

TEACHERS GUIDE

TO “OUTSIDE SHOTS”

Multidisciplinary classroom activities based on the Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, November–December 2014, 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.

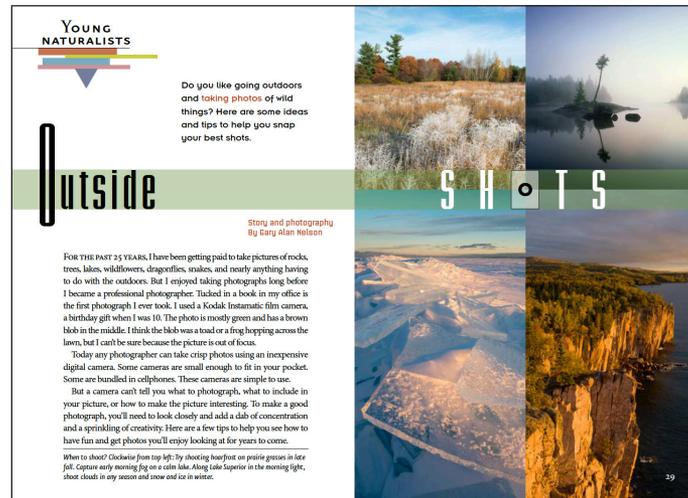
Find every issue online. Each story and issue is available in a searchable PDF format. Visit www.mndnr.gov/mcvmagazine and click on *past issues*.

Take a few minutes to tell us what you think about this education resource by filling out this short survey.

Thank you for bringing Young Naturalists into your classroom!

“OUTSIDE SHOTS”

Multidisciplinary classroom activities based on the Young Naturalists nonfiction story in *Minnesota Conservation Volunteer*, November–December 2014, www.mndnr.gov/mcvmagazine



SUMMARY. Digital photography has given teachers and students an inexpensive medium with which to communicate about life within and outside the classroom. In “Outside Shots,” the author, a professional outdoor photographer, shares techniques that will help photographers of any age improve the quality of their photography. Through text and photos readers learn how to select subjects, work with light, compose simple photos and evaluate their shots.

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. “Outside Shots” may be applied to the following Minnesota Department of Education standards:

LANGUAGE ARTS READING BENCHMARKS INFORMATIONAL TEXT 3-8. Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity

WRITING BENCHMARKS 3-12. Text Types and Purposes, Writing Process, Research to Build and Present Knowledge, Range of Writing

READING BENCHMARKS: LITERACY IN IN SCIENCE AND TECHNICAL SUBJECTS 6-12. 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 6-12. Text Types and Purposes, Writing Process: Production and Distribution of Writing Research to Build and Present Knowledge, Range of Writing

SCIENCE GRADES 3, 5, 6, 7, 8 AND HIGH SCHOOL

The Nature of Science and Engineering

3.1.1.2.3; 3.1.3.2.1; 3.1.3.4.1; 5.1.1.2.1; 5.1.1.2.2; 5.1.3.4.1; 6.1.3.4.1; 7.1.3.4.1; 7.1.3.4.2; 8.1.3.3.3; 8.1.3.4.1; 8.1.3.4.2; 9.1.3.4.3

Physical Science

3.2.3.1.2; 6.2.3.1.3

Earth and Space Science

8.3.3.1.5

Physics

9P.2.3.3.3; 9P.2.3.3.4

SOCIAL STUDIES GRADES 3, 5, 6, 7, 8 AND HIGH SCHOOL

Geography

4.3.1.2.2; 8.3.1.1.1; 9.3.1.1.2

History

3.4.1.2.1; 5.4.1.2.1; 6.4.1.2.1; 7.4.1.2.1; 8.4.1.2.1; 8.4.3.14.7

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

PREVIEW. (1) See Gary Alan Nelson's website (www.garyalannelson.com) for background on the author. (2) You may follow with a KWL (Ogle, 1986) activity. To find out what your students already know about cameras and photography, 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. Next, ask what students would like to learn, or what questions they have (**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, social studies, or art class, you may wish to focus your prereading activity on academic standards that apply for that class. (3) If cameras are available, pretest your students' photographic skills by taking students outside and asking them to photograph trees or other natural features. Tell them they will have another chance to photograph the same subjects after they have worked on the article. (4) See www.teachervision.com/classroom-management/graphic-organizers/43059.html 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. 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 options include: (1) Students may compare and contrast photos they took before working on the article with photos taken after. Ask them to evaluate the quality of before and after shots. (2) Students may write multiple-choice, true-false, or short-answer questions. Select the best items for a class quiz. (3) Students may create posters that combine visual art, writing, and oral presentations. Students may work in small groups or as individuals.

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. “Nature’s Alphabet,” “Panoramic Minnesota,” and “Twelve Months of Minnesota” (see Related Articles) make great companion pieces for “Outside Shots.” You may encourage students to include content from related articles in evaluation and/or extension activities.
2. Many outstanding nature photographers call Minnesota home. Your students can learn more about the photographers listed in Web resources.
3. The *Minnesota Conservation Volunteer* is renowned for the quality of its photography. Encourage your students to explore past issues. When did MCV switch from black-and-white to color photographs? (In 1957 the first color covers appeared, but color photos were not used within each issue until 1993.)
4. The best way to learn about photography is to take lots of pictures. If cameras are available, take photos throughout the year. Incorporate student photography into assignments across the curriculum. Photography is also a great way to learn about light.
5. Take a field trip to your school forest, a state park, or a scientific and natural area. Contact a naturalist at a state park to plan a program for your class.
6. Get a copy of *Minnesota’s Hidden Alphabet* by David LaRochelle and Joe Rossi, with free online teachers guide (www.davidlarochelle.net/chbooks/bk_mnha.html). The book is a follow-up project to the “Nature’s Alphabet” article Rossi created for *Minnesota Conservation Volunteer*.

WEB RESOURCES

DNR

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

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

OUTDOOR PHOTOGRAPHERS IN MINNESOTA

Gary Allen Nelson: www.garyalannelson.com

Jim Brandenburg: www.jimbrandenburg.com

Bill Marchel: www.billmarchel.com

Layne Kennedy: www.laynekenedy.com

Judy Olausen: www.olausen.com

Richard Hamilton Smith: www.richardhamiltonsmith.com

Joe Rossi: www.joerossiphotography.com

COMPARE AND CONTRAST

www.readwritethink.org/files/resources/interactives/compcontrast

www.readingquest.org/strat/compare.html

MINNESOTA DNR TEACHER RESOURCES

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

www.mndnr.gov/dnrkids/index.html

files.dnr.state.mn.us/education_safety/education/plt/familyactivities/plt_Activity-22TreasasHabitats.pdf

*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.

November–December 1983

“Adaptation: Nature’s Secret for Winter Survival”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=134

January–February 1985

“How Birds Survive Winter in Minnesota”

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=681

November–December 1994

“Shadow Tails” (YN article)

https://webapps8.dnr.state.mn.us/volunteer_index/past_issues/article_pdf?id=1344

January–February 1995

“What’s Making a Racket?” (YN article)

www.dnr.state.mn.us/young_naturalists/woodpeckers/index.html

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 “Outside Shots” by Gary Alan Nelson. Published in the Nov.–Dec.. 2014 *Minnesota Conservation Volunteer*, or visit www.mndnr.gov/mcvmagazine.

1. How old was the author when he took his first photograph? **Gary Alan Nelson was 10 years old when he took his first photo.**

*2. When is it a good time to take photos? **Answers will vary. Early and late in the daylight, in any season. Anytime it’s light enough to shoot and even after dark with flash is a good time to take photos.**

3. What subjects should you photograph? **Photograph subjects that interest you, that catch your attention.**

4. Why is it a good idea to take your camera along when you travel to new places? **When you are in a new place you are likely to pay closer attention to detail.**

*5. Look at the photo on page 31. What makes it interesting? **Answers will vary. Challenge your students to describe details they appreciate. Suggest that they focus on patterns and shapes.**

*6. What do you think the author means when he writes, “... see ordinary things in extraordinary ways”? **Answers will vary. What does extraordinary mean? There may be new details or patterns that went unnoticed before viewed through a camera lens.**

7. The word *photography* comes from what language? **Greek.** What does it mean? **Drawing with light.**

8. Why are the hours just after sunrise and just before sunset good times for taking photos? **During these hours colors are warmer and textures are more noticeable.**

9. When the sky is **white** or **gray**, keep it out of your pictures.

10. “Composing” a photo means **knowing what to include and what not to include in a photo.**

11. What should you do to keep clutter out of your photos? **To avoid clutter, get closer to the subject or take the photo from a different angle.**

12. Draw lines in the box below to show the “rule of thirds.” **Draw two horizontal and two vertical lines through the rectangle that divide it into nine smaller, equal rectangles.**

*13. Select two of the nine right ingredients for a good photograph and explain why they are important components of a good picture. **Answers will vary. Encourage students to be as detail oriented as possible and to justify their selections. For example, If “Does my photo tell a story?” is chosen, challenge the student to defend the importance of storytelling through pictures.**

14. A picture’s format is either **vertical** or **horizontal**.

15. How do the lines in a photo affect the way you view that picture? **Your eyes follow the lines in a photo. Horizontal lines lead your eyes across the photo and vertical lines lead your eyes from top to bottom.**

*16. The author concludes his article by suggesting that you make mistakes. Why? **Answers will vary. When you take lots of photographs some will not turn out, or will be mistakes. Our mistakes give us ideas about how to do better next time.**

Challenge:* What does the saying “a picture is worth a thousand words” mean? Create a story for the photo on page 30. **Answers will vary.

MINNESOTA COMPREHENSIVE ASSESSMENTS ANSWER KEY. Teachers guide for the Young Naturalists article “Outside Shots” by Gary Alan Nelson. Published in the Nov.–Dec. 2014 *Minnesota Conservation Volunteer*, or visit www.mndnr.gov/mcvmagazine.

1. A bird’s-eye view means you are looking at the subject from what direction? **B. above**

2. Moving closer to your subject simplifies the **A. background.**

3. The golden hours are **D. just after sunrise and just before sunset.**

4. What does the photo on page 31 demonstrate? **B. pattern**

5. What time of year is best to shoot pictures of clouds? **E. all of the above**

VOCABULARY ANSWER KEY. Teachers guide for the Young Naturalists article “Outside Shots” by Gary Alan Nelson. Published in the Nov.–Dec., 2014 *Minnesota Conservation Volunteer*, or visit www.mndnr.gov/mcvmagazine.

composing creating, arranging, or putting elements (subject, light, format, point of view) together

digital camera a camera that does not use film, but instead records the image on a sensor where it can be viewed immediately.

dimensional related to the dimensions (length, width, height) of an object

format the format of a photo refers to either a vertical or horizontal orientation

hoarfrost needlelike ice crystals

pastel a pale or subtle color

point of interest what the eye of the viewer settles on; the main subject of the photo

point of view position from which the subject is photographed

saturate to increase the difference or separation between colors

texture the contrast, lines and patterns in the photo

vibrant bright

viewfinder separate lens the photographer looks through to compose a photo. Most compact digital cameras do not have viewfinders. Instead, the image is viewed on a monitor.