

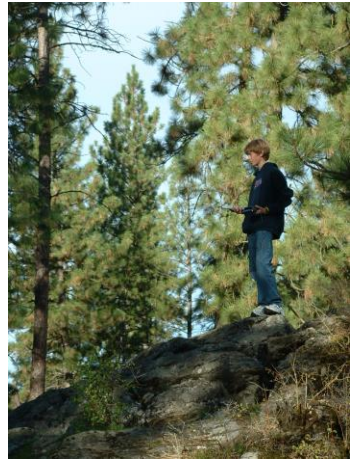
NORTH CENTRAL HIGH SCHOOL SCIENCE SYMPOSIUM

IT'S IN THEIR HANDS

May 15th, 2006

Red Lion at the Park Convention Center
Spokane, Washington

Presentation of primary research by
North Central High School Scientists



NORTH CENTRAL SCIENCE SYMPOSIUM

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“It’s in their hands”

Schedule

8:30 AM

Welcome

*Mr. Brent Osborn
North Central High School*

9:00 – 10:10 AM Presentations

Ballroom A

1. Analysis of Noise Pollution through the Varied Habitats of the Pinecroft Natural Area Preserve

-Carson Yach, Patrick Latkowski, & Jen Lee

2. Analysis of Microclimates within Pinecroft Natural Area Preserve

-Andrew Flatter, Jen Reilly, & Nate Leach

3. Impact of Arthropod Abundance on Soil Fertility

Liya Sichkar, Jessica Gadigan, & Katie Kerr

4. Wildlife Movement Across the Pinecroft Fence Line and its Economic Impact on the Surrounding Development

-Cory Hooper, Lauren Kubik, & Mitch Maly

5. Evaluation of Air Quality Variations at the Pinecroft Natural Area Preserve

-Lauren Morse & Cassandra Hennings

6. Sequence Analysis of the NADH Dehydrogenase 2 Gene in *Oncorhynchus mykiss gardneri* for Single Nucleotide Polymorphisms

-Leah Jordan & Randall James

Ballroom B

1. Assessment of Canopy Cover Impact on Understory Growth at Pinecroft NAP

-Natalia Sokolova, Riley Corrigan, & Evy Arpin

2. Discovery, Position, and Impact of Faults Lines at the Pinecroft NAP

-Steven Hicks, Ashley Hollister, & Danae Orlob

3. Evaluation of Juvenile *Pinus ponderosa* Growth Patterns at Pinecroft NAP

-Alex Shuler, Nathan Kinne, & Shantel Rushing

4. Insect Assessment at the Pinecroft Natural Area Preserve

-Bonnie Kongchunji, Rachel Kruetz, & Amber Eide

5. Quantification of Seasonal Variations in the Photosynthetic Rate on Ponderosa Pine

-Peter Obannon, Edward Warren, & Adam Kuntz

Poster Session 10:15 – 10:50 AM

Refreshments

Student Research Presentations Supervised by Randall James, NCHS

- 1. Restriction Fragment Length Polymorphism Analysis of Hatchery Population of *Oncorhynchus mykiss* as a Mechanism to measure introgression into wild population**
-Kaylyn Kline, Lindsay Giampietri, Raeanne Cumbie
- 2. An Analysis of Diversity in a Population of *Oncorhynchus mykiss* using Random Amplified Polymorphic DNA Analysis**
-Matthew Webley, Nathaniel Hood, Aileen Dean
- 3. An Analysis of the Genetic Health of *Squalus acanthias***
-Zach Saugen, Patrick McEachern, Jamie Tamura
- 4. A Comparison of Transformation Efficiency Involving Heat Shock, Electroporation, and a Combination of the two using the Plasmids pUC19 and pBAD-GFPuv**
-Nathan Law, Courtney Ramsey, Mac Martin
- 5. A Comparison between RFLP and RAPD Analysis to Measure Diversity in a *Oncorhynchus mykiss* population**
-Coury Baker, Amanda Hersey, Jeff Lytton

10:55 – 12:05

Presentations

Ballroom A

- 1. Tree Mortality Assessment at the Pinecroft Natural Area Preserve.**
-Brittney Outen, Ryan Thomas, & Lynde Peterson
- 2. Evolution of Seasonal Fluctuations in the Photosynthetic Pigments of *Pinus ponderosa***
-Matt Setliff, Rhiannah Johnson, & Aimee Hoff
- 3. Assessment of Genetic Diversity in Dalmatian Toadflax**
-Daniel Healey, Eli Thielen, & Jacob Menne
- 4. Soil Fertility Assessment through the Transitional Habitat from Grassland to Forest at the Pinecroft NAP**
-Dillion Coy, Jordan Heidel, & John Bergeleen
- 5. Analysis of the Industrial Impacts on *Pinus ponderosa* growth at the Pinecroft NAP**
-Tim Matthews, Garrison Rodrigues, & Aaron Sandaker

Ballroom B

- 1. Assessment of Bacterial Populations in Protected vs. Unprotected Grasslands**
-Shawn Winchell, Tyson Ostlie, & Jayson Wicke
- 2. Analysis of Fire Danger and Fuel Loading at Pinecroft Natural Area Preserve**
-Jessica Harris, Robert Wheeler, & Ryan Dickens
- 3. Analysis of Fence Effect on Vegetation at the Pinecroft Natural Area Preserve**
-D.J. Scott, Nicole Loffelmacher, & Jordan Bradley
- 4. Allelopathic Effects of Spotted Knapweed (*Centaurea Maculosa*) on Fescue Seed Germination**
-Jamie Ramsey, Jace Hovda, & Amanda Taylor
- 5. Determination of the Range and Feeding Behavior of *Bubo virginians* at the Pinecroft NAP**
-Bradlee Hersey & Joe Lentz

Luncheon 12:15 – 2:00

Ballroom C

Italian Club Sandwich, Red Bliss Potato Salad, Fresh Fruit, Hot soup of the day, Huckleberry Cheesecake
Freshly brewed coffee, decaffeinated coffee, herbal teas



Keynote address from Richard Landers



Keynote Address:

Richard Landers ***Outdoor Editor and journalist*** ***For the Spokesman Review***

A native Montanan, Rich Landers has focused his outdoor pursuits around Spokane and the Inland Northwest. Rich has worked for *Field & Stream* magazine in New York, as well as at *Montana Outdoors* magazine in Helena, Montana. He has written guidebooks for hiking and canoeing in the Inland Northwest. His revised version of *100 Hikes in the Inland Northwest* -- the Bible for hiking in this region -- was a prize winner in the 2003 National Outdoor Book Awards. Profits from sales of the book are donated back to trail projects.

Currently, most of his energy is focused on his duties as the Outdoors editor for *The Spokesman-Review*. Since 1977 he has been devoted to the job of Outdoors editor for *The Spokesman-Review* in Spokane, where he tackles a wide range of outdoor subjects with the ever-present underlying theme of conservation. He has won dozens of writing awards from regional and national professional journalism organizations as well as from the Outdoor Writers Association of America. Most important, he says, are the conservation awards he's received from the Idaho Conservation League, Washington Environmental Council, National Audubon Society and Safari Club International.

Landers is a journalism graduate from the University of Montana. He's pedaled his bicycle across the United States, climbed peaks from Rainier to McKinley, and served six terms on the board of the Spokane Mountaineers. He has hunted and fished extensively in the West as the former regional editor for *Field & Stream* magazine. His stories or photos also have appeared in other publications such as *Backpacker*, *Canoe & Kayak*, *Runner's World*, *Western Outdoors*, *Adventure Cyclist*, *American Forests*, *Popular Mechanics* and *The Washington Post*.

Rich is married to Meredith Heick, a Spokane rheumatologist. They have two children, Brook and Hillary, both of whom have already learned that an 8-inch trout is really a foot long.