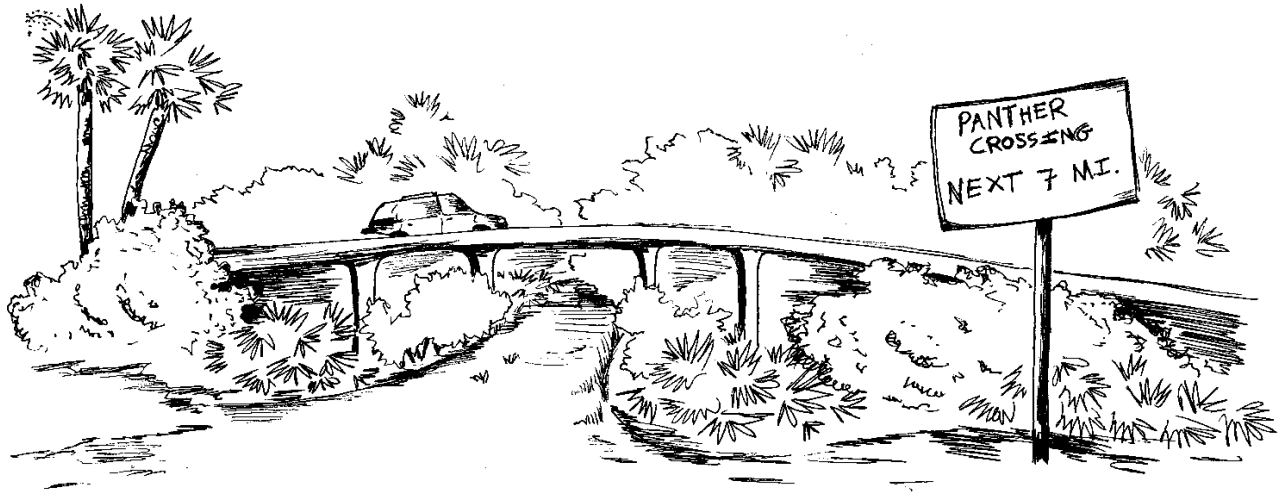




Lesson Eight

Crossing Paths: A Great Debate



Key Question

How do people with different viewpoints come together to make community decisions about wildlife management?

Subjects

Social Studies, Science, Reading/Language Arts

Time Estimate

60-90 Minutes one day

Key Vocabulary

Stakeholders, wildlife crossings, taxpayers, endangered species

Sunshine State Standards

Social Studies

SS.7.E.2.1 Explain how federal, state, and local taxes support the economy as a function of the United States government.

SS.7.C.2.7 Conduct a mock election to demonstrate the voting process and its impact on a school, community, or local level.

SS.7.C.2.13 Examine multiple perspectives on public and current issues.

Science

SC.7.E.6.6 Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.

Reading/Language Arts

LA.7.1.7.3 Determine the main idea or essential message in grade-level or higher texts through inferring, paraphrasing, summarizing, and identifying relevant details.

LA.7.5.2.1 Use effective listening strategies for informal and formal discussions, connecting to and building on the ideas of a previous speaker and respecting the viewpoints of others when identifying bias or faulty logic.



Objectives

In this activity, students will:

1. Read and interpret the viewpoint of a particular stakeholder in the building of a wildlife crossing.
2. Debate the issue from the perspective of a particular stakeholder at a simulated committee meeting.

3. Develop a group consensus based on multiple perspectives.
4. Present their solution to the class at a simulated community meeting.
5. Vote as a class on the final solution to the issue.

Materials

Each student will need:

- Stakeholder Role slip of paper
- Stakeholder Position worksheet

Background

The extensive home range requirements of the Florida panther often mean that individuals cross busy highways in order to find food, shelter, water, or a mate. Panthers usually cross at times of limited visibility (between dusk and dawn), a dangerous and potentially deadly task. Even motorists who follow the speed limits may collide with a panther that jumps out at the last moment.

As a response to this and other road kill problems, the Florida Department of Transportation has built multiple **wildlife crossings** or underpasses in areas where panther crossings are most frequent. The wildlife crossings are extremely successful in preventing accidents and saving animal lives – not only panthers, but bears, deer, and other animals as well. However, these crossings are costly (anywhere from \$2M to \$8M) and involve the installation of miles of fencing on either side of the highway. In order to retrofit existing highways with wildlife crossings, the county must support the decision to use **taxpayer** money for the project.

In this activity, students will play the roles of different **stakeholders** at a community meeting. They will determine whether or not a new wildlife crossing should be constructed at a certain spot on a local highway where panther-vehicle collisions have occurred. As the teacher, you act only as a facilitator. Do not provide opinions or try to persuade the students to see things a certain way. If necessary, remind them of their stakeholder's

views and keep the discussion focused on the problem at hand. The aim of this exercise is for students to see how **endangered species** management is not easy.

Advance Preparation

Prepare copies of the Stakeholder Position worksheet for each student. Print one copy of the Stakeholder Roles and cut them apart to be able to hand 1 role to each student. Determine who will be in each committee and write the committee number on the stakeholder role slip for each student.

Procedure

1. Ask students: How does society affect wildlife management? Discuss the idea that people with different beliefs and values can affect the management of wildlife, especially when dealing with controversial topics that may not have one correct answer. Explain that a stakeholder is any person who has an interest in a particular management decision.
2. Have students read the section titled **The Problem** individually or as a class. Discuss the problem as a class and make sure students understand the conservation history of the Florida panther and the function of the wildlife crossing.
3. Inform the students that they will now be given the opportunity to explore this issue firsthand. Each will be assigned the role of a stakeholder participating in a community meeting. As a group of stakeholders representing different viewpoints, they will need to come to a consensus regarding a specific issue.
4. Hand out **Stakeholder Role** sheets. Inform the students that even though they will be playing fictitious characters, the scene they will be enacting actually happened and will likely happen again.
5. Instruct students to read their roles carefully and answer the first 3 questions on the **Stakeholder Worksheet** to define their position. Have each student briefly

introduce their position to familiarize the class with their viewpoint. Please remind the students that this is just one individual's viewpoint and may not represent all of the people with similar values.

6. Place the students into committees of 5 or 6 students each. Make sure that each committee has at least 1 stakeholder that is pro, neutral and con. You may use the **Committee Assignments** sheet to form the groups.
7. Within their committees, have students discuss the pros and cons of the wildlife underpass, complete the remainder of the questions on the **Stakeholder Worksheet**. Then, the committee must come to a consensus on what to do about the wildlife underpass. They should write down their ideas and prepare to persuade the other committees in favor of their consensus.
8. It is now time to begin the town council meeting. To begin the meeting, test the student's knowledge of the issue by asking them to explain why the problem exists. Then, each committee will select a speaker in their group to present the committee's recommendation to the class.
9. After all committees have presented, hold a class vote on the situation. Discuss the outcome – were students surprised? Do they agree personally? How would the real-life situation be different?

The Florida panther once lived all over the Southeastern United States. In 1500, scientists estimate that there were 1,360 panthers living in Florida. The European settlers were afraid of the large cats and killed them whenever they encountered them. As more and more European settlers came to Florida, the number of panthers began to drop.

In the 1880's, the United States government believed that the country would be safer for people and livestock if large predators like panthers and wolves were eliminated. They allowed states to offer bounties, or money for killing the large predators. In 1887, Florida began paying \$5.00 for each panther scalp. Because of this, panthers were very scarce around human settlements and were pushed down into the swamps of South Florida. As the human population of Florida continued to grow, more roads were built and more cities and neighborhoods sprang up. This pushed the remaining Florida panthers into smaller and smaller areas of remaining wild lands. In 1958, there were so few panthers remaining in the state that Florida listed them as endangered. Hunting of panthers was no longer allowed.

In 1967, the U.S. government listed the Florida panther as an endangered species. By 1971, panthers were believed to be extinct in Florida. In 1973, a cougar hunter from Texas tracked and treed one panther in Glades County. The same year, Congress passed the Endangered Species Act, which gave the U.S. Fish and Wildlife Service the authority to help the panther recover. By 1976, and their survival was viewed as unlikely.

In the 1980's, more people began to see the Florida panther as an important piece of the environment. A Recovery Plan was developed in 1981 to help the many parks and refuges in Southwest Florida work together to help the panther survive. In 1982, students voted to name the Florida panther the official state animal of Florida. In 1984, Florida's Department of Transportation changed the speed limits on Alligator Alley and Highway 29 to 45 miles per hour at night to help prevent road kills.

In the early 1990s an estimated less than 30 panthers roamed in the swamps of South Florida. Florida panther numbers began to recover after 8 female Texas cougars were released in 1995 into South Florida to breed. They were later removed, but greatly helped the genetic diversity of panthers. As of 2020 there were an estimated 120-230 panthers in South Florida, a population still too small to sustain itself without human intervention.

The panther has become a symbol of wild Florida and many people and agencies are working hard to help the population survive. With more people and more panthers living in close proximity to each other, panther deaths by vehicles are on the rise. In 2016 alone, a record 32 panthers were killed by vehicles. As a response to road kill issues with panthers and other animals, the Florida Department of Transportation has built multiple wildlife crossings or underpasses in areas where panthers cross frequently. They have been tremendously successful in preventing accidents and saving the lives of many animals like deer and bears. However, these crossings are costly (from \$2 to \$8 million dollars) and involved the installation of miles of fencing on either side of the highway. When Alligator Alley was widened to four lanes, 23 wildlife crossings were built. Wildlife crossings have also been installed along highway 29 and other areas around the state.

The Florida Department of Transportation has also considered building a wildlife crossing along the Tamiami Trail in the Big Cypress National Preserve where many panther deaths have occurred over the years (5 in just 7 years). In order to construct these crossings, the county will have to support the decision to use taxpayer money for the project.

1. Animal Rights Activist

PRO

Wildlife does not have the ability to speak up for itself. However, through the data collected by wildlife biologists, we can see that an important wildlife pathway runs directly across the highway at this location. The Florida panther was here using these pathways for centuries before we came and constructed roads, houses, and other buildings in their home. If we do not do something to help these animals in their struggle for survival, we will continue to lose panthers and other animals to vehicle collisions. Do not ignore their needs simply because they don't have a voice!

2. Outdoor Recreationist

PRO

Early one morning last year, I was driving down this stretch of road on my way to hike some trails in the area. I saw a beautiful female panther and her kitten in a field not far from the road. Later, after I had finished my hike, I returned back by this same stretch of road and witnessed the mother lying in a ditch. She had been hit by a vehicle and killed. Without its mother, the kitten most certainly died shortly thereafter. People explore this part of Florida because of its natural beauty and "wildness". Nowhere else in the state (or any of the eastern states, for that matter) can you be lucky enough to have the wildlife sighting that I experienced. This is a treasure that we should protect and preserve as much as possible.

3. Florida Fish and Wildlife Conservation Commission Employee

PRO

It is the responsibility of the Florida Fish and Wildlife Conservation Commission (FWC) to protect endangered species of Florida, like the Florida panther. It is because of human actions that the panther is now endangered. We believe that the addition of a wildlife underpass is necessary in order to protect the panther. Too many breeding age females and sub-adults have already been lost to vehicle collisions along this stretch of road (5 in the 7 years). Radio telemetry data shows us that this is an important corridor for panthers – at least two adult cats cross the road here regularly.

4. National Wildlife Organization

PRO

With only about 120-230 individuals remaining as of May 2020, the Florida panther is among the most endangered species in the world. The panther is an important piece to the ecological balance of Southwest Florida. People from all over the world are watching Southwest Florida to learn about protecting an endangered species while allowing for human development. You have the opportunity to be a model community for endangered species protection! We need to do everything in our power to help the panthers survive.

5. Wildlife Biologist

PRO

As a biologist, I take radio telemetry data every other day from an airplane to document the location, movements, and habitat utilization of multiple panthers within the area. It is my scientific observation that this particular location along the highway is a heavily-traveled wildlife passageway to habitats on the other side of the road. Because of the change in elevation and water flow, different sides of the road offer different habitats for the panthers, so they will continue to cross at this location. The area also provides excellent hunting opportunities for the cats, so there are multiple breeding-age females who traverse this area frequently. A wildlife underpass at this location is essential! Without the underpass, panthers and motorists will both be at risk.

6. Insurance Agent

PRO

Based on a study conducted in 2007 by the U.S. Department of Transportation, an estimated 1 million to 2 million large animals are struck by vehicles each year in the United States. This results in millions of dollars of damage to vehicles and injuries to people. In Southwest Florida, collisions with panthers, bears, deer, alligators, and other large animals have been increasing. In order to keep drivers' insurance premiums at a reasonable rate, we need to minimize roadway collisions with wildlife. The proposed wildlife underpass would eliminate nearly all animal-vehicle collisions along this stretch of road, keeping the highway safer for all travelers.

7. Truck Driver

PRO

I drive this stretch of road many times each week to make my deliveries all over south Florida. Usually, I am driving this portion of the highway either early in the morning or early evening, when light is minimal, and very few other drivers are on the road. The current speed limit for this area is 45 mph at night. This slows my progress and requires me to work longer hours. With a wildlife underpass at this location, I would be able to make better time in my deliveries and be able to drive without concern about hitting an animal. An accident with an animal as large as a panther would most certainly damage my truck, and I don't make money if I don't have my truck!

8. County Law Enforcement

PRO

This stretch of the highway has been a trouble zone for some time now. We often must respond to vehicle-wildlife collisions as well as single-vehicle accidents resulting from motorists swerving to avoid wildlife. Sometimes, this even requires the shut-down of the entire highway for hours at a time. In addition, this stretch of road is not as heavily-patrolled by our officers as other areas because it is so remote. The 45mph speed

limit for nighttime travel is rarely observed. With the addition of a wildlife underpass at this location, we would certainly see fewer wildlife-related accidents. This is the safest option for travelers along this highway.

9. School Teacher

PRO

I am a middle school science teacher in a nearby community. I have been living and teaching here for nearly 30 years. Back in 1982, my students at that time contributed to the election which designated the Florida panther as the state mammal of Florida. Since that time, I have focused many of my lessons on the Florida panther and its struggles for survival. I have an updated log of all panther-related news in my classroom for my students. I have seen an unnerving pattern of panther fatalities at this particular location. My students ask me why no-one has done anything to change this pattern, and I have no good answer for them.

10. Business Owner #1

UNDECIDED

I am still undecided about this wildlife underpass issue. My concern is that with the proposed fencing in place, potential customers would have a difficult time accessing my business. In other local areas where the fences have been constructed, a gate is often required to allow for human access while preventing wildlife from escaping. I do NOT want a gate in front of my business! While I dislike hearing about all the panthers that have been killed in this area, my business is my livelihood. Even a small drop in customers would greatly affect my family's quality of life. I wouldn't be opposed if I could be guaranteed that the fencing would run behind my business and not block my signage. I do not want any responsibility for maintaining the fence. I also don't want workers on my property repairing the fence without first scheduling the repairs with me.

11. News Media

UNDECIDED

It is obvious that the struggle of the Florida panther is something very important to the people of southwest Florida. Each year, we receive more and more reports of panthers finding their way into neighborhoods and crossing major highways. While it is our job to report on situations that may be dangerous to our audience, we also must remain unbiased as to the possible solutions. Whatever the people of Southwest Florida decide, we will report.

12. Landowner #1

UNDECIDED

My property is located near the proposed site, but would not be affected by the fencing. On the one hand, I believe that this dangerous stretch of road is a hazard for people coming to visit my family and should be made safer. On the other hand, my fear is that without the lower speed zone, more and more large semi-trailers

would use this route. It is already dangerous to turn on to and off of the highway from my property. Accidents have been known to shut down the road completely. As this is the only road that I have access to, I have been stranded on my property for hours at a time waiting for them to investigate and clear wrecks. I just want the safest option.

13. Hunter #1

UNDECIDED

I often hunt with my sons in the area near the proposed wildlife underpass. It is a beautiful area which represents the closest thing to “native Florida” that you will find anywhere in the state. I wish that the government would just leave it alone. Though I would love to see this highway demolished altogether, I understand that that is not an option. Instead, I’d like to see that the highway remains as natural-looking as possible without hurting the wildlife populations around it.

14. Federal Government

UNDECIDED

I hesitate to support any decision about the proposed wildlife underpass at this time. It is not the role of the federal government to manage wildlife in the states. In this circumstance, it is the role of Florida Fish and Wildlife Conservation Commission (FWC) to protect the Florida panther. While the Endangered Species Act does provide some protection for the panther, roadway concerns are still best handled by state agencies. The FWC has a greater understanding of the biology, patterns, needs, and problems of the Florida panther because they are here studying it. That being said, if the decisions made here do not follow the requirements of the Endangered Species Act, we will be forced to intervene.

15. Rancher

UNDECIDED

I own a small ranch near the proposed wildlife underpass site where I raise goats and sheep. Recently, more and more of my livestock have fallen prey to panthers and other large predators. I am tired of buying them dinner! If the government is able to put in miles of fencing to protect the panthers, I believe that they should also be able to offer me fencing to protect my animals. If they decide to construct the wildlife underpass but do not help me with my fencing needs, I am sure that depredation incidents will increase on my property because it will be easier to get to.

16. Farmer**UNDECIDED**

I am a local farmer who utilizes the referenced stretch of roadway to transport my produce to farmer's markets around south Florida. I am undecided about whether or not to support the proposed wildlife underpass. I know that panthers are an important piece of the ecology of this area. Years ago, when there were fewer panthers, my crops would often be grazed upon by deer. Lately, there doesn't seem to be as many deer looking for food, so I've had better crop production. I am concerned, however, about the cost of the project. Where will all this money come from?

17. Parent #1**UNDECIDED**

I raise my three young children at our home just north of the proposed wildlife underpass. While I have never seen a panther myself, I am concerned for the safety of my children around wild animals. My fear is that the underpass would encourage MORE wildlife to visit my yard and increase the chances of one of my children being attacked. On the other hand, I am also concerned about the safety of my children in the car when I'm driving this stretch of road. It would be terrible to hit a panther! I need to learn more about the issue before I will be ready to voice my opinion.

18. Eco-tour Operator**UNDECIDED**

I own a small eco-tourism business which offers canoe and kayak trips throughout the area. The natural resources and wildlife viewing offered here in Southwest Florida is what drew me to this location in the first place. I think it is very important to try to preserve as much of it as possible. However, I am concerned that the proposed fencing would cut off my access to the waterways. Without access, I have no business!

19. Business Owner #2**CON**

I have owned and operated a small business in the area for close to 25 years. I have witnessed a lot of change in Southwest Florida over that time, and it isn't always good. Panthers have become a nuisance around my property – killing my hobby livestock and even a pet. I don't believe that there are as few left as some scientists say. It seems to me that we have more panthers than the area can support. Why spend millions of dollars to protect something that shouldn't even be on the Endangered Species List?

20. Indian Tribe Member #1**CON**

My tribe has been living on the land south of the referenced road for over a hundred years. Decades ago, this portion of the Everglades was granted to us as a reservation. We love the land and want to see it remain as undisturbed as possible. In recent years, Southwest Florida has grown exponentially, and development has destroyed much of the natural beauty here. People have tried to conquer nature rather than to live within her limits. This road is just another example. The construction of a wildlife underpass requires miles of unsightly fencing through our reserve. This is our land and we don't want to see it cluttered up until it looks like everywhere else in Florida. Other measures need to be taken to limit panther deaths in the area instead.

21. Hunter #2**CON**

I have been hunting in this area for many years and have seen a lot of changes lately. For twenty years I never once saw a panther here; now I've seen two in the last year. Along with the increase in panthers, I have seen fewer deer. If we continue to give the panther right-of-way, soon it will be illegal to hunt deer because they are the panther's main food source. Also, I like to enter the hunting grounds at a location that would be fenced off by the proposed project. Without access, I would have to walk miles extra in order to get to my hunting grounds.

22. Taxpayer**CON**

There are so many problems facing Southwest Florida right now, the last thing we need is to be spending taxpayer money to protect a couple of big cats down in the Everglades. There are several intersections here in town that have far more accidents than the site for the proposed wildlife underpass. Why don't we focus on keeping people safe first? If the animal activists want the underpass, make them find the money for it.

23. Recreational Fisherman**CON**

I spend every free minute I have fishing. I love to park my truck on the wide shoulder and fish directly in the canal that parallels the road. Sometimes I bring my catch back home for my family, but oftentimes I just fish catch-and-release style for relaxation. If the wildlife underpass is constructed, my access to the canal will be fenced off. I have just as much right to this space as anyone – and certainly more than a panther should!

24. Landowner #2**CON**

Part of the fencing related to the proposed wildlife underpass would cross right through my front lawn. Not only is it ugly and unwelcoming to look at, but it would require a gate in order for me to enter my driveway. As we all know, the weather in south Florida can be quite dangerous at times and opening a tall metal gate is not the safest activity in a thunderstorm. Why is my safety less important than the panthers'?

25. ORV Recreationist**CON**

My family has been in this area for generations. We know this land and love to take our off-road vehicles out to enjoy the landscape. The location for the proposed wildlife underpass and associated fencing is a favorite location of ours to explore. Not only would our access to the area be cut off by the fence, but we are afraid that this is just another step towards taking away our right to go off-road vehicle riding in the area. We believe that the interests of people should be considered before those of animals.

26. Parent #2**CON**

As a parent of two school-aged children, I would rather see this money go to construction projects that will make the roads in town safer. Very few people in town use the section of road in question. It's mostly tourists that travel that highway. In town, however, there are many streets that don't even have a shoulder, let alone a bike lane or sidewalk. I worry about the safety of my children when they are outside playing in the neighborhood. I think our tax money should be used for projects that will benefit the majority of taxpayers, not a few cats out in the swamp.

27. Indian Tribe Member #2**CON**

My tribe has been living on the land south of the referenced road for over a hundred years. Decades ago, this portion of the Everglades was granted to us as a reservation. We love the land and want to see it remain as undisturbed as possible. In recent years, Southwest Florida has grown exponentially and development has destroyed much of the natural beauty here. People have tried to conquer nature rather than to live within her limits. This road is just another example. The construction of a wildlife underpass requires miles of unsightly fencing through our reserve. This is our land and we don't want to see it cluttered up until it looks like everywhere else in Florida. Other measures need to be taken to limit panther deaths in the area instead.

Crossing Paths – A Great Debate

Committee Assignments

Committee 1:

Animal Rights Activist (pro)

Business Owner #1 (undecided)

Business Owner #2 (con)

Insurance Agent (pro)

News Media (undecided)

Indian Tribe Member #1 (con)

Committee 2:

Outdoor Recreationist (pro)

Landowner #1 (undecided)

ORV Recreationist (con)

Truck Driver (pro)

Farmer (undecided)

Parent #2 (con)

Committee 3:

Fish and Wildlife Employee (pro)

Hunter #1 (undecided)

Landowner #2 (con)

County Law Enforcement (pro)

Taxpayer (con)

Committee 4:

National Wildlife Organization (pro)

Parent #1 (undecided)

Indian Tribe Member #2 (con)

Federal Government (undecided)

Hunter #2 (con)

Committee 5:

Wildlife Biologist (pro)

Rancher (undecided)

Recreational Fisherman (con)

School Teacher (pro)

Eco-tour Operator (undecided)

Your Name: _____ Stakeholder: _____



Directions: Answer the following questions about your stakeholder role. Remember, you must answer the questions in the role that you have been assigned. As a result, some of the answers may not align with your personal opinions. Put yourself in this person's shoes.

Your Position

1. Do you think that the proposed wildlife underpass should be built? _____

2. Why do you care whether or not there is a wildlife underpass built on this road? _____

3. What is your biggest concern about this issue? _____

Preparing for the Community Meeting

4. What other stakeholders might *agree* with your position? Why? _____

5. What other stakeholders might *disagree* with your position? Why? _____

6. Which stakeholders have not taken a definite stand on this issue? _____

7. How will you attempt to *change the position* of those who disagree with you or are undecided?
