







# BIG SANDY WATER INSTITUTE



## 2011 Summer Schedule

That in the end we will only conserve what we love; we will love only what we understand; and we will understand only what we are taught. baba dioum

## SUMMER SCHEDULE 2011

Most BSWI	
Classes are	
FREE	

#### What to bring daily

lunch sunglasses 」 swim wear ☐ change of clothes ☐ hat

 $\square$  appropriate footwear  $\square$  raingear

water bottle  $\Box$  towel



Severe weather. Classes will be cancelled. Please call 218-768-2111 x233 for weather and class cancellation update.

sunscreen

#### #EE001 - WILD ENCOUNTERS FAMILY FUN DAY (Rice Lake National Wildlife Refuge)

\*Activities will take place at Twin Lakes Friday, June 10 from 9am - 3pm

A day filled with unique opportunities for families to enjoy together.

- 9:00 12:00 Birding 101 Learn how to use binoculars and get tips on how to become a "Birder", a hobby that will provide you with a lifetime of joy. Binoculars and bird quides will be provided or you may bring your own. Led by Warren Nelson, Birder and Wildlife Photographer and Michelle McDowell, Refuge Biologist.
- 9:00 12:00 Kids Krafts Assorted fun kids activities will be available throughout the morning for kids of all ages. Activities will be led by fun loving volunteers.
- 9:00 12:00 Nature Walk and Talk Use your natural senses as you enjoy the sights and sounds of nature along the trail with Master Naturalist Pam Brand.
- 9:00 12:00 Fishing Fun Fishing will be held at both north and south water control structures on the Rice River; fishing poles and bait will be provided if needed, as well as assistance from experienced anglers. No fishing license needed for kids under the age of 16 and no license needed for parents or quardians fishing with kids under the age of 16 during this Take-A-Kid Fishing Weekend. Catch and release is encouraged.
- 12:00 1:00 FREE Picnic Lunch at Twin Lakes; followed by an orientation to the Big Sandy Water Institute.

Bird Mist Netting Demonstration - Time and place to be determined. Led by Biologists studying Goldenwinged warblers.

 2:00 - 3:00 - Lake Superior Zoo - Get up close with live zoo animals and learn interesting facts about the common and not-so-common wildlife that live at the zoo.

Bus will depart school at 8:30am and return at 3:15pm



#### #EE002 - RIVERS AND LAKES FAIR (Aitkin High School) Saturday, June 18 from 9am - 2pm

The River and Lakes Fair is a fun filled event where folks of all ages can learn about our natural resources. Programs will focus on Aquatic Invasive Species, Birding by Ear, and the Connection Between People and Water Quality. Kids will enjoy building blue birdhouses, carnival games and learning the art of fly tying. The fair will include

free water testing for nitrates and an aquarium of live fish from local lakes.





#### #EE003 - WOODS, WETLANDS & WILDLIFE AND

ARCHERY PROGRAMS (Long Lake Conservation Center)
Monday, June 20 from 9:30am - 3pm \* Age: 8 and up

Did you know that a forest is more than just trees! Let's spend the morning with Aitkin County Forestry Department discovering woods and wildlife and their different habitats. Students will find their way in the forest. They will learn if cutting trees is good or bad for the environment. Students will be hands on in touch with nature while learning how to protect our environment and the animal habitats. The afternoon will be spent learning the proper mechanics of archery, field basics, history of archery and learning about the different types of bows. This will be a hands-on session. Equipment will be provided.

Bus Pickup: School at 9:10am \* Bus Return: School 3:20pm

#### #EE004 - KAYAKING AND FOREST PESTS

(Army Corps of Engineers Libby Dam)
Tuesday, June 21 from 9:30am - 3pm \*

Tuesday, June 21 from 9:30am - 3pm \* Age: 8 and up
Spend time in kayaks on the water with trained kayak instructors Brenda
Hadrich and Paula Garrett. Beginning kayak students will learn basic skills
and safety for beginning kayaking. Intermediate kayak students will build off
beginning kayak skills and safety previously learned. A scavenger hunt on the
water and more fun and games will take place while kayaking and learning.
Students will learn hands on about some of the invasive species that are
threatening our forests such as the Emerald Ash Borer. Army Corps of
Engineers park rangers will lead activities that will help students identify

this forest pest, where it is currently found within our state, and management practices that they can implement in their lives to stop the spread of forest pests like EAB and others. Fun take home crafts will serve as a reminder to burn firewood where you buy it and help prevent the spread!

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; School 3:20pm

#### #EE005 - WINGED MIGRATION & FISHING

Wednesday, June 22 from 9:30 - 3pm \* Ages: 8 and up

During the morning the students will use their imagination and pretend to be various species of migratory birds and learn of the many hazards facing their feathered friends with the help of the Winged Migration Game. At its conclusion the students will be able to accurately describe a myriad of threats that migratory birds face, both natural and unnatural, and how wildlife biologists are looking for ways to reduce bird mortality caused by man-made obstacles. Students will also be able to identify no fewer than 6 species of waterfowl. The afternoon will be spent fishing for Northern pike from the banks of the Rice River. Rods and reels will be provided as will adult supervision to those needing help.

Bus will depart school at 9:20am and return at 3:10pm



#### #EE006 - SNAPPING TURTLE ECOLOGY (Army Corp of Engineers, Libby Dam)

Thursday, June 23 from 9:30am - 3pm \* Age: 8 and up Students will gain knowledge of snapping turtle ecology and reproduction physiology via slide show, local field trip and incubation of turtle eggs. Scientific data will be collected by the students to include day/date/time/location of nest; nest site soil temperature and weather conditions, egg viability, mass and diameter; and incubation

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; School 3:20pm

temperature of eggs. Students will go home with a turtle egg for

incubation.



#### #EE007 - FISHING ON BIG SANDY LAKE AND FISH BIOLOGY PROGRAM (Army Corp of Engineers Libby Dam)

Monday, June 27 from 9:30 - 3pm \* Age: 8 and up

Are you interested in fishing for one of Minnesota's many game fish on Big Sandy Lake? Explore the underwater habitat, learn about water stewardship, increase your fishing skills while learning how to cast a line, bait a hook and identify various species of fish. Students will observe dissection of fish and identify fish internal organs as they spend time with MN DNR Fisheries as well as local anglers.

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; School 3:20pm

## #EE008 - DNR WATERCRAFT CERTIFICATION COURSE (Army Corps of Engineers/Libby Dam) Tuesday, June 28 from 9:30am - 3pm \* Age: Must be 12 years and up Registration fee: \$10/student

Youth will receive instruction by Minnesota DNR for safe use of motorized personal watercraft, jetski and tiller/console operated boats. Classroom instruction will be held in the morning and the afternoon will be spent on the water. Participants passing the test on this date will receive their certification. A packet must be completed prior to taking the course. Packets will be mailed or can be picked up in the CE office once registered.

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; School 3:20pm



## #EE009 - SNORKELING, HIKING, POND STUDY AND DIGITAL BRIDGE TO NATURE PROGRAM (Savanna Portage State Park)

Wednesday, June 29 from 9:30am - 3pm \* Age: 8 and up



Come discover what critters live in Loon Lake! Students will have time to wade in the lake and catch those critters for a pond study. Staff will give students an opportunity to look under small microscopes at creatures and returning them to their watery home when finished. For more exploration the morning will include a "Digital Bridge to Nature" inspired photography program. Students will explore nature through the lens of a camera.

During the afternoon hours students will spend time in the water snorkeling...peeking at lake creatures that share the waters when swimming. A hike around the lake wandering through the forest habitat identifying forest, prairies and wetlands is a must!

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; School 3:20pm

### #EE010 - BIRDS AND MAMMALS (Rice Lake National Wildlife Refuge and School) Thursday, June 30 from 9:30am - 3pm \* Age 8 and up

Students will spend the day talking about the life of a bird and mammals. This day will include many hands on activities studying bird specimens and frozen mammal skins. The study of teeth, claws, coloration, body size/shape and how they are re-lated to the type of lifestyle they have. Students will be listening to bird songs and calls and learning about things like "where does a bird sleep?" why do they sing?", and "why / when / how do they migrate?". Students will dissect some owl pellets and finish the day as they travel to the refuge to do some bird watching. Students may bring their own binoculars or we will provide them. Students need to meet at School at 9:30am and picked up at 3pm

### #EE011 - FISH MIGRATION (Rice Lake National Wildlife Refuge) Monday, July 11 from 9:30 - 3pm \* Ages: 8 and up

During the morning session students become a northern pike in a Swim for Your Life Cycle Game! With some imagination the students will grow from an egg to adulthood while traveling a migration route full of danger. At the game's conclusion the students will be able to identify which habitats northern pike need at the different stages in their life cycle, and the natural and human-induced obstacles they have to overcome. The afternoon will be spent fishing for Northern pike from the banks of the Rice River. Rods and reels will be provided as will adult supervision to those needing help.

Bus will depart school at 9:20am and return at 3:10pm

## #EE012 - KAYAKING AND MINNESOTA'S GEOLOGY (Army Corp of Engineers Libby Dam) Tuesday, July 12 from 9:30am - 3pm \* Age: 8 and up



Spend time in kayaks on the water with trained kayak instructors Brenda Hadrich and Paula Garrett. Beginning kayak students will learn basic skills and safety for beginning kayaking. Intermediate kayak students will build off beginning kayak skills and safety previously learned. A scavenger hunt on the water and more fun and games will take place while kayaking and learning.

Students will be introduced to some of the basics of Minnesota's dynamic geology including it's icy past and how this has shaped the local area and the state. Corps of Engineers

staff will lead students in activities that will help them to identify geologic features in the local landscape, as well as understand a bit about where the rocks that we commonly see in the area come from and why. This program will show students what a "sweet treat" Minnesota's Geology really is!

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; School 3:20pm

#### #EE013 - MINNESOTA ZOO

Wednesday, July 13 \* Age: 6 and up (Limit 30) \* Fee: \$10/person

The Minnesota Zoo is home to 504 different species of animals. We will spend the day absorbing all the zoo has to offer from discovering each animals natural behaviors to a ride on the monorail overlooking the wild animals and their homes. We will also spend time in the IMAX watching Born to be Wild. Student's will need to bring their lunches and money for a stop at McDonald's on the way home. (or bag supper too) Bus leaves school at 7:45am and will return around 8pm

### #EE014 - SMALL WATERCRAFT BOAT SAFETY (Army Corp of Engineers) Thursday, July 14 from 9:30am - 3pm \* Age: 8 and up

Come learn the rules of boating and water safety with Army Corps of Engineers Park Rangers! This interactive program utilizes small electric powered boats to teach some basic rules of boating, as well as the importance of wearing a life jacket and how to assist someone in a drowning situation. This interactive program encourages fun and safety on the water!

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; School 3:20pm

## #EE015 - FISHING LAKE MINNEWAWA & ROCKET ECOLOGY (Lake Minnewawa & School) Monday, July 18 from 9:30am - 3pm \* Age: 8 and up

Explore the underwater habitat, learn about water stewardship, increase your fishing skills while learning how to cast a line, bait a hook and identify various species of fish. Fishing for pan fish on Lake Minnewawa with

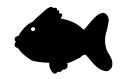
local anglers is a "favorite" for kids. Everything we do affects the environment around us. In this session, participants will launch rockets equipped with cameras to take aerial photos. Photos will be downloaded to computers. Students will identify activities that affect the environment, with emphasis on impacts on surface waters. Students will use the internet to look at satellite pictures to identify similar impacts on national and worldwide scales.

Bus Pickup: School at 9:10; Willey's 9:15am; Sather's 9:20am Students must be picked up at school at 3pm



## #EE016 - LAKE SUPERIOR MARITIME MUSEUM FIELD TRIP (Duluth, MN) Tuesday, July 19 \* Age 8 - 13 years old

Spend the day at the Maritime Museum on Lake Superior. Take a tour and learn the history of the Duluth Pier, Aerial Bridge, Soo Locks and Lake Superior shipwrecks. Students will learn about invasive species in the Great Lakes and the Soo Locks. Life about a Great Lakes Vessel...come aboard and discover.



Bus will depart school at 9:00am and return at 3:45pm

### #EE017 - OVERNIGHT CAMPING ADVENTURE (Army Corps of Engineers Libby Dam) Wednesday, July 20, 9:30am - Thursday, July 21, 11am \* Age: 5th grade & up

WOW...adventures and fun while learning how to be stewards of our own environment. If you have never had the opportunity to camp this is your chance to experience the "great outdoors". Youth will be guided through the entire



camping adventure.
Activities will include paddling the waters of Big Sandy Lake in kayaks, learning the proper mechanics of archery, hiking the forests around Libby Dam, swimming, fishing,

#### What to bring camping!

- sleeping bag/pillow
- layered clothing (fleece shirt or wind breaker)
- rain gear
- bug repellent
- tent

- flashlight
- swim wear
- towel
- hat
- change of clothes
- appropriate footwear

#### What to NOT bring Camping!

Electronics

cooking around an open fire, smore's by the bonfire and of course learn how to set up and take down camp. This camping adventure will leave your child with many fond memories of the great outdoors and our BSWI staff and their friends.

Bus Pickup: School at 9:10am; Willey's 9:15am; Sather's 9:20am. Parents must pick child up at Army Corp of Engineers Libby Dam at 11am by the main office on the July 21.

## #EE018 - SWIMMING LESSONS (Round Lake) Monday-Thursday; July 25 - 28 and August 1 - 4

American Red Cross Swimming Instructor: Mychal Hadrich Lifeguard: Anna Carlson

9:00am-Level 6: Swimming and skill proficiency; refines the strokes so participants swim them with ease, efficiency, power and smoothness over greater distances.

10:00am-Level 5: Stroke Refinement: provides further coordination and refinement of strokes.

11:00am-Level 4: Stroke Improvement: develops confidence in the skills learned and improves other aquatic

12:00pm-Level 3: Stroke development; builds on the skills in Level 2 through additional guided practice in deeper waters.

1:00pm -Lunch

2:00pm-Level 2: Fundamental Aquatic Skills; builds on the skills learned in Level
1 and gives participants success with fundamental skills such as
floating and basic locomotion.

3:00pm-Level 1: Students must be 6 years old by 8/31/11. Introduction to Water Skills; helps students feel comfortable in the water and to enjoy the water safely.

Fee: \$50/person no more than \$110/family Location: Round Lake Public Beach (Cty Rd 6)

Transportation is not provided for swimming lessons.





## **REGISTRATION INFORMATION 2011**

Student's Name		Age
Address	S	
City	State	Zip
Phone	Emergency Phone	
Email _		
	List any activity restrictions, health problems and/or medication	ons relating to your child.
ISD #4 with the any stuc commen	ACT stand that every effort will be made to protect and safeguard all students. I liable for any illness or mishap from any cause whatsoever. I also give the i e problems of discipline. I understand that any student disregarding rules is s dent who willfully destroys property will be held responsible and charged ac ts, photos and video of the student named above in its promotional materials (Guardian Signature	nstructors/supervisors full authority in dealing subject to being sent home. I understand that cordingly. I give ISD #4 permission to use
REGISTE	#EE001 - WILD ENCOUNTERS FAMILY FUN DAY #EE002 - RIVERS AND LAKES FAIR #EE003 - WOODS, WETLANDS & WILDLIFE AND ARCHERY PROGRAMS #EE004 - KAYAKING AND FOREST PESTS #EE005 - WINGED MIGRATION & FISHING #EE006 - SNAPPING TURTLE ECOLOGY	Transportation  FYI: For all classes located at Army Corp of Engineers, Savanna Portage State Park or Minnewawa.  School 9:10am (Pickup) 3:20pm (Dropoff)
R MY C	#EE007 - FISHING ON BIG SANDY LAKE AND FISH BIOLOGY PROGRAM  #EE008 - DNR WATERCRAFT CERTIFICATION - \$10 FEE #EE009 - SNORKELING, HIKING, POND STUDY AND DIGITAL BRIDGE TO NATURE #EE010 - BIRDS AND MAMMALS #EE011 - FISH MIGRATION	Willey's 9:15am (Pickup) 3:15pm (Dropoff) Sathers 9:20am (Pickup) 3:10pm (Dropoff)  FYI: For classes held at Rice Lake Wildlife Refuge School 9:20am (Pickup) 3:10pm (Dropoff)  Children will not be left at dropoff sites if parents are not there. You will be required to pick your child up at the school North Entrance.
HILD FO	#EE012 - KAYAKING AND MINNESOTA'S GEOLOGY  #EE013 - MINNESOTA ZOO - \$10 FEE  #EE014 - SMALL WATERCRAFT BOAT SAFETY  #EE015 - FISHING LAKE MINNEWAWA AND ROCKET ECOLOGY  #EE016 - LAKE SUPERIOR MARITIME MUSEUM #EE017 - OVERNIGHT CAMPING ADVENTURE	REGISTER BY: Mailing form to McGregor Community Education, PO Box 160, McGregor, MN 55760 Drop off registration form at the Community Education office or drop box outside of office.
2	#EE018 - SWIMMING LESSONS	ALSO register by emailing to

Ilkruse@mcgregor.k12.mn.us



In order for the preservation and conservation of our natural resources and waterways, youth need to learn the importance of being stewards of their own environment in which they live. Big Sandy Water Institute is a program that focuses on those needs and the impact it has on our environment by spending time helping them become more mindful of the earth and



in touch with nature by blending recreational and environmental activities together. Our goal is to teach youth the importance of their surroundings to ensure future sustainability and enjoyment of our natural resources.

## A special thanks to the following sponsors and partners who have made Big Sandy Water Institute possible:



Army Corps of Engineers Federal Dam Rice Lake National Wildlife Refuge DNR Fisheries Aitkin County Forestry Dept. MN Dept. of Natural Resources BSALWMP Savanna Portage State Park Jack-a-Lope Hunters Lake Country Power Trust Minnewawa Sportsmens Club
Big Sandy Lake Association
Big Sandy Lake Foundation
McGregor Lions Club
McGregor Firefighter Relief Association
Aitkin County Water Planning Task Force
Township of Shamrock
Tamarack Sno-Flyers
Long Lake Conservation Center









BIG SANDY WATER INSTITUTE

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