

Teachers Guide

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“Oh Deer!” Multidisciplinary Classroom Activities

Teachers guide for the Young Naturalists article “Oh Deer!” by Tom Dickson Published in the September–October 1996 *Volunteer*, or visit www.mndnr.gov/young_naturalists/deer/index.html

Young Naturalists teachers guides are provided free of charge to classroom teachers, parents, and students. This guide contains a brief summary of the article, suggested independent reading levels, word count, materials list, estimates of preparation and instructional time, academic standards applications, preview strategies and study questions overview, adaptations for special needs students, assessment options, extension activities, Web resources (including related Conservation Volunteer articles), copy-ready study questions with answer key, and a copy-ready vocabulary sheet and vocabulary study cards. There is also a practice quiz (with answer key) in Minnesota Comprehensive Assessments format. Materials may be reproduced and/or modified a to suit user needs. Users are encouraged to provide feedback through an online survey at www.mdnr.gov/education/teachers/activities/ynstudyguides/survey.html.



Summary

“Oh Deer!” describes the five species of deer that have been present in Minnesota. Behavior, appearance, antler growth, and range (habitat) are among the topics covered.

Suggested reading levels:

Upper elementary through ninth grade

Total words:

1,320

Materials:

Copies of article, study guide, drawing paper, colored pencils, lined paper, pens or pencils

Preparation time:

About one hour, not including extension activities

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Estimated instructional time:

Two to three 50-minute class periods for study guide and one or two extension activities

Minnesota Academic Standards applications:

“Tree Guardians” may be applied to the following Minnesota Department of Education standards:

Language Arts

I. Reading and Literature

- A. Word Recognition, Analysis and Fluency
- B. Vocabulary Expansion
- C. Comprehension

II. Writing

- A. Types of Writing
- B. Elements of Composition
- C. Spelling
- D. Research
- E. Handwriting and Word Processing

III. Speaking, Listening and Viewing

- A. Speaking and Listening
- B. Media Literacy

Science
Grade 4

IV. Life Science

B. Diversity of Organisms
Grade 5

IV. Life Science

E. Biological populations change over time
F. Flow of Matter and Energy
Grades 7

IV. Life Science

B. Diversity of Organisms
C. Interdependence of Life
E. Biological Populations Change Over Time
F. Flow of Matter and Energy

Arts

Artistic Expression
D. Visual Arts

Complete Academic Standards are available at www.education.state.mn.us. Teachers who find other connections to academic standards are encouraged to contact *Minnesota Conservation Volunteer*.

Preview

Use the KWL strategy (Ogle, 1986) to find out what your students already know (K) about deer species in Minnesota, what (W) they would like to learn, and eventually, what they learned (L) while reading the article and related materials, and through participating in extension activities. You might begin by asking small groups to brainstorm as many facts/ideas as possible. Then combine the groups for a class list. Display your K and W ideas on poster board or paper (see Vocabulary preview). Add to your L list as you read and discuss the article. See www.teach-nology.com/web_tools/graphic_org/kwl for a KWL generator that will produce individual organizers for your students. KWL also gives you the opportunity to introduce interdisciplinary connections you will make during extension activities. For example, if you plan to use the article during science or art you may ask students to review their KWL for concepts that are specific to those disciplines. An appropriate activity for older students involves building categories of knowledge that may be added to as students read the article and complete the study guide. Assign categories to small groups. Allow a few minutes for group discussion and then discuss as a class. Record the categories on posters and display. Add information as it emerges.

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Vocabulary preview

See the copy-ready vocabulary list included in this guide. You may also wish to add words to or delete words from the list based on your knowledge of your students' needs. 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).

Connections to vocabulary in the article may also be made during KWL. If students are not familiar with some of the terms, include them in the W list. Other terms may be added to the W list as they read the article. Eventually they can be moved to the L list. You may write vocabulary from the article in green ink, while other ideas are written in black. Notes: Some of the words in the vocabulary list definitions may require further explanation.

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 that 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

Questions in the study guide parallel the story. That is, the answer to the first question occurs first in the story, followed by the second, and so on. Read the study guide with your class before reading the story. Depending on the reading ability of the class, teachers might wish to read the story aloud and complete the study guide as a class or in small groups. Inclusion teachers might wish to provide direct support as their students read the story and complete the study guide. The study guide may also be used as a quiz. Note that items 7, 11, and 14 and the Challenge require varying degrees of critical/analytical thinking.

Adaptations

Read aloud to special needs students. Abbreviate the study guide or highlight priority items to be completed first. For example, highlight questions 1–9, which cover facts about the deer family. Special needs students may try these first and then, if time allows, try the others. Peer helpers, teaching assistants, or adult volunteers may lend a hand with the study guide. Study guide and/or extension activities may also be done in small groups.

Assessment

Students may write a paragraph either summarizing the article or detailing a specific aspect of the article (a species of deer, habitat, diet, digestion, or antler growth). Selected items from the study guide and vocabulary list may be used as a quiz. Poster sessions may be used to assess understanding through visual arts and oral presentation.

Extension activities

1. Draw white-tailed deer, moose, and caribou antlers. How are they alike and how are they different? Draw deer using their antlers.
2. Describe a deer hunting experience. Use the when, where, who, what, why, and how method to include all the important details. See “The World from a Stump” in Related Articles.
3. Have you ever visited a deer farm? Describe your visit. How are deer raised on farms different than those living in the wild?
4. How does the number of deer affect the number of wolves?

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Extension activities continued

5. Read Anne Dunn’s story “Deer Wife,” in *Winter Thunder*. Discuss the metaphor of the deer as presented by the Ojibwe storyteller.
6. Divide the class into two groups and conduct a debate, allowing each side to state their case on the following questions: Should the number of white-tailed deer living in Minnesota be controlled? Why or why not? What do you think should be done to reduce deer damage (eating flowers and shrubs) in urban areas?
7. Write a story about being a deer living in Minnesota.

Web resources

Nature Works

www.nhptv.org/natureworks/ and click on Nature files

Wisconsin Department of Natural Resources

www.dnr.state.wi.us/org/caer/ce/eek/critter/mammal/fawn.htm

Kritter Cards, animal greeting cards

www.krittercards.com/deer.htm

University of Michigan, Museum of Zoology

[animaldiversity.ummz.umich.edu/accounts/odocoileus/o._virginianus\\$narrative.html](http://animaldiversity.ummz.umich.edu/accounts/odocoileus/o._virginianus$narrative.html)

Minnesota DNR

www.mndnr.gov/mammals/deer/index.html

www.mndnr.gov/snapshots/mammals/index.html

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

Minnesota Deer Hunters Association

www.mndeerhunters.com/

Note: More than 100 articles about deer and deer hunting have been published in the *Minnesota Conservation Volunteer* since the 1940s. The following articles, and many others are available online at www.mndnr.gov/volunteer/articles/index.html. A much larger number are available in hard copy at no cost. Given enough lead time, a classroom teacher can assemble a wonderful collection of articles at varying reading levels that contains a wealth of information about deer, deer ecology, and deer hunting.

Related articles

Many related *Minnesota Conservation Volunteer* articles are available online at www.dnr.state.mn.us/volunteer/articles/index.html, including:

November–December 2008

“The Deer Woods”

www.mndnr.gov/volunteer/novdec08/deer_woods.html

November–December 2007

“The World from a Stump” (YN article with study guide)

www.mndnr.gov/young_naturalists/stump/index.html

May–June 2007

“Seeking Woodland Crowns”

www.mndnr.gov/volunteer/mayjun07/woodland_crowns.html

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Related articles continued

January–February 2006

“State Parks Boom”

www.mndnr.gov/volunteer/janfeb06/boom.html

November–December 2005

“Balancing Act”

www.mndnr.gov/volunteer/novdec05/balancing_act.html

May–June 2004

“Antlered Does”

www.mndnr.gov/volunteer/mayjun04/findoes.html

September–October 2004

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

www.mndnr.gov/young_naturalists/gallery/index.html

September–October 2003

“Searching for CWD”

www.mndnr.gov/volunteer/sepoct03/cwd.html

“First Hunt”

www.mndnr.gov/volunteer/sepoct03/firsthunt.html

September–October 2002

“Researchers Track Deer on the Move”

www.mndnr.gov/volunteer/sepoct02/deer.html

“A Tough Fight to the Top”

www.mndnr.gov/volunteer/sepoct02/toughfight.html

References

- Dunn, A. *Winter Thunder*. Minneapolis: Holy Cow Press, 2001.
- 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.
- Tekiela, S. *Mammals of Minnesota Field Guide*. Cambridge, MN: Adventure Publications, 2005.

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Study Questions

Teachers guide for the Young Naturalists article “Oh Deer!,” by Tom Dickson Published in the September–October 1996 *Volunteer*, or visit www.mndnr.gov/young_naturalists/deer/index.html

Name _____ Period _____ Date _____

1. The most popular wild animal, according to this article, is the _____.

2. A white-tailed deer can run _____ MPH and jump _____ feet high.

3. Circle the five members of the deer family that have lived in Minnesota.

- A. Caribou
- B. Elk
- C. Moose
- D. Mountain Deer
- E. Mule Deer
- F. White-tailed deer
- G. Antelope

4. Put the three phases of antler growth in order:

- _____ velvet scraped to show tines
- _____ new growth covered with velvet
- _____ velvet dries, antlers harden

5. Between a deer’s cloven hoof (toes) you find _____ which is used to _____

6. _____ Deer eat in an unusual way. Put the steps in order to describe how a deer eats.

- _____ Chews the food in a safe place
- _____ The deer gulps down food
- _____ Stomach acid breaks down the food
- _____ Throws up the food into the mouth

7. How is a deer’s fur coat like your winter jacket? How is it different?

Same _____

Different _____

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8. About how many white-tailed deer live in Minnesota? _____

9. Match what deer eat with the season: Spring and summer = SS; Fall and winter = FW

clover _____

grass _____

wild grapes and other fruit _____

shoots and twigs _____

tree buds _____

acorns _____

10. What is the largest member of the deer family? _____

11. _____ In 1995, 10,000 moose lived in northern Minnesota. In 2000, only 4,700 moose were here. What do you think happened? _____

12. Describe a moose's diet. If you were a moose, how many trips to the salad bar would you make each day? According to the article, moose eat _____ and that is about _____ trips to the salad bar each day.

13. _____ What predators do moose have? (circle two) bears, humans, wolves, elk

14. Explain how a mule deer is different from a white-tailed deer. How are they similar?

Different _____

Similar _____

15. Where can the last wild elk herd in Minnesota be found? Near _____

16. How are female caribou different from other female deer? _____

Challenge: Why do you suppose caribou disappeared from Minnesota? _____

Study Questions Answer Key

Teachers guide for the Young Naturalists article “Oh Deer!,” by Tom Dickson Published in the September–October 1996 *Volunteer*, or visit www.mndnr.gov/young_naturalists/deer/index.html

1. The most popular wild animal, according to this article, is the **white-tailed deer**.
 2. A white-tailed deer can run **40 MPH** and jump **8 feet high**.
 3. Circle the five members of the deer family that have lived in Minnesota. **A. Caribou, B. Elk, C. Moose, E. Mule Deer, F. White-tailed Deer**
 4. Put the three phases of antler growth in order:
 - a. **new growth covered with velvet**
 - b. **velvet dries, antlers harden**
 - c. **velvet scraped off to show tines**
 5. Between a deer’s cloven hoof (toes) you find a **gland**, which is used to produce a **scent to mark territory**.
 6. Deer eat in an unusual way. Put the steps in order to describe how a deer eats.
 - a. **The deer gulps down food**
 - b. **Throws up the food into the mouth**
 - c. **Chews the food in a safe place**
 - d. **Stomach acid breaks down the food**
 7. How is a deer’s fur coat like your winter jacket? How is it different? **Answers will vary, but should include that, like your jacket, a deer’s coat traps warm air against its body. Unlike like your jacket, a deer cannot take off its fur coat.**
 8. About how many white-tailed deer live in Minnesota? **Over 1 million**
 9. Match what deer eat with the season: **SS clover, SS grass, FW wild grapes and other fruit, FW shoots and twigs, SS tree buds, FW acorns**
 10. What is the largest member of the deer family? **Moose**
 11. In 1995, 10,000 moose lived in northern Minnesota. In 2000, only 4,700 moose were here. What do you think happened? **Answers will vary. Scientists are still analyzing what happened, but believe nutrition problems caused by a high level of parasites may have caused the decline.**
 12. Describe a moose’s diet. If you were a moose, how many trips to the salad bar would you make each day? According to the article, moose eat **leaves, shoots and other plant parts**, and that is about **200** trips to the salad bar each day.
 13. What predators do moose have? **humans and wolves**
 14. Explain how a mule deer is different from a white-tailed deer. How are they similar? **Mule deer are heavier, have bigger ears and antlers, and jump differently. Both are deer, shed antlers, and share the same habitat.**
 15. Where can the last wild elk herd in Minnesota be found? **Near Grygla in northwestern Minnesota.**
 16. How are female caribou different from other female deer? **They have antlers.**
- Challenge: Why do you suppose caribou disappeared from Minnesota? **Answers will vary. May include loss of habitat, predation or climate change.**

Minnesota Comprehensive Assessments Practice Items

Teachers guide for the Young Naturalists article “Oh Deer!” by Tom Dickson Published in the September–October 1996 *Volunteer*, or visit www.mndnr.gov/young_naturalists/deer/index.html

Name _____ Period _____ Date _____

1. Why are you lucky if you see a mule deer in Minnesota?

- A. Mule deer are well camouflaged.
- B. Mule deer do not normally range this far east.
- C. A mule deer has not been seen in Minnesota since the 1940s.
- D. Mule deer are often mistaken for elk.

2. Wapiti is another name for _____ .

- A. moose
- B. white-tailed deer
- C. caribou
- D. elk

3. American Indians made _____ out of deerskins.

- A. money
- B. bucks
- C. clothing
- D. weapons

4. Why might some people think a moose appears comical? _____

5. How is a deer’s digestive system similar to a cow’s?

- A. They both can digest plants
- B. They both chew their cud.
- C. They both throw up food and eat it.
- D. All of the above.

Minnesota Comprehensive Assessments Answer Key

Teachers guide for the Young Naturalists article “Oh Deer!,” by Tom Dickson Published in the September–October 1996 *Volunteer*, or visit www.mndnr.gov/young_naturalists/deer/index.html

1. Why are you lucky if you see a mule deer in Minnesota? **B. Mule deer do not normally range this far east.**
2. Wapiti is another name for **D. elk.**
3. American Indians made **C. clothing out of deerskins.**
4. Why might some people think a moose appears comical? Answers may vary. **A moose has a large, melon-shaped nose, humped shoulders and a flap of skin hanging from its chin.**
5. How is a deer’s digestive system similar to a cow’s? **D. All of the above.**

Vocabulary

Teachers guide for the Young Naturalists article “Oh Deer!,” by Tom Dickson Published in the September–October 1996 *Volunteer*, or visit www.mndnr.gov/young_naturalists/deer/index.html

- antler** bony growth on the head of all male deer and female caribou
- bugling** bull elk blare like a trumpet to warn off other bulls
- cloven** hoof divided into two parts
- cud** food that has been swallowed, thrown back up into the mouth, and chewed again
- herbivore** plant-eating mammal
- rut** fall breeding season for deer
- scrapes** male deer mark the ground with their hooves to warn other males to stay away
- sheds** fallen antlers
- tines** pointed ends of antlers
- velvet** fuzzy skin covering antlers from the time they start growing in the spring until the antlers harden

Vocabulary Study Cards

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Cut along the horizontal lines, fold on the dashed vertical line and tape or staple. Blanks are provided to allow you or your students to add new words or phrases.

An
antler is?

FOLD HERE

The bony growth on the head of all male deer and female caribou is an?

What does
bugling mean?

FOLD HERE

When a **bull elk** **blares** like a **trumpet** to warn off other bulls it is?

What is a deer’s
cud?

FOLD HERE

Food that has been swallowed, thrown back up into the mouth, and chewed again is called?

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Cut along the horizontal lines, fold on the dashed vertical line and tape or staple. Blanks are provided to allow you or your students to add new words or phrases.

A
herbivore is?

FOLD HERE

A plant-eating mammal
is a?

What is the
rut?

FOLD HERE

The fall breeding season for
deer is called the?

What are
scrapes?

FOLD HERE

The places where
male deer mark the ground
with their hooves to warn
other males to stay away
are called?

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Vocabulary Study Cards

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Cut along the horizontal lines, fold on the dashed vertical line and tape or staple. Blanks are provided to allow you or your students to add new words or phrases.

Sheds
are?

FOLD HERE

Fallen antlers
are called?

What are
tines?

FOLD HERE

The pointed ends of antlers
are called?

On an antler
velvet is?

FOLD HERE

**A fuzzy skin covering
antlers from the time they
start growing in the spring
until the antlers harden**
is called?

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Vocabulary Study Cards

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Cut along the horizontal lines, fold on the dashed vertical line and tape or staple. Blanks are provided to allow you or your students to add new words or phrases.

FOLD HERE

FOLD HERE

FOLD HERE