



Cass County Conservation Board Middle School Program List Next Generation Science Standards

Welcome to the Cass County Conservation 6th - 8th grade Curriculum revised to reflect the Next Generation Science Standards. Here you will find any in-school programs we offer and field trip options. Feel free to contact Lora Kanning at lkanning@casscoia.us or 712-769-2372/712-254-0105 (cell) with any questions. The Cass County Conservation Board is dedicated to wildlife habitat development, management and preservation. These goals are reached by purchasing land for wildlife, by improving habitat quality and by providing educational programs for the citizens of the county.

There is specific programs listed per grade and there is also a basic layout for all of the general classes CCCB offers across grades. We have put the programs in the best fit grade by the Iowa Science standard, feel free to still ask for the program even though it might not be listed in your grade level. If you don't see a class that meets your needs please contact a naturalist to see if we can customize a class for your classroom. The programs listed are sponsored by the Cass County Conservation Board and are designed to actively involve your students. Call Lora Kanning at 712-769-2372 or e-mail lkanning@casscoia.us to schedule a program (Some require further advance notice)!



6th- 8th Grade

- **The Great Backyard Bird Count:** Everyone is needed to participate, even if they can only correctly identify one kind of bird! I will help them with their identification skills when I visit your classroom and help them understand their important role in this national program. Atlantic has consistently been in the top 5 communities, for submitting the most checklists! Can we do it again? 7-LS2-1
- **Amazing Circulation:** We can tailor topics to your focus: Circulatory systems of humans, worms, fish, turtles, Open versus closed circulatory systems, Circulatory and survival, and Heart rates of different animals. 6-LS1-3
- **Leaf ID:** With real examples students will learn how to key out leaves to identify tree species, including evergreen trees. 8-LS1-5
- **Invasive Species:** Discover flora and fauna species in Iowa that are considered invasive. In-School program with optional field trip opportunity. 7-LS2-1
- **Have you Herd of Bison:** Introduce your students to the Bison's adaptations, habitat, and species success. 7-LS2-2
- **Vericomposting:** Worms eat my garbage!? Find out how these amazing creatures love our leftovers! Many extension activities available! 7-LS2-3
- **Real, Live, Endangered Species:** Your students will get to see a live animal (an ornate box turtle) that is listed as threatened on Iowa's Endangered Species list. I could also bring several mounted critters (Trumpeter Swan, River Otter, and Bobcat) that are, or have been, on the list. 7-LS2-1
- **Pollinator Garden Buffet:** This lesson uses the Pollinator Garden Buffet activity to help youth learn about the needs of pollinators and how to design an ideal habitat. Youth will learn about how pollinators need flowers that bloom all season long as well as places to build their nest. 7-LS2-1
- **Convection Currents:** Students will learn how temperature affects air currents. 8-ESS2-5



6th- 8th Grade

- **Integrated Pest Management:** Pest management is an important component of crop production for the food we eat. However, pest management can negatively impact pollinators. Integrated pest management uses pest identification, pest biology, and multiple tactics to keep pest damage low while reducing the use of pesticides and protecting pollinators. This activity teaches youth some insect identification skills and insect biology and asks them to evaluate insects such as pests, beneficial, or neither. Great field trip opportunity. 8-LS1-5
- **Native Bee Nests:** Youth can apply what they know about the importance of native bees and providing native bee habitat by making a native bee nest for solitary, tube-nesting bees. 8-LS4-3
- **Model of Pollination:** Youth will learn the process of pollination and how native bees are involved as pollinators by creating and using models. By using a physical model, youth will be able to see exactly how bees pick-up and deposit pollen and gain a better understanding of how pollination leads to the formation of fruits and seeds. 8-LS4-2
- **Groundwater Flow Model:** Using a flow model, we will dive into Iowa's underground structures including groundwater. This active lesson will help your students better understand water movement below the surface. Please schedule 2 week advance notice. 6-ESS2-1 7-ESS2-4
- **Rock It:** Focus on rocks, minerals and fossils and where they come from. 6-ESS2-3
- **Star ID:** Learn about constellations, tailored to the month of your program. 7-ESS1-2
- **Space Adventuring:** Learn about discovering space, tailored to eclipses, seasons and lunar events. 7-ESS1-1
- **Water Address:** Students discover an animal's water address and even OUR own! Reinforces water conservation, adaptations, and the watershed concept. Internet access is optional. 6-ESS2-2
- **Native Bee Decline:** In this lesson, youth will learn about how bees are responding to environmental changes. They will discuss how the different flower parts are involved in pollination and reproduction of the plant. Please schedule two week advance notice. 7-LS1-4, 8-ESS3-4