

White- Tailed Deer Lesson Plan

Keywords: deer, whitetails, history, biological diversity

Lesson Plan Grade Level: 6th - 8th

Total Time Required For Lesson: 50 minutes as one continuous time block, plus an optional 1 hour field trip.

Setting: Classroom

Subjects Covered: History, Biology, and Science

Topics: Whitetail Deer, Biological Diversity

Goals For The Lesson:

Students will gain an understanding of historical importance of white- tailed deer and recognize three reasons for population change in white- tailed deer.

Students will understand the impact of high deer populations on forest environments.

Materials Needed:

White- Tailed Deer fliers (From The Woods Series)

White- Tailed Deer Pretest (one for each student)

White- Tailed Deer Posttest (one for each student)

Paper

Pencils

Large white paper (roll)

Appendices 1a, 1b, 1c, &1d

Appendix 2

Appendix 3

Appendix 4

Paper/ pencils

Brown Bags (6)

Clippers (to clip vegetation)

Scale

State Standards Addressed: *E&E Standards:* 4.2.7, 4.3.7, 4.6.7, 4.7.7, 4.8.7

Teaching Model: Experiential Learning Model (Experience, Share, Process, Generalize, Apply)

Methods:

Preparation:

Read through the entire lesson and appendices to ensure your understanding of the content and activity.

Create four areas in the classroom. The students will be working in groups and should have a designated area to work.

Designate an area where the students will be capable of walking through the forest and trimming vegetation (pretending they are deer). Be sure to schedule the trip when hunting is not in season. The student's guardian should sign a permission slip for the field trip, if you are going off school grounds. (Appendix 3) If necessary arrange transportation.

Doing The Activity:

Introduction to the lesson. Explain to the students that they will be learning about the state animal of Pennsylvania, its history and current status.

Steps:

(Experience and Share Stages 25 minutes)

1. Administer the pretest to the students; explain that the purpose of the pretest is test knowledge the students already have acquired on the subject. (allow approximately 7 minutes for the test then collect)
2. Ask the students if they have any comments concerning the pretest.
3. Hand out the *White-tailed Deer* flier.
4. Explain to the students that they will be working in groups to read the flier and complete an activity. Each group will read the flier and then complete the assigned activity. (Appendices 1a- 1d)
5. Assign four groups and ask them to go to the designated area. Hand out the appendices, one for each group.
6. Allow time for the students to complete the activity, monitor the group to ensure all the students are participating.

(Share and Process Stages 25 minutes)

7. Allow time for each group to present their information, as they are directed by the appendix.
8. Explain to the students that they will be conducting an activity outside of the classroom.
 - * Discuss your expectations while traveling and in the forest.
 - * Tell the students that they will be pretending to be deer and that they will receive more instructions once you have reached the designated area. (Appendix 4)
9. When you return from the field trip ask the students to describe their experiences.

(Generalize and Apply Stages 12 minutes)

10. After the educator has reviewed all the information concerning the flier and activities (prepare the students for the posttest by completing discussion questions. (Appendix 2), again ask the students if there are any questions.
11. Administer the posttest. Allow the students time to complete then collect.

Assessment: The students will be evaluated through participation and upon completion of the posttest.

Conclusion To The Lesson: “This completes today’s lesson I hope that you have gained a more thorough understanding of white- tailed deer; their importance and thier impacts on the forests. Does anyone have any further comments concerning the lesson?”

References and Resources:

White- Tailed Deer flier (From The Woods Series)
The Pennsylvania State University
112 Agricultural Administration Building
University Park, PA 16802

Harding, Fred. Forager activity, Unpublished MFR Paper. 1997.

This lesson was prepared by Katie Roth, Middle School Teacher and Sanford Smith, Extension Specialist Penn State School of Forest Resources.

Appendix 2- White- Tailed Deer

1. How did the Native Americans rely on white- tailed deer?
(food, shelter, clothing, and trading)
2. What helped to keep the white- tailed deer population in 'balance with nature' while Native Americans inhabited Pennsylvania?
(large predators for example, mountain lions, wolves, people)
3. How did the deer population change by the end of the 1800's?
(decline in the population due in the increase of hunting and decline in habitat)
4. What was established in 1895 to protect the wildlife resources in Pennsylvania?
(Pennsylvania Game Commission)
5. What was/ is the role of the Pennsylvania Game Commission?
(establish game lands, brought deer from other states, enacted a law to protect does)
6. Define the term biodiversity. *(in a simple sense, it means a wide variety of shrubs, trees, flowers, and wildlife)*
7. How has the deer population changed forests in Pennsylvania? *(limit biodiversity by eating shoots, twigs and leaves of young trees, shrubs and wildflowers)*
8. Describe three methods utilized to help maintain the deer population?
(hunting, birth control, natural predators)
9. How has the deer population changed from the 1700s to today? *(1700's estimated 10 deer per square mile; late 1800's almost no deer remained, today there is an estimated 30 deer per square mile)*

Appendix 3

Educational Field Trip

Dear Guardian,

Our class has been studying the white- tailed deer. We have learned information concerning their population and impact on the forests. As a part of our lesson, I have planned a field trip to _____ to further our understanding of white- tailed deer. I am asking you for permission to permit your child, _____ (child’s name) to attend the trip. We will be leaving school on _____ (month and date) at _____ (time) and will return to school on _____ (month and date) at _____ month and date. Please complete the form below and have your child return it to me before _____ (month and date). Thank you for your time.

Sincerely,

____ **Yes I permit my child to attend the field trip.**

Child’s Name

____ **No, I don’t permit my child to attend the field trip.**

Signature of Guardian

Date

Appendix 4

White – Tailed Deer Field Trip

- Once you have arrived at the designated area, explain to the students that they will be pretending to be deer. They will need to find at least five different things to eat. Discuss: the diet of deer (berries, acorns, vegetation etc.) and deer nutrition. Deer require 5-8 pounds of forage per day. Wildflowers, tree and shrub twigs, plant buds, fruits, and acorns are just a few of the nutritious foods deer seek.
- Tell the students to divide into groups of 4 or 5. Ask the students to follow you in a single file line to an open area. Hand each group a brown bag to gather their food.
- Ask the students to respect nature and not harm any of the wildlife; if necessary, the teacher and other adults may clip vegetative plant parts. (If the students are clipping the teacher should designate only those students who are cautious and reliable. Explain that their clippings should be no longer than 3 inches long)
- Tell the students they have 15 minutes to locate their food, if necessary you may permit more time. Let the 'deer' browse' for their food on their own. Remind the students to be aware of their predators.
- After the students have completed the activity allow the students to share and discuss their findings. Once you have returned to school use a scale to weigh the deer food. One deer must consume 5-8 pounds of food each day.
- Which of the deer foods were surprising to you?
- Was finding deer food harder or easier than you expected? Why?
- Did any of the groups find enough food for a single deer for a day?
- If not, how long would a deer need to browse to find enough food for a day (use the average weight of food that each person collected over the time they were allowed to collect as the rate)?