# ST. CROIX RIVER RESEARCH RENDEZVOUS

Science Museum of Minnesota | St. Croix Watershed Research Station



8:30 – 9:00 Registration & Continental Breakfast

9:00 **INTRODUCTION AND ANNOUNCEMENTS:** Dr. Adam Heathcote, Director,

Department of Water and Climate Change

### SESSION 1: ORGANISMAL BIOLOGY IN THE ST. CROIX WATERSHED (moderator Dr. Mark Edlund)

9:10	An Overview of the Saint Croix National Scenic Riverway's Acoustic Bat Monitoring Program – Michael Rhoades, Jay Johnson: National Park Service-St. Croix National Scenic Riverway
9:30	Investigating Bumble Bee (Bombus) Nesting in Three Habitats in the Upper  Midwest – Chan Dolan, Zachary Portman, Daniel Cariyeau: University of Minnesota

**Midwest** – Chan Dolan, Zachary Portman, Daniel Cariveau: University of Minnesota Twin Cities Entomology Department

9:50 Once a Prawn a Time ...: a St. Croix Shrimp Story – Holly Howard¹, Elizabeth Nelson², Mark Hove¹, Matt Berg³, Allison Holdhusen⁴, Troy Howard¹, Tyler Howard¹, Jenny Kruckenberg¹, Caitlin Nagorka⁴, Konrad Schmidt¹, Greg Seitz⁵, Marian Shaffer⁴, and Bob Whaley¹: ¹Volunteer, ² Minnesota Department of Natural Resources, ³ Grantsburg High School/Endangered Resource Services, LLC, ⁴ National Park Service, ⁵ StCroix360.com

10:10 Lower St. Croix River Lake Sturgeon Population Demographics and Population Connectivity – Kasey Yallaly: Wisconsin Department of Natural Resources

10:30 - 10:45 **BREAK** 

## SESSION 2: RESEARCH HAPPENING IN THE ST. CROIX WATERSHED (moderator Dr. Lienne Sethna)

10:45	Yellow Iris: Yet Another Invasive Flower – Connor Bacon <sup>1</sup> , Mike Rhoades <sup>2</sup> , Luke
	Lindsay <sup>1</sup> , Chris Struckhoff <sup>1</sup> , Logan Planer <sup>3</sup> , Hannah Fennern <sup>3</sup> , Jay Johnson <sup>1</sup> : <sup>1</sup> Seasonal Staff, National Park Services, <sup>2</sup> Full-time Staff, National Park Service, <sup>3</sup> Intern, National Park Services

11:05 **Archaeology at the Pine Needles Natural History Preserve** – Edward Fleming: Department of Anthropology, Science Museum of Minnesota

11:25 Late Pre-contact Plant Use at the Sheffield Site – Jasmine Koncur: Department of

Anthropology, Science Museum of Minnesota

11:45 – 12:15 **POSTER SESSION** 

#### SESSION 3: ST. CROIX RIVER MUSSEL RESEARCH (moderator Kelsev Boeff, MS)

- 1:15 Brief Overview of SACN's Zebra Mussel Monitoring Throughout the St. Croix Watershed - Chris Struckhoff: National Park Service-St. Croix National Scenic Riverway
- Can High Freshwater Mussel Density and Large Mussel Size Restrict Juvenile 1:35 **Recruitment?** – Daniel J. Hornbach<sup>1</sup>, Bernard Sietman<sup>2</sup>, Jillian Fedarick<sup>3</sup>: <sup>1</sup>Department of Environmental Studies, Macalester College, <sup>2</sup>Minnesota Department of Natural Resources, Center for Aquatic Mollusks Programs, <sup>3</sup>Department of Wildlife, Fisheries, and Conservation Biology, University of Maine
- Characterization of Spectaclecase Host Fish, Hioddon spp., Movement Patterns in 1:55 the St. Croix National Scenic Riverway – Matthew Meulemans<sup>1</sup>, Michelle Bartsch<sup>1</sup>, Diane Waller<sup>1</sup>, Bernard Sietman<sup>2</sup>, Zeb Secrist<sup>2</sup>, Joel Strias<sup>3</sup>, & Marian Shaffer<sup>4</sup>: <sup>1</sup>U.S. Geological Survey, Upper Midwest Environmental Sciences Center, <sup>2</sup>Minnesota Department of Natural Resources, Center for Aquatic Mollusk Programs, <sup>3</sup>Minnesota Department of Natural Resources, <sup>4</sup>National Park Service, St. Croix National Scenic Riverway
- 2:15 Partner-Based Winged Mapleleaf (Quadrula fragosa) Propagation Efforts – Michelle Bartsch<sup>1</sup>, Diane Waller<sup>1</sup>, Steve Houdek<sup>1</sup>, Theresa Schreier<sup>1</sup>, Gage Valeri<sup>1</sup>, Doug Aloisi<sup>2</sup>, Megan Bradley<sup>2</sup>, Elizabeth Glidewell<sup>2</sup>, Mike Davis<sup>3</sup>, Bernard Sietman<sup>3</sup>, Madeline Pletta<sup>3</sup>, Lindsay Ohlman<sup>3</sup>, Zeb Secrist<sup>3</sup>, Dan Hornbach<sup>4</sup>, Mark Hove<sup>5</sup>, Dan Kelner<sup>6</sup>, Tamara Smith<sup>7</sup>, Lisie Kitchel<sup>8</sup>, Jesse Weinzinger<sup>8</sup>, Nathan Eckert<sup>9</sup>, Katie Sickmann<sup>10</sup>, Lauren Brochtrup<sup>10</sup>, & Marian Shaffer<sup>11</sup>: <sup>1</sup>U.S. Geological Survey, Upper Midwest Environmental Sciences Center; <sup>2</sup>U.S. Fish and Wildlife Service, Genoa National Fish Hatchery, <sup>3</sup>Minnesota Department of Natural Resources, Center for Aquatic Mollusk Programs; <sup>4</sup>Macalester College, Department of Environmental Studies, <sup>5</sup>University of Minnesota Department of Fisheries, Wildlife and Conservation Biology, 6U.S. Army Corps of Engineers, 7USFWS, Minnesota-Wisconsin Ecological Services Field Office, 8Wisconsin Department of Natural Resources, 9USFWS, Neosho National Fish Hatchery, 10Wild Rivers Conservancy, 11St. Croix National Scenic Riverway, National Park Service

## SESSION 4: MANAGING OUR ST. CROIX WATERSHED (moderator Dr. Jason Ulrich)

- 2:50 GIS Along the Riverway - Claire Cadiz: National Park Service, St. Croix National Scenic Riverway
- 3:10 Lakeshore Landowner Values: Lessons learned from a survey and focus groups in the Carnelian-Marine-St. Croix Watershed, Minnesota – Angie Hong: Water Education Senior Specialist with the East Metro Water Resource Education Program
- 3:30 Restoration of Tracts of High Ecological Value within St. Croix National Scenic **Riverway –** Luke Lindsay: St. Croix National Scenic Riverway
- 3:40 When Lakes Misbehave: Paleolimnological analysis of Ann Lake, Kanabec Co., MN -Mark Edlund<sup>1</sup>, Joy Ramstack Hobbs<sup>1</sup>, Eric Alms<sup>2</sup>, Deanna Pomije<sup>3</sup>, Sharon Smith<sup>4</sup>: <sup>1</sup>St. Croix Watershed Research Station, Science Museum of Minnesota, <sup>2</sup>MN Pollution Control Agency, <sup>3</sup>Kanabec County SWCD, <sup>4</sup>Ann Lake Watershed Alliance
- **CLOSING REMARKS / FROLIC & SOCIAL HOUR** 4:00

## **POSTER SESSION: ST. CROIX RIVER MUSSEL RESEARCH**

Archaeological Collections from the St. Croix Valley at the Science Museum of Minnesota – Mara Taft, Ed Fleming: Anthropology Department, Science Museum of Minnesota

Collection Archives at the St. Croix Watershed Research Station – Mari Leland, Erin Mortenson, Joy Ramstack Hobbs, Mark B. Edlund: St. Croix Watershed Research Station, Science Museum of Minnesota

The Effect of Extraction Time and Extractant on Chlorophyll- $\alpha$  Concentrations – Alex Dillon, Amelia Wilson-Jackson, Lienne Sethna: St. Croix Watershed Research Station, Science Museum of Minnesota

The Role of Thermal Structure and Nutrient Stoichiometry on Harmful Algal Bloom Formation in Remote, Northern Minnesota Lakes – Lienne Sethna, Adam Heathcote, Mark Edlund: St. Croix Watershed Research Station, Science Museum of Minnesota

The Science Museum of Minnesota's Biology Collection as a Resource for St. Croix Watershed Biodiversity Research – Catherine M. Early: Biology Department, Science Museum of Minnesota

