







# BIG SANDY WATER INSTITUTE



## 2010 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 2010

Most	What to bring d	aily			
BSWI classes are FREE	☐ lunch ☐ swim wear ☐ change of clothes ☐ appropriate footwear ☐ water bottle	□ sunglasses □ sunscreen □ hat □ raingear □ towel	Don't forget bag lunch		
Severe weather Classes will be cancelled					

Severe weather. Classes will be cancelled.

Please call 218-768-2111 x233 for weather and class cancellation update.

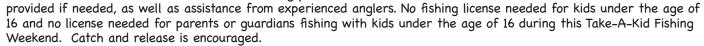
#### #EE001 - WILD ENCOUNTERS FAMILY FUN DAY

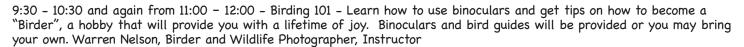
(Rice Lake National Wildlife Refuge) Friday, June 4 from 9am - 2pm

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

9:00 – 10:30 – Photography 101 and Wildflower Tour – This class will instruct the photographer the basics of setting up their camera including close-up photography of wildflowers, other vegetation and wildlife. Participants are required to bring their own camera. Duane Ganz, Professional Photographer.

9:00 – Noon – Fishing at the south water control structure and the north water control structure on the Rice River; fishing poles and bait will be





9:30 – 10:30 and again from 11:00 – 12:00 – Nature Walk – Come and use your senses as you enjoy the sights and sounds of nature along the trail while we go on a "leafy" scavenger hunt! Pam Brand, Master Naturalist, Instructor

11:00 – 1:00 pm – Native American Crafts – Have some fun and learn how to make a craft based on traditional Ojibwe culture. Minisinaakwaang Leadership Academy, Instructors

Noon – 1:00 pm – FREE Picnic Lunch at Mandy Lake; followed by an orientation to the Big Sandy Water Institute, Introduction of the Summer Reading Program by the Friends of the McGregor Library, Pine Cone Bird Feeders by the Friends of Rice Lake Refuge.

1:00 pm - 2:00 pm - Backyard Critters - View live animals and learn wildlife viewing tips, habitat needs, and interesting facts about the common and not-so-common wildlife that live in your neighborhood. Beth Gerard, Eco Education, Instructor

## #EE002 - KAYAKING AND RIVER ROVING (Army Corps of Engineers Libby Dam) Wednesday, June 16 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.

Think rivers are just long skinny versions of lakes? Think again! Delve into the underwater world of minnows, mussels, and mayflies! Students will explore the differences between lake and river aquatic ecosystems with park rangers from the U.S. Army Corps of Engineers. Students will be able to identify adaptations that allow species to survive in these different water environments and how all the organisms work together to support each other.

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



### #EE003 - EARTH ADVENTURES AND ELECTRIFYING SCIENCE DAY (McGregor School)

Thursday, June 17 from 9:30am - 3pm \* Age: 8 and up
Let's go exploring with the Science Explorers! Students will explore 3rd rock
from the sun; Earth. Take a journey through the atmosphere encountering
clouds, tornadoes and climate. Be prepared to get dirty as we unearth
the subsoil to discover rocks, minerals, and how erosion carves out our
landscapes. As we dig further into the mantle, we will shake it up with
earthquakes and tectonic plates. Finally things will really heat up as we
end our adventure in the earth's core where volcanoes and underwater
mountains are formed.

Students will be learning about electricity and the flow of electrons. Build

electrical circuits using wires, batteries, motors, buzzers, lemons and more. Test everyday items to decide if they are conductors or insulators. Next, discover which liquid solutions will conduct electricity through electrolyte testing. Then experiment with magnetism and electrical charges by making an electromagnet to take home.

Students will meet at McGregor School at 9:30am and picked up at 3pm

#### #EE004 - FISHING ON BIG SANDY LAKE, FISH ID AND HYPOTHERMIA LESSON

(Army Corp of Engineers Libby Dam) \* Monday, June 21 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.

Chattering teeth, stumbling feet, mumbling speech...students will learn about the dangers of hypothermia through fun hands on lessons and activities taught by U.S. Army Corps of Engineers Park Rangers. Lessons will focus on what hypothermia is, symptoms of it, and what to do if you or someone you know may have hypothermia. Things are going to get down right frosty!

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

## #EE005 - KAYAK RIVER TRIP (Army Corp of Engineers Libby Dam) Tuesday, June 22 from 9:30am - 3pm \* Age: 10 and up

Maneuver the waters of the Mississippi in your kayak as students go on an adventurous kayaking trip with Brenda and Paula. Students will stop for a picnic lunch and experience a day "on the water" in their kayaks.

\* Pre-requisite: Students must have prior kayaking experience.

Bus Pickup: McGregor School at 9:10am; Willey's 9:15am; Sather's 9:20am

Bus Return: Sather's 3:10pm; Willey's 3:15pm; McGregor School 3:20pm

#EE006 - BEAR NECESSITIES AND FISHING (Rice Lake National Wildlife Refuge)

Wednesday, June 23 from 9:30am - 3pm \* Age: 8 and up

Students will be encouraged to think like a bear and "look for food to survive." What role do weather, fire, man, and other bears mean to a young bear trying to survive on its own? Through interactive games and role playing the



students will gain a better understanding of what is meant by the terms: sufficient habitat, limiting factors, and carrying capacity. Students will then have an opportunity to provide examples of limiting factors that affect the carrying capacity for other native MN wildlife. This will be followed by some more fun when everyone is given the opportunity to catch fish in the Rice River with the assistance of experienced anglers. Fishing rods, bait, and tackle will be provided for the participants to use.

Bus pickup: McGregor School at 9:15am
Bus Return: McGregor School 3:15pm









## #EE007 - SNAPPING TURTLE ECOLOGY (Army Corp of Engineers, Libby Dam) Thursday, June 24 from 9:30am - 3pm \* Age: 7 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 temperature of eggs. Students will go home with a turtle egg for incubation.

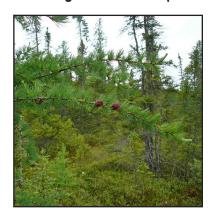
Bus Pickup: McGregor School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; McGregor School 3:20pm

#### #EE008 - BIRDS AND MAMMALS

## (Rice Lake National Wildlife Refuge and School) Monday, June 28 from 9:30am - 3pm \* Age 7 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 related 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 McGregor School at 9:30am and picked up at 3pm



### #EE009 - WCCO TV STATION TOUR AND COMO ZOO EDUCATION PROGRAM (Minneapolis/St. Paul) Tuesday, June 29 \* Age: 10 and up \* Max: 15 students \* Registration fee: \$10/student

Are you intrigued by the weather, sports and news? Students will tour WCCO News Station in Minneapolis visiting the air control area, the tape room, the newsroom, news control, the news studio and the weather center. From there they will travel to Como Zoo in St. Paul for an educational program called ALL THROUGH AFRICA From snow covered mountains to dusty, hot deserts, Africa is an amazingly diverse continent. Learn about the African landscape and the



habitats that support its animals. During class, you'll meet African animals from the desert, savanna, and rain forest. To further your adventure, an African animal adaptations checklist takes you around the zoo grounds on a safari either before or after your class.

Bus will leave school at 7am and return at 5pm

## #EE010 - FISHING LAKE MINNEWAWA & ENVIRONMENTAL EDUCATION MOVIE DAY (Lake Minnewawa and School)

Wednesday, June 30 \* Age: 7 and up \* Max: 25 students

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. After lunch students will kick back and enjoy an outdoor movie adventure on the big screen in the MHS Auditorium!

Bus Pickup: McGregor School at 9:10; Willey's 9:15am; Sather's 9:20am Students must be picked up at school at 3pm (No bus return)

## #EE011 - WOODS, WETLANDS & WILDLIFE AND ARCHERY PROGRAMS (Long Lake Conservation Center)

#### Monday, July 12 from 9:30am - 3pm \* Age: 7 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. This hands-on day will take students to places that will put them 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: McGregor School at 9:10am \* Bus Return: McGregor School 3:20pm



Unable to attend. Please notify in advance so another student on the waiting list may participate.

#### #EE012 - KAYAKING AND ANIMAL TRACK PROGRAM (Army Corps of Engineers/Libby Dam) \* Age: 8 and up Tuesday, July 13 from 9:30am - 3pm

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.



Ever wonder what made those footprints in the mud? We will take a look at some common animal tracks that can be found in our area and then take a walk along the river to see what we can find. Students will have a chance to cast any tracks that we find with plaster and then identify the critter that made them.

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

#### #EE013 - OVERNIGHT CAMPING ADVENTURE

(Army Corps of Engineers Libby Dam)

Wednesday and Thursday, July 14 & 15 from 9:30am (14th) to 11am (15th) \* Age: 5th grade and 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, 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 staff and friends.

#### What to bring camping!

- sleeping bag/pillow
- flashlight • layered clothing swim wear (fleece shirt or wind towel
- breaker) • rain gear
- bug repellent
- tent

- change of clothes
- appropriate footwear

hat

#### What to NOT bring Camping!

Electronics

Bus Pickup: McGregor 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 on the 15th by the main office



#EE014 - FIELD TRIP TO LAKE SUPERIOR ZOO & HARTLEY NATURE CENTER (Duluth) Monday, July 19 from 8:30am - 4:15pm \* Age: 6 - 11 years old \* Max: 30 students Registration fee: \$10/student

"Our first stop in Duluth will be the Lake Superior Zoo where students will be a "Zookeeper" for the morning. Taking care of zoo animals involves a variety of tasks that are all important to the health and well being of each individual animal. This is a truly hands-on adventure. You will learn about animal nutrition, behavior, and become a vet detective! This will give students the opportunity to experience all aspects of a zookeeper's job.

From there we will travel to the Hartley Nature Center where students will learn all about insects and spiders; their bodies, behaviors, and relationships while overturning rocks and logs to catch them in action.

Bus will depart McGregor School north entrance at 8:30am and return at 4pm

#### #EE015 - DNR WATERCRAFT CERTIFICATION COURSE

(Army Corps of Engineers/Libby Dam)

Tuesday, July 20 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, jet ski 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: McGregor School at 9:10am; Willey's 9:15am; Sather's 9:20am Bus Return: Sather's 3:10pm; Willey's 3:15pm; McGregor School 3:20pm







## #EE016 - BUGS, BOGS AND FISHING THE RICE RIVER (Rice Lake National Wildlife Refuge) Wednesday, July 21 from 9:30am - 3pm \* Age: 8 and up

Participants will be sure to get wet and have a fun time learning what a bog is and what kinds of bugs call bogs their home. Is there a difference between a bog and a swamp? A bog and a marsh? Students will discover the secrets of a bog; how a bog is formed, what critters call a bog home, why bogs are important, and some special adaptations of plants that allow them to grow there. Students will have the opportunity to identify plants and bugs of the bog. Bug nets and collection jars will be provided so that everyone gets an opportunity to assist in the collection effort of bugs above and below the water's surface. More fun will be had when everyone is given the opportunity to catch fish in the Rice River with the assistance of experienced anglers. Fishing rods, bait, and tackle will be provided for the participants to use.

Bus pickup: McGregor School at 9:15am \* Bus Return: McGregor School 3:15pm

### #EE017 - SNORKELING, HIKING, POND STUDY AND WATER LIFE PROGRAM

#### (Savanna Portage State Park)

Thursday, July 22 from 9:30am - 3pm \* Age: 7 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.

Exploring Water Life...be our guest on a learning adventure as we discover life underwater. We will discuss the amazing adaptations of beavers, otters, fish and other water critters. Take home a fish printing craft that you make during the program. We'll use paint during the fish printing, so wear something you might be getting dirty.

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



## #EE018 - AMERICAN RED CROSS SWIMMING LESSONS (Round Lake) Monday, July 27 - Thursday, August 6 American Red Cross Swimming Instructor: Mychal Hadrich Lifeguard: Anna Carlson

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

Transportation is not provided for this swimming activity.

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

11:00am-Level 4: Stroke Improvement: develops confidence in thee strokes learned and to improve other aquatic levels.

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

1:00pm -Lunch

2:00 -Level 2: Fundamental Aquatic Skills; gives students success with fundamental skills.

3:00 -Level 1: Students must be 6 years old by 8/31/10. 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 this activity





KEG151	KAIION INFOKMA	110N 2010
Student's Name		Age
Address		
City	State	Zip
Phone	Emergency Phone _	
Email		
	ty restrictions, health problems and/or medications	relating to your child.
ISD #4 liable for any illness or mish with the problems of discipline. I un any student who willfully destroys p comments, photos and video of the s	be made to protect and safeguard all students. I a nap from any cause whatsoever. I also give the inst derstand that any student disregarding rules is sub property will be held responsible and charged acco tudent named above in its promotional materials.	tructors/supervisors full authority in dealing bject to being sent home. I understand that rdingly. I give ISD #4 permission to use
Parent/Guardian Signature		
R		FREE
	ortation is provided for this activity	

## ☐ EE002 EE009 ☐ EE010 EE011 EE012

EE003

EE004

EE005

**EE006** 

**EE007** 

**EE008** 

EE013

☐ EE014

☐ EE015

EE016

□ EE017

□ EE018

Bus will leave school at 9:10 am and return at 3:20 pm No transportation is provided for this activity Bus will leave school at 9:10 am and return at 3:20 pm Bus will leave school at 9:10 am and return at 3:20 pm Bus will leave school at 9:15 am and return at 3:15 pm Bus will leave school at 9:10 am and return at 3:20 pm No transportation is provided for this activity Bus will leave school at 7:00 am and return at 5:00 pm Bus will leave school at 9:10 am; parents must pick their children up at school at 3:00 pm Bus will leave school at 9:10 am and return at 3:20 pm Bus will leave school at 9:10 am and return at 3:20 pm Bus will leave school at 9:10 am on July 14; parents must pick their child up at 11:00 am on July 15 at Libby Dam Bus will leave school at 8:30 am and return at 4:00 pm Bus will leave school at 9:10 am and return at 3:20 pm Bus will leave school at 9:15 am and return at 3:15 pm Bus will leave school at 9:10 am and return at 3:20 pm No transportation is provided for this activity

### Transportation

(YOU MUST PRE-REGISTER FOR TRANSPORTATION)

FYI: For all classes located at Army Corp of Engineers, Savanna Portage State Park or Minnewawa.

School... 9:10am (Pickup) 3:20pm (Dropoff) 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.

#### **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.

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 who have made Big Sandy Water Institute possible:



McGregor Community Education Northland Foundation Army Corps of Engineers Federal Dam Rice Lake National Wildlife Refuge BSALWMP Savanna Portage State Park Jack-a-Lope Hunters Jeffers Foundation Minnewawa Sportsmens Club
Big Sandy Lake Association
Big Sandy Lake Foundation
McGregor Lions Club
Aitkin County Water Planning Task Force
Shamrock Township
Tamarack Sno-Flyers
Long Lake Conservation Center









## BIG SANDY WATER INSTITUTE

McGregor Community Education ISD #4, PO Box 160 McGregor, MN 55760



Post Office or Rural Route Box Holder