



## A RAFTER OF TURKEYS

### LESSON PLAN

#### Grade Level(s)

3 - 5

#### Estimated Time

2-3 one-hour class periods

#### Purpose

Students will learn about the domestication and life cycle of the turkey, recognize how turkeys are raised on farms, and identify turkey products.

#### Materials

##### **Activity One: History of the Turkey**

- *KWL Chart* (from the *Student Motivator* section)
- *Turkey Reading Passages* (one per group)
- *Turkey Images* (one set per student)
- Colored folder (one per student)
- Crayons, colored pencils, tape, glue, and scissors

##### **Activity Two: Life Cycle of the Turkey**

- *KWL Chart* (from the *Student Motivator* section)
- *Turkey Life Cycle Cards*
- Colored folder (one per student, used in *Activity One*)
- Crayons, colored pencils, tape, glue, and scissors

##### **Activity Three: Turkey Products**

- *KWL Chart* (from the *Student Motivator* section)

#### Essential Files (maps, charts, pictures, or documents)

- [Turkey Reading Passages](#)
- [KWL Chart](#)
- [Turkey Images](#)
- [Turkey Life Cycle Cards](#)

#### Vocabulary

**breed:** a group of animals or plants usually found only under human care and different from related kinds

**commercial:** designed mainly for profit

**conservation:** the act of keeping in a safe or sound state

**consumer:** a person who buys and uses up goods

**diverse:** differing from one another

**domesticated:** living with or under the care of human beings

**extinct:** no longer existing

**genetics:** a branch of biology that deals with the inherited traits and variation of organisms

**heritage:** something acquired from the past

**pigment:** a natural coloring matter in animals and plants

**predator:** an animal that lives by killing and eating other animals

**producer:** a person who grows agricultural products or manufactures articles

**selective breeding:** the process of breeding plants and animals for particular genetic traits

**wild:** living in a state of nature and not under human control and care

Did you know? (Ag Facts)

- A group of turkeys is called a “rafter.”
- The red fleshy thing that hangs from a turkey’s neck is called a “snood.”
- The male turkey is called a “tom.” The female is called a “hen.”
- Only tom turkeys gobble. Hens make a clucking sound.
- The dark of “dark” meat comes from a chemical compound called “myoglobin,” which plays a key role in oxygen transport. Dark meat is found in muscles that are used frequently, such as the legs.

Background Agricultural Connections

The birds we know as turkeys are native to Mexico and the eastern United States. They were first **domesticated** by the Aztecs in Mexico. Early European explorers called them “turkey” after the country in Asia that has that name. The explorers had not yet figured out that they were in the New World and not Asia. Since turkeys looked similar to peacocks brought by explorers to Europe from Asia, they assumed that’s what they were. At that time, anything from the exotic East was given the name “turkey.”

[more ...](#)

Interest Approach – Engagement

1. Ask the students if there is a difference between wild and domesticated animals. Ask them to give you examples of domestic animals and their wild counterparts such as pigs and wild boars, or domesticated white turkeys and ones that live in the wild. Print the *KWL Chart* provided in the *Essential Files*. This should be kept on chart paper and displayed in the classroom for use throughout the lesson. Ask the students the following questions and place their answers in the first two columns. The third column will be filled in at the conclusion of *Activity Three*.

- *What I Know.*

- *What do you know about the difference between wild and domesticated animals?*
- *Have you ever seen a wild turkey? Have you ever seen a domesticated turkey?*
- *What physical differences did you notice between a wild and domesticated turkey?*
- *What do you know about any other differences between a wild and domesticated turkey?*
- *What holiday is associated with turkeys?*

- *What I Want to Know.*

- *What do you want to learn about turkeys?*
- *Why are turkeys important to people?*
- *What differences do you want to learn about wild and domesticated turkeys?*
- *How are turkeys raised on a farm?*

2. Next, access the Illinois Ag in the Classroom, [Poultry Ag Mag](#) and display it on the white board. Have students take turns and read the section titled "Turkey Talk" found on page three. Make sure to point out the picture at the bottom of the white domesticated turkeys and ask the students if they look different than the ones seen in the wild. Refer back to the *KWL Chart* and add any additional information that the students learned from the reading.

## Procedures

### **Activity One: History of the Turkey**

1. Place the students into groups of 3-4 to create 4 separate groups. Give each group a copy of one of the *Turkey Reading Passages* included with this lesson. Each passage is different and covers the following topics; *Turkey History*, *Supermarket Turkeys*, *Wild Turkeys*, and *Heritage Turkeys*.
2. Each reading passage includes a set of questions, have each group answer their questions.
3. Once they have read the texts and found their assigned information, student groups can report the information to their classmates found in their readings.

4. Groups will then use the information to create a lap book while using a colored folder about Turkeys. Please refer to the [video](#) for directions on creating a lap book. Tell the students that they will be adding pictures to the lap book from the next two activities; *The Life Cycle of a Turkey*, and *Turkey Products*. Turkey images that can be used in the lap book are included in the *Essential Files*. You may also add your own.
5. Next, have each group present their lap books to their classmates and share their design and information recorded in each book.
6. For more sharing, rotate the lap books from group to group allowing each group time to read the information recorded in each book.
7. Ask each group to report one thing they learned from reading their classmates lap book. These statements can be added to the third column of the *KWL Chart* found in the *Essential Files*.

### **Activity Two: Life Cycle of the Turkey**

1. Discuss with the students that Turkeys have a life cycle much like a chicken. Turkeys and chickens are both classified as poultry; therefore their life cycle is much the same.
2. Use the *Cackle Hatchery* [website](#) to show students pictures and videos of the White Breasted Turkey, which are the types of turkeys raised by farmers to be sold in the supermarkets. The pictures and videos show both the poults (young turkey) and adults. Their website also includes pictures and videos of the Heritage Turkey that can be shown for comparison.
3. Next, place the students in the same groups from *Activity One* and have them add the *Turkey Life Cycle Cards* to their lap books.
4. From beginning to end of the Turkey Life Cycle they should place the cards in the following order; Hen, Eggs, Poults, Adult.
5. Once each group has completed this section of their lap book ask the following questions;
  - *What stage of the life cycle do turkeys live together in houses and grow to become adults? (Growing stage)*
  - *Why do you think the poults are vaccinated, claws trimmed, and top nook cut off? (keep turkeys from hurting each other)*
  - *What is the name of the farm where hens are raised? (Breeder)*
  - *Where do the turkey eggs hatch? (Hatchery)*
  - *Approximately, how many days does it take for a turkey egg to hatch? (28 days)*
6. After the discussion of the Turkey Life Cycle, refer back to the *KWL chart* and ask students to add more information to the last column.

### **Activity Three: Turkey Products**

1. For the last activity, the students will discuss the different turkey products found in the supermarket.
2. Read the following passage to the class taken from the *Background* section of the lesson plan;
  - *The turkeys most of us eat today have very little in common with the Standard Bronze turkey. The turkey we buy in the supermarket is from a breed with white feathers, called the “White Breasted Tom.” Commercial producers prefer turkeys with white feathers because white feathers don’t leave pigment spots under the skin when they are plucked. The White Breasted Tom was the result of many years of selective breeding. Besides white feathers, the breed also has more breast meat and meatier thighs than early turkeys. Today the White Breasted Tom is the only turkey in large-scale production in the US. White Breasted Toms are usually raised indoors so they will be protected from airborne bacteria, viruses and diseases carried by migratory birds. Inside, the flock is also protected from predators. The turkeys are fed a diet of corn and soybean meal mixed with a supplement of vitamins and minerals.*
3. Ask the students what other food products they can purchase that contain turkey. Answers should include, sandwich meat, soups, turkey burger, and turkey bacon.
4. Remind students that the White Breasted Turkey breed was the result of selective breeding with more white meat that comes from the breast of the turkey and meatier thighs and legs which contain a darker colored meat.
5. Take a student survey and find out how many students prefer white turkey meat to dark turkey meat. Next include their answers from step three in another survey to find out which turkey product students prefer to eat the most. Graph the results in two pie graphs and include them in their lap books.
6. Next, place the students back into their groups from the other two activities and have them solve the following math problems.
  - White Breasted Tom turkeys grow to a marketable weight of 20 pounds in four months. Heritage birds grow to a marketable weight of 18 pounds in seven months. If you have a flock of 20 turkeys for each breed, how many turkeys can each group grow in a year?
  - In 2007 Americans ate an average of 13.6 pounds of turkey. Round the 13.6 pounds to the nearest whole number and determine how much turkey the entire class would have eaten, if each student ate that amount. Next, have students calculate the average amount of turkey eaten by their family in a year.
  - If you have cook a 20-pound turkey for Thanksgiving dinner and each person eats 1.5 pounds of turkey, how many people can you invite to dinner?
7. Once the answers are discussed, refer the students back to the *KWL chart* and add any remaining new information that they learned.

## Concept Elaboration and Evaluation

After conducting these activities, review and summarize the following key concepts:

- Wild and domestic turkeys look significantly different from one another.
- The knowledge of genetics and inherited traits have allowed turkey breeders to produce a turkey that is efficient to raise and nutritious to eat.
- In addition to tradition turkey meat, there is also turkey burger, turkey bacon, and sandwich meat.

## Essential Links

- [Lap Book Video](#)
- [Cackle Hatchery](#)
- [Illinois Poultry Ag Mag](#)

## Enriching Activities

- Students can conduct a school wide survey to determine which kind of turkey meat is preferred white or dark meat. Additionally they can survey the faculty and staff in the same manner and compare the percentages to the student survey. For another comparison, determine the answers from male and female students and determine the appropriate graph to display the data.
- Visit the *Interactive Map Project* website and view the map for [turkey production](#) in the United States. Identify the states which raise the most turkey and discover if your state raises a significant amount of turkeys and how many.
- Students will draw a picture of a turkey, using the following polygons: 10 triangles 10 quadrilaterals 5 irregular pentagons 2 regular pentagons 3 hexagons 1 regular octagon These are the minimum requirements. Students may use more, but must include all of the above.

## Suggested Companion Resources

- [Farm Pop-ups](#) (Activity)
- [Eating the Plates](#) (Book)
- [Time for Cranberries](#) (Book)
- [Cranberry Bounce](#) (Multimedia)
- [New Jersey's Red October](#) (Multimedia)

## Sources/Credits

- <http://www.nwtf.org/>
- <http://www.health.harvard.edu/>
- [http://www.agmrc.org/commodities\\_\\_products/livestock/poultry/turkey-profile/](http://www.agmrc.org/commodities__products/livestock/poultry/turkey-profile/)

## Author(s)

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Organization Affiliation

Oklahoma Agriculture in the Classroom and National Agriculture in the Classroom

- [Agricultural Literacy Outcomes](#)
- [Education Content Standards](#)
- [Common Core Connections](#)

Agricultural Literacy Outcomes

**Culture, Society, Economy & Geography**

- Provide examples of agricultural products available, but not produced in their local area and state (T5.3-5.e)

**Science, Technology, Engineering & Math**

- Identify examples of how the knowledge of inherited traits is applied to farmed plants and animals in order to meet specific objectives (i.e., increased yields, better nutrition, etc.) (T4.3-5.c)