

#### Lesson #1 The Big Bad Wolf of North Carolina? Lesson #2 Who do we call? Lesson #3 What about me? Lesson #4 How can we help?

Is the wolf really big and bad? Are the children's books and movies showing a true picture of the wolf? During AIG camp you will explore who the red wolves really are and why they have such a bad reputation. Get ready for a howling week!

UNIT ESSENTIAL QUESTION: How can we help the endangered red wolf from becoming extinct?

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Red Wolf Research Paper



#### **RED WOLF RESEARCH PAPER**

Is there actually a pure breed red wolf? It is questioned whether the red wolf may have derived from the coyotes or gray wolf. In addition it has been questioned whether the red wolf came from what is known as the Eastern wolf. The Eastern wolf was believed to have roamed the earth 750,000 years ago in eastern North America. When scientists have studied the Eastern wolf and red wolf, they have found them to be the nearest kin to each other or perhaps the same species. No matter what the genetics show, this animal that once was known as a predator in the southeastern region of the United States is now barely surviving to exist (Dybas, 2012).

If you were to picture a red wolf, you would see an animal that has a brownish, orange, cinnamon colored coat. Their coat may also include gray and black. They stand at two feet tall and their bodies are measured at three and half to four feet long. They have bushy tails that are about 16 inches long. On the scale their weight can be from thirty-five to sixty pounds. The females are known to be smaller than the males (*Red wolf*, 2006).

The red wolf is known to be the predator of many medium sized animals. Those animals include: beavers, rodents, rabbits, and deer. They have also been known to eat garbage and dead animals. Old animals with weaker defenses have also been noted as choice for the red wolves next meal. "A study of some 2,220 scat samples from red wolves in the Alligator River environs shows that their diet is about 50 percent white-tailed deer, 30 percent raccoons, and 20 percent small mammals such as rabbits and rodents" (Dybas, 2012, p.26). They will also occasionally eat other items like insects, grass and fruit (Hutt, 2008).

Wolves have been known to travel in packs. Those packs can be as large twenty in number with a pack leader. They travel in groups to protect themselves. When food is scarce

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they are likely to be seen hunting alone (*Red wolf*, 2006). Being that the red wolf does not hunt for larger animals, they are less likely to hunt in packs (U.S. Fish and Wildlife Service, 2006). They usually rest during the day and are active in the evening, during the night, and in the early morning. Their habitat includes agricultural lands, wetlands and forests (Hutt, 2008).

The red wolf mates for life. Mating season is during late winter and gestation is normally two months. The mother nurses the puppies until they are old enough to eat solid foods. When the puppies first begin eating solid foods, their parents may chew their food up for them first. Other wolves in the packs help to tend to the puppies in addition to their mothers and fathers. The puppies begin to travel with the pack once they are three to five months of age. If food is scarce, the pups are likely to die at a young age. The normal lifespan for the red wolf would be up to twenty years (*Red wolf*, 2006).

By the 1970's it was believed that there was less than 100 animals left in the population. At that time they were located in a small area of coastal Louisiana and Texas. In the 1980's they were officially considered to be extinct in the wild. Their extinction was caused by aggressive predator control programs and clearing of their habitats (U.S. Fish and Wildlife Service, 2006). One of the aggressive predators of the red wolf would include farmers who have shot or poisoned the animal in order to protect their farmland. "Biologists will deem the wolf "recovered," and thus no longer endangered, when 220 animals are spread among three wild populations and an additional 330 live in captivity" (Press, 2000).

After only identifying only 17 living red wolves, the U.S. Fish and Wildlife Service selected 14 to become part of the Red Wolf Recovery Program in the 1970's. The overall goal of this program is to conserve the genetics of this animal and release them back into the wild. Four

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red wolf pairs were released at the Alligator River National Refuge in northeastern North Carolina in 1987. This was the first time an officially extinct species was restored back to the wild. Since the release of the four pairs, there are almost 100 red wolves located on 1.7 million acres in this location (U.S. Fish and Wildlife Service, 2006). According to Kim Wheeler from the Alligator River Refuge, it is their goal to continue to keep at least a dozen red wolves in the conservation area to ensure that there is a purebred population thriving (personal communication, January 24, 2012).

To monitor the red wolves, they are fitted with a tracking collar. When the pups are between the ages of 8 and 10 months, they are captured, fitted with a radio collar, and released back into the wild. Each tracking collar sends off a unique frequency that identifies each wolf. On the ground, the signals can reach up to 1.5 miles and aircraft from up to 20 miles away can receive the signals. One day they hope to be able to monitor the red wolves from satellites. In addition to these modern ways of monitoring, they still rely on looking for tracks and scat and listening for howls (U.S. Fish and Wildlife Service, 2006).

Local farmers have mixed feelings about the red wolves being released. Some are thankful to have them because they help to control raccoons, nutria, and deer, which damage their fields and eat their crops. They also appreciate their beauty and enjoy seeing them in the wild. Other farmers think the red wolves are bad for their cattle. Even though red wolves eat many deer, they do not eat cattle (Dybas, 2012). In addition many landowners have uneasy feelings concerning the red wolves roaming in their neighborhood. They feel they should have the right to kill the red wolf if it is causing harm on their property. These landowners stated that the wolves were threats to their pets, children and livestock. These feelings led them to dispute

the federal regulations that were mandated. The court ruled in favor of the red wolves stating that landowners cannot take the life of a red wolf unless it is unintentional or in self-defense (Press, 2000).

The Alligator River location was partly chosen to be the location of the red wolf refuge because the area was free from coyotes. In the 1990's coyotes also begin to make this location their habitat (Dybas, 2012). This has caused problems for the red wolf. One of the main problems is mistaken identity. In August of 2012 a temporary rule was introduced to allow hunters to shoot covotes both day and night due to the covotes rapid increase of numbers and their destruction of livestock. With the wolves and the covotes looking very similar (a covote is about four inches shorter and weighs about half as much as an adult red wolf) it is believed this law has caused the death of several red wolves. After the death of the fifth red wolf, a judge has added a temporary injunction that will not allow night time shooting in the five counties surrounding the red wolves current location (Hampton, 2012). The safest place for a red wolf may be the captive facility located within the Alligator River National Wildlife Refuge (Dybas, 2012). In an effort to help the public distinguish between coyotes and red wolves, wildlife managers have created a red wolf laminated pocket ID card with descriptive information about the red wolves as well as a map of their current range. These cards are given out during hunter safety classes and are available where hunting licenses are sold (Denton, 2007).

Besides the threat of being hunted on purpose or in a case of being mistaken for a coyote, there are other threats to the red wolves in the wild. Being hit by a vehicle could also kill them. Hookworms, heartworms and mange are diseases that affect their health and mortality. They could also breed with the eastern coyote, resulting in hybrid offspring. The damage to their

habitat and enclosures by hurricanes has not caused many deaths, but has threatened their security (U.S. Fish and Wildlife Service, 2006).

The year 2012 marked the anniversary of the twenty-fifth year that the red wolves were reintroduced into northeastern North Carolina. Although as noted above there have been several setbacks, the wolves have been able to survive. At this time there are approximately a little over 100 wolves in the wild while there are about 192 located in breeding facilities. One of the recovery goals of the Red Wolf Recovery Program is to maintain the genetics of the current red wolf by having at least thirty captive breeding facilities throughout the United States. In addition, they would like to continue to retain approximately eighty-five percent of the red wolf genetics for one hundred and fifty years. Lastly they would like to increase their wild population to about 220 wolves and their captive to around 330 wolves (USFWS RED WOLF RECOVERY PROGRAM, 2013).

Endangered means there is still time. What can be done to help the red wolf? We can hunt responsibly and drive safely. We can learn about wildlife and how to enjoy and protect wild animals. We can also support the Red Wolf Recovery Program, Red Wolf Coalition, and other cooperating facilities (U.S. Fish and Wildlife Service, 2006).

#### References

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#### **Connecting to Power**

Power is strength and physical might. Power is the ability to overcome obstacles and continue to survive. Being tough is being powerful.

Someone or something that is powerful is able have a great influence on others. Francis Bacon said, "Knowledge is power." The more we know, the more power we can have to influence others. To have power is to inspire others to do the right thing.

Through the eyes of many people the wolf is looked at as a dangerous animal. Looking at the books <u>The Three Little Pigs</u>, <u>Little Red Riding Hood</u> and even the <u>Twilight</u> series, the wolf is portrayed as a powerful animal. The wolf is an animal that could take on the world and survive. Although the red wolf is endangered and may seem weak, it has been able to survive regardless of the circumstances.

The red wolves have not been able to survive the odds alone. With the power of influence, the Red Wolf Coalition has been able to make this happen. They have been able to keep red wolves in captivity and in the wild to ensure that this breed of wolves continue to sustain. The Red Wolf Coalition has had the power to influence others to support their efforts.

Since the Red Wolf Coalition has began, their efforts to save the red wolf have had complete power over the animal. The wolves that are held in captivity are held hostage for their benefit. Those wolves lose the power to live freely. All the other wolves

are located on the refuge outside of captivity, but are monitored with tracking collars from the time they are pups.

The more knowledge we have about the red wolves, the more power we will have to help preserve the species. In recent months many wolves have been shot in what is believed to be mistaken identity. It is essential that the public receive knowledge about the red wolf. The red wolf is similar to the coyote in both shape and size, yet there are some differences. If the public were more knowledgeable of this difference, perhaps the death toll of the already endangered species would decrease.



#### **TECHNOLOGY INTEGRATION**

The red wolves, although endangered and protected, continue to lose their lives. During the 2013 AIG camp, the students will explore the red wolves, while discovering why they are endangered. Throughout their discovery of the red wolves, they will learn about the protection services of the red wolf, specifically the Alligator River Refuge. This will lead them to discover about the many deaths of the red wolves in this area. The students will use these discoveries to educate others about the red wolves in a final product, which will be shared with Kim Wheeler, executive director of the Red Wolf Coalition.

The students will begin the week by being introduced to the website we have created for the students. In this website, the students will be able to explore all the materials we used each day. This website will be located at <a href="http://redwolfaig.weebly.com/">http://redwolfaig.weebly.com/</a>. We feel that it is important that the students have this website both at camp and at home with all the information and links for the week in one place.

Since the students in Pitt County Schools' AIG program already have Edmodo accounts, we decided that this would be a great tool to use throughout the week. Edmodo will be used to take polls and to reflect on each day. Edmodo is a tool that can be used to collaborate with students beyond the classroom. Through Edmodo you can give badges. Edmodo allows the students to receive badges from their teacher when they respond to questions appropriately based on the rubric. As part of the

communication with the students for the week we will be giving out Red Wolf badges to the students for their responses on Edmodo and their contributions to the Red Wolf website.

The students will begin the week by sharing what they already know about the red wolf. They will completing a KWL chart that will be created using a Google form. The link to this form will be located in Edmodo (to keep it private from the world wide web) and it will allow anyone with the link to participate. The students will also use a Google form when are responding to their wolf story.

Since part of the red wolf unit is to teach content, we want the students to be as engaged as possible during the teaching part. Smart notebook allows you to keep the students engaged while presenting facts. The students will begin the week by responding to questions using Senteos with the SmartBoard so their answers will be anonymous. Students will also be able to watch PowerPoint presentations and online videos on the SmartBoard. In addition, Prezi is a presentation tool that is located on the Internet. With Prezi, videos can be seamlessly integrated. We will also use Prezi while presenting information to give the students a variety of presentation techniques.

Skype, an online communication that allows you to communicate through video conferencing, will be used so we can communicate with guest speaker Kim Wheeler from Red Wolf Coalition. Kim Wheeler will be able to share about the red wolves located at the Alligator River with the students. In addition, this will allow the students to able to communicate with a primary source.

Finally, the students will use the knowledge they have gained to complete a final project. They will use Photo Booth and iMovie to create a short public service announcement concerning the deaths of the red wolves in Columbia, North Carolina. This public service announcement will become part of a red wolf webpage they are helping to create using Weebly. This webpage will include information regarding the red wolves including why they are endangered. Also, as part of their webpage, the students will make a recommendation to the red wolf coalition on possible new locations to locate red wolves.



## Red Wolves Content Outline

#### I. Description

- A. Coat: brownish, orange, cinnamon color that may include gray and black
- B. Tail: bushy, about 16 inches long
- C. Length: 3.5 4 feet long
- D. Height: 2 feet tall
- E. Weight: 35 60 pounds
- F. Females are smaller than males

#### II. Diet

- A. Animals such as rodents, rabbits, raccoons, beavers, and deer
- B. Dead animals
- C. Garbage
- D. Insects
- E. Grass and fruit
- III. Habitat
  - A. Wetlands
  - B. Forests
  - C. Agricultural Lands

#### IV. Life cycle

- A. Mating
  - 1. Mate for life

- 2. Mating season: late winter
- 3. Gestation: 2 months
- B. Offspring
  - 1. Pups nurse until they eat solid foods
  - 2. Parents may chew their food up for them at first.
  - 3. Other wolves in the pack help care for the pups
  - 4. Pups start traveling with the pack when they are 3 5 months old
- C. Lifespan can be up to 20 years
- V. Background on being endangered/extinct
  - A. Red wolves were endangered in the 1970's
    - 1. Less than 100 animals were left
    - 2. They were located in a small area of coastal Louisiana and Texas
  - B. Red wolves officially considered extinct in the 1980's
    - 1. Causes
      - a. Aggressive predator control programs
      - b. Clearing of habitats
      - c. Farmers protecting their farmland
    - 2. To be considered "recovered"
      - a. Need 220 animals spread over 3 wild populations
      - b. Need 330 animals in captivity
- VI. Red Wolf Recovery Program
  - A. Started in the 1970's

B. 14 Red wolves chosen to be part of the program from only 17 identified animals

- C. Overall goals
  - 1. Conserve the genetics of the Red wolves
    - a. Having at least 30 captive breeding facilities in the U.S.
    - b. Continue to retain 85% of the Red wolf genetics for 150 years
  - 2. Release Red wolves back into the wild
- D. 4 Red wolf pairs released
  - 1. Year: 1987
  - 2. Place: Alligator River National Refuge, NC
  - 3. First time an officially extinct species was restored back to the wild
- E. Monitoring
  - 1. Tracking collars are put on pups when they are 8-10 months old
  - 2. Look for tracks and scat
  - 3. Listen for howls
  - 4. Future: monitor from satellites
- VII. Possible problems for the Red Wolves
  - A. Farmers are scared they will be bad for their cattle.

B. Landowners think they should have the right to kill a Red wolf if it is damaging their property and they think Red wolves are a threat to pets, children, and livestock.

- C. Vehicles: being hit on trails and roads
- D. Coyotes

- 1. Mistaken Identity: being shot because they look like coyotes
  - a. Height: four inches shorter than a Red wolf
  - b. Weight: half of the weight of the Red wolf
- 2. Interbreeding: losing the Red wolf genetics
- E. Threats in the wild
  - 1. Diseases
    - a. Hookworms
    - b. Heartworms
    - c. Mange
  - 2. Habitat damage/loss from
    - a. Hurricanes
    - b. Humans

# VIII. Red wolf Organizations

A. Red Wolf Species Survival Plan (SSP): manages red wolves at zoos and nature centers in the U.S.

B. Red Wolf Coalition (RWC): promotes public involvement in red wolf conservation

C. U.S. Fish and Wildlife Service (USFWS): their Red Wolf Recovery program monitors the wild red wolf population.

# IX. Stakeholders in red wolf recovery

A. Hunter: worried red wolves will deplete the supply of game

B. Red wolf biologist: concerned about red wolves breeding with coyotes

C. Farmer: concerned about red wolves killing their cattle

- D. Resort owner: concerned about public safety
- E. Animal rights activist: animals have as much right to live as humans do
- F. Local resident: worry that endangered species means property restrictions
- G. Visitor hiker camper: want to experience read wolves in nature
- H. The red wolf: have to kill to live, but will not eliminate our food source

I. Environmentalist naturalist: believe the red wolves play an important role as a top predator

J. Wildlife management officials: believes everyone needs to compromise

#### X. How to help

- A. Learn about red wolves and teach others
  - 1. Education is important to understanding the misunderstood red wolves.

2. The more we know, the better equipped we will be to change the attitudes of others.

- B. Get involved by supporting the work of red wolf organizations
- C. Ask others to support wildlife conservation
  - 1. Elected officials
  - 2. Lawmakers
  - 3. Civic and business organizations
- D. Protect natural areas so there will be wild lands for wildlife
- E. Reduce your carbon footprint to reduce climate change
- F. Hunt responsibly to reduce accidental deaths of red wolves
- G. Drive safely: look out for wildlife on or near roads and trails



# LESSON #1: The Big Bad Wolf of North Carolina?

LESSON OBJECTIVEStudents will evaluate the affects of fairy tales/folk tales on the views of the red wolves?POINT TO PONDERFairy tales distort the images of animals to make their stories more interesting.ESSENTIAL QUESTIONWhy have we given wolves the reputation of being big and bad?CONTENT Outline the content this lesson.I. Description of red wolvesA. Coat: brownish, orange, cinnamon color that may include gray and blackB. Tail: bushy, about 16 inches long C. Length: 3.5 - 4 feet long D. Height: 2 feet tall E. Weight: 35 - 60 pounds F. Females are smaller than malesII. Diet A. Animals such as rodents, rabbits, raccoons, beavers, and deerB. Dead animals C. Garbage D. Insects E. Grass and fruitIII. Habitat A. Wetlands	I. DEFINE OBJECTI	VES AND CONTENT
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	C. Vehicles: being hit on trails and roads
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	2. Habitat damage/loss from
	a. Hurricanes
	b. Humans

II PLANNING <sup>,</sup> KNO	W / UNDERSTAND / DO
	After the lesson,
What 3 items are worth knowing? (Think about the content you have selected. What is important for students to KNOW?)	Students will KNOW that wolves represented in books and movies are misrepresented. Students will KNOW the characteristics of the red wolf: Students will KNOW that the red wolves are endangered animals that face many obstacles.
	After the lesson,
What are the enduring understandings that students	Students will UNDERSTAND that the wolves portrayed in fairy tales and/or books they have read often misrepresent the wolf.
should take away from the lesson?	Students will UNDERSTAND that there are many possible reasons for the red wolves' endangerment.
(Define the BIG Ideas.)	Students will UNDERSTAND the true characteristics of the red wolves.
	After the lesson,
What 3 items are important for students to be able	Students should be able to compare and contrast the characteristics of fictional wolves to real wolves.
to DO? (Define what students should be able to DO as a result of your lesson.)	Students should be able to discriminate that the characteristics of fictional wolves in most stories differ from the characteristics of real wolves
	Students should be able to analyze the possible effects that the fictional wolves may have had on the real wolves.

III. PLANNING	
HOOK Describe how you will grab students' attention at the beginning of the lesson. Be CREATIVE.	TIME: 5 minutes The students will look through the contents of the <b>Red Wolf</b> <b>Discovery Box</b> that we are borrowing from the Red Wolf Coalition. We will be playing an audio CD of wolf howls while the students experience first-hand the warm, protective pelt of a wild canid(wolf and/or coyote), wolf and coyote skulls that show the powerful jaws and teeth, track casts, a VHF radio tracking collar, various books about red wolves and conservation, and copies of a special red wolf issue of <i>International Wolf</i> magazine. Students will predict what they will be learning about this week based on the materials available.
INSTRUCTION	TIME: 60 minutes
Explain Step-by- step what you will do in this lesson. Include ALL	1. Ask students myth questions about the Red Wolves: the students will respond to using the Senteos. (5 minutes)
support and teaching materials with your unit.	2. Have students log into their Edmodo accounts and join the AIG Camp Red Wolf Group (join code: 1k5wo9). (5 minutes)
	<ol> <li>Students complete a KWL chart using Google forms on Edmodo.</li> <li>(5 minutes)</li> </ol>
	4. Using Prezi, present to the students common words or phrases derived by the wolf. Students will share and discuss what they think the words mean. (5 minutes)
	<ol> <li>Discuss how fairy tales and stories have given the public a negative view of the wolf population. Share several common books in which the wolf population is considered a threat to other animals. (5 minutes) Images from books and movies will be presented using Prezi.</li> </ol>
	<ul> <li>6. Each pair of students will read a short story/folktale. The students will fill out a Google form about phrases or words to describe the wolf, and answer the questions:</li> <li>What actions did the wolf take in the story?</li> <li>What actions do other characters in the story do?</li> <li>How was the wolf portrayed?</li> <li>The answers will be displayed on SmartBoard and students will share and discuss the characteristics from their folktales. (15 minutes)</li> </ul>

	7. Discuss with students how children's books and stories have the power to influence others on unrealistic characteristics of wolves.
	8. Present the real Red Wolves (characteristics, diet) using Prezi. (5 min)
	9. Predator/Prey Game (15 minutes)
ASSESSMENT (Performance	TIME: 5 minutes
Task) What will	Students will reflect using Edmodo:
the students DO to demonstrate	How have fairy tales/folk tales affected the views of the wolves?
that they have mastered the content? Be	In your opinion has their endangerment been affected by these works of literature? Why or why not?
specific and include actual assessment with unit materials.	To receive a Fairy Tale Badge, the students must answer the questions with at least three reasons that support how fairy tales have affected the views of wolves.
	To receive the endangerment badge the students must list two reasons why wolves have or have not been affected by works of literature.

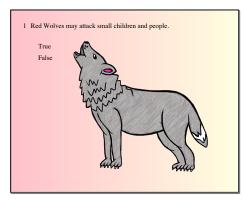
DOES THE ASSESSMENT ALLOW YOU TO DETERMINE WHETHER OR NOT THE STUDENTS HAVE MET YOUR STATED LESSON OBJECTIVE? **YES** OR NO

#### ASSESSMENT AND INSTRUCTIONAL MATERIALS

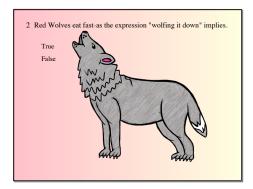
Insert ALL materials here including Assessments and Instructional Materials. Explicitly LIST any additional files for this lesson. Be sure that ALL materials have been submitted for this lesson.

#### March 15, 2013



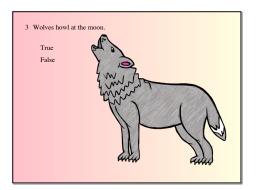


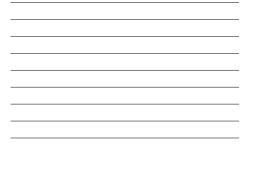


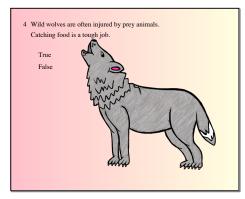




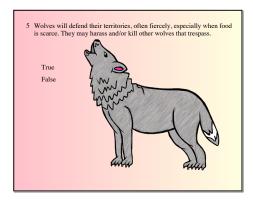
March 15, 2013













What do you know about the red wolves?
* Required
First and Last Name *
What do you already know about the Red Wolves?
What do you hope to learn about the Red Wolves? *
Submit
Never submit passwords through Google Forms.
Powered by This form was created inside of Pcs.k12.nc.us.

### Wolf Words Prezi Link

#### http://prezi.com/s0eubwk-wdht/wolfish-

words/?auth\_key=9a472e2ca07b6893d285984123c2563d1a6670aa&kw=views0eubwk-wdht&rc=ref-1911431

#### **Wolf Characteristics Presentation**

http://prezi.com/zpncgbjh4jxc/edit/?auth\_key=ggqz0v9&follow=y1b6pnty10nx&k w=edit-zpncgbjh4jxc&rc=ref-1911431 **Wolves in Stories Prezi** 

http://prezi.com/k7aanhom8tin/present/?auth\_key=3dnvp2m&follow=y1b6pnty1 0nx



#### National Science Content Standards:

#### Life Science Standard

- Regulation and Behavior
- Populations and Ecosystems

# Unifying Concepts and Processes

- Systems, order, and organization
- Evidence, Models and Explanation

# Vocabulary:

Predator Prey Food chain/web Population

# Materials:

- About 250 Deer Cards – you may want to have extras on hand
- About 50 Wolf Cards
- Student worksheets: one per student
- Defined "forest"
- Directions for simulation for each group

# Deer Me: A Predator/Prey Simulation

**Introduction:** In this activity, students will simulate the interactions between a predator population of gray wolves and a prey population of deer in a forest. After collecting the data, the students will plot the data and then extend the graph to predict the populations for several more generations. Before playing, review the definitions for food chain, population, predator, and prey.

This activity will work well either before or after playing WolfQuest.

# **Objectives:**

At the end of this activity, the student will:

- 1. Identify predator/prey relationships and how they co-exist in nature.
- 2. Examine the changes that populations undergo to keep a balance in the ecosystem.
- 3. Create a graph illustrating population changes in a predator/prey relationship.

# Procedure:

Teacher Prep:

- ✓ Make 250 "Deer" cards and 50 "Gray Wolf" cards per group. It is recommended to make these cards out of card stock paper and laminate them for repeated use each year.
- ✓ Copy one worksheet for each student.

Set up: Heterogeneous groups of 4; each with a defined "forest".

#### Directions:

- Determine the size of your forest. Using your table works well but the space can be defined using masking tape, if necessary. You may also make "forests" using 2 sheets of 11x17 construction paper taped together.
- 2. Distribute 3 deer in the forest by tossing 3 deer cards on your "forest".
- 3. Toss one gray wolf card in an effort to catch a deer. (At this point in the activity there is no way that the gray wolf can catch the 3 deer that it needs to survive and reproduce. The gray wolf is not allowed to skid across the table and the deer should be distributed in the forest.)

<ol> <li>Complete the data table on Activity Sheet 2 for generation #1. The gray wolf will starve and there will be no surviving gray wolf or new baby wolves.</li> </ol>
5. At the beginning of generation #2, double the deer left at the end of generation #1 by tossing three new deer cards. A new gray wolf immigrates into the forest and is interacting with the deer by being tossed on the table to try to capture the dispersed deer.
6. Eventually the deer population increases to a level that allows the wolf to catch 3 deer in a single toss. If the wolf catches 3 deer, it not only survives but it reproduces, too. It has one baby wolf for each 3 deer that it catches. Therefore, if it catches 6 deer, it will have 2 babies. Wolves are not allowed to cheat, but they should try to be efficient. (Stupid wolves result in an overabundance of deer.)
7. As the number of wolves increases, throw each wolf card once for each wolf. Record the number of deer caught by each wolf. The simulation is more realistic if the number of new baby wolves is based on each wolf's catch rather than merely the total number of deer caught in a generation.
<ol> <li>There are always at least 3 deer at the beginning of a generation. If and when the entire deer population is wiped out, then new deer immigrate into the forest.</li> </ol>
<ol> <li>Remember that the number of deer in the forest needs to be correct at all times. Remove the deer caught and add new ones as indicated by the data table.</li> </ol>
10. Model about sixteen generations and predict nine more, or up to a total of 25 generations. Base the prediction on the pattern observed during the first sixteen generations.

# Deer Me

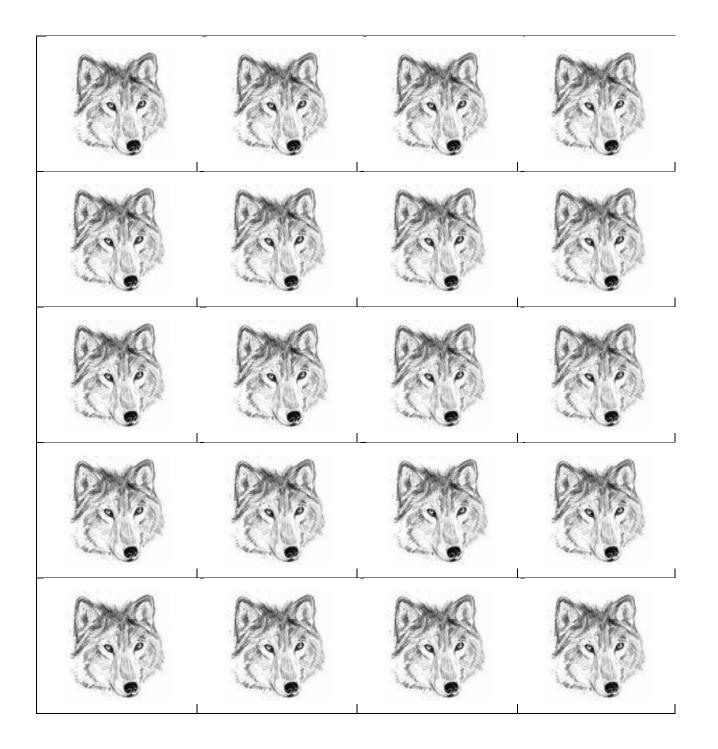
# How does a population of predators affect a population of prey?

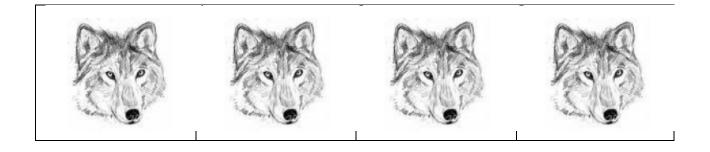
#### Directions:

- 1. Determine the size of your forest. Using your table works well but the space can be defined using masking tape, if necessary.
- 2. Distribute 3 deer in the forest by tossing 3 deer cards on your "forest".
- 3. Toss one gray wolf card in an effort to catch a deer. (At this point in the activity there is no way that the gray wolf can catch the 3 deer that it needs to survive and reproduce. The gray wolf is not allowed to skid across the table and the deer should be dispersed, or spread, out in the forest.)
- 4. Complete the data table on your worksheet for generation #1. The gray wolf will starve and there will be no surviving gray wolf or new baby wolves.
- 5. At the beginning of generation #2, double the deer left at the end of generation #1 by tossing three new deer cards into your forest. A new gray wolf immigrates into the forest and is interacting with the deer by being tossed on the table to try to capture the dispersed deer.
- 6. Eventually the deer population increases to a level that allows the wolf to catch 3 deer in a single toss. If the wolf catches 3 deer, it not only survives but it reproduces, too. It has one baby wolf for each 3 deer that it catches. Therefore, if it catches 6 deer, it will have 2 babies. Wolves are not allowed to cheat, but they should try to be efficient. (Stupid wolves result in an overabundance of deer.)
- 7. As the number of wolves increases, throw each wolf card once for each wolf. Record the number of deer caught by each wolf. The simulation is more realistic if the number of new baby wolves is based on each wolf's catch rather than merely the total number of deer caught in a generation.
- 8. There are always at least 3 deer at the beginning of a generation. If, and when, the entire deer population is wiped out, then new deer immigrate into the forest.
- 9. Remember that the number of deer in the forest needs to be correct at all times. Remove the deer caught and add new ones as indicated by the data table.

10. Model sixteen generations and predict nine more for a total of 25 generations. Base your predictions on the pattern observed during the first sixteen generations. Each person should make his or her own predictions without the help of their group members.

DEER	DEER	DEER	DEER
DEER	DEER	DEER	DEER
DEER	DEER	DEER	DEER
DEER	DEER	DEER	DEER
DEER	DEER	DEER	DEER
DEER	DEER	DEER	DEER
DEER	DEER	DEER	DEER





#### The Wolf on the Prairie (Cheyenne)

(This is a Cheyenne story first published by George Bird Grinnell in By Cheyenne Campfires, in 1926. The following is my retelling of this historical tale. The Sand Creek Massacre happened on November 29, 1864, and ended with 200 Cheyenne and Arapaho, mostly women and children, dead and mutilated. The massacre started a war between the United States and Plains tribes that didn't end until 25 years later with the massacre at Wounded Knee. In 1902 when this story was recorded, one of the women truolved was still altve.)

It had been a long journey to Fort Lyon, but the elders said we would be safe there. Our leaders were promised protection if we camped near the fort. But safety meant soldiers with guns. Our warriors tried to defend the camp, but there were too many soldiers. My husband was wounded. He told us to go. My sister and I and our two daughters crept off into the night. If we traveled quickly, we might reach another village of our people and be safe. We traveled on and on, six or seven days, and it was cold, so we took shelter in a small cave in the side of a cliff.

That was when he came. The children were asleep when I saw a large shape walk on all fours into the cave. It lay down beside us and went to sleep. In the morning, I saw that it was a large gray wolf. We were frightened at first, but the wolf seemed to act like one of our dogs. It walked next to us, stopping when we had to rest. We tried to walk quickly, but we had not eaten in days. Finally, my sister looked at the wolf and said, "O wolf, please do something for us. We and our children can barely walk with our hunger."

When she spoke, the wolf seemed to listen to her. Then it got up and ran over the hill. Soon, the wolf came running back, and it had blood on its muzzle. It led us over the hill, where we saw a dead buffalo, surrounded by gray wolves. The wolves were not eating. We ate quickly and carried some meat for later. When we were finished, our friend wolf and the other wolves ate the rest of the buffalo. We kept traveling day after day. One night, we made a camp in a hollow with some willows. That night, we heard noises. Something was coming, and it was breaking sticks as it came. I told my sister and our daughters to get up. The wolf stood up and began howling. Its voice was answered by the voices of wolves all across the valley. The sounds came closer. The wolves came down and began fighting with the thing. We ran out of the valley as far as we could. The next morning, our wolf caught up with us. It lay down to rest when it found us.

We kept traveling, but with the new fallen snow on the ground, we couldn't find the trails of our people. Finally, my sister looked at the wolf and said, "Friend wolf, please help us find the trail of our people." The wolf seemed to listen and ran off. When it came back, it led us across the prairie to an old camp, where we found food that our relatives had left for us. From there, the wolf ran off again. We camped for a few days there. When the wolf returned, it led us to a high hill. When we looked down from the hill, we saw a huge village of our people. The wolf stayed on the hill as we ran down to our people. Our relatives were happy to see us. My sister took a bundle of buffalo meat up the hill to the wolf.

"Now that you have led us to our people, you can go back to your old ways. Thank you," she said.

The next day, she went up the hill again, but the wolf was nowhere to be seen. The meat was gone as well.

#### GRAY WOLVES GRAY MATTER

#### The Hungry Wolf

(This is a version from Kazakhstan, but there are similar versions from Finland and Russia.)

One day, wolf was feeling hungry, so he sniffed the air and began looking for some dinner. "Ah, goat meat," he said, sniffing the air. The wolf ran up to the goat and growled, "O.K. goat, its time for dinner and you're the dinner."

"If that's my fate, then there's nothing to be done about it. But as you can see, I am really quite old and thin. If you let me go home, I will get my daughter. She is quite young and plump," said the goat.

"O.K., but be quick about it, I am hungry," said the wolf.

The goat went back to the herd and got the goatherd. The wolf heard the sound of barking dogs, and the goatherd came running with his rifle. "Bang, bang," the bullet whizzed over the wolf's head as he ran into the woods. "Well, that's the last time I will trust a goat to do what he says," said the wolf as he rested in a cave.

The next day, in another field, wolf smelled a sheep. "Mmmm. Mutton, I love mutton," said the wolf. The wolf ran up and grabbed the sheep. "O.K. sheep, its time for dinner, and you're the dinner," growled the wolf.

"Well if that's my fate, I guess I can't escape," said the sheep, "but before you eat me, I have always wanted to dance my circle dance before I die. Since you are going to eat me anyway, could I dance before I die?"

#### SECTION 3: Social Systems

"O.K., but you have to stay where I can see you," said the wolf, and he lay down to rest before dinner. The sheep danced around wolf again and again, each time making a larger and larger circle. As she danced, she sang a song. The song put wolf to sleep, and the sheep ran off to find a shepherd. Once more, wolf had to run from dogs and men, and he was still hungry. "I should never let my prey leave my grasp," said the wolf.

The next day, wolf traveled farther on the steppe, where he met an old horse. "O.K. horse, it's time for dinner, and you're the dinner," growled the wolf.

"Fine, I am old and have lived far too long already. My master no longer feeds me grain, he just leaves me to graze in dry fields. But since you are going to eat me anyway, could you start with my tail, so I may keep on grazing?" said the horse.

"Very well, but you can't move," said the wolf. When the wolf went behind the horse, the horse kicked out with both of his hind hooves, sending the wolf flying across the steppe. And that was the end of that foolish wolf.

(Retold by Storyteller Kevin Strauss, copyright 2006)

(Note: A "steppe" is a prairielike grassland area in central Asia.)

#### GRAY WOLVES GRAY MATTER

#### Murphy and the Wolf (Ireland)

Long, long ago, a man named Murphy was walking from Dublin to a neighboring town. As the road passed through a dark forest, he heard a rustling in the bushes.

Being a sensible man, he drew his sword and stood very still. A moment later, a huge black wolf sprang from the forest to attack him. But old Murphy used to be a solider, and each time the wolf lunged, he would fight it off with his shining sword. Finally, bruised and cut, the wolf stumbled back into the darkness of the woods to wait for easier prey.

As the road left the forest, Murphy could see a town in the distance. He also saw his friend walking toward him on the road. "You're not going through the woods, are you," said Murphy.

"I've got to get to Dublin, so I guess I am," said the friend.

### SECTION 3: Social Systems

"Well then, at least take my sword. There is a terrible wolf in the woods, and if you have a weapon, you can fight him off," said Murphy. The friend thanked Murphy and continued on his way.

The friend had just entered the woods when the wolf sprang from the bushes. The friend drew Murphy's sword. The wolf stopped. It recognized Murphy's sword and realized that Murphy was unarmed. The wolf ran down the road after Murphy.

Suddenly, Murphy heard the sound of a running wolf. He turned to see that black wolf right behind him. Murphy tried to run for the town gates, but the wolf was too fast. It caught Murphy and killed him right there on the road.



#### GRAY WOLVES GRAY MATTER

#### Wolf and the Honey Pots (Germany)

Long, long ago, wolf was starving in the forest. He hadn't eaten for weeks. It seemed as if all of the deer and rabbits had left the forests. So in desperation, he began hunting closer and closer to the houses of people.

One night, as he was entering a village, he met a fox. "Tell me, fox, how can I get something to eat? I am starving. You know this place. Tell me where I can find food," said the wolf, as his white teeth glistened in the moonlight.

Fox was worried that if he didn't find the wolf some food, the wolf would eat him.

"Shhhhh, be quiet and I will show you where we shall get enough food for you. There is a farmer nearby who keeps bees. I have been watching him collect honey each day and carry jars of honey down to his basement. Now that it is dark, we can go there and eat our fill," said fox.

Wolf followed fox along the hedge to the house where the farmer lived. "Here is the cellar window. Push it open and we can go inside," said the fox, "Everyone's asleep. You need not be afraid."

"I'm not afraid," said wolf, "I'm just cautious. A careless wolf is a dead wolf. That's what my father used to say."

Finally, fox pushed open the basement window and crept inside. Wolf followed.

Once inside the cellar, fox and wolf saw four big pots full of honey. "The first pot is mine, since I have already eaten half of it. The rest of the pots are for you," said fox.

Wolf chose a pot and started lapping up the sweet honey. Fox lapped honey from his pot, then he climbed out through the window to be sure he could still fit. Then he would eat some more. Then he went back to the window again.

### SECTION 3: Social Systems

"Why are you going to the window all the time?" said wolf. "I just want to make sure that the road is still clear. Don't worry, you just go back to eating," said fox.

Wolf was very hungry, so he went back to eating. Once fox was done eating, he decided that it was time to play a trick on wolf. While wolf was busy with his head in a honey pot, fox sneaked out the window to tell the farmer that wolf was in the basement eating all of his honey.

The farmer grabbed a stick and rushed down to the cellar to beat the wolf. "How dare you steal my honey, your four-footed thief!" said the farmer as he beat the wolf with his stick. The wolf ran for the window, but after eating so much honey, he was too fat to get all the way through. He could only get his head and front legs out, not the rest of his body. The farmer gave the wolf such a beating that his howls echoed across the village. Finally, battered and bruised, the wolf pulled himself through the window.

Fox was waiting in the bushes at the edge of the forest when wolf found him. "Why didn't you tell me that the farmer was coming? I should tear you to pieces!" said the wolf.

"It's not my fault," said fox. "When I heard the farmer coming, I had to run myself and didn't have time to warn you."

"You are lying, and I am going to kill you," said the wolf.

"You'll have to outrun the farmer's dog first. Look, here he comes," said fox.

Wolf turned and leapt behind a bush, but when he looked for the dog, it wasn't there, and neither was the fox.

#### The Mountain Wolf's Gift (Japan)

Long ago, near Kyoto, there lived a young merchant. One night, the merchant was forced to travel through a narrow mountain pass on business. The new moon hid her face from the sky, and the night was inky dark. The merchant held his paper lantern in front of him, and though he was shaking, walked into the forested pass. The trail was narrow but well marked. The trees seemed to be twisted together, blocking out even the faint starlight. There were places in that pass where the trees were so thick that it was frightening even in the daylight. People talked of monsters and ogres in these mountains, but the merchant tried not to think about that as he walked. Then he heard it, up ahead to the right. It was a strange, deep snoring sound.

"That must be the wind," he thought. But the wind doesn't snore. "Perhaps it is a badger or a squirrel," he thought. Finally, he couldn't take it any longer. He had to see what it was or run back to Kyoto in terror, so taking his paper lantern, he stepped off the path and into the forest.

Not far from the path, he found the source of the strange snoring noise. In a small clearing stood a huge black wolf. At first the merchant wanted to run, but he stood still. Then he noticed something strange about the wolf. Its mouth was open, and it kept stretching its neck in and out. But it didn't try to run away at all. Thinking this was very strange, the young merchant walked closer to the wolf.

The wolf, who had been standing, kneeled down on his front legs as if to bow. To the merchant, it looked as if the wolf were begging for help. The wolf opened its mouth wide, and the merchant could see something was caught in the wolf's throat. "So that's the problem. Here, I'll take it out for you," said the merchant. Slipping one arm out of his kimono, the merchant put his hand down the wolf's throat and pulled out a thick piece of bone. "Next time, you are going to have to be more careful when you eat bones like this," said the merchant. The wolf whined softly in relief and disappeared into the mountain forest.

Several days went by. The young merchant was invited to a harvest celebration in the neighborhood. The guests were in the middle of the feast when everyone heard a deep growl at the door. The host looked out his window and turned ghostly pale. "Everyone, grab your swords. There is a huge black wolf at the door, a wolf at the door," cried the host.

Everyone turned pale and began shaking with fright. But the merchant walked up to the door. Through the window he saw the wolf that he had helped. "Don't worry, I'll take care of this," said the merchant as he walked through the door.

The guests ran to the windows to watch what would happen. They knew that the merchant was unarmed. When the wolf saw the young merchant, he suddenly became as quiet as a kitten. He padded up to the merchant's feet. When the merchant patted its head, it licked his hand in joy.

"You seem much happier without that bone in your throat," said the merchant. Then, as if remembering something, the wolf took something black that he had beside him and dropped it with a thud on the doorstep. As the merchant reached down to examine the gift, the wolf slipped silently away.

The merchant looked closely and saw that the wolf had brought him a huge pheasant. Perhaps it was the wolf's way of thanking the merchant for the favor it had received.

3/16/13	Folizale Evaluation	
	Folktale Evaluation * Required	Edit this form
	Story Title *	
	Phrases or words used to describe the wolf? Specific actions of the wolf? *	
	What do other charcters in the story do? •	
https://docs.google.com/a/	peak12.nc.usforms/#1pmhVms/3huPg0001EIc2IMPqvhJDepe6qkaX6gKzytq0/viewform	1/2

olictale	Evaluation	

	Folktale Evaluation
Wolf portrayal (foolish, m	ean, helpful, or wise) *
	*
<u>Submit</u> Never submit passwords thro	ugh Google Forms.
Fowered by Google Drive	This form was created inside of Pcs.k12.nc.us. Report Abuse - Terms of Service - Additional Terms

2/2



### LESSON #2: Who do we call?

ES AND CONTENT	
The students will be able to identify organizations that are protecting the red wolf population and ways we can make a difference in the red wolf population.	
Red Wolf volunteers are greatly rewarded for their time.	
How can educating the public about the red wolf help protect them?	
VII. Possible problems for the Red Wolves	
A. Farmers are scared they will be bad for their cattle.	
B. Landowners think they should have the right to kill a Red wolf if it is damaging their property and they think Red wolves are a threat to pets, children, and livestock.	
C. Vehicles: being hit on trails and roads	
D. Coyotes	
1. Mistaken Identity: being shot because they look like coyotes	
a. Height: four inches shorter than a Red wolf	
b. Weight: half of the weight of the Red wolf	
2. Interbreeding: losing the Red wolf genetics	
E. Threats in the wild	
1. Diseases	
a. Hookworms	
b. Heartworms	
c. Mange	
F F	

2. Habitat damage/loss from
a. Hurricanes
b. Humans
VIII. How to help
A. Learn about red wolves and teach others
1. Education is important to understanding the misunderstood red wolves.
<ol><li>The more we know, the better equipped we will be to change the attitudes of others.</li></ol>
B. Get involved by supporting the work of red wolf organizations
<ol> <li>Red Wolf Species Survival Plan (SSP): manages red wolves at zoos and nature centers in the U.S.</li> </ol>
2. Red Wolf Coalition (RWC): promotes public involvement in red wolf conservation
3. U.S. Fish and Wildlife Service (USFWS): their Red Wolf Recovery program monitors the wild red wolf population.
C. Ask others to support wildlife conservation
1. Elected officials
2. Lawmakers
3. Civic and business organizations
D. Protect natural areas so there will be wild lands for wildlife
E. Reduce your carbon footprint to reduce climate change
F. Hunt responsibly to reduce accidental deaths of red

wolves
G. Drive safely: look out for wildlife on or near roads and trails

	W / UNDERSTAND / DO
	After the lesson,
What 3 items are worth knowing?	Students will KNOW about the different organizations that help protect the red wolves.
(Think about the content you have selected. What is important for students to	Students will KNOW that Kim Wheeler is the executive director of the Red Wolf Coalition and the endeavors she has taken to ensure the population continues to thrive.
KNOW?)	Students will KNOW that the public can help save the red wolf population by educating others.
	After the lesson,
What are the enduring understandings that students should take away from the lesson? (Define the BIG Ideas.)	Students will UNDERSTAND that there are many organizations committed to the red wolves survival.
	Students will UNDERSTAND that the Red Wolf Coalition has both red wolves that live in the wild and captive near the Alligator River.
	Students will UNDERSTAND that they can help better educate the public about the red wolves.
	After the lesson,
What 3 items are important for students to be able	Students should be able to locate the Alligator River using Google Maps.
to DO? (Define what students should be able to DO as a	Students should be able to create a draft version of their public service announcement about the deaths of the red wolves in Columbia, NC.
result of your lesson.)	Students should be able to identify the various organizations that support red wolves.

III. PLANNING HOOK Describe how you will grab students' attention at the beginning of the lesson. Be CREATIVE.	TIME: 5 minutes Red Wolf Video Clip: <u>http://vimeo.com/40360924</u> (Tricky Business: Endangered Red wolf threatened by rule) Students will discuss that North Carolina now allows coyotes to be hunted at night. In your opinion will this hurt or help the wolf population?
INSTRUCTION	TIME: 55 minutes
Explain Step-by- step what you will do in this lesson. Include ALL support and	1 Display a red wolf and coyote picture on the smart board and have the students use compare and contrast the coyote with the red wolf.
teaching materials with your unit.	2. Discuss with the students using PowerPoint the various types of organizations that help protect the red wolves.
	3. Locate the Alligator River using Google Maps. (1-3 10 minutes)
	4. Skype session with Kim Wheeler. Kim will share about the red wolves and how her organization helps to protect the red wolves. She will also share about the recent deaths of wolves in Columbia, NC. (25 minutes)
	5. Allow students time to ask Kim Wheeler questions about her organization and the deaths of wolves. (10 minutes)
	6. At the conclusion of the Skype session with Kim Wheeler, discuss how powerful volunteers are within the Red Wolf Community.
	7. Students will debate the different roles of stakeholders in a community near the red wolves and how they are affected. (10 minutes)
ASSESSMENT (Performance Task) What will the students DO	TIME: 10 minutes The students will respond to the question through Edmodo: How can you make a difference in the red wolf population?
to demonstrate that they have mastered the	The students must list three ways they can make the difference in the red wolf population in order to receive volunteer badge.

content? Be	
specific and	
include actual	
assessment with	
unit materials.	

# DOES THE ASSESSMENT ALLOW YOU TO DETERMINE WHETHER OR NOT THE STUDENTS HAVE MET YOUR STATED LESSON OBJECTIVE? YES OR NO

### ASSESSMENT AND INSTRUCTIONAL MATERIALS

Insert ALL materials here including Assessments and Instructional Materials. Explicitly LIST any additional files for this lesson. Be sure that ALL materials have been submitted for this lesson.



Link to comparison excel document: https://docs.google.com/spreadsheet/ccc?key=0ApK55WNYJ-IcdDVXRm9HY21rSUQ0eGV6bHQwV1VXR3c&usp=sharing

#### SPECIAL ISSUE RED WOLF RECOVERY

History in Brief

Red wolf recognized as distinct species **1905** 

Red wolf listed as endangered species 1967

Endangered Species Act becomes law 1973

Last red wolves removed from wild. Red wolf declared extinct in wild **1980** 

14 captured animals become nucleus of Captive Breeding Program to save the red wolf from extinction **1980-1985** 

Reintroduction begins with release of red wolves into ARNWR\* 1987

First pups born in wild at ARNWR\* 1988

Reintroduction into GSMNP\* 1991

First release into PLNWR\* in northeastern North Carolina **1993** 

Red wolf recovery effects terminated in GSMNP\* in 1998

# The Southeast Chronicle

## Debate Over Red Wolf Recovery Begins

Plans are underway to investigate the possibility of restoring red wolves to the High Pines State Park. A recent feasibility study conducted by a team of biologists reveals that the High Pines area will support a sustained population of approximately 40 red wolves.

Several factors were studied by the biologists whose findings have been published and released to the public. Prey base was the first criterion examined. Biologists determined that the High Pines has sufficient numbers of small mammals and deer needed to sustain red wolves. Secondly, road density is low. The park is accessible to hikers and to back country campers. Some logging roads are maintained for private timber companies holding leases to log specific areas. Permanent human population is low, although there is some private property within the perimeter of the park. There are no towns or villages within the park, although there are a number of vacation cottages. In addition, two ski resorts operate during the winter season,



The unspoiled wild area of High Pines State Park is the center of controversy over the proposed reintroduction of red wolves.

and three year-round lodges host hikers, hunters, sightseers, and men and women who fish the mountain streams.

High Pines State Park is ringed with several small towns and a number of sheep and dairy farms.

A poll of residents living in and near High Pines State Park indicates a division of opinion over red wolf reintroduction. A Citizens Roundtable has been convened.

## Community in Conflict

Findings from the recent feasibility study involving the proposed reintroduction of red wolves to the High Pines State Park were greeted with mixed reactions by a Citizens Roundtable held in the town of Clear Creek. A representative of each of several perspectives on the issue of red wolf recovery spoke. Some groups strongly advocate the return of the red wolf to this portion of its former range; others, however, voiced firm opposition. Some stakeholders were undecided. Each of the perspectives will be presented by the representative stakeholders at the next Roundtable session where a compromise plan will be drafted.

\*ARNWR - Alligator River National Wildlife Refuge \*GSMNP - Great Smoky Mountains National Park \*PLNWR - Pocosin Lakes National Wildlife Refuge

## Stakeholders and Perspectives

Persons or groups with a vested interest in an issue

Points of view - ways of looking at issues

The stakeholders are affected both by the problem and by the solution.

Note to teachers: For the conflict resolution activities that follow, these "stakeholder cards" can be photocopied and cut so that students can "draw" a card rather than simply selecting one with a point of view they find compatible with their own!

## Hunter

This has always been a hunting community. The local people enjoy hunting deer and small game, and we use the meat to feed ourselves and our families. Most of us are not trophy hunters, and we don't get many folks from outside the area who need guides. I am worried that red wolves will deplete the supply of game. Sure, we have a lot of deer



around here, but sometimes, if we get a bad winter, the white-tail have a hard time of it. I am also concerned that if red wolves are reintroduced, there will be pressure to stop hunting altogether. Money from hunting licenses is a source of income for the state, and some of that money is used to protect wildlife and habitat. Hunting is a way of life around here. Hunters want to be sure that deer and small game are not stressed by a top predator like the red wolf.

## Red Wolf Biologist

So little is known about red wolves in the wild. Few studies were done, and red wolves were almost extinct before field research could be done and data collected. Red wolves are shy and elusive, and it is hard to do observations of their behavior in the wild.



The Captive Management Program taught us a lot, but we still have much to learn about this beautiful and tenacious animal. The radio-collared wolves in the restoration area have taught us a lot about how the red wolf lives and hunts and about its pack structure. We are deeply concerned about the potential for the red wolves breeding with resident coyotes. This is a problem for which we are seeking solutions. Coyotes are an exotic species here; they are not native to North Carolina. Red wolves are. High Pines State Park is one of the few areas that has very few coyotes, thus making it an ideal recovery site.

### Farmer

I have a herd of dairy cattle. My neighbor raises beef cattle and sheep. Our income depends on our livestock. If red wolves live around here and start killing our cattle and sheep, we will lose money. We aren't rich, and we can't afford to lose livestock. We have enough trouble with coyotes around here as it is.



But at least it's not against the law to shoot a coyote. But red wolves are endangered. I could go to jail or have to pay a big fine if I kill a red wolf. Maybe both. I don't have anything against wolves or any other wild animal. But something has to be done to make sure my

interests are protected if wolves are restored to this area. I just barely get by some years as it is, and red wolves would just add to my list of worries.

## **Resort** Owner

I depend on visitors to the High Pines State Park. The park attracts hikers, river runners, and hunters. Families come because of the recreational opportunities in the park. I admit I have a few

concerns about public safety. We don't have to worry much about bears around here except when people ignore common sense and leave food around. We have heard that red wolves are shy and stay away from people. But what if they lose their fear of humans? Could there be problems? Would people try to attract them with food so they could see them and take pictures? The whole idea of having red wolves in this area kind of intrigues me, but some plan would have to be worked out so the public would accept them but so they wouldn't try to get them to hang around campsites like dogs. Red wolves might actually be good for business because we could sell mugs and t-shirts in our gift shop. We could even help with an education program if someone would sponsor one.



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## Animal Rights Activist

Animals have as much right to live as humans do. It is wrong for humans to kill animals for their own purposes and



to replace their habitats with shopping malls, subdivisions, and roads. Red wolves are a prime example of how humans can

destroy an entire species. Red wolves were rescued only after having been pushed to the brink of extinction by humans. The future of this animal is still in jeopardy. It is time for us humans to reconsider our place in the scheme of life on earth. In the case of red wolves, humans should find ways to coexist with these magnificent predators. No animal except man has ever caused the artificial extinction of hundreds of species by exploiting plants and animals and their habitats. It is time to halt this destructive process and, as Thoreau and others suggested, to work out some relation to wildness.

## The Red Wolf

"I am a hunter's hunter, my track a sign of hope, its absence a warning,"



absence a warning," (Christopher Camuto). I was here long before settlers came from across the seas. I am Wa'ya to the Cherokee, principal clan animal to the Ani-Wa'ya, the Wolf people. I am a provider, a loyal mate,

a devoted parent. I am responsible for my pups and for making sure they know how to hunt in order to survive. I am a carnivore. I depend on deer and small mammals to live. We red wolves have evolved over thousands of years with our prey. We have to kill to live. We have no other food source. Successful hunting is hard and dangerous. We have never caused the extinction of another species. We are blamed for declines in prey populations, but that is an unfair accusation. We would never cause our own extinction by eliminating our food source. Every healthy ecosystem needs summit predators. Our role is vital.



Many of us have lived in this area for generations. We don't farm,but we own small businesses. Many of us see no reason to reintroduce an animal that has not lived here for many years. We worry

that an



endangered species means property restrictions. What if a red wolf pack takes up residence on the

twenty acres I own in the park? Could I build a cabin if a wolf pack has a den there? It is against the law to kill an endangered animal. But what if I need to protect my children and pets? I am not clear on how the law works in that case. I don't hate wolves, and I don't believe that fairy tale stuff. But I don't think red wolves belong here. They belong in an area where there are fewer people. What if wolves lose their fear of people because they are protected? Would little kids be in danger? How would their numbers be controlled?

## Environmentalist Naturalist

Top predators are essential to a healthy ecosystem. Red wolves play an important role in a well-balanced ecosystem. Too many ungulates such as white-tailed deer cause extensive



damage to vegetation, and even with the hunting season, some hard winters, and natural mortality, their numbers are increasing. We need

red wolves for the natural control of the deer and to ensure that the strongest and healthiest animals survive to breed. Red wolves generally do not kill livestock as long as their natural prey is plentiful. Coyotes sometimes kill livestock, and although coyotes are surprisingly scarce in this area, their numbers could increase in the absence of a top predator. One reason we are considering High Pines for red wolf recovery is the absence of large numbers of coyotes. This factor could help red wolves recover in the wild without the danger of being hybridized out of existence. Here is a chance for humans to do something positive to help an endangered animal!

## Visitor Hiker Camper

I live in the city, but my family and I come here every year to enjoy the outdoors. We want our children to experience nature and wildlife, and that includes hearing red wolves howl and finding tracks - maybe even seeing them. We hear conflicting



information about whether or not red wolves could be

dangerous to

humans. We need accurate information. We plan to teach our children responsible behavior toward all wildlife. We don't want a situation like we sometimes have with bears where they have to be destroyed because they become nuisances around campsites when people leave food around. We would hate to see the same thing happen with wolves. We need to work on public education.

## Wildlife Management Officials

Everyone wants wild areas and wildlife for some personal or economic reason. We are trying to find a balance here between the demands for recreation, solitude, wildlife habitat, and jobs. The truth is, there is something for everyone - including the red wolf. What needs to happen is



for everyone to compromise. People can't just be out for themselves and their personal interests any longer. We have to look at the big picture

together, and maybe we will all have to adjust our thinking about what's important. Maybe farmers can rethink their livestock-raising practices. Maybe hunters will see the health of the deer herds improve with a top predator around. Maybe hikers can hear the howl of a wolf. Maybe, just maybe, we will ALL benefit from the return of the red wolf. Resolving Conflict -Finding Balance

### The following Conflict Resolution Activity will take several class sessions depending on the length of your class periods.

The article in The Southeast Chronicle and the perspectives of the stakeholders show how complicated the issue of red wolf recovery can be. Each stakeholder needs food, shelter, and a means of protecting what is valuable to him or her. Each stakeholder has wants as well - things that are not necessary for survival but that are nice to have.

#### The questions and the challenge!

Can the issue of red wolf recovery in this area be resolved? If you think it can, then how? The challenge will be to work out ways that all the stakeholders can meet their needs and wants and live together in harmony. In order for a plan to be successful, two things must happen:

- 1. Each stakeholder must assess needs and wants carefully and be sure they are REASONABLE.
- 2. Each stakeholder must assess needs and wants carefully and be sure they are not harmful or destructive to the well being of others.

### What to do!

- 1. Divide the class into groups of three or four students depending on the size of the class.
- 2. Photocopy the perspective cards. You may want to be the alpha wolf and present the red wolf's perspective. Each group may draw a perspective card, or you may assign a stakeholder perspective to each group. This will encourage each student to examine and to defend a point of view which he or she may not have previously considered or which he or she might not personally support.
- 3. Each group should have a copy of the Group Solution pages that follow. They should be prepared to share all work with the rest of the class. You will come together to negotiate a solution to the proposed recovery of the red wolf to High Pines State Park.



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#### Name of stakeholder

Your first task is to list the needs and the wants of your stakeholder. Read the perspective card carefully. It will help you, but you should also include your own ideas! Stop and check to be sure that the needs are reasonable and are not harmful or destructive to others.

### Compromises and Creative Solutions

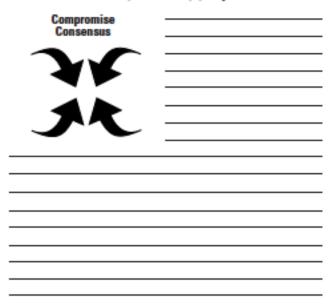
Look at your perspective card. Write the name of your stakeholder on the line.

п

1	Needs	Wants
2		
3.		
4.		
	Stop! My needs a are reasons	Check! ind wants able and
	are not har destructive	mful or 2 to others.

### Solution

With your group members, write a DRAFT solution to the issue of red wolf recovery in High Pines State Park using compromise and consensus. Your draft solution should be in line with the reasonable needs and wants you have listed above. Use a separate sheet of paper if you wish.



Koundtable

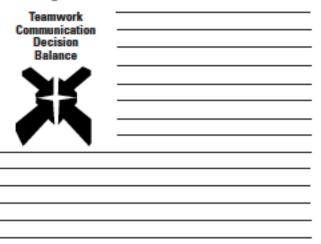
If possible, arrange the desks or tables so the entire class can sit in a big circle. This way, each member can listen carefully to each stakeholder and ask questions if necessary for clarification. Members of the roundiable should take NOTES on notebook paper as each stakeholder speaks. Each group will select a spokesperson to speak for the stakeholder the group represents. When you speak:

- 1. ANNOUNCE the name of the stakeholder you represent. PAUSE to let the members of the roundtable write it down.
- READ slowly and carefully your list of needs and wants. Pause to let roundtable members take notes. Speak slowly and clearly.
- READ aloud your stakeholder's solution. Read slowly and carefully, pausing to look at the members of the roundtable. This is a good place to practice your public speaking skills.
- 4. When you have finished, ask if there are any questions or if you need to repeat anything you have said.

#### Step 2

Stop 2 Each stakeholder group will meet again. This time your task will be to work on a compromise. You have listened to the other stakeholders. You have notes recording their needs and wants and their respective Draft solutions. You should now be prepared to assess your own needs and wants. What must you retain? What can you give up? What needs and wants can you compromise so that a solution can be reached and so that other stakeholders' needs and wants can be net as well as your own? Remember teamwork, communication, decision, and balance. Use a separate sheet of paper if you wish. List the compromises.

### Compromises



Proposal Strategy

Progress Success

### Revised Group Solution To The Red Wolf Recovery Proposal **3** Revised Group Solution Red Wolf Recovery Proposal

Now that each stakeholder as spoken and you have made your list of compromises, write your group Solution to the red wolf recovery proposal. Be prepared to negotiate in the final roundtable session so that the plan can be finalized and voted upon.

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## Final Roundtable Proposal

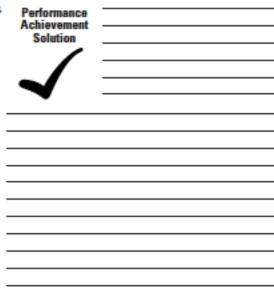
The entire roundtable (whole class) will reconvene. A spokesperson for each stakeholder will present the final proposal made by the group. As the speaker for the stakeholder group presents the solution to the roundtable, he or she should note the COMPROMISES made by the stakeholder group.

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As each Stakeholder group presents the group's proposals for a solution to the red wolf recovery issue, the teacher will write the proposals on a large sheet of tagboard or on the chalkboard. The list of proposals should then be revised so that each proposal is clearly stated and is not repeated. It would be a good idea at this point for a student volunteer to type the proposal list and to provide a place for a "Yes" or "No" vote. Another idea would be to have students vote on the entire list of proposals - either the entire plan is accepted or IL is rejected. Teachers can base their decision on the age of their students and on the amount of time and preparation spent with this activity.

#### What I Learned

What i Learned NEGOTIATION and COMPROMISE are not easy processes. They are, however, necessary. Each of you is to write a paragraph stating what you achieved through this process. Remember the steps: performance, achievement and solution. What skills have you karned? What realizations have you come to? When you have finished, the class may want to compile a list of what has been learned and achieved.



3/17/13





### The U.S. Fish & Wildlife Service (USFWS)

This the main organization in charge of protecting and conserving all endangered animals in the United States.

The Red Wolf Recovery Program is responsible for the wild red wolf population. They monitor their health and expansion.

### Red Wolf Species Survival Plan

This organization is in charge of managing the captive red wolves in zoos and nature centers.



their population.

.



They promote public involvement in red wolf conservation.

### We can make a difference!

Working together, these organizations saved the red wolves from extinction.

Day 3: What about me?



### LESSON #3: What about me?

I. DEFINE OBJECT	IVES AND CONTENT		
LESSON	The students will work with a partner to plan a PSA that will		
OBJECTIVE	influence others to protect the red wolves.		
POINT TO	Allowing people to kill coyotes at night is destroying the red wolf		
PONDER	population because of mistaken identity.		
ESSENTIAL QUESTION	As humans, what can we do to help the red wolf population continue to thrive?		
CONTENT	VIII. Red wolf Organizations		
Outline the content you will teach in this lesson.	A. Red Wolf Species Survival Plan (SSP): manages red wolves at zoos and nature centers in the U.S.		
	B. Red Wolf Coalition (RWC): promotes public involvement in red wolf conservation		
	C. U.S. Fish and Wildlife Service (USFWS): their Red Wolf Recovery program monitors the wild red wolf population.		
	IX. Stakeholders in red wolf recovery		
	A. Hunter: worried red wolves will deplete the supply of game		
	B. Red wolf biologist: concerned about red wolves breeding with coyotes		
	C. Farmer: concerned about re wolves killing their cattle		
	D. Resort owner: concerned about public safety		
	E. Animal rights activist: animals have as much right to live as humans do		
	F. Local resident: worry that endangered species means property restrictions		
	G. Visitor hiker camper: want to experience read wolves in nature		

H. The red wolf: have to kill to live, but will not eliminate our food source
<ol> <li>Environmentalist naturalist: believe the red wolves play an important role as a top predator</li> </ol>
J. Wildlife management officials: believes everyone needs to compromise

IL PLANNING: KNO	W / UNDERSTAND / DO
	After the lesson,
What 3 items are worth knowing? (Think about the content you have selected. What is important for students to KNOW?)	Students will KNOW that public service announcements are used to create awareness or change peoples opinions about an issue.
	Students will KNOW that the red wolves impact many groups of people and animals.
	Students will KNOW that iMovie can be used to create movies using video, pictures, and recorded voice.
	After the lesson,
What are the enduring understandings that students should take away from the lesson? (Define the BIG Ideas.)	Students will UNDERSTAND that a public service announcement can impact millions of people.
	Students will UNDERSTAND that all stakeholders in the red wolf population should be able to voice their opinion.
	Students will UNDERSTAND how to use iMovie to create and edit a short public service announcement.
What 3 items are important for students to be able to DO? (Define what students should be able to DO as a result of your	After the lesson,
	Students should be able to organize their ideas into a public service announcement about the red wolves to sway others of their opinion.
	Students should be able to debate the different roles of the red wolf community.

lesson.)	
	Students should be able to create short movies using iMovie such as their public service announcement.

III. PLANNING	
HOOK	TIME: 5 minutes
Describe how you	
will grab students'	Public service announcement video(s):
attention at the	http://www.youtube.com/watch?v=mSQU1cRdZjE 2:14 min
beginning of the	http://www.youtube.com/watch?v=kMwRSbK5uuo 1:53 min
lesson. Be	
CREATIVE.	After watching the video, discuss with the students the pros and
	cons of these videos. Do they grab your attention? Are they
	informative?
INSTRUCTION	TIME: 35 minutes
Explain Step-by-	
step what you will	1. Share the iMovie we created with our public service
do in this lesson.	announcement about the red wolves.
Include ALL	
	2. Students will work with a partner to create a rough draft of their
support and	2. Students will work with a partner to create a rough draft of their
teaching materials	PSA about red wolves using the attached planning sheets (15
with your unit.	minutes)
	3, Instruct students on how to use iMovie. (15 minutes)
	4. Students will work with a partner to plan their PSA. The PSA will
	be created using iMovie.
	5. Play Cat PSA and then discuss the power of a public service
	announcement. (5 minutes)
ASSESSMENT	TIME: 30 minutes
(Performance	
Task) What will	Completed draft and planning of the PSA about the red wolves. (25
the students DO	minutes)
to demonstrate	(minutes)
that they have	Edmodo daily question: Do you think public service
mastered the	announcements influence the public? Explain why or why not?
content? Be	
specific and	Include three reasons. (5 minutes)
include actual	Chudente will reactive a DCA hadro if they have at least three
assessment with	Students will receive a PSA badge if they have at least three
unit materials.	reasons to support their answer on public service announcements
	influencing the public.

DOES THE ASSESSMENT ALLOW YOU TO DETERMINE WHETHER OR NOT THE STUDENTS HAVE MET YOUR STATED LESSON OBJECTIVE? YES OR NO

### ASSESSMENT AND INSTRUCTIONAL MATERIALS

Insert ALL materials here including Assessments and Instructional Materials. Explicitly LIST any additional files for this lesson. Be sure that ALL materials have been submitted for this lesson.

# **PSA Planning Sheet**

Ν	Name:	
T	Target	
Audi	ence:	
Your	Organization:	
Atter	ntion Grabbers:	
Goal	s of your PSA:	

Message:\_\_\_\_\_

**Narration Brainstorm:** Write your narration. It should not be longer then 60 seconds.

**Outline** –This is where you take the Who, What, When, Where, Why, and How and decide HOW you are going to organize them to tell your story. Your story should flow in an uninterrupted progression. Contrast this to a series of short unrelated bits of information. Your story should have an introduction, body of information, and a conclusion. How you present this is called your *Treatment of the Story*. Describe HOW and in what order you plan to tell your story in the script outline below.

## **Story Script Outline**

## **Treatment of the Story**

Au <u>dic</u>		Video
Ι.	Introduction	
II.	Body of Information	
111.	Conclusion	

#### Public Service Announcement Rubric

	5-4	3-2	1	0
Originality/Creativity	The PSA reflects an exceptional degree of student creativity & the use of <b>original ideas</b> <b>and images</b> .	The PSA reflects student creativity & the use of some original ideas and images.	The PSA reflects some creativity, but limited original thinking.	The PSA reflects a lack of significant creativity or original thinking. Unoriginal or inappropriate or topics and images are included.
Audience Appeal	The PSA is attractive to the listener & maintains their interest from beginning to end of the broadcast.	The PSA is catches listener attention early, but wanes before the end of the PSA broadcast.	The PSA has moments of audience appeal, but it is brief.	The PSA has no audience appeal & listeners mostly ignore the broadcast segment.
Script	Written with clarity and appropriate information.	Script written with clarity with few or little gaps.	Script not detailed enough.	Rough outline present, but no detailed script.
Timing	The PSA length is between within 1 second of 30, 45 or 60 seconds Exclusive of credits w/ names at the end.	The PSA is between 1-2 seconds of the requirement.	The PSA is between 2-5 seconds of the requirement.	The PSA is more than 5 seconds off the requirement.
Social Benefit	The ideas shown have an application to the lives of the targeted audience. The PSA is one that will motivate change to improve the targeted audience's community in some meaningful way.	Ideas shown have an application to the targeted audience and are likely to motivate change in a meaningful way.	Ideas shown have little application to the lives of the targeted audience	Ideas shown have no application to the targeted audience.

Tag Line	The message is clear and concise. A single thought or phrase within the PSA summarizes the entire message.	Tag line is evident; there is some continuity and flow.	Tag line is present but is incomplete or weak	No evidence of a tag line
Facts/Statistics	The message is based on factually accurate and verifiable information. Opinion or bias expressed is based in and supported by fact. Source information has been verified and documented in script package and in the credits at the end of PSA.	Message is based on factually accurate information but opinion and bias are not supported by fact. Source information has been verified and documented in script package and in the credits at the end of PSA.	Message is based on factually accurate information but has not been verified or documented.	Message is not based on factually accurate information and there is no documentation.
Sound-Music (if used)	There is no background music used. If there is background music, the sound or voices which clearly enhances the PSA's appeal. The songs are royalty free and documented in the script and in the PSA or are composed by this group.	If there is background sounds, the sounds somewhat enhance the PSA's appeal. The songs do not infringe on copyright laws.	. If there is background sounds, the sounds somewhat enhance the PSA's appeal. The songs may infringe on copyright laws.	There is some background sound; however, it does little to enhance the PSA appeal. The songs infringe on copyright laws.
Credits and Follow- up	Credits and Follow- up information are provided to direct the intended audience to local or national advocacy groups	Credits and Follow up information are provided but is limited.		No Credits or Follow up information is provided or it's inaccurate.



#### STEP 1: Open iMovie

Click the iMovie icon (the star) in the dock

If the iMovie icon is missing

Go to spotlight and type in iMovie. iMovie will be a top hit. Click on it to open it.

Step 2: Go to file and New Project

1. Name your project. Red Wolf PSA followed by the group number we assign you.

#### Step 3: Import video clips

- 1. Click on File on the top menu bar
- 2. Choose Import Movies
- 3. Browse to the location of Movie Files.
- 4. Click on Photobooth.
- 5. Click on your movie.

#### The Big Bad Wolves of North Carolina April Benton and Nancy Rountree

- See illustration below. Click the circle beside Create New Event and name it Red Wolf AIG.
- 7. Select Large Size
- 8. Click Import
- 9. Notice the clip(s) you imported now appear in the Event Viewer in iMovie.

	Save to: Macintosh HD (	429.2GB free)	\$	)
	Add to existing Event:	allen psa	÷	)
₩.	• Create new Event:	Red Wolf AIG		h Marenna -
	Optimize video:	Large - 960x540	*	) st m a m
	Selecting Large significantly	reduces file size with little in	mage quality loss.	
	<ul> <li>Copy files</li> <li>Move files</li> </ul>			
			Cancel	Import

STEP 4: Add clips to the movie – In this step, you will make the clips part of your movie by moving them from the event viewer to the project viewer.

1. Double Click one of the clip in the Event Viewer

Add the clips to the movie

- 1. Drag the clip(s) from the Event Viewer to the Project Viewer
- 2. You are able to drag when your mouse looks like a hand.

## STEP 5: Delete video/trim tracks (Only if you need to delete part of your movie..if not skip to Step 6.)

Delete

- 1. Click on a clip a yellow box will appear
- 2. Adjust the box to select the footage you want to delete

3. Use the delete key to delete the part of the clip INSIDE the box

#### Trim

- 1. Hold Control and click on the clip
- 2. Adjust the box to select the footage you want to delete
- 3. Click Done to trim the part of the clip OUTSIDE the box

## STEP 6: Add Titles – A title is text you add to a movie, such as an opening movie title or ending credits. You can add creative titles to the movie using a variety of styles, fonts, and colors.

Add an opening title to the movie

- 1. Click the Add Titles icon
- Drag the title type you would like and place it on top of the video clip you want to overlay
- 3. You can also drag it before the first clip which will provide a black background for your title
- 4. Click on the blue bar over the clip
- 5. Change the text in the viewer on the right
- 6. Click Done

STEP 7: Add transitions – You can use a transition to smooth the change from one scene to the next. Transitions are often used to indicate the passage of time between two clips.

- 1. Click the Add Transition icon the middle right of the screen
- 2. Select a transition and drag it between two project clips
- 3. A transition icon appears between the clips
- 4. To adjust the duration of the transition, hold Control and click on the transition icon between the clips
- 5. Choose Set Duration
- 6. Enter the time in seconds
- 7. Be sure to select Applies only to selected transitions
- 8. Click OK

Preview the transitions as part of the movie

· Click the Play button in the Project Viewer to see your transitions included

## Step 8: Share your Movie- You can share your movie to add it to our Red Wolf Website and Edmodo Website.

1. In the menu click on Share.

- Click on Export Movie.
   Export as: Red Wolf AIG... See picture below to see where to save and the size to export. 4. Click on Export

	Export As: Red	Wolf AIC	3					
	Where: Movies			*				
		iPod	iPhone	iPad	etv	Computer		
Size to Export:	Mobile			•			480×272	0
	Medium	•	0	•	•	•	640×360	0
	○ Large		0	0	0	0	960×540	0
	OHD 720p		0			0	1280×720	0
	OHD 1080p					0	1920×1080	0
						Can	cel Exp	ort

# Day 4: How can we help?

### LESSON #4: How can we help?

I. DEFINE OBJECTI	VES AND CONTENT
LESSON	The students will be able to create a Public Service
OBJECTIVE	Announcement using iMovie.
POINT TO PONDER	Humans have created the extinction of animals.
ESSENTIAL QUESTION	How can we influence others to protect the Red Wolves?
CONTENT	VIII. How to help
Outline the content you will teach in	A. Learn about red wolves and teach others
this lesson.	1. Education is important to understanding the misunderstood red wolves.
	<ol><li>The more we know, the better equipped we will be to change the attitudes of others.</li></ol>
	B. Get involved by supporting the work of red wolf organizations
	1. Red Wolf Species Survival Plan (SSP): manages red wolves at zoos and nature centers in the U.S.
	2. Red Wolf Coalition (RWC): promotes public involvement in red wolf conservation
	3. U.S. Fish and Wildlife Service (USFWS): their Red Wolf Recovery program monitors the wild red wolf population.
	C. Ask others to support wildlife conservation
	1. Elected officials
	2. Lawmakers
	3. Civic and business organizations
	D. Protect natural areas so there will be wild lands for wildlife
	E. Reduce your carbon footprint to reduce climate change
	F. Hunt responsibly to reduce accidental deaths of red wolves

G. Drive safely: look out for wildlife on or near roads and trails
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II. PLANNING: KNO	W / UNDERSTAND / DO
What 3 items are worth knowing? (Think about the content you have selected. What is important for students to KNOW?)	After the lesson, Students will KNOW why the red wolves are endangered. Students will KNOW that a website can be used to reach millions of people. Students will KNOW that in order to make a difference in the red wolf population they will need to take a stand.
What are the enduring understandings that students should take away from the lesson? (Define the BIG Ideas.)	After the lesson, Students will UNDERSTAND that they can help protect the red wolves by educating others. Students will UNDERSTAND that they can create a website to reach millions of people about their opinions of the red wolf. Students will UNDERSTAND why the red wolves are endangered.
What 3 items are important for students to be able to DO? (Define what students should be able to DO as a result of your lesson.)	After the lesson, Students should be able to work with a partner to create an iMovie. Students should be able to identify ways to protect the red wolves. Students should be able to express their opinions concerning red wolf endangerment through a PSA that will be added to our Red Wolf website.

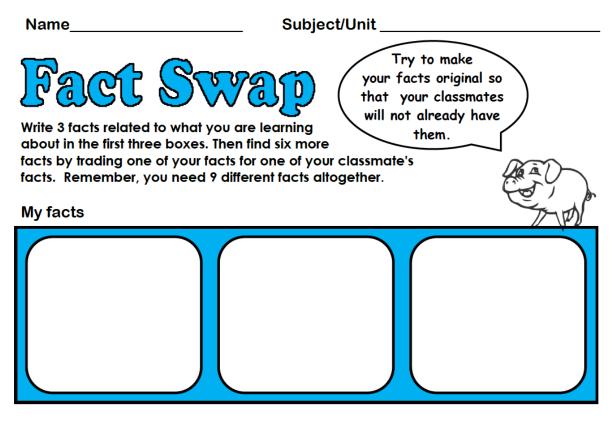
III. PLANNING	
HOOK	TIME: (5 minutes)
Describe how	
you will grab students' attention at the beginning of the lesson. Be CREATIVE.	Fact Trading Activity. Students will receive fact swap activity sheet below. They will write down three facts that they have learned this week. Then they will mingle in the class to collect facts from other students to complete the paper.
INSTRUCTION	TIME: 1 hour 25 minutes
Explain Step- by-step what you will do in this lesson.	1. Introduce the students to ways they can help the red wolves using the Smart Notebook. (5 minutes)
Include ALL support and teaching materials with	2 Discuss with the students that the more knowledge we have about the red wolves the more power we have to help preserve the species.
your unit.	3. Students will finish their iMovies and share them to be placed on the Red Wolf website. (1 hour)
	(4-7 will only be used if time allows)
	4. Brainstorm as a class the information we would like to include on our website to educate the public about the red wolves and how they can help them survive. (5 minutes)
	<ol> <li>Students will be introduced to the basic functions of Weebly.</li> <li>(5 minutes)</li> </ol>
	6. Each student/pairs will be assigned a focus area that they would like to create for the red wolf site ( <u>http://redwolfaig.weebly.com</u> ) that we will be sharing with Kim Wheeler once it is completed. (Focus Area: will be a short article like a blog post.
	7. Using a rubric the students will create their portion of the website.
ASSESSMENT (Performance	TIME: 10 minutes
Task) What will the students DO to	Students will receive an iMovie badge for a score of 35 or higher on the Public Service Announcement Rubric. (45 is a perfect score)

demonstrate that they have mastered the content? Be specific and include actual assessment	Complete last portion of the KWL chart on what they learned during the camp.
with unit materials.	

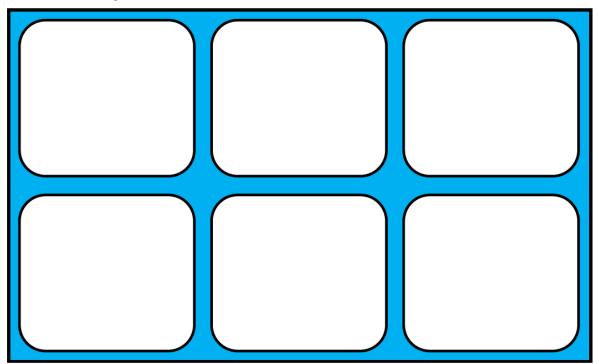
DOES THE ASSESSMENT ALLOW YOU TO DETERMINE WHETHER OR NOT THE STUDENTS HAVE MET YOUR STATED LESSON OBJECTIVE? YES OR NO

#### ASSESSMENT AND INSTRUCTIONAL MATERIALS

Insert ALL materials here including Assessments and Instructional Materials. Explicitly LIST any additional files for this lesson. Be sure that ALL materials have been submitted for this lesson.



#### Facts from my classmates

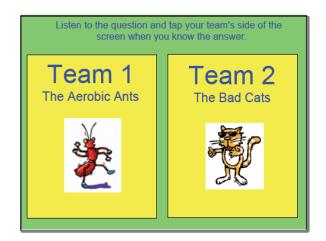


#### The Big Bad Wolves of North Carolina April Benton and Nancy Rountree

#### Game to Introduce ways to help Red Wolves

#### March 17, 2013







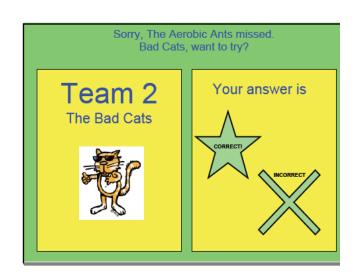


#### Game to Introduce ways to help Red Wolves

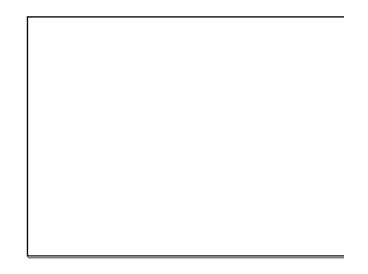
C

#### March 17, 2





Click here if both teams missed the question	What is your score? If your answer was correct roll the die and <u>add</u> the number to your team total. If your answer was incorrect, roll the die and <u>subtract</u> the number from your team total. Tally your score below and then click on the correct question to continue.					
Team 1 The Aerobic Ants		Team 2 The Bad Cats				
Did you add?	Did you subtract?	Did you add?	Did you subtract?			



#### The Big Bad Wolves of North Carolina April Benton and Nancy Rountree

#### Red Wolf Family Feud Lesson

Opening: We have been learning about the red wolves for the past three days.

Today we are going to play a family feud to learn our last concept. Today we are going to be looking at ways we can make changes to help the red wolves.

According to United States Fish and Wildlife Refuge we can help the red wolves by doing the following things: (Discuss these through a <u>Prezi</u> presentation) Learn about red wolves so you can teach others. Visit a place where red wolves live. Join the Red Wolf Coalition. Talk to elected officials Protect natural areas Change your carbon footprint.

Now for the Family Feud part. Based on what we learned this week. we are going to brainstorm ways to educate others that we can put into our website.

Have pairs take turns tapping SmartBoard in Family Feud Game Show Technique (They tap the SmartBoard after being posed the question "How can we educate others?") to add to our list of ways to educate others.

The student who taps the SmartBoard the fastest is able to answer first. A recorder will list ideas on chart paper. We will then break up into groups to create each portion of the website based on what we learned this week about the red wolves.

Prezi Presentation: http://prezi.com/ju69sdv20ld4/how-can-we-helpprezi/?auth\_key=0cad0e401aff79f1a58bff85b76546560738b6ee

## Website Article Rubric Student Name:

CATEGODY	4	2	0	1
CATEGORY	4	3	2	1
Spelling and	Spelling and	Spelling and	Spelling and	There were
Capitalization	capitalization	capitalization	capitalization	many spelling
	were checked by	were checked by	were mostly	and
	another student	another student	correct, but were	capitalization
	and are correct	and were mostly	not checked by	errors.
	throughout.	correct.	another student.	
Content/Facts	Facts were	Facts were	Facts were	Facts were
	accurate for all	accurate for	accurate for most	often
	events reported.	almost all events	$(\sim75\%)$ of the	inaccurate for
	_	reported.	events reported.	events
				reported.
Fonts and	The use of font	The use of font	The use of font	The use of
Colors	styles and colors	styles and colors	styles and colors	font styles
	is consistent and	is consistent and	is consistent, but	and colors is
	shows a logical	shows a logical	is not used	not consistent
	pattern. It helps	pattern for the	effectively to	OR detracts
	organize the	most part. It helps	organize.	from the
	material.	organize the		organization.
		material		
		somewhat.		
Readability	The overall	The overall	The article is	The article is
	appearance of	appearance of the	relatively	difficult to
	the article is	article is	readable.	read.
	pleasing and	somewhat		
	easy to read.	pleasing and easy		
	-	to read.		