

Science & Nature Conference Payment Coupon

Please duplicate as necessary.

All registrations must be placed online. This is for payment purposes only.

Please write "Science & Nature Conference" and your student's name on your check before attaching this payment coupon to receive proper credit.

Name of Student _____

District _____ School _____

Grade: (3-4) (5-6) School Contact _____

Name of Parent/Guardian _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

Please send payment coupon and check payable to:

South Central Service Cooperative
Attn: Mary Hillmann
2075 Lookout Drive
North Mankato, MN 56003

Registration Fee (Oct. 13 or when filled): \$27. Late Registration Fee (Oct. 14-20): \$37.

Science & Nature Conference

Tuesday, October 24, 2017

Gustavus Adolphus College, St. Peter

Registration Fee (By Oct. 13 or when filled): \$27

Late Registration Fee (Oct. 14-20): \$37.

Students and Chaperones Must Register Online: www.mnscsc.org.

Click "EVENTS & REGISTRATION"

Students: Select "Science & Nature
STUDENT Registration"

Chaperones: Select "Science & Nature
CHAPERONE Registration"

Payment options: Online when you register
or by check.

Adults attend free. Seating may not be
available in all sessions.

The planning form below will help students to list session choices before going **online to register**. If you do not see your session listed online, it is full. Please choose another session. Be sure to keep your e-mail confirmation listing your conference schedule. If you experience a problem with registration or **do not receive a registration confirmation** within 24 hours of registration, please email mhillmann@mnscsc.org. Please note: You may need to check your spam or junk folder for your confirmation email.

Online Registration Planning Form

1st choice session #: _____ Title: _____

2nd choice session #: _____ Title: _____

3rd choice session #: _____ Title: _____

4th choice session #: _____ Title: _____

5th choice session #: _____ Title: _____

*This is not a valid registration.
You must register online.*

SCSC reserves the right to add/change sessions or substitute presenters as necessary.



**SCIENCE & NATURE
CONFERENCE
OCTOBER 24, 2017
GUSTAVUS ADOLPHUS COLLEGE, ST. PETER, MN**

SCSC
South Central
Service Cooperative
Quality Through Cooperation Since 1976

Science & Nature Conference

Oct. 24, 2017

Grades 3–6

Grade 3–4 Conference Schedule

8 a.m. - 8:50 a.m.	Check-in (<i>Alumni Hall</i>)
9 a.m. - 9:55 a.m.	Session 1: Opening Program
10:05 a.m. - 11 a.m.	Session 2
11 a.m. - 11:30 a.m.	Lunch (<i>Alumni Hall</i>)
11:35 a.m. - 12:30 p.m.	Session 3
12:40 p.m. - 1:35 p.m.	Session 4

Grade 5–6 Conference Schedule

8 a.m. - 8:50 a.m.	Check-in (<i>Alumni Hall</i>)
9 a.m. - 9:55 a.m.	Session 1
10:05 a.m. - 11 a.m.	Session 2
11 a.m. - 11:30 a.m.	Lunch (<i>Alumni Hall</i>)
11:35 a.m. - 12:30 p.m.	Session 3
12:40 p.m. - 1:35 p.m.	Session 4

All students in grades 3–4 will attend an opening session and then proceed to their three selected session. **Students in grades 5-6 will select four sessions** to attend throughout the day (no opening program). Sessions are handicap accessible. Please contact us at mhillmann@mncsc.org to indicate any special requirements.

Please note: Some sessions may contain latex.

Preserving America – Teddy Roosevelt and the Conservation Movement

How did a sickly boy who was not expected to live come to love the wilderness and ultimately become our conservationist president? “President Theodore Roosevelt” will share his amazing story as we learn about the changing habitats of America and the threats to wildlife survival. What affect did “Teddy” have on America’s public lands and habitats and what changes are happening today that may end that legacy? In this informative presentation, we will show you are never too young to create change.



Things to Remember:

- **All registrations must be made online.** Register early for the sessions of your choice — sessions will be filled and confirmed on a “first come, first serve” basis.
- Registration deadline: Oct. 13 or when filled. Cost: \$27/student.
- Late registration: Oct. 14–20. Cost: \$37/student. Please note, online registration will close Oct. 20. Walk-in registration may be available on Oct. 24 at the conference with limited session availability.
- Schools/families must provide and register their own chaperones. All adult leaders participate in the conference free of charge. Seating may not be available in all sessions. Chaperones may attend sessions as space allows.
- The sessions are located in various buildings on the Gustavus Adolphus Campus. Please dress according to the weather as you will need to travel to different buildings throughout the day.
- Everyone is responsible for bringing their own lunch and beverage. Lunch will not be provided and will not be available for purchase.
- Please write Science & Nature and your student’s name on your check to receive proper credit. Mail it with the payment coupon on this brochure to: South Central Service Cooperative, Attn: Mary Hillmann, 2075 Lookout Drive, North Mankato, MN 56003.
- **No refunds for absence.** Schools may send a replacement. Please notify SCSC of changes in advance if possible. Refunds will be issued for cancellations made by Oct. 19. No refunds will be issued after this date. Refunds for online payments will be charged a processing fee.
- For information on session presenters, directions to Gustavus Adolphus College and/or parking on campus, please visit www.mncsc.org/science-nature.
- **For registration assistance,** please contact Mary Hillmann: 507-389-2509 or mhillmann@mncsc.org.
- As a participant in the Science & Nature Conference, you grant SCSC permission to publish your photos and/or name for promotional purposes.
- By registering, you release, absolve, and hold harmless South Central Service Cooperative, its employees, and agents from any damage resulting from injury incurred while participating in the Science & Nature Conference. You understand South Central Service Cooperative assumes no responsibility before, during or after the program.

Sessions for Grades 3-4 (Select three sessions)

1. Wonderful, Magical Rainforests

What is a tropical rainforest, how many types are there and why are they important? See photos of rainforest animals and plants and learn what makes them unique. Discover the many foods and household items that come from the tropics. Learn how you can help save the rainforests and all their treasures!
Lee Ann Landstrom, Author and Interpretive Naturalist

2. The Lake Game

The fate of the lake depends on what humans do in the watershed. Choose what you would do in different scenarios, and then use a fun 3-D watershed model to show how your choices affect a lake. We will finish by talking about things we can do to keep Minnesota's lakes swimmable and fishable. Get ready to go with the flow!

Wildland Management and Recreation, Parks, and Leisure Services Students and Dr. Robyn Ceurvorst, Minnesota State University, Mankato and Deb Groebner, Minnesota DNR Division of Fish and Wildlife

3. Cutest Life Science Lab Ever – Bunnies!

Learn science concepts while playing with rabbits. See amazing biodiversity with 10 different breeds, many of which are endangered. You will get into the pens and have hands-on time with the rabbits while we talk about genetics, conservancy and the life cycle. Long sleeves are required for full participation in this session.

Stephanie Smith Ross Smith, STEM Bunnies

4. Animals Nobody Loves

It's slimy! It's gross! It's dirty! Why do we consider some animals to be creepy, crawly and scary? Learn about the ecological importance of some of Minnesota's most misunderstood and feared wildlife. Live animals will join us for this presentation.
Bob Ebsen, Wildlife Science Center

5. Phun Physics

Energy, motion, light, heat, sound and pressure! Learn about the world around you with fun physics demonstrations.

Jessie Petricka and the Gustavus Society of Physics Students, Gustavus Adolphus College

6. Mini-Catapults

Practice the engineering design process to construct a small catapult. Find out how far you can fling an object!

The Works Museum

7. Snakes, Lizards and Turtles, Oh My!

The 29 species of reptiles native to Minnesota have amazing adaptations to deal with our cold winters. Find out how they do it and why they are important components of our ecosystems!

Beth Girard, Minnesota Herpetological Society and Master Naturalist

8. Lights, Camera, Action!

In this session, we will take on the roles of scientists and artists, experimenting with lights, robots, photography and video to explore how we experience and think about light and color.

Children's Museum of Southern Minnesota

9. Balloon Rocket Car Fun

America's Fun Science and Dr. Fun present an introduction to basic rocket theory, wheel and axle design, and construction in a fun, hands-on setting. Learn about Newton's Third Law and its application to balloon rocket car design as you assemble your own colorful rocket car and race to the finish! Then take your balloon rocket car home to impress friends and family. Plus, one copy of the new children's book "Tyronne Carter, Kid Scientist" will be raffled off in each class!

Tyronne E. Carter, America's Fun Science

10. Habitat Preservation: The Bison Challenge

"Teddy Roosevelt" will teach us about saving the bison through habitat preservation. Learn about habitats, what affects them and why they are important. Explore the challenge of preserving the bison through slides and hands-on exercises. What did we do to protect the woodland bison during Roosevelt's time and what should we be doing today? What happens when we add new animals to a habitat to protect them at places like Yellowstone National Park? Join us to learn this and more!

Adam Lindquist, Teddy Roosevelt Live, The Theodore Roosevelt Leadership Institute

11. The Bug Show: Close Encounters with Insects and their Relatives

Participate in this unique, hands-on program where you can examine an assortment of live and preserved arthropods. Use as many of your senses as you feel comfortable. See some of the weirdest, wackiest bugs ever! Hear funny stories about bugs and learn about the many unique (and comical) ways insects protect themselves. Touch (or at least get a close look at) live bugs. A special bug snack will be available . . . if you are brave enough to use your sense of taste!

Dr. Bruce Glebink, aka Bruce the Bug Guy, The Bug Zone, LLC

12. A Slimy Good Time!

It's ooey, a little bit gooey, somewhat messy and a fun experiment that allows young scientists to create a recipe that is a real hit around Halloween! Participants will make their own slime to take home. The recipe is easy and fun and one that can be duplicated over and over!

Melanie M. Schmidt, Mankato Area Community Education

13. Super Structures

Build human-scale structures of great height and strength. Explore the strengths of different shapes made with dowels and rubber bands and use investigation and geometry to build strong towers or bridges that can withstand a load of up to 8 pounds. Have fun while you apply engineering principles to build a super structure!

Science Museum of Minnesota

14. Science of Sports

What needs to happen for an athlete to be able to have fun, stay safe and do their best? Natural ability helps, but so do scientists! Explore how science helps us train our bodies and brains to play, as well as how engineers help create the equipment and tools that make different sports the best they can be.

The Bakken Museum

15. All About Bees

What is happening with pollinators like bees? Why does it matter? Safely observe a working honey bee colony, try on beekeeping suits, sample honey and learn more about bees. Why are they important? What we can do to help? Pollinate Minnesota will guide you in this interactive program all about a tiny insect and the food we eat.

Erin Rupp, Pollinate Minnesota

16. Chem in a Flash

Hop on board the chemistry express for a high-speed science experience! Perform instantaneous experiments in this fast-paced class on split-second reactions that go like mad! Pick up an Action Flash kit and have a blast!

Mad Science of Minnesota

17. Skull Science

Herbivores, omnivores, carnivores, insectivores! How can you tell from a skull? Learn about the main types of teeth animals have and how they use them to survive. We will examine skulls of animals and through the process of deduction be able to conclude which "vore" group the animal belongs to. We will then meet a live animal that corresponds to each group.

Minnesota Zoomobile

18. Mysteries of the Minnesota River Valley

Freshwater lamprey? Mooneye fish? What's your dish?! We'll have specimens, artifacts, historical items and stories galore to share the "secrets" of some of the critters common to, but often unnoticed, in the Minnesota River sandbars and mudflats. Hear about the discovery of a woolly mammoth femur right here in the Minnesota River Valley!

Art and Barb Straub, Retired Educators and Master Naturalists

19. Habitat Hideout

Living in the fast lane can be exciting, but it takes a lot of energy. Fish seek places where they can rest, find food and evade predators. Learn where different kinds of fish like to hide and play a relay game. Next time you go fishing, you will know where to cast your line!

Wildland Management and Recreation, Parks, and Leisure Services Students and Dr. Robyn Ceurvorst, Minnesota State University, Mankato and Deb Groebner, Minnesota DNR Division of Fish and Wildlife

20. Strange Creatures of Minnesota

When it comes to the strange and unusual, you don't have to look far to find it! Minnesota has its own collection of odd and unusual creatures. We are home to North America's only marsupial and the only poisonous mammal! Minnesota also has walking pincushions and animals whose teeth never stop growing! Find out which ones top the list as the weirdest critters and see if any of them live near you!

Cody Michel, Prairie Ecology Bus Center

Sessions for Grades 5-6 (Select four sessions)

21. Stream Flow Fun

Come learn all about how streams move and change! Experience the hands-on learning of a stream table to investigate how stream channels and watershed landscape changes affect stream flow. We will also talk about stream pollution and effects of flow and pollutants on stream biology.
Breeanna Bateman and Eileen Campbell, Minnesota Pollution Control Agency

22. Balloon Rocket Car Fun

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Tyronne E. Carter, America's Fun Science

23. Geocaching

It's treasure hunt time! However, your only clues to finding the loot are a bunch of numbers. What's a treasure-hunter to do? Learn how to enter those numbers into a Global Positioning System (GPS) and follow it to the cache! Learn to perform basic GPS functions and then put that knowledge to the test and see if you can find the hidden treasure!
Jessie Hendrix, Prairie Ecology Bus Center

24. Grossology

Sometimes the most interesting things in nature can also be termed "gross!" You'll discover cool things such as how that awful skunk smell is an amazing defense tool and the slime used by slugs is fascinating transportation! Plus, by getting the scoop on poop, you will learn that scat is where it's at! And finally, a grossology course just wouldn't be complete without a little blood and bugs. By the time you're done, we will hopefully have changed your "ewwww's" and "aaackk's" to "oohh's" and "aaahh's."
Alisha Paplow, Prairie Ecology Bus Center

25. Animals Nobody Loves

It's slimy! It's gross! It's dirty! Why do we consider some animals to be creepy, crawly and scary? Learn about the ecological importance of some of Minnesota's most misunderstood and feared wildlife. Live animals will join us for this presentation.
Bob Ebsen, Wildlife Science Center

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Adam Lindquist, Teddy Roosevelt Live, The Theodore Roosevelt Leadership Institute

27. Using the Little GPS in our Heads

Learning how to navigate using maps, whether through a forest, park, city, or even malls and airports, teaches us so much more than just how to get from where we are to where we want to go. We learn how to make quick decisions, solve problems and trust our knowledge and judgement. The power of these skills and the confidence we gain are useful in all areas of life. Come and learn through games how to confidently navigate your way without using electronic tools like a GPS or smartphone.
Andrea Schneider, I Know My Way, LLC, Orienteering USA

28. Super Structures

Build human-scale structures of great height and strength. Explore the strengths of different shapes made with dowels and rubber bands and use investigation and geometry to build strong towers or bridges that can withstand a load of up to eight pounds. Have fun while you apply engineering principles to build a super structure!
Science Museum of Minnesota

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Erin Rupp, Pollinate Minnesota

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Cody Michel, Prairie Ecology Bus Center

34. M3: Mysteries or Magic of Matter

Participate in hands-on activities that will reveal the mysteries of science experiments involving density, light, color, water and polymers. Finish up by showing your knowledge in a Jeopardy game.
Drs. Rebecca Moen, Jim Rife, Terry Salerno and Biochemistry Students, Minnesota State University, Mankato

35. Chem in a Flash

Hop on board the chemistry express for a high-speed science experience! Perform instantaneous experiments in this fast-paced class on split-second reactions that go like mad! Pick up an Action Flash kit and have a blast!
Mad Science of Minnesota

36. It's Not Magic, It's Science

Join wacky professor Jerry Wenzel as he demonstrates science concepts in a fun and easy to understand way. You will be amazed at what appears to be magic, but is really science. This will be an unforgettable science learning experience that will have you asking for more. Who knows, he may even shrink wrap you!
Jerry Wenzel, Science Magic Programs

37. Food Chain Tag

Who's hungry? Let's become bacteria, minnows, perch, northern pike and anglers to join a food chain in action! In this active role-playing session, discover how energy flows and is transferred between the interdependent organisms of a lake ecosystem. What will happen when this ecosystem is out of balance?
Wildland Management and Recreation, Parks, and Leisure Services Students and Dr. Robyn Ceurvorst, Minnesota State University, Mankato and Deb Groebner, Minnesota DNR Division of Fish and Wildlife

38. Fish Families

Learn how to identify the most popular fish species that live in Minnesota! We will use fish body shape, fins and unique features to categorize fish by family. Then we will play a fishing game to practice your new observation skills and learn about fishing regulations and conservation. If you like to go fishing, this session will help you know what to say when someone asks, "What's biting today?"
Wildland Management and Recreation, Parks, and Leisure Services Students and Dr. Robyn Ceurvorst, Minnesota State University, Mankato and Deb Groebner, Minnesota DNR Division of Fish and Wildlife

39. Energy and Me

How does flipping a light switch affect the air around and above us? How can energy be in our bodies, machines and outer space? Explore these ideas through experiments, nutritional snack making, acting, stories and more.
Heidi Ferris, Growing Green Hearts, LLC

40. Plantable Paper-Making

How will you engineer a system to make paper? Get a little messy as we work out the chemistry of fibers, parts working together, seed-saving, recycling and sustainability. Creative cultural stories and artisan paper-making will get you playing while designing, experimenting and thinking critically.
Petra Johnson, Growing Green Hearts, LLC