



# Ferret Lesson Plans

## GRADE 2 LESSON #1

### Where do Black-footed Ferrets Live?

#### MATERIALS

Copy of Where do Black-footed Ferrets Live?  
Student response sheet

#### METHOD

Introduce to students that they will be learning about the black-footed ferret, an endangered animal that lives in the prairie grassland areas of the USA, Mexico, and western Canada. It would be helpful to show students pictures of the black-footed ferret and the grassland or prairie ecosystem. Please see the following websites; [www.blackfootedferret.org](http://www.blackfootedferret.org); [www.pc.gc.ca/eng/pn-np/sk/grasslands/edu/edu1/f.aspx](http://www.pc.gc.ca/eng/pn-np/sk/grasslands/edu/edu1/f.aspx)

Read the story, Where Do Black-footed Ferrets Live? aloud to students or as a shared reading activity. You may give each student a copy of the text page, or you may wish to display it on chart paper and add it to a bulletin board.

Read instructions on the student response sheet aloud to students.

**Question 1.** Discuss with students that black-footed ferrets are a member of the mammal group. With this knowledge shared, discuss the stages of growth for the kit and elicit from students information about how kits live during each stage of life; for each stage ask students questions like where do they live and how or what do they eat?

Sample answers:

- Newborn kits - stay in the burrow close to mother
  - are fed on mother's milk
- Young kits - begin to leave burrow
  - explore area near burrow
  - fed mother's milk and begin to eat meat
- Older kits - begin to move farther from burrow
  - follow mother when hunting
  - eat animals caught by mother
- Young adults - move to new areas, find empty burrows for themselves
  - begin to hunt on their own



**Question 2.** Make it clear to students that the black-footed ferret lives in the prairies because this is where it finds all it needs to survive; food (prairie dogs), shelter (prairie dog burrows), and space (a place to raise its young).

## **Where Do Black-footed Ferrets Live?**

Black-footed ferrets live in grassland areas where they hunt prairie dogs and use their burrows and tunnels to hide, sleep, and raise their babies. Grassland areas, or prairies, are large, flat areas that have very few trees and mostly grass species. The black-footed ferret is a type of weasel and is smaller and more slender than a cat. They have yellowish-brown fur, black feet, a black tail tip, and a black mask like a raccoon. Female ferrets have from one to seven babies in the spring. The babies, called kits, are born in a prairie dog burrow that the ferrets have taken over. Since ferrets are mammals, the kits are fed on their mother's milk for the first part of their lives. After several weeks the kits will come out of the burrow and begin to explore areas nearby. During the summer they learn to hunt and to escape danger from other animals by following and watching their mother. By October, most kits have grown to full size and are ready to live on their own.



Name: \_\_\_\_\_

## **Where Do Black-footed Ferrets Live?**

1) Draw one of the stages in the life of a black-footed ferret in the space below.

2) In the space below explain why you think that the prairie is a good place for the black-footed ferret to live.

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## GRADE 2 LESSON #2

### How are Black-footed Ferrets Adapted to Their Environment

#### MATERIALS

Copy of How are Black-footed Ferrets Adapted to Their Environment?  
Student response sheet

#### METHOD

Review with students concepts covered in lesson 2.1, namely;

- black-footed ferrets are mammals that live in grassland areas that have few trees
- they hunt prairie dogs and use prairie dog burrows as their homes
- young are raised in the burrows and learn to survive by watching their mother

Tell students that in this lesson we will learn more about how black-footed ferrets live. Introduce the idea that every animal has ways that they live and behave that help them to survive in their own environment. The things that help the black-footed ferret survive in the prairie grasslands are called adaptations.

Read the student text How are Black-footed Ferrets Adapted to Their Environment together as a shared reading activity (make and distribute copies of the student text or copy it onto chart paper and retain for later reference). You may need to review vocabulary with students before hand; camouflage, predator, badger, keen, burrows.

Discuss the adaptations of the black-footed ferret to its environment. Go through the text again and guide students in identifying things that are part of the ferret's physical make-up, its appearance, or behaviour that help it survive. Guiding questions would be things like...

- Does this help the ferret to get food? How?
- Does this help the ferret to raise its young? How?
- Does this help the ferret avoid being caught by other animals that might hunt it? How?

As this discussion progresses note adaptations in chart form using a table. A completed table is included for reference. You may wish to complete a class chart or use the included student response page to have students complete their own chart.

In concluding the lesson, note that the black-footed ferret is well adapted to its environment and that this is what we see when we study any plant or animal in nature.



## **How are Black-footed Ferrets Adapted to Their Environment?**

Black-footed ferrets have long, slender bodies with sharp claws. This helps them crawl in and out of burrows and tunnels where they live. Ferrets have adapted to hunt prairie dogs at night while the prairie dogs are sleeping. They have very good eyesight, hearing, and a keen sense of smell which helps them locate the prairie dogs in their tunnels in the dark. They use their sharp teeth and claws to catch their prey. Ferrets have yellowish-brown fur which acts as camouflage next to the dry grasses and soil around their burrows. Since ferrets are nocturnal, their main predators are species that are also most active at night, such as owls, badgers and coyotes. To protect themselves from these predators, they instinctively move from burrow to burrow for coverage. They also make sounds and signals to each other to warn of danger so that they can escape by going into their burrows.



## Black-footed Ferret Adaptations

Completed Chart:

Body shape, appearance	Where it lives	Behaviour
<ul style="list-style-type: none"> <li>- long, slim body is good for crawling in tunnels</li> <li>- sharp claws are good for digging and hunting</li> <li>- sharp teeth are good for hunting</li> <li>- good eyesight, smell, and hearing are good for hunting and escaping predators</li> <li>- yellowish-brown fur blends in with dirt and dry grass (camouflage) to help avoid being caught by predators</li> </ul>	<ul style="list-style-type: none"> <li>- lives on the prairie where there are large numbers of prairie dogs</li> <li>- uses prairie dog tunnels and burrows for protection, shelter, and to raise young</li> <li>- wide open spaces make it easy to see predators</li> </ul>	<ul style="list-style-type: none"> <li>- active at night so they can hunt prairie dogs.</li> <li>- when in danger, it hides in underground burrows</li> </ul>



Name: \_\_\_\_\_

**Black-footed Ferret Adaptations**

<b>Body shape, appearance</b>	<b>Where it lives</b>	<b>Behaviour</b>



## GRADE 2 LESSON #3

**What is Extinction?****MATERIALS**

Copy of What is Extinction?

Student Activities sheet

**METHOD**

Review with students that black-footed ferrets are adapted to life in the grassland ecosystem. This means that the way they are built (physical adaptations) and the way they behave (behavioural adaptations) allow them to find food, raise their babies, and live in safety in the prairie ecosystem.

Ask students what they think would happen if a black-footed ferret could no longer find food (prairie dogs)? Lead them to understand that the ferret's survival and its ability to raise young would be at risk if it could not find sufficient food.

Ask students what they think would happen if the black-footed ferret could no longer find burrows for hiding and raising its young? Lead them to understand that without tunnels as shelter the ferret and its young would be in danger from other animals such as owls, coyotes, and other predators.

Read the first section of *What is Extinction?* together as a shared reading activity (make and distribute copies of the student text or copy it onto chart paper and retain for later reference). Read the box on extinction.

Help students understand that humans should be concerned for all of the plants and animals in the world, and that the extinction of a species is a very sad thing – it means the balance of nature has been upset in a way that can never be repaired. As humans we should do all we can to try to prevent this from happening.

Read the remainder of the text. Discuss with students how ferrets might be reintroduced into the wild. How could zookeepers prepare young ferrets to live on their own?

As part of the preparation, young ferrets are put in pre-conditioning pens where they learn to hunt prairie dogs. They also learn to use burrows as shelter and as a way to escape danger.

- What would zookeepers look for when trying to find places to release the black-footed ferrets?

Zookeepers would want to find an area with a good population of prairie dogs. They would also want this area to be protected, meaning that people would not make farms or build houses in the area, leaving it in its natural state.

Have students complete one of the response activities listed on the following page.





## What Is Extinction?

In Canada, much of the prairie grassland has been turned into farms. Farmers usually see burrowing rodents as pests because they dig holes in grazing areas, fields, and disturb crops. In the United States, farmers often try to get rid of prairie dogs and this means that there are fewer prairie dogs in many parts of the prairies. As prairie dogs disappeared the black-footed ferret had no food and also no tunnels or burrows to use as shelter. The black-footed ferret was thought to be extinct.

Extinction - When an animal becomes extinct there are no more of that animal on earth; it is gone forever.

A small population of black-footed ferrets was found in Wyoming, USA in 1981 and 18 individuals were brought into captivity to start a breeding program.

Since 1992, the Toronto Zoo has helped the black-footed ferret come back from near extinction. The Zoo has bred hundreds of ferrets and the babies from these ferrets have been released into prairie grassland areas where the ferret once lived. In this way the black-footed ferret can be returned to its natural place in the grassland ecosystem.



## What is Extinction? Student Activities

1. Design a sign to be posted on a zoo exhibit that discusses how black-footed ferrets are being raised for reintroduction into the grassland ecosystem. The poster should include things like the name and a picture of the animal, how it lives, and should state that it is endangered. It should also mention where the animal lives and why it is endangered.
2. Design a sign to be posted in an area where the black-footed ferret is being reintroduced. The sign should explain a bit about the animal (its name, how it lives, and that it is endangered). It should also mention that the area must be left undisturbed so that the ferrets can get used to their new home.
3. Draw a picture of black-footed ferrets being released into the grassland ecosystem. Think about how the ferrets would be carried (in small covered cages), how they would be released (cages placed at release sites in the grasslands where prairie dog burrows are easy to find), and how might scientists check that newly released ferrets are surviving (nocturnal – **spotlighting** at night).

**Spotlighting** is when scientists go out at night and shine flashlights looking for the green eyeshine of the ferrets. They then watch and see what burrow the ferret goes in. They place a microchip reader around the hole so when the ferret pops his head out (ferrets have microchips placed under their skin before release), they can identify the individual ferret. In summer, scientists will also locate the kits and vaccinate them for potential diseases.