, <u>kglew@u.washington.edu</u>

Cedar River Watershed Project – Survey of lichens. Martin Hutten surveyed the bryophytes. The project took place over the past year - 2007. Diversity of lichens was generally low – except in a few locations. Pollution and substrate appeared to be the most likely limiting factors in the watershed for both lichens and bryophytes. Very few cyanolichens found compared to similar sites of age and topography found in other parts of the Cascades and Olympics. The report will soon be published. We are hoping to have an on-line version posted for people to view.

The Northwest Lichenologists Foray was held in the North Cascades of Washington State, early September 2007. Four days and 3 windy nights were spent at the Meadow's Campground. Hikes too the participants to Slate Peak, Haystack Mountain, ridge above Ninety-nine Basin, and Tatie Peak. Katherine collected lichens in the area from 1992 through 1998. Additional species were found to add to the list for the area. Of special interest was *Psora rubiformis* – typical in more northern areas. May be the southern most location known.

Lichens from the Colville National Forest continued to be a working project this past year. Recent collections identified were from 2005 and 2007.

Lichens from the San Juan Islands are in the process of curation. Some interesting finds that represent disjunct distributions from California and south. Lots of crustose lichens along the shores, mainly reflecting nitrogen associations with bird guano.

Lichens of Washington

Burke Museum Herbarium, University of Washington, WTU Image Collection: <u>http://biology.burke.washington.edu/herbarium/imagecollection.php</u>

Scroll to "Browse Lichens" in left hand column, you can view by lichen genera or complete epithet. At the bottom of the left side column, you will see lichen genera or complete scientific names.

From: **Einar Timdal** <u>einar.timdal@nhm.uio.no</u> Posted: <u>lichens-l@HAWAII.EDU</u> Date: Wed, 23 Jan 2008 Subject: Re: Free PDF's

For all papers from the following journals/volumes (with a record in the RLL database), RLL now provides links to the journal web site so that the user can locate and download a pdf of the paper:

Bulletin of the California Lichen Society (all volumes) Buxbaumiella (vol. 1-15, 45-62) Fritschiana (all volumes) Fungal Diversity (all volumes) Mycotaxon (vol. 1-65) Opuscula Philolichenum (all volumes)

It would have been even better to link directly to the pdf files, but that was too much for me. Using the volume number, I tried to get as close to the pdfs as possible. Anyone who wishes to assist is free to make direct links to the pdfs at the RLL web site.

For Graphis Scripta (vol. 13-18), I have manually made all the links to each pdf file.

Australasian Lichenology was mentioned in the discussion but I have not found its web site - does anyone know? Other journals publishing free pdfs that I have missed?

RLL now provides links from 810 records (= 2%), so we still have a long way to go.

Einar Timdal, dr. philos. First curator, lichen herbarium Node director, GBIF -Norway Natural History Museum University of Oslo PO Box 1172 Blindern, N-0318 Oslo, Norway Tel.: +47 22851620 Einar.Timdal@nhm.uio.no www.nhm.uio.no/lichens