

TEACHERS GUIDE

TO “FAWN’S FIRST DAY”

Multidisciplinary classroom activities based on the Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, May–June 2015, 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!

“FAWN’S FIRST DAY”

Multidisciplinary classroom activities based on the Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, May–June 2015, www.mndnr.gov/mcvmagazine



SUMMARY. “Fawn’s First Day” tells the story, in text and photos, of a white-tailed deer fawn’s birth and first few hours of life. The author describes milestones from a fawn’s birth through its first year. Young readers will also learn how the doe nourishes the fawn and keeps it safe from predators.

SUGGESTED READING LEVELS. Third through high school grades

MATERIALS. KWL organizer, index cards, paper, poster board, colored pencils, crayons, pens, markers, 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. “Fawn’s First Day” 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 IN SCIENCE AND TECHNICAL SUBJECTS 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 Text Types and Purposes, Writing Process: Production and Distribution of Writing Research to Build and Present Knowledge, Range of Writing

MATHEMATICS

GRADES 3, 4, 5, 6, 7, AND 8

3.1.1.5; 3.1.2.1; 3.1.2.2; 3.4.1.1; 4.1.1.5; 4.4.1.1; 5.1.1.3; 5.1.1.4; 5.4.1.1; 6.1.1.3; 6.1.3.3; 7.4.2.1; 8.4.1.1; 8.4.1.2; 8.4.1.3

SCIENCE GRADES 3, 5, AND 7

Life Science

3.4.3.2.1; 3.4.3.2.2; 5.4.1.1.1; 7.4.2.1.1; 7.4.2.1.2

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. (1) See <https://www.youtube.com/watch?v=xIAxeQY-9Ws> for a brief video introduction to white-tailed deer. (2) You may follow with a KWL (Ogle, 1986) activity. To find out what your students already know (K) about white-tailed deer, divide the class into small groups to brainstorm their ideas. Give each student a copy of the organizer (see www.teach-nology.com/web_tools/graphic_org/kwl) and encourage each to make notes during the group discussion. Repeat step one by asking 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

or art class, you may wish to focus your prereading activity on academic standards that apply for that class. (3) See www.teachervision.fen.com/tv/printables/TCR/0743932080_007.pdf for a brainstorming web download.

VOCABULARY PREVIEW. See the copy-ready vocabulary list included in this guide. You may wish to modify the list based on your knowledge of your students' needs or the subject you are teaching. Pretesting vocabulary individually, in small groups, or with your entire class can be an effective vocabulary preview strategy. You may then post-test at the conclusion of this activity (see Assessment section below).

You may wish to use the study cards found at the end of this guide. Cut along the horizontal line, fold in the middle, and tape or staple. Study cards (see *Strategic Tutoring*, Hock, Deshler, and Schumaker 2000) can be applied to any subject area. On one side of the card, in large letters, write a key word or phrase students are expected to know. In smaller letters, frame the word or phrase in a question or statement. On the other side of the card, in large letters, write the answer to the question. Finally, in smaller letters, frame the answer in a question or statement. Blanks are provided to allow you or your students to add new words or phrases.

STUDY QUESTIONS OVERVIEW. Study questions parallel the story (the answer to the first question appears first in the article, followed by the second, and so on). *Preview the entire guide with your class before you read the article.* You may wish to read the story aloud and complete the study questions in class, in small groups, or as an independent activity. The questions may be assigned as homework, depending on the reading ability of your students. Inclusion teachers may provide more direct support to special needs students (see Adaptations section). The study questions may be also used as a quiz. Note: Items with an asterisk require varying degrees of critical thinking.

ADAPTATIONS. Read aloud to special needs students. Abbreviate the study questions or highlight priority items to be completed first. If time allows, remaining items may be attempted. Peer helpers, paraprofessionals, or adult volunteers may lend a hand with the study questions. With close teacher supervision, cooperative groups can also offer effective support to special needs students, especially for extension activities.

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 white-tailed deer (see the "L" list from your KWL activity). (2) Students may write multiple-choice, true-false, or short-answer questions. Select the best items for a class quiz. (3) In small groups or as individuals, students may create posters that combine visual art, writing, and oral presentations. Posters may focus on one or more big ideas from the story.

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. “Oh Deer!” and “The Parenting Game,” both Young Naturalists articles with teachers guides (See Related Articles), make great companion pieces for “Fawn’s First Day.” You may encourage students to include content from related articles in evaluation and/or other extension activities.
2. *Minnesota Conservation Volunteer* has devoted hundreds of pages to every aspect of the white-tailed deer’s life cycle, conservation, and position as Minnesota’s premier big-game animal. Students who enjoy hunting will find many articles of interest, a few of which are included in Related Articles.
3. What is chronic wasting disease (CWD), and why are wildlife biologists so concerned about it? What is causing the disappearance of Minnesota’s moose herd? See Related Articles for starters, then invite a wildlife biologist, state park naturalist, or conservation officer from the DNR to your classroom.
4. Watch “The Private Life of Deer,” a 53-minute PBS documentary on white-tailed deer. Find the link in Web Resources.
5. Take a field trip to your school forest, a state park, or a scientific and natural area. Contact a naturalist at your state park to plan a program for your class. Bring materials to make plaster casts of deer tracks and cameras to photograph tracks, scat, scrape, or rubs.
6. Several Number/Operation and Data Analysis Mathematics standards may be addressed with deer population and harvest data found in DNR reports (see Web Resources). “Minnesota’s Growing Game” and “Bounce Back” in Related Articles will give students historical context for white-tailed deer population, harvest numbers, and trends.

WEB RESOURCES

DNR

www.dnr.state.mn.us/animals/index.html

www.dnr.state.mn.us/livingwith_wildlife/fences/index.html

www.dnr.state.mn.us/mammals/deer/mgmt.html?tab=2

http://files.dnr.state.mn.us/wildlife/deer/2015/gS/deerharvest_2014.pdf

http://files.dnr.state.mn.us/wildlife/deer/reports/harvest/popmodel_2014.pdf

WHITE-TAILED DEER INFORMATION AND PHOTOS

www.nhptv.org/natureworks/whitetaileddeer.htm

www.fcps.edu/islandcreekes/ecology/white-tailed_deer.htm

<http://animals.nationalgeographic.com/animals/mammals/white-tailed-deer>

WHITE-TAILED DEER VIDEOS

<https://www.youtube.com/watch?v=V1wo6lRmmuQ>

<https://www.youtube.com/watch?v=xIAxeQY-9Ws>

PRECOCIAL ANIMALS

https://web.stanford.edu/group/stanfordbirds/text/essays/Precocial_and_Altricial.html

www.bbc.co.uk/nature/adaptations/Precocial

MINNESOTA DNR TEACHER RESOURCES

www.mndnr.gov/education/teachers/index.html

www.mndnr.gov/dnrkids/index.html

*Note: All websites were active at the time of this guide's publication. However, some may no longer be active when this guide is accessed.

RELATED ARTICLES. In addition to the related articles listed below, every *Minnesota Conservation Volunteer* article published since 1940 is now online in searchable PDF. See www.mndnr.gov/mcvmagazine. Young Naturalists articles and teachers guides are found at www.dnr.state.mn.us/mcvmagazine/young-naturalists.html.

September–October 1996

“Oh Deer!” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/deer/deer.pdf

September–October 1998

“Minnesota’s Growing Game”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=873

May–June 2002

“Deer Disease at Our Door”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=378

September–October 2002

“A Tough Fight to the Top”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=99

November–December 2002

“A Tale of Two Herds” (CWD)

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=98

September–October 2003

“Searching for CWD”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=2136

November–December 2003

“Wired Life” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/telemetry/wiredlife.pdf

September–October 2004

“Gallery of Game” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/game/game.pdf

“Hunting for Results”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=1911

March–April 2005

“The Parenting Game” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/parenting/baby_animals.pdf

January–February 2007

“Nature’s Calendar” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/phenology/phenology.pdf

November–December 2007

“The World From a Stump” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/stump/stump.pdf

July–August 2008

“End of the Reign?”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=4152

January–February 2008

“Counting Critters” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/counting_critters/counting_critters.pdf

September–October 2009

“Bounce Back”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=5036

January–February 2011

“The Greatest of Feet” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/taxonomy/taxonomy.pdf

November–December 2012

“Who Is *Alces alces*?” (YN article with teachers guide)

http://files.dnr.state.mn.us/mcvmagazine/young_naturalists/young-naturalists-article/taxonomy/taxonomy.pdf

REFERENCES

Hock, M.F., Deshler, D.D., and Schumaker, J.B. *Strategic Tutoring*. Lawrence, Kan.: Edge Enterprises, 2000.

Ogle, D.S. K-W-L Group Instructional Strategy. In A.S. Palincsar, D.S. Ogle, B.F. Jones, and E.G. Carr (Eds.), *Teaching Reading as Thinking: Teleconference Resource Guide*, pp. 11–17. Alexandria, Va.: Association for Supervision and Curriculum Development, 1986.

STUDY QUESTIONS ANSWER KEY. Teachers guide for the Young Naturalists article “Fawn’s First Day.” Published in the May–June 2015 *Minnesota Conservation Volunteer*, or visit www.mndnr.gov/mcvmagazine.

1. A white-tailed doe may have as many as **three** fawns each spring.
- *2. What are the chances that a fawn will be a female? **Chances that a fawn will be female are about 50 percent.**
3. Why are state parks a good place for white-tailed deer? **In state parks deer habitat (food and shelter) is favorable for survival.**
4. What is the placenta, and why is it important to the fawn? **The placenta connects the developing fawn (fetus) to its mother. The fawn gets all the nutrients and oxygen it needs through the placenta.**
5. Why must the doe remain quiet while giving birth to her fawn? **She stays quiet so as not to attract predators.**
6. The doe eats the placenta to **prevent predators from detecting its scent.**
7. What is imprinting? **Imprinting is the process whereby the mother and baby learn each other’s scent. Mother and baby will always be able to find each other, even when other deer are present.**
8. How does the doe’s milk protect the fawn from disease? **During the fawn’s first day of life the milk contains colostrum, which has antibodies (disease-fighting proteins) that protect the fawn from disease.**

9. If you find a fawn in the woods, what should you do? **If you find a fawn leave it alone. Its mother is probably nearby.**

10. During its first two weeks of life, what is a fawn's best defense against predators? **Before it is able to run fast enough to escape predators, a fawn's best defense is to depend on its camouflage—that is, to stay quiet and motionless.**

11. If a fawn moves away from its hiding place while its mother is gone, how does its mother find it? **The doe can find its fawn by following a scent left by glands in the fawn's hooves.**

12. How does the doe protect her fawn if a predator approaches? **She may stay away from her fawn to distract the predator or run in circles around the fawn and snort loudly to frighten the predator away.**

13. Depending on its gender a fawn stays with its mother for how long? **Females may spend their entire lives in the same home range as their mothers. Males usually leave after they are about 18 months old to make their own home range.**

*14. Can you find the fawn in photo 15 on page 37? What makes the fawn so hard to locate? **The fawn is just to the left of the X formed by two small trees. A fawn's dappled coat helps it blend in with its background. Fawns are also good at staying still and quiet.**

*Challenge: White-tailed fawns are precocial. What does that mean? Can you think other animal babies that are precocial? Precocial animals can stand, walk, and run soon after they are born. There are many precocial mammals, birds, reptiles, and amphibians. Brainstorm lists in small groups and then put group lists into a class list. There are three links in Web Resources for reference if you wish.

MINNESOTA COMPREHENSIVE ASSESSMENTS ANSWER KEY. Teachers guide for the Young Naturalists article “Fawn’s First Day.” Published in the May–June 2015 *Minnesota Conservation Volunteer*, or visit www.mndnr.gov/mcvmagazine.

1. For most of the year white-tailed does live **A. in small family groups.**
2. White-tailed fawns live on their mother's milk for about **D. 10 weeks.**
3. Fawns weigh between **B. 5 and 8** pounds when they are born.
4. The doe eats the fawn's **D. A and B** to protect it from predators.
5. White-tailed deer predators include **D. all of the above.**

VOCABULARY ANSWER KEY. Teachers guide for the Young Naturalists article “Fawn’s First Day.” Published in the May–June 2015 *Minnesota Conservation Volunteer*, or visit www.mndnr.gov/mcvmagazine.

abdomen also called the belly; contains the internal organs

antibody protein produced in the blood that fights bacteria and viruses

colostrum first milk a baby mammal receives from its mother

habitat natural environment in which an animal or plant lives

home range area within which an animal spends its life

nutrients substances in foods that organisms need to survive and grow

Odocoileus virginianus (genus and species) scientific name for white-tailed deer

oxygen abundant molecule in Earth's atmosphere that animals must breathe to survive

predator animal that kills and eats other animals

weaning gradual transition from mother's milk to adult diet

womb also called the uterus; organ within which the unborn animal develops