

19th NORTHWEST ALGAL SYMPOSIUM PROGRAM

Walla Walla College Marine Station
Rosario Beach, Washington

Friday Afternoon, April 22

- 15:00 **Registration and Housing Assignments** at Headquarters in Dining Hall:
18:00 **Dinner** (Dining Hall)

Friday Evening, April 22

- 19:30 Informal Social (on the beach or in the Dining Hall depending on weather)
 Poster Set up (Dining Hall) (Plan to remove Posters by noon Sunday April 24)

Saturday Morning, April 23

- 07:30 **Breakfast** (Dining Hall)

08:00 Registration resumes in Dining Hall

- 08:30 **Welcome & Contributed Papers** (Chapel)

08:45 FACILITATION OF INVERTEBRATE EPIFAUNAL COMMUNITIES:
 UNTANGLING ALGAL MORPHOLOGICAL DIVERSITY FROM ALGAL
 STRUCTURAL COMPLEXITY.
 Colin R. Bates & Robert E. DeWreede. Department of Botany, University of British
 Columbia, Vancouver, B.C., Canada.

09:00 EVALUATING THE EFFECT OF HARVEST ON FIVE SPECIES OF ALGAE ON
 THE OREGON COAST
 Kerri A. Kidder, John J. Young, & Andrew Ohana-Richards. University of Oregon,
 Oregon Institute of Marine Biology, Charleston, Oregon

09:15 USING HISTORICAL DATA TO ESTIMATE CHANGES IN FLOATING KELP
 (*NEREOCYSTIS LUETKEANA* AND *MACROCYSTIS INTEGRIFOLIA*) IN PUGET
 SOUND, WASHINGTON
 Helen Berry, Tom Mumford, & Peter Dowty. Division of Aquatic Resources,
 Washington Department of Natural Resources, Olympia, Washington, USA

09:30 SPATIAL PATTERNS AND TRENDS OF EELGRASS (*ZOSTERA MARINA*) AT
 MULTIPLE SCALES IN PUGET SOUND: KEY FINDINGS FROM THE FIRST
 FIVE YEARS OF LONG-TERM MONITORING
 Blain Reeves¹, Pete Dowty¹, Helen Berry¹, Tom Mumford¹, Sandy Wyllie-Echeverria²,
 Jim Norris³, & Ian Fraser³. ¹Division of Aquatic Resources, Washington Department of
 Natural Resources, Olympia, Washington, USA & ²Center for Urban Horticulture,
 College of Forest Resources, University of Washington, Seattle, Washington, UDSA,
 & ³Marine Resources Consultants, Port Townsend, Washington, USA

09:45 THERAPEUTIC USES OF *FUCUS* SPP.
Ryan W. Drum. Island Herbs, Waldron Island, Washington

10:00 C/T Break (Dining Hall)

Low Tide

Bowman Bay @ 10:24AM 0.38ft

Reservation Bay @ 10:27AM 1.25 ft

Ship Harbor @ 10:47 0.39 ft

12:00 Lunch (Dining Hall)

Saturday Afternoon, April 23

13:00 Contributed Papers (Chapel)

13:00 BIOMECHANICAL PROPERTIES AND HOLDFAST MORPHOLOGY OF COENOCYTIC ALGAE (HALIMEDALES, CHLOROPHYTA) IN BOCAS DEL TORO, PANAMA

Kim Anderson¹, Lisa Close², Robert E. DeWreede³, Brandon J. Lynch⁴, Carlos Ormond⁵, and Matt Walker⁶ (authors arranged alphabetically).

¹University of Central Oklahoma, 110 N. University Drive, Edmond, Oklahoma,

²University of California, Davis, School of Veterinary Medicine, One Shields Ave.,

Davis, California, ³University of British Columbia, Department of Botany, Vancouver,

B.C., Canada, ⁴University of Arizona, Tucson, Arizona, ⁵University of British

Columbia, Vancouver, B.C., Canada, ⁶Texas A&M University-Kingsville, 700 University Blvd., Kingsville, Texas.

13:15 STRENGTHENING AND WEAKENING OF JOINTS IN THE ARTICULATED CORALLINE *CALLIARTHRON*

Patrick T. Martone. Hopkins Marine Station of Stanford University, Pacific Grove, CA

13:30 CERAMIACEAE IN THE PACIFIC NORTHWEST: A PHYLOGENETIC STUDY USING TWO GENES.

Amy Carlile, J. Robert Waaland, & Benjamin D Hall. Department of Biology, University of Washington, Seattle, Washington.

13:45 GREEN MACROALGAL – SEA SLUG ASSOCIATIONS ON WEST-COAST SHORES OF OKINAWAJIMA, JAPAN.

Cynthia D. Trowbridge, Yoshiaki J. Hirano, & Yayoi M. Hirano. Hatfield Marine Science Center, Oregon State University, Newport, Oregon & Marine Biosystems Research Center, Chiba University, Japan.

14:00 *PERCURSARIA DAWSONII* HOLLENBERG & I.A. ABBOTT IS NOT A *PERCURSARIA*!

Sandra Lindstrom, Louis Hanic, & Larry Golden. Department of Botany, University of British Columbia, Vancouver, British Columbia, Canada.

14:15 METABOLISM OF TRINITROTOLUENE BY MICROPLANTLET CULTURES OF THE TROPICAL MARINE RED MACROALGA *PORTIERIA HORNEMANNII*
Octavio T. Cruz-Urbe & Gregory L. Rorrer. Department of Chemical Engineering, Oregon State University, Corvallis, Oregon.

14:30 PATTERNS OF DISTRIBUTION IN THE ROCKY INTERTIDAL AT SOUTH FARALLON ISLANDS, SAN FRANCISCO COUNTY, CALIFORNIA
Kathleen Dickey. University Herbarium, University of California Berkeley, California

14:45 PHLOROTANNIN BIOSYNTHESIS: PRELIMINARY INVESTIGATIONS OF CANDIDATE BIOCHEMICAL PATHWAYS
Karen N. Pelletreau, Nancy M. Targett & Kathryn J. Coyne. College of Marine Studies, University of Delaware, Lewes, Delaware.

15:00 Business Meeting

15:15 C/T Break (Dining Hall)

15:45 Poster Session (Dining Hall) Authors to be available for discussion until 16:30

THE NATURE CONSERVANCY'S LIST OF RARE AND ENDANGERED MARINE ALGAL SPECIES FOR THE NORTHWEST
Gayle Hansen. Hatfield Marine Science Center, Oregon State University, Newport, Oregon

RAPID EVOLUTION OF THE CHLOROPLAST-ENCODED CFXQ GENE
Amanda Hoyt, Kun Lin Lee, Michael Lakeman, & Rose Ann Cattolico. Department of Biology, University of Washington, Seattle, Washington.

EFFECTS OF *EGREGIA MENZIESII* POPULATIONS ON ROCKY INTERTIDAL ALGAL ASSEMBLAGES
Brent Hughes. Phycology Laboratory, Moss Landing Marine Laboratories, Moss Landing, California.

RECOVERY OF MARINE INTERTIDAL ALGAE AFTER SYSTEMATIC WEEDING DISTURBANCES
Amber I. Phillips, Michael H. Graham, Matthew E. S. Bracken, & John J. Stachowicz. Phycology Department, Moss Landing Marine Labs, San Jose State University, Moss Landing, California.

DISTRIBUTION OF HETEROCYSTOUS CYANOBACTERIA IN SOME PADDY FIELDS, WHEAT FIELDS AND FORESTS OF IRAN IN RELATION TO SOIL MACRO-ELEMENT AMOUNTS
B. Nowruzi, & A. Ahmadi-Moghadam. Department of Biology, Faculty of Sciences, Shahid Bahonar University, P.O. Box 736, Kerman, Iran.

OBSERVATIONS ON PHYTOPLANKTON COMMUNITY COMPOSITION, ABUNDANCE, AND PRODUCTION IN A BRITISH COLUMBIA COASTAL

INLET

Melanie Quenneville, Angelica Pena, & Sophia Johannessen. Institute of Ocean Sciences, Fisheries and Oceans, Canada

EFFECTS OF DIVERSITY ON INVASION SUCCESS OF MACROALGAL SPECIES.

Laura White. Department of Zoology, University of British Columbia.

EFFECTS OF ENTRAINMENT AND THERMAL INCREASE ON BACTERIA AND PHYTOPLANKTON IN THE MOSS LANDING POWER PLANT: WHAT BLOOMS IN THE PLUME?

Gala Wagner & Nick Welschmeyer. Moss Landing Marine Laboratories.

Saturday Evening, April 23

17:30 **Pre-Banquet Social** (Skyline Beach Club)

18:30 **Banquet**

19:30 **Banquet Speaker: Dr. Thomas F. Mumford**, Washington Department of Natural Resources, Olympia, Washington.
Don't be surprised if there is an auction after the talk

Sunday Morning, April 24

07:30 **Breakfast** (Dining Hall)

09:00 **Contributed Papers** (Chapel)

09:00 THE STRAINS CONCEPT IN PHYTOPLANKTON ECOLOGY: REVISITING WOOD AND LEATHAM (1992)
Michael B. Lakeman & Rose Ann Cattolico. Department of Biology, University of Washington, Seattle, Washington.

09:15 THE EFFECT OF IRON LIMITATION ON Cadmium/PO₄ RATIOS IN MARINE PHYTOPLANKTON
Erin S. Lane & Maria T. Maldonado. Department of Earth and Ocean Sciences, University of British Columbia, Vancouver, British Columbia.

09:30 COPPER REQUIREMENTS OF COASTAL AND OCEANIC DIATOMS
Amber L. Annett & Maria T. Maldonado, Department of Earth and Ocean Sciences, University of British Columbia, Vancouver, British Columbia

09:45 SILICON AND GERMANIUM UPTAKE BY THE MARINE DIATOM *NITZSCHIA FRUSTULUM* CREATES NOVEL PHOTOLUMINESCENT NANOMATERIALS
Clayton Jeffryes¹, Tian Qin¹, Shu-hong Liu¹, Chih-hung Chang¹, Tim Gutu², Jun Jiao², & Gregory L. Rorrer¹. ¹Department of Chemical Engineering, Oregon State University, Corvallis, Oregon. ²Department of Physics, Portland State University, Portland, Oregon.

- 10:00 *HETEROSIGMA AKASHIWO* CHLOROPLAST GENOME SEQUENCE
Rose Ann Cattolico, Michael Jacobs, & Melinda Duplessis. Department of Biology,
University of Washington, Seattle, Washington.
- 10:00 C/T Break** (Dining Hall)
- 10.30 Low Tide:** (see lunch note below)
Bowman Bay @ 10:54AM -0.67ft
Reservation Bay @ 10:50AM 0.27ft
Ship Harbor @ 11:17AM -0.68ft
- 11:30 Take down posters if you have not already done so and have a safe trip home
- 12:00 Lunch** (Dining Hall Lunch (Sack Lunch) is part of the meal plan)