

# St. Croix National Scenic Riverway

National Park Service  
U.S. Department of Interior



St. Croix National Scenic Riverway  
Minnesota & Wisconsin



## Rivers Are Alive Field Trip Packet





Dear educator,

Thank you for participating in the St. Croix National Scenic Riverway, Rivers Are Alive K-12 watershed education program. Rivers Are Alive field trips offer your students the opportunity to experience the wonder of this incredible National Park and its greater watershed. Your students will learn why the St. Croix and Namekagon Rivers are federally protected as Wild and Scenic Rivers, and we hope to inspire personal connections that make them want to be stewards of rivers and all wild places.

Rivers Are Alive field trips are designed to offer your students the opportunity to personally connect with the St. Croix National Scenic Riverway and its greater watershed through immersive, hands-on, nature-based, standards aligned activities. Please review this field trip guide carefully, so you and your students get the most out of their Rivers Are Alive experience. We are willing to visit your school before and after your field trip with pre and post activities to deepen the experience, or we can provide you with those activities so you can conveniently lead them and fit them in when the time is right.

This field trip guide will share what to bring, expect, and share with your students before the big day!

If you have further questions, please feel free to contact us at:

St. Croix River Association: 715-483-3300

River Connections Steward, Jaime Souza – [jaimes@scramail.com](mailto:jaimes@scramail.com)

Thank you again for taking part in the Rivers Are Alive K-12 watershed education program. We look forward to working with you and your students.

---

# 2

## The St. Croix National Scenic Riverway

### -BACKGROUND-

#### NATIONAL PARK SERVICE

The (NPS) is charged with the management and preservation of the nation's most precious natural and cultural resources. These resources are woven into our heritage, and they provide opportunities for recreation, appreciation of beauty, historical reflection, cultural enrichment, and environmental education.

The future vision of the NPS includes protection of park resource; access and enjoyment for all people; education and interpretation to convey contributions of each park unit and the National Park system to the nation's values, character, and experience; continuing science, research and resource management to manage and protect Park resources.

#### ST. CROIX NATIONAL SCENIC RIVERWAY

The Saint Croix National Scenic Riverway, a unit of the National Park System, is a federally protected system of riverways located in eastern Minnesota and northwestern Wisconsin. It protects 252 miles (406 km) of river, including the St. Croix River (on the Wisconsin/Minnesota border), and the Namekagon River (in Wisconsin), as well as adjacent land along the rivers. The St. Croix National Scenic Riverway is one of the original eight National Wild and Scenic Rivers, largely as a result of legislation by senators Walter Mondale of Minnesota and Gaylord Nelson of Wisconsin. The largest scenic Riverway east of the Mississippi River, it lies within parts of eight counties in Wisconsin: Bayfield, Burnett, Douglas, Pierce, Polk, St. Croix, Sawyer, and Washburn; and three in Minnesota: Chisago, Pine, and Washington.

The Upper St. Croix from Gordon Dam to the Boomsite above Stillwater, MN and the Namekagon River is managed by the National Park Service. The Riverway headquarters and main visitor's center are located in St. Croix Falls, Wisconsin, with an additional visitor's center in Trego, Wisconsin operated during the summer. Large areas along both sides of the river are also managed by state agencies and include state parks and state forests.



CRAIG BLACKLOCK PHOTOGRAPHY

The cultural resources found within the current boundaries of St. Croix National Scenic Riverway document evidence of past human activities occurring on or near the Riverway over an extended period of time. Human occupation began as early as 10,000 years ago. Burial mounds, campsites, chipping stations, quarries, wild rice processing areas, rock art, and village sites offer evidence of the seasonal and complex nature of prehistoric life along the rivers. Historic American Indian archeological sites are also present and evidence the coming of European people and culture. The St. Croix River/Brule River was a favored fur trade route from the Mississippi River to Lake Superior. Interaction took place between traders and Dakota and Ojibwe and other Indians as they traveled the rivers and traded. In 1837 a treaty opened the area to settlement by Euro-Americans. Logging and early settlement occurred along the Riverway and is evidenced by the remains of logging dams and camps, the foundations of houses and farms, and the "trash" people left behind. More recent cultural resources are recreational homes, roadbeds and pine plantations.



The 1886 log jam in the Dalles of the St. Croix River, Minnesota Historical Society

# 3

## Your Field Trip

### LOGISTICS

Field trip schedules and destinations vary with each school. This field trip guide attempts to offer an overview of what you can expect from all Rivers Are Alive experiences, no matter the destination or time frame.

The education staff who will be leading your group will be waiting for your bus at an agreed upon location (river landing, state park, visitor center, etc.). When you arrive, please have the lead teacher step off the bus and we will tell that person where we want the students to gather. Once the students are off the bus, there will be time for restrooms and a brief orientation to the St. Croix National Scenic Riverway, the St. Croix River Association, a review the day's schedule and set program expectations. We will also provide instruction on what students should do with their lunches and backpacks. Students are encouraged to carry a water bottle with them throughout the field trip.

### SCHEDULE

The schedules on the following pages represent a typical Namekagon and St. Croix River field trip. However, please keep in mind that changes in weather, river levels, field trip destinations, and/or transportation may require schedule adjustments. Flexibility is essential to having an enjoyable Rivers Are Alive experience. School groups are encouraged to depart from school for the field trip as soon as is practical, and to depart as late as the bus and school schedules allow.



Namekagon Visitor Center, Namekagon River, Trego, WI

| STUDENT SCHEDULE | GROUP 1  | GROUP 2               | GROUP 3               |
|------------------|--|-----------------------|-----------------------|
| 10:00            | Arrive at Namekagon Visitor Center, restrooms, orientation, and organizing learning groups |                       |                       |
| 10:15 – 11:30am  | Let's Go Mucking   | River Web of Life     | Visitor Center & Film |
| 11:30 – Noon     | LUNCH  |                       |                       |
| Noon – 1:15pm    | Visitor Center & Film  | Let's Go Mucking      | River Web of Life     |
| 1:15 – 2:30pm    | River Web of Life  | Visitor Center & Film | Let's Go Mucking      |
| 2:30pm           | Depart for Shell Lake  |                       |                       |

Riverside Landing, Namekagon River, Danbury, WI

| STUDENT SCHEDULE  | GROUP 1   | GROUP 2           |
|-------------------|---|-------------------|
| 9:30am            | Arrive at landing, restrooms, orientation, split into learning groups |                   |
| 9:45 – 10:45am    | Let's Go Mucking  | River Web of Life |
| 10:45 -11:45am    | Mussels Activity  | Let's Go Mucking  |
| 11:45am – 12:15pm | Free Time, Restrooms and Lunch  |                   |
| 12:15 – 1:15pm    | River Web of Life   | Mussels Activity  |
| 1:15pm – 1:30pm   | Group Wrap-up and Depart  |                   |

---

Interstate Park Experience, Taylors Falls, MN & St. Croix Falls, WI

| STUDENT SCHEDULE  | GROUP 1                    | GROUP 2                   | GROUP 3                     | GROUP 4                   |
|-------------------|----------------------------|---------------------------|-----------------------------|---------------------------|
| 9:45 – 10:35am    | Discovery Hike on WI       | WI Pothole Trail          | MN Pothole Trail            | Macro Observation         |
| 10:45 – 11:35am   | WI Pothole Trail           | Discovery Hike on WI side | Macro Observation           | MN Pothole Trail          |
| 11:45am – 12:05pm | *Lunch at WI Pothole Trail |                           | *Lunch under covered bridge |                           |
| 12:05 – 12:15     | Walk to MN Interstate      |                           | Walk to WI Interstate       |                           |
| 12:15 – 1:05pm    | MN Pothole Trail           | Macro Observation         | Discovery Hike on WI side   | WI Pothole Trail          |
| 1:15 – 2:05pm     | Macro Observatio           | MN Pothole Trail          | WI Pothole Trail            | Discovery Hike on WI side |

William O’Brien State Park, Marine on St. Croix, MN

| STUDENT SCHEDULE | GROUP 1                       | GROUP 2             | GROUP 3             |
|------------------|-------------------------------|---------------------|---------------------|
| 9:45 – 10:00am   | Arrive, restrooms & welcome   |                     |                     |
| 10:00 – 11:00am  | Let’s Go Mucking              | What’s a Watershed? | Hands-on History    |
| 11:00 – 12:00pm  | Hands-on History              | Let’s Go Mucking    | What’s a Watershed? |
| 12:00 – 12:30pm  | Lunch                         |                     |                     |
| 12:30 – 1:30pm   | What’s a Watershed?           | Hands-on History    | Let’s Go Mucking    |
| 1:30 – 1:45pm    | Closing, restrooms, departure |                     |                     |

# 4

## Preparing For Your Field Trip

### NAMETAGS

For safety and courtesy, we prefer to address students and adults by name. This can even be a single piece of masking tape with a participant's name. Please make sure your students arrive with their nametags on.

### LUNCH

School lunches or bag lunches with disposable items are best. Before leaving school, please label and organize the lunches by class to save time. Having lunches marked and organized for easy distribution will decrease the time spent passing them out and increase field trip time. Coolers for cold drinks are permitted. As a reminder, food and drinks to purchase are not available. We will supply garbage bags and recycling bags and appreciate your help in making sure students *Leave No Trace*. Students and chaperones are responsible for leaving the park clean.

**What to Wear:** Comfortable pants or shorts, socks, comfortable close toed shoes, and a hat for sun protection are suggested for both students and adults. Please keep in mind that if your students are mucking for macroinvertebrates **they may get their feet wet. We recommend rubberboots or watershoes for mucking.** Students must wear shoes at all times, even in the water. Most long-time Rivers Are Alive schools have students wear tennis shoes and bring water shoes. Students are welcome to bring a towel.

### INCLEMENT WEATHER

If rain or cold weather is in the forecast, please communicate with parents that students should come properly dressed to be outside during the entire field trip. Layers work best and can always be left on the bus.

*\* The window for completing these programs is limited due to the high demand of Rivers Are Alive programs. Therefore, whenever it is safe to do so, it is preferable to go ahead with the program on the planned day, even if the forecast is less than ideal. This is especially true early in the week, when most of the programs remain to be completed. On rare occasions, because of safety concerns the program may be rescheduled. SCRA staff should have good contact information for the lead teachers to coordinate any changes in plans. \**

---

## **BUG SPRAY & SUN SCREEN**

In the spring months, Teachers may recommend that parents send appropriate insect repellent that they can use with their children. In the fall, the bugs are usually gone. We always recommend students come prepared with sun screen in every season.

## **TRANSPORTATION**

The schools will arrange for bus transportation of the students. When possible, to maximize the time that students have to participate in the programs, it is ideal to schedule buses which do not have to travel to additional schools before dismissal time. Whenever possible buses should remain at the field trip site for the duration of the program. For some field trips it is necessary for buses to shuttle students to different sites within a state park. To maximize your field trip time, plan to depart from school as early as possible in the morning.

## **CHAPERONES**

Chaperones are an integral part of the field trip experience. They provide support to the Rivers Are Alive education staff, as well as guidance for the students. Please encourage chaperones to assist in maintaining discipline and to be on the lookout for potential safety hazards. We ask that adults refrain from smoking in front of the students. Chaperones should be reminded to be active participants in all program activities and keep cell phones turned off or have the ringer turned down. It is disruptive and potentially unsafe if a chaperone is on their cell phone during the middle of an activity. When the adults are actively engaged and modeling attentive behavior, the students will follow. There should be at least one teacher and one other chaperone with each learning group. Having additional chaperones is useful and encouraged.

---

# 5

## Preparing Students for your Field Trip

### AQUATIC MACROINVERTEBRATES

Aquatic macroinvertebrates are small animals that live in water, are big enough to see with the naked eye, and have no backbone. These animals include many types of insects as well as other animals such as worms, mollusks, and crustaceans. Most aquatic macroinvertebrates make their homes in rocks, leaves, and the sediment of streambeds. These organisms have many special adaptations allowing them to live in demanding environments. Macroinvertebrates that live in riffles and fast-moving water may have features that help them hold on to rocky or hard substrates such as hooked feet or suction cups; or flat, streamlined bodies that can handle rapid water velocities. These bugs are important because they are an integral part of the food chain. They provide food for fish and other aquatic organisms. Many of them are also key indicator species. They can tell us about the quality of the water where they are found. Bugs that have a low tolerance to pollution tell us that the water they are found in is relatively healthy.

### GEOLOGY

What is the geologic time scale? A scale that is used by geologists and other scientists to describe the timing and relationships between events that have occurred during the history of the Earth. The scales are organized by eras and periods. Each era or period is named and contains a description of the prevalent organisms of that time and how long it lasted. Please consult our Geology pre-activity lesson plan to learn more.

### PRE-ACTIVITIES

Pre-site preparation conducted by classroom or Rivers Are Alive educators prior to field trips is a crucial part of the program. We have standards aligned activities that are easy to facilitate and will prepare students for their Rivers Are Alive experience. If students learn about the St. Croix National Scenic Riverway before the trip, they will have the opportunity to make tangible connections with what they previously learned. Additionally, Rivers Are Alive education staff will be able to build on their prior knowledge instead of covering the basics.

### PREDICT, OBSERVE, EXPLAIN

This strategy can be used in the classroom to predict what the students will experience on your field trip. What activities do they think they will be doing? What animals they might encounter, and what they will be learning. Record your predictions on the board or in notebooks. Observations can be made during the trip, and then discussed and compared to predictions afterwards. Were the original predictions accurate? What predictions can you make about wildlife activity at different times of the day and year? How about the future? Will habitats and wildlife populations change over time? What other evidence could you use to make more accurate predictions?

---

# 6

## Reflecting on Your Field Trip

### POST FIELD TRIP ACTIVITIES

We also have standards aligned post activities that serve as field trip follow-up and reflection. We encourage teachers to use our lesson plans and / or conduct activities that allow students to share their experience and express their new awareness with others.

#### ART

Students, depending on ability levels may color a pre-made/determined page, use various mediums (crayons, paint, markers) to create what they saw, felt, heard, touched, smelled, or tasted on their adventure. Cutting out animals and trees to make a scene from their experience. Using objects in the room, or musical instruments to demonstrate sounds they may have heard or how they felt during this experience. Creating a replica of something they remember.

#### MATH

Allow students to “plan a trip” on the Namekagon or St. Croix Rivers, where they have to calculate mileage and distance, using the charts found here: [Paddling Guide to the Namekagon River](#), [Paddling Guide to the Upper St. Croix River](#), [Paddling Guide to the Lower St. Croix River](#)

#### READING & RESEARCH

Your Rivers Are Alive will just scratch the surface of all there is to learn about the St. Croix National Scenic Riverway. Consider having your students check out books about the Riverway and conduct research on the wild and scenic values that characterizes the Riverway. If students took photographs of their field trip experience, you may want to have them upload into the computer to share with others using Google Slides, a Power Point, or just to view on a SMART Board if available. Then, allow them to display their research and invite parents (and us!) for a Wild and Scenic Science Fair night.

#### SCIENCE

Follow the life cycle of an animal that goes through metamorphosis. This animal can be either an aquatic based animal, like the students saw on their field trip, or a land based animal. How is this type of life cycle beneficial to the animal? What challenges might metamorphosis pose to survival?

#### WRITING

Consider having students write St. Croix Haiku poems, essays, or journal entries about their field trip.

---

# 7

## Evaluation, Safety, Rules Emergencies



### **PROTECT OUR NATIONAL PARK**

Remind your students and chaperones that in a national park, collecting or damaging any plants, rocks, historic sites or animals is prohibited.

### **WILDLIFE**

Feeding or harassing animals in the park is illegal. Remember that these are wild animals. In addition to protecting ourselves, this also protects the wild nature of the animals.

### **PLANTS**

Picking flowers or breaking off leaves damages plants. Collecting pine cones, feathers, rocks, or natural objects is

not allowed in the St. Croix National Scenic Riverway or any national park.

### **BE CONSIDERATE OF OTHERS**

Loud noises and disruptive behavior may disturb wildlife or other visitors.

### **STAY TOGETHER**

Remind students to always stay with their group. Each group should be led by an instructor or ranger, with an adult chaperone or classroom teacher at the end.

### **BE AWARE**

Biting/stinging insects are common in the park so avoid exposure or injuries by being aware of your surroundings, especially where you put your hands or feet.

### **LEAVE NO TRACE**

We hope to inspire students to practice leaving no trace. This helps keep wild places, wild. Likewise, after lunch, your group is responsible for picking up all pieces of trash and crumbs.

---

# Directions To Your Program Location 8

We will always send you the best driving directions and address we can find. If we can send a Google map link and image, we will do so.

