



Call for Contributed Abstracts for Oral and Poster Presentations

*86th Annual Conference of the
NORTHWEST SCIENTIFIC ASSOCIATION
with NORTHWEST LICHENOLOGISTS*



EXTENDED Deadline for Submission: February 28, 2015

Instructions for Submission and Conference Information:

<http://www.northwestscience.org/2015meeting>

Past, Present, and Future Challenges to Natural and Managed Ecosystems *Sagebrush, Salmon, and Syrah in a Non-stationary Environment*

SOLICITING FOR

**April 1-4, 2015
Columbia Basin College
Pasco, Washington**

Student participation encouraged!

GENERAL TOPICS:

BOTANY, BRYOLOGY, CLIMATOLOGY, ECOLOGY, ENTOMOLOGY,
FISHERY BIOLOGY, FORESTRY, HYDROLOGY, GEOGRAPHY, GEOLOGY,
LICHENOLOGY, PALEONTOLOGY, WETLAND ECOLOGY, SOIL SCIENCE,
WILDLIFE BIOLOGY, & MORE

and

SPECIAL SESSIONS:

VOLCANISM IN NORTHWEST ECOSYSTEMS
LICHENOLOGY & BRYOLOGY
NORTHWEST GEOLOGY & PALEONTOLOGY

WATER RESOURCES
POLLINATOR ECOLOGY

FISH PASSAGE IN MANAGED RIVERS
SALMON RECOVERY
MGMT, RESTORATION, & PRESERVATION OF SAGEBRUSH LANDS

Supported by:

**COLUMBIA BASIN COLLEGE, WASHINGTON STATE UNIVERSITY - TRI-CITIES, ICE AGE FLOODS INSTITUTE,
AND THE MCBONES CENTER FOR RESEARCH FOUNDATION**

ABSTRACT REQUIREMENTS & GUIDELINES

NORTHWEST SCIENTIFIC ASSOCIATION
Columbia Basin College
Pasco, Washington
April 1-4, 2015

The Northwest Scientific Association is soliciting papers to address a broad range of topics and special sessions in natural, social, and applied sciences (see also *Call for Papers* or go to <http://www.northwestscience.org/>).

Abstracts are required for all oral and poster presentations at the 2015 NWSA conference held jointly with the Northwest Lichenologists, Columbia Basin College, Washington State University Tri-Cities, Ice Age Floods Institute, Mount St. Helens Institute, and MCBONES Research Center and Foundation.

Abstract submittal EXTENDED: 11 December 2014 to 28 February 2015

Presentations for General & Special Sessions will be 15 minutes long, with 5 minutes for questions (20 min. total).

Please adhere to these requirements when preparing your abstract.

All abstracts must be submitted electronically to: NWSA.2015@gmail.com

- ✓ The e-mail subject line must indicate the Presenter's Last Name & whether submitted for a poster presentation or oral session.
Examples: Smith - Oral; Coleman - Poster
- ✓ The body of your e-mail must contain the following information:
 - 1) Name, affiliation, mailing address, and e-mail of the corresponding author.
 - 2) Names and affiliations of additional authors.
 - 3) Include at least two keywords for use in preparing a subject list.
 - 4) State (again) whether submission is for an Oral or Poster Session.
 - a. For submission of abstract for Oral Presentation, indicate session topic. If unsure about whether paper fits published session topics, then state "Contributed Paper." See website <http://northwestscience.org/Symposia> or *Call For Papers* for possible session topics.
 - b. For submission of abstract for Poster Session, state whether presenter is a student and, if so, whether the poster should be considered in competition for "Best Student Poster."
 - c. Specify poster dimensions as either 4 x 4 ft or 4 x 8 ft.

Attach abstract as an MS WORD document to the e-mail. The abstract must be formatted using guidelines below. Failure to follow instructions may result in delays or disqualification. Abstracts that do not follow formatting guidelines will be returned to sender for re-submission.

ABSTRACT FORMAT FOR PAPER AND POSTER PRESENTATIONS (SEE EXAMPLE FOLLOWING INSTRUCTIONS):

- Prepare abstract using Times New Roman, 12-point font in MS Word (.doc or .docx). Improperly formatted abstracts will be returned for revision.
- All text should be **left justified**.
- The title should appear in **ALL CAPITALS**, be bolded, and followed by a period.
- Continue on same line with names of all authors and their full addresses.
- Type author name(s) in upper and lower case. Separate each name with a semicolon after the address.
- Add the full address, using 2-digit state or province abbreviations, including zip or postal code, for each author directly after each author's name. If authors from the same institution follow one another, add the address after the last affiliate. Bold the author's name who is presenting the talk or poster.
- Add the e-mail address of the corresponding author after the last author and italicize it.
- Skip a line and type the abstract in one paragraph in normal case. The word count for the body of the abstract may not exceed 350 words.
- The abstract should include a **statement or summary of the research results**, not a promise that "results will be discussed" at the meeting.

Example Abstract:

DEEP SOIL: SAMPLING, MODELING, AND SIGNIFICANCE OF CARBON IN SUBSURFACE

LAYERS. Jason James, Warren Devine, Rob Harrison, University of Washington, School of Environmental and Forest Sciences, Box 352100, Seattle, WA 98195; Thomas Terry, Sustainable Solutions, 5935 Swayne Rd. NE Olympia, WA 98516; *jajames 'at' uw.edu*

Soil is the primary sink for carbon (C) in forest ecosystems, but it is often overlooked in ecosystem C budgets. Efforts to quantify C pools often sample soils to a depth of 0.2 meter (m) despite observations that deep soil C is neither scarce nor entirely stable. This study examined the systematic sampling depth for ecosystem C analyses in the Pacific Northwest, and compared best-fit models of C in deep soil layers with laboratory measurements. Forest floor samples were collected as well as mineral soil bulk density samples at the midpoint of regular depth intervals (bounded by 0-0.1 m, 0.1-0.5m, 0.5-1.0 m, 1.0-1.5 m, 1.5-2.0 m, and 2.0-2.5 m) from 22 sites across the coastal Pacific Northwest Douglas-fir zone. Soil samples were screened to 4.7 millimeters and analyzed for C content. We found that systematic soil sampling shallower than 1.5 m significantly underestimated total soil C. On average, sampling to 2.5 m compared to 0.5 m increased total C by 156% (85.3 Mg per hectare to 132.7 Mg per hectare). On average, 65% of total C was found in the top 0.5 m of soil, 35% of total C was between 0.5 and 2.5 m, and 21% of total C was between 1.0 and 2.5 m (ranging from 6% to 57%). A nonlinear mixed model using an inverse polynomial curve form and predicting total C to 2.5 m given only data to 1.0 m was reliable for 20 of 22 sites; the sites that could not be accurately modeled carried the greatest C at depth and contained noncrystalline minerals. Shallow soil sampling at best provides a biased estimate and at worst leads to misleading conclusions regarding soil C. Researchers seeking to quantify soil C or measure change over time should sample deep soil to create a more complete picture of soil pools and fluxes.

Final notice for acceptance of abstract will be sent on or before 15 March 2015.