

TEACHERS GUIDE

TO “A ROMP OF OTTERS”

Multidisciplinary classroom activities based on the Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, November–December 2016, www.mndnr.gov/mcvmagazine

Minnesota Conservation Volunteer magazine tells stories that connect readers to wild things and wild places. Subjects include earth science, wildlife biology, botany, forestry, ecology, natural and cultural history, state parks, and outdoor life.

Education has been a priority for this magazine since its beginning in 1940. “One word—Education—sums up our objective,” wrote the editors in the first issue. Thanks to the MCV Charbonneau Education Fund, every public library and school in Minnesota receives a subscription. Please tell other educators about this resource.

Every issue now features a Young Naturalists story and an online Teachers Guide. As an educator, you may download Young Naturalist stories and reproduce or modify the Teachers Guide. The student portion of the guide includes vocabulary cards, study questions, and other materials.

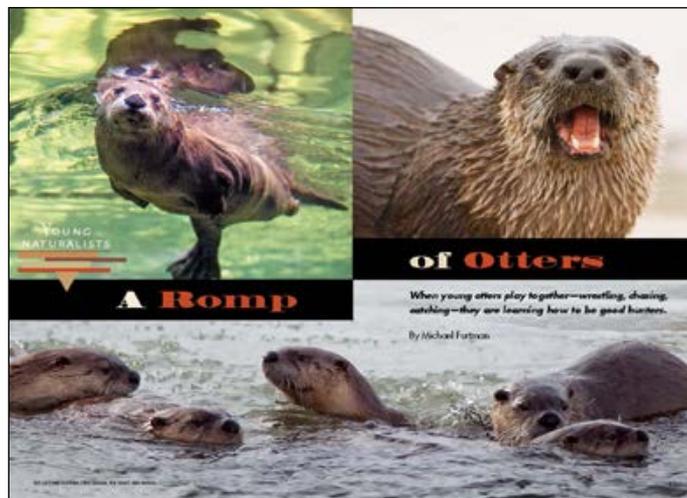
Readers’ contributions keep *Minnesota Conservation Volunteer* alive. It is the only state conservation magazine to claim the distinction of being financially supported by contributions from its readers.

Find every issue online. Each story and issue is available in a searchable PDF format. Visit www.mndnr.gov/mcvmagazine and click on *past issues*.

Thank you for bringing Young Naturalists into your classroom!

“A ROMP OF OTTERS”

Multidisciplinary classroom activities based on the Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, November–December 2016, www.mndnr.gov/mcvmagazine



SUMMARY. Through all seasons of the year, river otters swim, dive, slide, and splash in Minnesota’s waterways. “A Romp of Otters” introduces students to these playful creatures with compelling photos and colorful descriptions of what they eat, how they reproduce, and the ways in which they interact with each other. It also tells the story of past population plunges and how otters are making a comeback today.

SUGGESTED READING LEVELS. Third through middle school grades

MATERIALS. KWL organizer, poster board, markers, paper, pencils, YouTube videos (See Web Resources), and other print and online resources your media specialist may provide

PREPARATION TIME. One to two hours, not including time for extension activities

ESTIMATED INSTRUCTION TIME. One or two 50-minute class periods (not including extensions)

MINNESOTA ACADEMIC STANDARDS APPLICATIONS. “Tiny Travelers” may be applied to the following Minnesota Department of Education standards:

LANGUAGE ARTS READING BENCHMARKS INFORMATIONAL TEXT GRADES 3–8

Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity

WRITING BENCHMARKS GRADES 3–8 Text Types and Purposes, Writing Process, Research to Build and Present Knowledge, Range of Writing

READING BENCHMARKS: LITERACY IN SCIENCE AND TECHNICAL SUBJECTS 6–8

Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity

WRITING BENCHMARKS: LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS 6–8 Text Types and Purposes, Writing Process: Production and Distribution of Writing, Research to Build and Present Knowledge, Range of Writing

MATHEMATICS GRADE 6

6.3.3.1

SCIENCE GRADES 3, 5, AND 7

Life Science

3.4.1.1.1; 5.4.1.1.1; 5.4.2.1.2; 5.4.4.1.1; 7.4.2.1.1; 7.4.2.1.2; 7.4.3.1.3; 7.4.3.2.3; 7.4.4.1.2

ARTS GRADES K–12

1. Artistic Foundations: Visual Arts
2. Artistic Process: Create or Make: Visual Arts
3. Artistic Process: Perform or Present: Visual Arts
4. Artistic Process: Respond or Critique: Visual Arts

Current, complete Minnesota Academic Standards are at www.education.state.mn.us. Teachers who find other connections to standards are encouraged to contact *Minnesota Conservation Volunteer*.

PREVIEW. Your students may be familiar with otters from the zoo or from watching nature videos about sea otters, but it may surprise them to learn that otters live in Minnesota. (1) You may wish to start with a short video of river otters playing (see Web Resources) to introduce your students to what river otters look like and how they behave. (2) You might follow this with a **KWL** activity. To find out what your students already know (**K**) about otters, divide the class into small groups to brainstorm their ideas. Give each student a copy of the organizer and encourage each to make notes during the group discussion. Ask what students would like to learn, or what questions they have, about the topic (**W**). Record their questions on poster board for reference. As you read and discuss the article you will begin to compile the (**L**) lists, or what they learn while reading the article and related materials and participating in extension activities. KWL gives you the opportunity to introduce interdisciplinary connections you will make during extension activities. If you use the article in science or art class, you may wish to focus your prereading activity on academic standards that apply for that class.

VOCABULARY PREVIEW. You can find a copy-ready vocabulary list at the end of this guide. Feel free to modify it to fit your needs. Share the words with you students and invite

them to guess what they think they mean. Tell them you will be reading a story that will help them understand these words so they can use them in the future!

You might wish to use the study cards (adapted from *Strategic Tutoring*) found at the end of the Study Questions for this Young Naturalists feature. On one half of the card is a key vocabulary word or phrase written as a question. The other half defines the word or phrase. Cut along the horizontal line, fold in the middle, and tape or staple, then use like flash cards. We've included a few blanks so you or your students can add new words or phrases if you'd like.

STUDY QUESTIONS OVERVIEW. Preview the study questions with your class before you read the article. Then read the story aloud. Complete the study questions in class, in small groups, or as an independent activity, or use them as a quiz.

ADAPTATIONS. Read aloud to special needs students. Abbreviate the study questions or focus on items appropriate for the students. Adapt or provide assistance with extension activities as circumstances allow.

ASSESSMENT. You may use all or part of the study guide, combined with vocabulary, as a quiz. Other assessment ideas include: (1) Ask students to describe what they learned about river otters. See the "learned" list from your **KWL** activity. (2) Have students write multiple-choice, true-false, or short-answer questions based on the article. Select the best items for a class quiz. (3) Have students create posters and presentations to demonstrate what they have learned.

EXTENSION ACTIVITIES. Extensions are intended for individual students, small groups, or your entire class. Young Naturalists articles provide teachers many opportunities to make connections to related topics, to allow students to follow particular interests, or to focus on specific academic standards.

1. Take a field trip to the Minnesota Zoo to observe the otters on the Minnesota Trail. Have students bring notebooks to record their observations of otter behavior. What activities did they observe that were mentioned in the article? What other activities did they observe?
2. Groups of otters are called "romps" and the young of otters are called "pups." Help students practice their internet research skills by making a list of other Minnesota wildlife and finding out the names for their groups and young.
3. After watching river otters in action outdoors, at the zoo, or in a video, invite students to write and illustrate poems about otters.
4. How do river otters survive winter? See what you can find out about the adaptations they have that help them tolerate cold weather.
5. Minnesota has an otter trapping season during which people trap otters for their fur, which is used to make hats, coats, and other things to wear. Should Minnesota allow otter trapping? Invite students to research the pros and cons of the topic and present them in

a poster, or hold a Lincoln-Douglas debate on the topic. Education World's [It's Up for Debate](#) website offers useful resources for introducing debate to elementary students.

6. Invite students to write stories about an otter. Before they begin, discuss the elements of a story and how the story arc carries readers from the beginning through conflict, climax, and resolution.

WEB RESOURCES

GENERAL TEACHER AND STUDENT RESOURCES

[Minnesota DNR Teachers' Resources](#)

[DNR Kids Page](#)

YOUNG NATURALISTS FEATURE

[The Slinky, Stinky Weasel Family](#)

RIVER OTTER VIDEOS

[Wild River Otters Playing](#)

[Molalla the Baby River Otter Learns to Swim](#)

[River Otters on the Run](#)

RIVER OTTERS

[River Otter](#) (Minnesota DNR)

[North American River Otters](#) (National Wildlife Federation)

[North American Otter](#) (Arkive) - photos, descriptions, links to additional information

[North American River Otter](#) (BioKids) - detailed but student-friendly information on biology, ecology

*All *Minnesota Conservation Volunteer* stories are [available online](#) in searchable PDF.

STUDY QUESTIONS ANSWER KEY

1. Name five adaptations that help river otters live in water. **Answers may vary but can include: a tube-shaped body that helps them slip smoothly through water, webbed feet, a rudderlike tail, the ability to close ears and nostrils to keep out water, the ability to hold their breath for a long time, a thick, oily coat that keeps them warm.**

2. Fill in the blank: An otter can stay underwater for up to **eight** minutes.

3. How do whiskers help an otter survive? **Whiskers help an otter find a meal by picking up vibrations when a fish swims nearby.**

4. Name six things an otter eats. **Answers may vary but can include: crayfish, fish, minnows, frogs, turtles, birds, other small animals.**

5. Name three things that eat otters. **Coyotes, bobcats, wolves.**

6. Male otters mark their territory with **droppings** and **scent from their scent glands**.

7. How many otter pups are in a litter? **One to five.**

8. How does a mother otter feed her newborn young? **She nurses them—nourishes them with milk from her body.**

9. Where do river otters live? **E. all of the above.**

10. Why did otters start to disappear after European settlers arrived in Minnesota? **In the 1800s, the settlers trapped otters so they could use their fur for clothing. In the 1900s, people replaced otter habitat with farms, roads, and buildings and polluted the waterways in which otters lived.**

11. What has happened since then that has helped otters populations recover? **Today, trappers follow rules that help keep them from taking too many otters. Trappers caught otters in northern Minnesota and released them in southern Minnesota. Rivers in southern Minnesota have been cleaned up.**

12. What does the author say we need to do if we want to have otters in our future? **We need to keep our rivers, ponds, and lakes clean.**

Challenge: An otter weighs about 30 pounds. What is the metric system equivalent? **10 kilograms (Note that the original number only has one significant digit, so the conversation should have one significant digit as well.)**

MINNESOTA COMPREHENSIVE ASSESSMENTS ANSWER KEY

1. Another name for an otter's whiskers is **A. vibrissae.**

2. An otter can grow to be **5** feet long and weigh **30** pounds.

3. **To romp means to move about in a playful, active way. It's a perfect description for the way otters move on land, in water, and in between.**

4. True or false: Otters hibernate in the winter. **False. Otters are active year around.**

5. A young otter is called **C. a pup.**