

Learning Guide



Black-Footed Ferrets

We hope you enjoyed learning all about adorable and endangered black-footed ferrets. Extend your learning with this print-ready Learning Guide!



What's in this Learning Guide?

Get Set to Listen

Answer TRUE or FALSE statements before and after listening to the episode.

Vocabulary

Discussion Questions

CCSS.ELA-Literacy.SL.3-8.1, SL.3-8.3

Writing Prompts

CCSS.ELA-Literacy.W.3-8.1, W.3-8.2, W.3-8.3, W.3-8.4, W.3-8.7, W.3-8.8

Black-Footed Ferret Diagram

CCSS.ELA-LITERACY.SL.3-5.2, W.3-5.8; NGSS: 3-LS4-3

Compare Types of Ferrets

CCSS.ELA-LITERACY.RI.3-5.9, W.3-5.8, SL.3-5.2, SL.3-5.5

Create a Prairie Habitat

CCSS.ELA-LITERACY.SL.3-5.2, SL.3-5.5; NGSS: 5-LS2-1, 3-LS4-3; VA:Cr2.1

Burrow Survival Challenge

CCSS.ELA-Literacy.RI.3.3-5.3, W.3-5.2, W.3-5.8, SL.3-5.2; NGSS: 3-LS4-3, 5-LS2-1

Genetic Diversity Activity

CCSS.ELA-Literacy.RI.3.3-8.3, RI.3-8.9, SL.3-8.2, W.3-8.9; NGSS: 3-LS4-2, 3-LS4-3, 3-LS4-4, MS-LS3-1, MS-LS3-2, MS-LS4-4, MS-LS4-6

Conservation Scientist Investigation

*CCSS.ELA-Literacy.SL.3-8.2, W.3-8.7;
NGSS: MS-LS2-5, 3-LS4-4*

Additional Resources & Book List



The Children's Hour
kids public radio

© 2026 The Children's Hour radio show podcast
<https://www.childrenshour.org/black-footed-ferret/>



Get Set to Listen

1. Before listening!

Read each statement and write TRUE or FALSE based on what you already know.



2. After listening!

Based on what the experts said in the episode, write TRUE or FALSE.



Before Listening	TRUE or FALSE?	After Listening
	1. Black-footed ferrets are one of the most critically endangered mammals in North America.	
	2. Black-footed ferrets are active mainly during the day.	
	3. Black-footed ferrets are solitary animals, which means they live alone.	
	4. Black-footed ferrets primarily eat prairie dogs.	
	5. Black-footed ferrets hibernate during winter.	
	6. Black-footed ferrets were once thought to be extinct.	
	7. Scientists intentionally domesticate black-footed ferrets for life as pets.	

What did you learn?



Get Set to Listen

Answer key

1. TRUE
2. FALSE. They are mainly nocturnal.
3. TRUE
4. TRUE
5. FALSE. They remain active year-round.
6. TRUE
7. FALSE. They want them to keep behaviors needed to survive in the wild.



Vocabulary

Listening for Words

1. Make a four-column chart and label the columns “I don’t know,” “I’ve seen or heard, but don’t know the meaning,” “I think I know the meaning,” and “I know the meaning.”
2. Write the vocabulary word in the column that describes how well you know the meaning of the word.
3. Listen to [the episode](#). Note how the speaker uses the words.

Matching Words with Definitions

1. Print and cut apart the word and definition cards.
2. Spread out the word cards so you can see them all. One by one, attach a definition card to each word card.

Writing with New Words

After working with the words and definitions, write a one-page essay or story that uses at least three of the words.

extinct

When a species no longer exists anywhere on Earth.

endangered

At risk of disappearing or becoming extinct.



Vocabulary

nocturnal

Active mostly during the night.

solitary

Living alone.

ecosystem

A community of living things and their environment working together.

population

The number of members of a species living in an area.



Vocabulary

conservation

The protection and careful management of animals, plants, and natural resources.

reintroduction

Returning a species to an area where it once lived.

genetic diversity

The variety of genes found within a population.

clone

An organism that is genetically very similar or nearly identical to another organism from which it was created.



Vocabulary

trait

A specific characteristic or quality that sets a person, animal, or thing apart from others.

genetic carrier

An individual who carries a particular trait but does not outwardly show it. They can still pass the trait on to their offspring.

inherit

Receiving physical traits, like eye color or size, from your parents through your genes.

offspring

The children of a person or the young of an animal or plant.



Discussion Questions

1. What do you think would happen if prairie dogs disappeared from the prairie?
2. Why do you think black-footed ferrets became endangered?
3. Why do you think scientists do not want to domesticate black-footed ferrets?
4. Why do you think black-footed ferrets are active at night?
5. Which fact about black-footed ferrets from the episode surprised you the most? Why?
6. What does the story of the black-footed ferret teach us about protecting wildlife?
7. How is the ecosystem like a puzzle?

Group Discussion Strategies

Think Pair Share:

1. Individually, student writes down their answer to a question.
2. Students pair up and tell each other their answers.
3. Teacher calls for volunteers to share with the whole class their answer (and/or their partner's answer). Teacher notes key words/phrases on board.

Round Robin:

1. Teacher poses one question (written on top of a large page) to students, who are assembled into small groups of 3 or 4.
2. Students take turns brainstorming the answers. The recorder of the group writes down all answers.
3. The leader reads the group's ideas to the entire class. Teacher moderates.



Writing Prompts

Narrative Prompts

1. Imagine you are a black-footed ferret living on the prairie. Describe your day, including where you live, what you eat, and how you stay safe.
2. Write a story from the point of view of Shep, the ranch dog who helped rediscover the black-footed ferret. What did you see, hear, and do?
3. Imagine you are a young black-footed ferret being released into the wild. Describe your journey and the challenges you face.

Informational/Expository Prompts

1. What makes the black-footed ferret an important animal to the prairie ecosystem? What do you think would happen if prairie dogs disappeared from the prairie? What if black-footed ferrets disappeared?
2. Why is genetic diversity important for endangered animals?
3. Explain the different conservation methods scientists use, including breeding programs, artificial insemination, reintroduction, and cloning.
4. How are animals, plants, and people connected in an ecosystem?
5. Explain how black-footed ferrets find food, use prairie dog burrows, and protect themselves from predators.

Opinion/Persuasive Prompts

1. Do you think cloning is a good way to help endangered species? State your opinion and support it with reasons and evidence.
2. Convince your readers that people should take action to protect endangered species.
3. Why is it important to protect animals even if they are not common or familiar to people?
4. Do you think zoos should participate in breeding and conservation programs? Explain your position.



Black-Footed Ferret Diagram

Listen

- [Part 1: What Is a Ferret and Why Are They Endangered?](#)
 - [segments \(8:39-14:38\) + \(17:07-17:48\)](#)
- [Part 2: Breeding Black-Footed Ferrets for the Wild](#)
 - [segment \(25:00-31:42\)](#)

Read

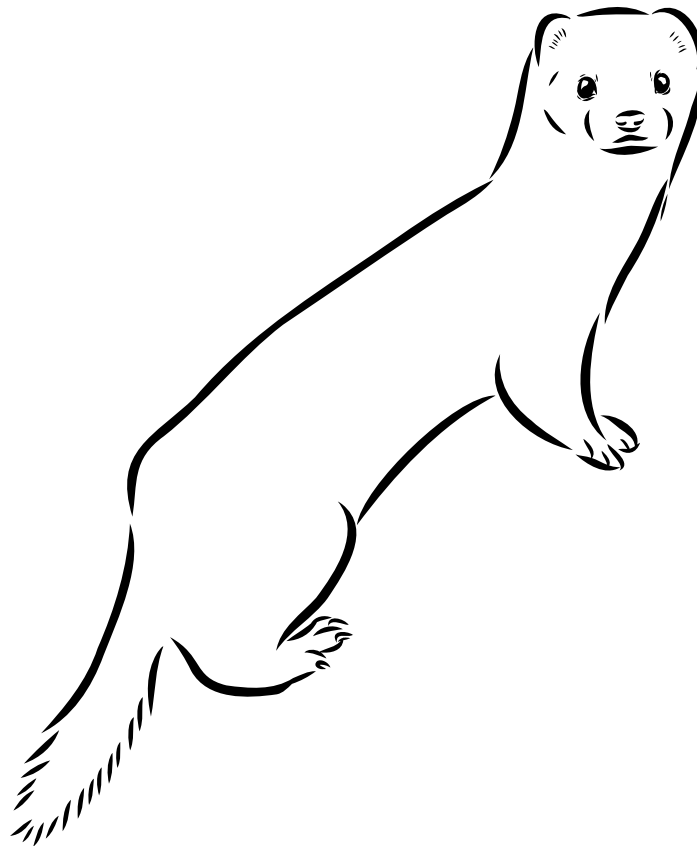
- [Black-Footed Ferret Facts for Kids](#)
- [Britannica Kids: Ferret](#)

Diagram

Draw and label a black-footed ferret.

Include labels and descriptions for:

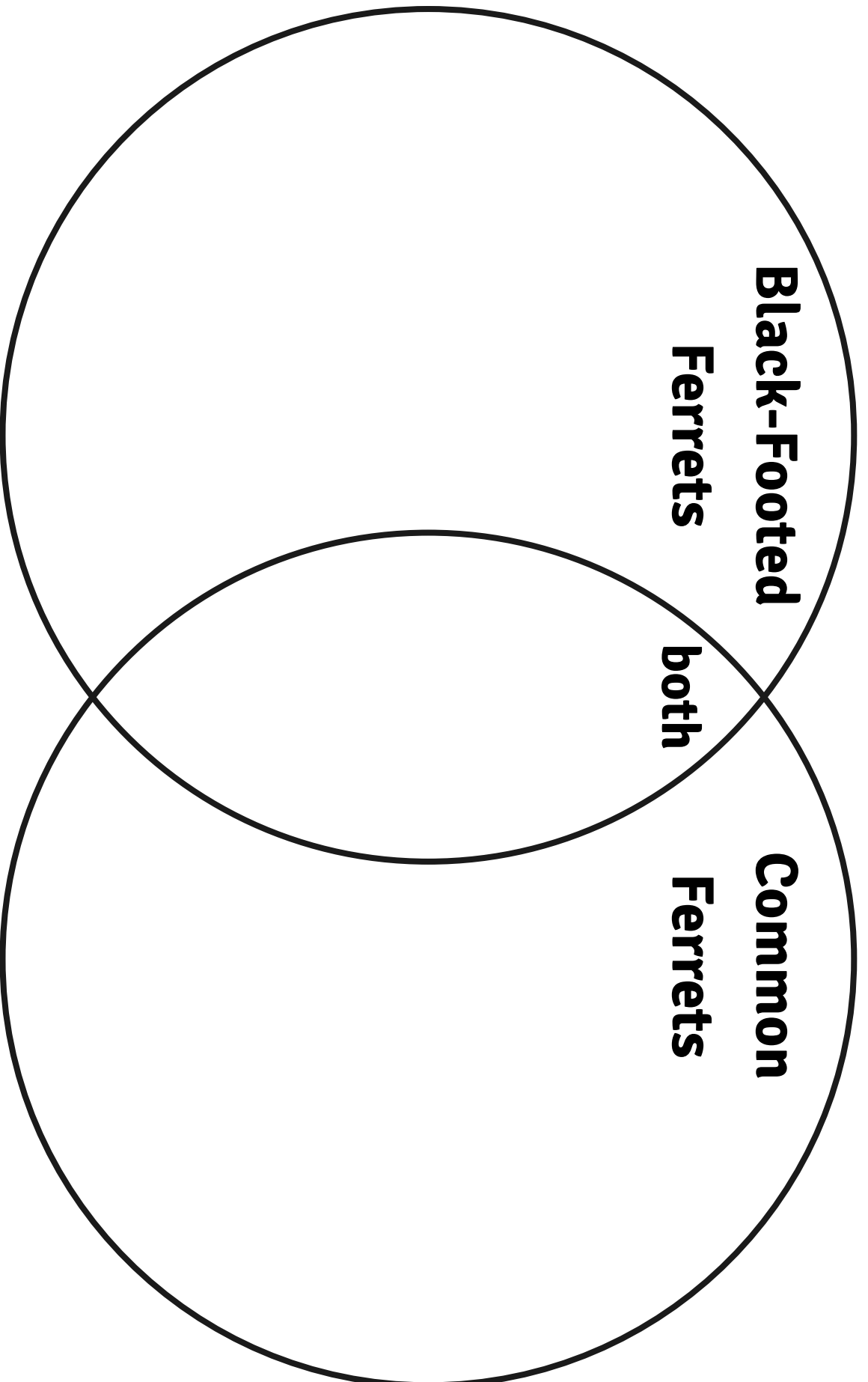
- Black feet
- Fur
- Long, flexible body
- Eyes, ears, nose, teeth, and whiskers
- A prairie dog burrow





Compare Types of Ferrets

Name _____



Learn

- Read about the similarities and differences between black-footed and common ferrets in [this Britannica Kids: Ferret encyclopedia entry](#).
- Listen to [Part 1: What Is a Ferret and Why Are They Endangered?](#)
 - [segments \(8:39-14:38\) + \(17:07-17:48\)](#)
- Listen to [Part 2: Breeding Black-Footed Ferrets for the Wild](#)
 - [segment \(25:00-31:42\)](#)



Create a Prairie Habitat

Listen

- [Part 1: What Is a Ferret and Why Are They Endangered?](#)
 - [segments \(8:39-14:38\) + \(17:07-17:48\)](#)
- [Part 2: Breeding Black-Footed Ferrets for the Wild](#)
 - [segment \(25:00-31:42\)](#)

Your Mission

Create a paper model or diorama of a prairie habitat. Your project should show plants, animals, water, and other parts of the prairie ecosystem.

Your model should help someone understand how everything in a prairie is connected.

Materials

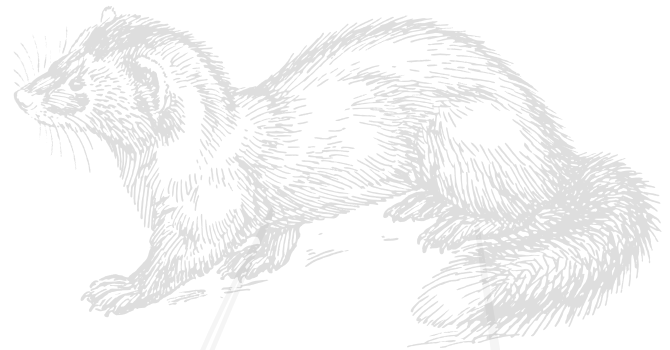
You can use whatever materials you have available. Some ideas are:

- Shoebox or small cardboard box
- Construction paper
- Cardboard
- Glue or tape
- Scissors
- Crayons, colored pencils, or markers
- Cotton balls
- Craft sticks
- Clay or modeling dough
- Small rocks, twigs, or leaves
- Yarn or string
- Recycled materials

What to Include

Make sure your prairie model includes:

- Prairie dogs
- Black-footed ferrets
- Prairie grasses
- Other plants, such as wildflowers and shrubs
- Predators, such as hawks, coyotes, or foxes
- Water, such as a pond, stream, or puddle
- Other prairie animals, such as bison, rabbits, snakes, insects, and birds
- Sunlight
- Soil



Discuss

How is each part of the ecosystem connected?

What role do plants play? Predators?

How do water, sunlight, soil, and other nonliving factors support the ecosystem?



Burrow Survival Challenge

Listen



- [Part 2: Breeding Black-Footed Ferrets for the Wild](#)
 - [segment \(25:00-31:42\)](#)
- [Part 3: How Scientists Are Bringing Back Black-Footed Ferrets & How You Can Help](#)
 - [segments \(35:24-39:51\) + \(44:45-47:45\)](#)

Prairie dog burrows are important homes and shelters for black-footed ferrets. Ferrets use these underground tunnels for protection, resting, raising young, and accessing their main prey—prairie dogs. This shows how closely connected prairie dogs and black-footed ferrets are in the prairie ecosystem.

Materials

- “Burrow Survival Challenge” maze worksheet in this Learning Guide.

Discuss & Write

1. Why do black-footed ferrets use prairie dog burrows? _____

2. How does a burrow protect a ferret from predators? _____

3. How can burrows provide shelter from hot and cold weather? _____

4. Where can ferrets find food in or around the burrows? _____

5. What might happen to black-footed ferrets if prairie dog burrows disappeared? _____

Challenge

Design your own prairie dog burrow maze. Add dead ends, multiple tunnels, food locations, and predator zones. Then trade mazes with a partner and see if they can safely guide their ferret through!

Act It Out

Turn an entire room into an interactive Burrow Survival Challenge! Label areas and/or draw predators and prey to avoid or find.

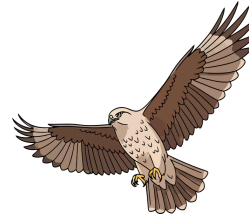


Burrow Survival Challenge

Your Mission

Help this black-footed ferret use the prairie dog tunnels to avoid their predators and safely find its food (prairie dogs).

black-footed ferret

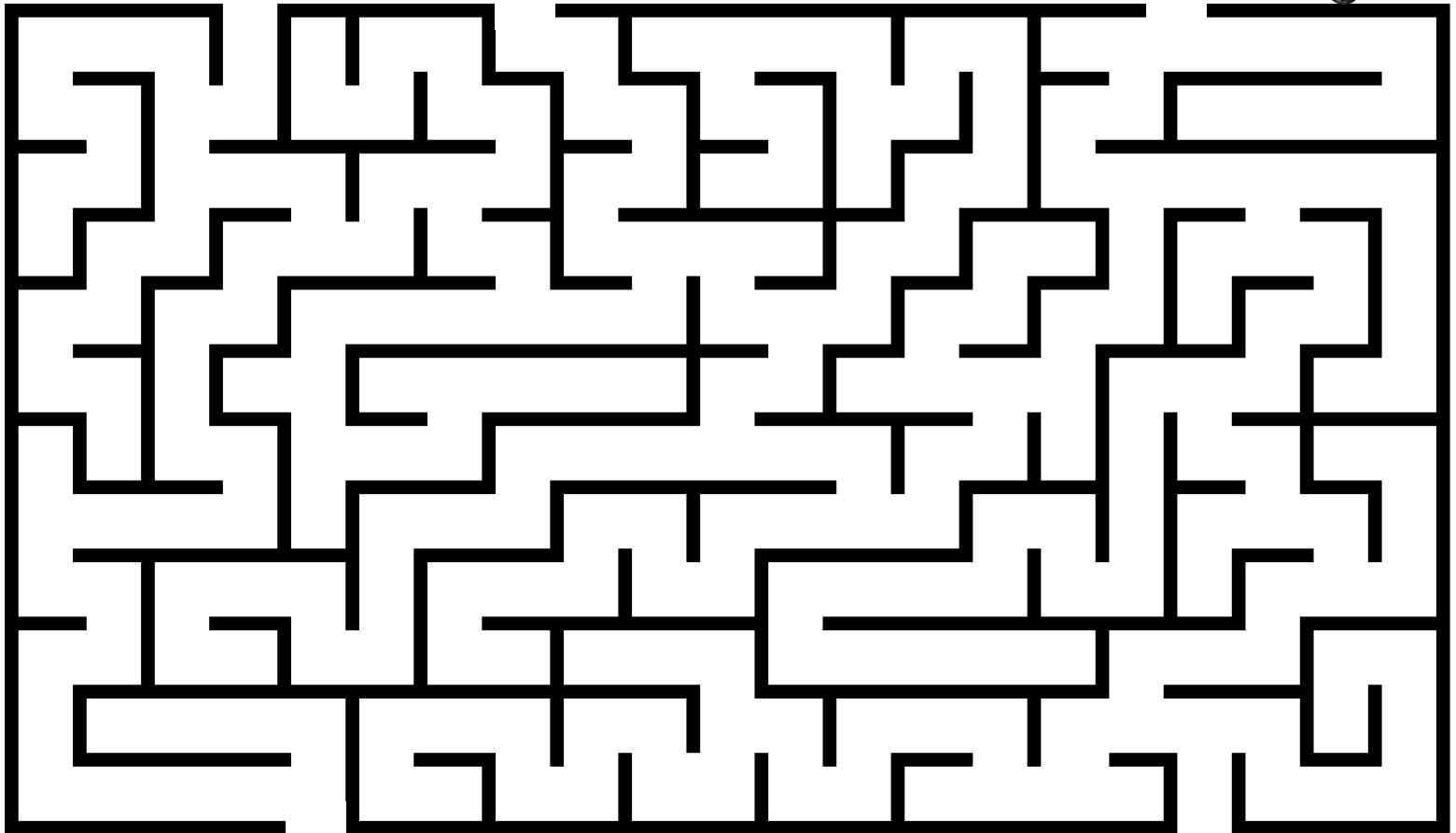


hawk (predator)

prairie dog (prey)



badger (predator)



prairie dog (prey)

coyote (predator)





Genetic Diversity Activity

Listen

- [Part 2: Breeding Black-Footed Ferrets for the Wild](#)
 - [segment \(25:00-31:42\)](#)
- [Part 3: How Scientists Are Bringing Back Black-Footed Ferrets & How You Can Help](#)
 - [segments \(35:24-39:51\) + \(44:45-47:45\)](#)

Genetic diversity can help a population survive changes in its environment.

Preparation

- Print enough copies of the “**Trait Cards**” so that each person or group has 3.
- Cut the “**Trait Cards**” so they can be arranged in different combinations by participants.
- *Optional: pictures of different black-footed ferrets to demonstrate genetic diversity.*

Directions

1. Get 3 sets of “**Trait Cards**”. Cut them out if they aren’t already.
2. Choose 8 *unique traits* to combine to create several imaginary black-footed ferret families.
3. Give each family a name and record the traits they have.
4. Now imagine that members of “Family 1” breed with members of “Family 2”.
Choose some traits from each family, but *choose only 8 traits total* to represent the traits inherited by the offspring.
5. Compare the traits of the original ferret families with those of their offspring. Reflect on genetic diversity and the impact of lost traits.

See **Example** page.

Note: A healthy population usually has many different versions of genes, creating differences among individuals.





Genetic Diversity Activity

Example

Family 1

Extra long teeth	Smaller ears
Better at seeing in the dark	White nose
Longer, more sensitive whiskers	Easily frightened
All black fur	20 percent smaller body

Family 2

Extra long teeth	Smaller ears
20 percent bigger body	White nose
Longer, more sensitive whiskers	Deaf
More attentive mother	Faster growing, stronger claws



Offspring of Family 1 & Family 2

Extra long teeth	Smaller ears
Better at seeing in the dark	White nose
Longer, more sensitive whiskers	Easily frightened
More attentive mother	20 percent smaller body



Note: Any traits that *were present* in the original 2 families but *are not present* in the offspring are considered lost traits.

Now it's your turn!

Use the blank “**Genetic Diversity Activity**” worksheet and the “**Trait Cards**” to create your own imaginary black-footed ferret families and reflect on the importance of ***genetic diversity***.



Genetic Diversity Activity

Directions

1. Choose *8 unique traits* from the “**Trait Cards**” to combine to create several imaginary black-footed ferret families.
2. Give each family a name and record the traits they have.
3. Now imagine that members of “Family 1” breed with members of “Family 2”.
Choose some traits from each family, but *choose only 8 traits total* to represent the traits inherited by the offspring.

Family Name: _____

Family Name: _____



Offspring of _____





Genetic Diversity Activity

Compare

Note: Any traits that *were present* in the original 2 families but *are not present* in the offspring are considered **lost traits**.

Which traits were present in both parent families?	Which traits were inherited from only one parent family?	Which traits were lost ?

Reflect

1. Can you think of any environmental conditions that might affect the likelihood that a ferret born with a particular trait will survive long enough to pass that trait on to their offspring? (*Hint: Think about a green grasshopper vs. a red grasshopper.*)
2. What might happen if the environment changes and the population no longer has certain traits?

Extend

Repeat this activity with multiple families to simulate an entire community of black-footed ferrets. Create ferret parents that produce multiple offspring. Do they inherit the exact same traits from their parents, or are they slightly different? (*Think about real-life human siblings. Are they exactly the same, or does one perhaps inherit a particular trait from one parent whereas their brother does not?*) How does having multiple offspring and a larger community of families reduce the likelihood that a particular trait will be lost?

Consider: In real-life genetics, individuals can be **genetic carriers** for particular traits. This means that although the trait is not outwardly **expressed**, they can still pass the trait on to their offspring. (*For example, an individual who does not have red hair might still have a child who has red hair if their parent had red hair.*)



Genetic Diversity Activity

Trait Cards

Extra long teeth	Easily frightened	Longer, more sensitive whiskers
Better at seeing in the dark	Smaller ears	White nose
20 percent bigger body	20 percent smaller body	All black fur
Deaf	Faster growing, stronger claws	More attentive mother



Conservation Scientist Investigation

Listen

- [Part 2: Breeding Black-Footed Ferrets for the Wild](#)
 - [segment \(25:00-31:42\)](#)
- [Part 3: How Scientists Are Bringing Back Black-Footed Ferrets & How You Can Help](#)
 - [segments \(35:24-39:51\) + \(44:45-47:45\)](#)

Watch

- [Black-Footed Ferrets: National Geographic](#)

Your Mission

Only a very small number of black-footed ferrets are left alive today. They are very close to disappearing forever. You are a wildlife scientist, and you must create a recovery plan to help the black-footed ferret population grow.

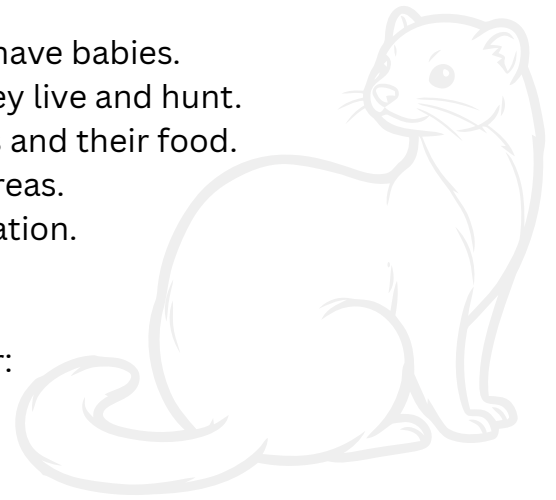
Pick one or combine a few of these methods:

- **Breeding:** Raise ferrets safely in human care so they can have babies.
- **Habitat Protection:** Save and fix the grasslands where they live and hunt.
- **Disease Control:** Stop sicknesses from hurting the ferrets and their food.
- **Reintroduction:** Move raised ferrets back into safe wild areas.
- **Cloning:** Use advanced science to help rebuild the population.

Your Task

Write down your plan. Answer these questions on your paper:

- Which method did you choose?
- How does this method help the ferrets?
- What is one challenge or problem you might face?



Extend

Think about the animals and nature in your own local area. Brainstorm some easy and realistic ways you can help local wildlife. (Examples: pick up plastic trash, build a bird bath, or plant flowers for bees).

Take Action

Choose one action from your list that you can actually do this week.

The Wildlife Helper Promise: Write a short promise statement, such as the one below:

"I, [Your Name], promise to _____ to help local wildlife stay safe and healthy."



Additional Resources

[Black-Footed Ferrets](#)

Learn how you can help save black-footed ferrets on the WWF website.

[Black-Footed Ferret Facts for Kids](#)

An easy-to-read article from Kiddle, a kids' encyclopedia.

[Black-Footed Ferret Educational Resources](#)

[Grassland Ecosystems & Black-Footed Ferrets: Teacher Activity Guide](#)

An extensive, multidisciplinary unit with activities for grades 2, 4, and 7 from the Toronto Zoo.

[Britannica Kids: Ferret](#)

Learn about the similarities and differences between black-footed and common ferrets in this encyclopedia entry.

Videos

[Black-Footed Ferrets: National Geographic](#)

They're cute and cuddly, but nearly went extinct. Follow scientists as they capture black-footed ferrets to help save them.

[Off Limits: Black-Footed Ferrets](#)

Get an up-close and personal look at this behind-the-scenes at the Toronto Zoo.

[Black-Footed Ferrets Born at the Smithsonian's National Zoo](#)

A 1-minute hidden camera look at these newborn babies!

[Conservation Connect: Black-Footed Ferrets](#)

Visit the National Black-Footed Conservation Center with the US Fish & Wildlife Service Education Specialist Kimberly Frazer to learn all about these interesting animals in this 7.5-minute video.

[Black-Footed Ferrets: The Rediscovery](#)

This video describes the rediscovery of black-footed ferrets in Wyoming 30 years ago, after they were believed to be extinct.

[Black-Footed Ferrets and Prairie Dogs: Ecosense for Living](#)

This 14-minute video from PBS Kids is designed for grades 6-12.



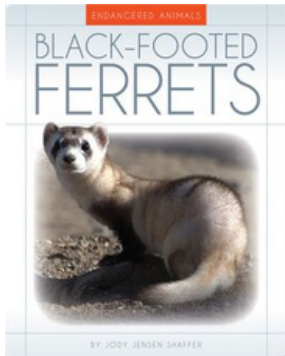
Book List



BFFs! Black-Footed Ferrets

by Elaine Miller Bond

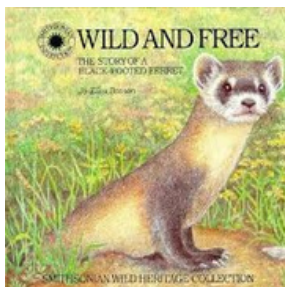
This fact-filled book is a great introduction to one of the most endangered mammals in North America. Enjoy rare photographs of these adorable animals cuddling, prowling, and even dancing!
ages 6-9



Black-Footed Ferrets: Endangered Animals series

by Jody Jensen Shaffer

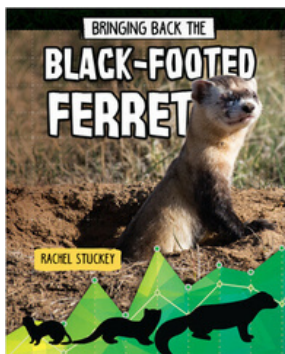
Learn all about these adorable endangered animals, including where they live, why they're endangered, and how people are working together to help save them. Available on [Epic!](#)
ages 8-10



Wild and Free: The Story of a Black-Footed Ferret

by Jo-Ellen Bosson

From the Smithsonian Wild Heritage Collection.
ages 4-8



Bringing Back the Black-Footed Ferret

by Rachel Stuckey

This book tells the story of the rediscovery and the inspired captive breeding program that revitalized the population of this animal once thought to be extinct.
ages 8-12



Meems and Feefs: The Council of Ferrets, Vol. 2

by Liza Cooper

A whimsical and epic graphic novel about two ferrets and their human companion. Full of laughs, thrills, and heartwarming moments.
ages 8-12