

How a Pronghorn Survives



Photo Credit: Nick Chill Photography via Compfight cc

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Table of Contents

Pronghorn Adaptation and Survival.....3,4

Why Does a Pronghorn Run So Fast?.....5-7

A Prairie Food Web and Interdependence.....8-11

A Pronghorn's Ecosystem.....12,13

A Pronghorn's Diet.....14,15

What If There Were No Pronghorns?.....16-19

Answers.....20,21

Glossary.....22,23

Index.....24

Bibliography.....25

About the Author.....26,27

Pronghorn Adaptation and Survival

The pronghorn has a very important **adaptation**. This adaptation is running fast. The Pronghorn antelope is the second fastest land animal in the world. Only the cheetah is faster. The pronghorn can run 61 miles (98 km) an hour for long distances. That makes the pronghorn antelope the quickest long-distance runner in the world! Some animals like cheetahs have what it takes to run very fast but get tired quickly, the speed way, and other animals like wolves have what it takes to run not as fast, but for a longer distance, the **stamina** way. But the pronghorn can run fast, and for a long distance. They can run 40-61 miles per hour for long-distances and they can run 62-67.7 miles per hour for shorter distances. Pronghorns run sustained speeds, commonly at 60 miles an hour.

These pronghorns running at full speed are running 108 kilometers an hour (67 miles per hour). The fastest pronghorn ever recorded was 67.7 miles per hour. Almost as fast as a Sailfish at 68 miles an hour.



Photo Credit: Great Beyond via Compfight cc

The secret to their running is right in the nose. Special heat exchanges in their nose keep the pronghorn antelope from overheating. The pronghorn can get tired but in a long time. The pronghorn also has no **dewclaws**. Dewclaws can affect their speed a lot putting them down back to 45 miles an hour. But no dewclaws can affect their jumping. Pronghorns don't jump. They just bend low under instead of jumping. Other animals like elk run 45 miles an hour, but they can jump higher than a pronghorn because they have dewclaws.

A pronghorn has a one of a kind horn. They carry the only forked horns in the world! They shed the outer part of their horn every year just like an antler. Except these are horns. Their horns are shaped like a prong. That's why they are called the pronghorn. Females also have horns but they are much smaller.



Photo credit: Nick Chill Photography via Com. right cc

Heat exchanges in the pronghorn's nose keep the pronghorn from overheating.

Did You Know!

Pronghorns are very brownish white so they can **camouflage** in the high grass making them almost invisible in the light.

Question: Are pronghorns visible?
Answer on page 21

Why Does a Pronghorn Run So Fast?

If we want to know how a pronghorn runs so fast, let's look at predators from the past. About 20,000 years ago there was a predator in America. It was a cheetah-like animal called Miracinonyx (American Cheetah). Miracinonyx was related to a cougar but had the speed of a cheetah. The pronghorn **evolved** to run almost as fast as a Miracynonyx and run for a longer distance. The Miracinonyx is already **extinct**.



Website: <http://carnivoraforum.com/topic/9330891/1/>

Miracynonyx can't really run as fast as a cheetah but faster than a pronghorn, in between. That means that the pronghorn became second place at running after the extinction of the Miracynonyx.



Website: <http://bigbadwolves.tripod.com/the-dire-wolf-project.html>

Dire Wolves live in the prairies of North America. They hunt many things including Coyotes and Foxes and other dogs including other types of wolves and several herbivores. They are already extinct.

Other predators like Miracynonix and Dire Wolves made pronghorns into such great runners, but luckily those predators from the past gave pronghorns the great running power because they would already be extinct by now because predators now like pumas, golden eagles, wolves, bobcats, and coyotes could all run very fast and they could kill all the pronghorns. Except Golden Eagles fly, not run so they can be one of the pronghorn's worst enemy.

Many pronghorn predators can run or travel in their way fast, it could have been the same 20,000 years ago with pronghorns. Maybe they had the same adaptations and things, or maybe they were similar. Bobcats and other predators that existed 20,000 years ago still hunt the pronghorns and forced them to run. The more the pronghorns ran, the faster they became until pronghorns were born to run fast. When they are born, they run 30 miles per hour.



Photo Credit: goingslo via Compfight cc

Bobcats live in prairies and are force pronghorns to run because they hunt pronghorns.

Did you know!

A pronghorn doesn't need to learn how to run. If a predator comes nearby then a powerful **instinct** causes the pronghorn to burst into a run.



Photo Credit: wildphotons via Compfight cc

Golden eagles are predators to pronghorns too. They will hunt several animals including a pronghorn.

A Prairie Food Web and Interdependence



Photo Credit: Tambako the Jaguar via Compfight cc

Bobcat



Photo Credit: digitalART2 via Compfight cc

Cougar



Photo Credit: ahisgett via Compfight cc

Golden Eagle



Photo Credit: royalty-free image collection via Compfight cc

Bison



Photo Credit: D-Stanley via Compfight cc

Gazelle



Photo Credit: Tambako the Jaguar via Compfight cc

Prairie Dog



Photo Credit: Nick Chill Photography via Compfight cc

Pronghorn



Photo Credit: Thomas via Compfight cc

Grass



Photo Credit: tiindenbaum via Compfight cc

Sage brush



Photo Credit: tiindenbaum via Compfight cc

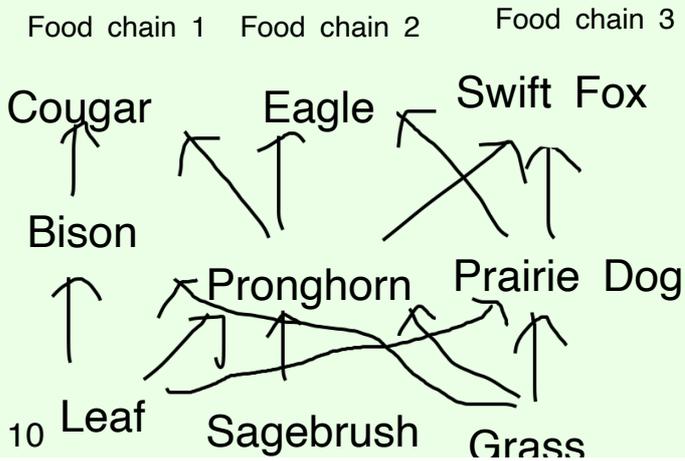
Flowers

 = Keystone Species

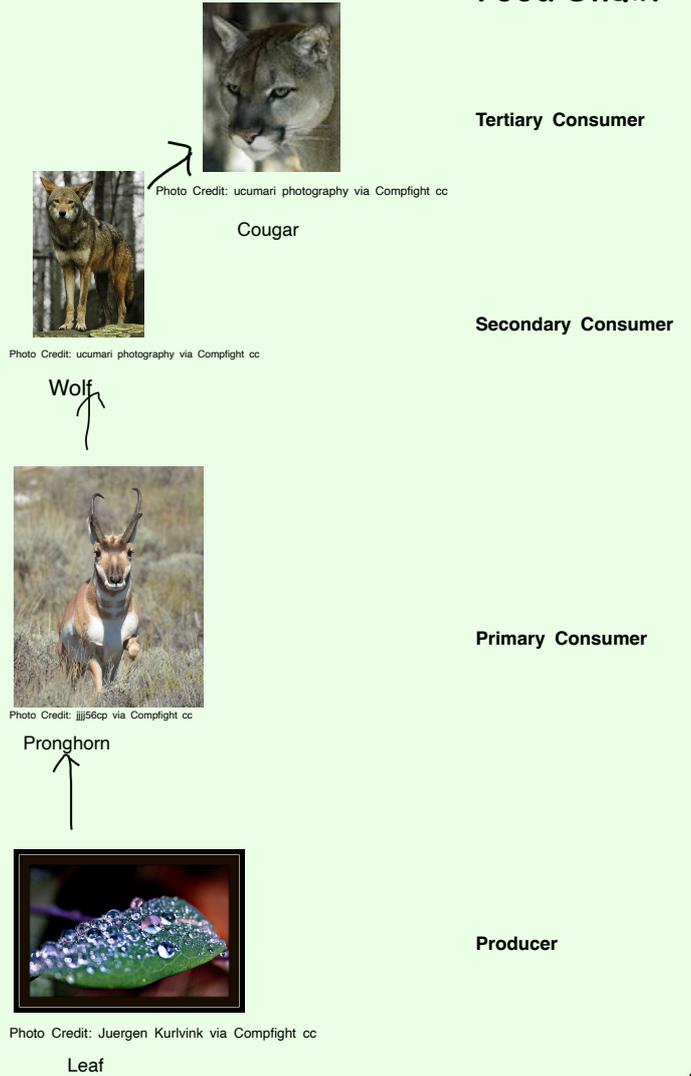
The Bison is a **keystone species** of the prairie. A keystone species is an animal in the ecosystem that is the most important animal in the ecosystem. The prairie's keystone species is the bison because unlike other herbivores bison are grazers and a prairie wouldn't be a prairie without grazing and bison graze. The bison helps pronghorns and all the other animals in the prairie. A food chain is a line how an animal eats another animal. A food web is many food chains together.

Food Web Example

See food web on page 8-9.



Food Chain



A Pronghorn's Ecosystem

The pronghorn antelope lives in southern Canada down to northern Mexico. They live in grasslands called prairies. Another type of pronghorn called the Sonoran pronghorn lives in the Sonoran Desert. Even though it is called the pronghorn antelope, this is not an antelope at all. It has its own family but all of the pronghorn's closest **relatives** are extinct. Right now the pronghorn's closest relative is the giraffe. The giraffe is not even closely related. The pronghorn can run fast so it needs a wide open area like a prairie.

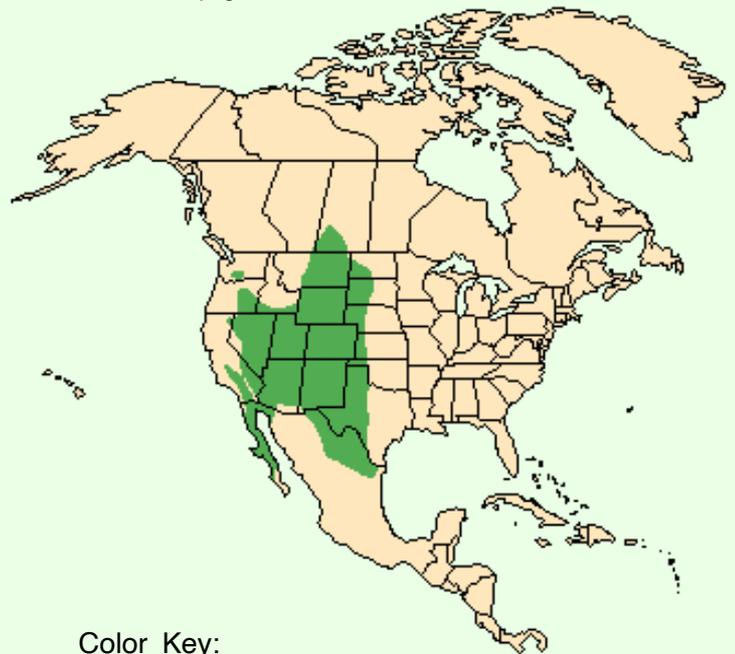


A prairie has a creative mixture of flowers. There are millions of different types of flowers in the prairie.

Photo Credit: The Knowles Gallery via Compfight cc

This is where a pronghorn lives.

Question: How many habitats are an ecosystem?
Answer on page 20



Color Key:

Website: <http://pronghornantelopes.wordpress.com/habitat-and-range/>

 = Pronghorn Range

A Pronghorn's Diet

Pronghorns eat a mixture of plants. Since they are **herbivores** they don't have any **prey**. They eat sagebrush, grass, carrots, leaves, fruits, flowers, acorns, and so many other plants.

Pronghorns are **mammals** and mammals breathe air. Pronghorns belong to a family called **ruminants**. A few animals are ruminants including pronghorns. Ruminants are all mammals and herbivores and can digest plants that no other herbivore can digest.

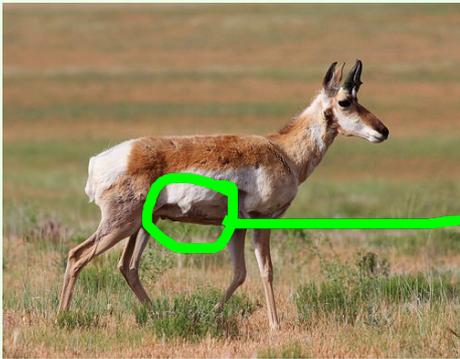


Photo Credit: tombenson76 via Compfight cc

Ruminants have 3-4 stomach chambers. A pronghorn has 4 stomach chambers.

Question: Can a pronghorn eat a cactus?

Answer on page 20



Photo Credit: cobalt123 via Compfight cc

A pronghorn eats blossoms.



Photo Credit: anne arnould via Compfight cc

Fruits are on a pronghorn's menu.

Even though pronghorns are **threatened** they are hard to go extinct because they eat so many plants.



Photo Credit: A Guy Taking Pictures via Compfight cc

A pronghorn definitely eats grass.



Photo Credit: Chris Campbell via Compfight cc

Carrots are also on a pronghorns menu.

What If There Were No Pronghorns?

You have no idea what will happen if there were no pronghorns left in their habitat.

Become an Expert

Go to page 10

~~ANIMALS~~

~~PLANTS~~



Photo Credit: USFWS Mountain Prairie via Compfight cc

Pronghorn Predators: Wolves, bobcats, pumas, eagles, coyotes, etc.

Pronghorn Diet: Grass, shrubs, sagebrush, fruit, nuts, etc.

If there were no pronghorns then all the predators will go extinct because they have no food, even though they have other prey. Then there will be too less plants and too many herbivores and then soon carnivores will go away and the herbivores will eat all the plants and then there there going to be no plants, no animals, and nothing living in the prairie. Only small insects, and tiny animals will survive.



Photo Credit: Nick / KC7CBF via Compfight cc



Photo Credit: HVargas via Compfight cc



Photo Credit: trickofthelight via Compfight cc

So what will happen if there were no pronghorns? A lot! Just taking one animal away from an ecosystem, all the animals in that ecosystem will go extinct except ones that adapt. Just taking one away makes all go away!

I will be a lot different if there were no pronghorns or any other animals. It will be just a plain grassland and an endless field with hardly any life.



Photo Credit: Madeleine_ via Compfight cc



Photo Credit: ucumari photography via Compfight cc

Answers

Page 15

Pronghorns can eat cactus spikes because they are ruminants and ruminants can digest food that no other herbivore can digest.

Page 13

3-9 habitats. A habitat is like a mini ecosystem and an ecosystem is like mini biome.



Photo Credit: xoque via Compfight cc

Pronghorns are amazing creatures.

Page 4

Pronghorns are visible when they camouflage but they are extremely hard to see and have excellent eyesight.



Photo Credit: Platy guffy 88bio via Compfight cc

A pronghorn camouflages in the grass completely.

Glossary

Adaptation- When an animal changes to fit in their habitat.

Camouflage- Blending in with your surroundings.

Dewclaws- Extra hooves under an animal's body that effect running a bit but can jump.

Evolve- The scientific idea of how an animal changes over a long period of time.

Extinct- Where an animal is no longer living.

Herbivores- Vegetarian animals.

Instinct- An adaptation that does not need to be learned.

Keystonespecies- An animal that is extremely important to the ecosystem.

Mammals- Animals that breathe air and have a backbone and they give birth to live young.

Predators- Animals that hunt other animals.

Prey- Animals that are food for other animals.

Relatives- Being close to each other like in a family.

Ruminants- A special group of herbivorous mammals that can digest plants no other animals can digest.

Stamina- Doing something for a long time.

Strides- Long stretches with your legs and strides will push you further when you run.

Threatened- An Animal that is nearly endangered.

Index

Adaptation 3,4

Digest 14,20

Ecosystem 10,12,18

Extinct 5,12,17

Flowers 12,14,15

Herbivores 14

Grass 15,17,19

Grazing 10,19

Ruminants 14,20

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About the Author

Stanley Holewa is 8 years old. I live with my little brother and my mommy and daddy. I live in Bangkok, Thailand. I go to NIST International School. In Mr. Reid's class we chose an animal to collect information and make an eBook about it. Mr. Reid showed us an example of an eBook. It was about Sloths. I chose an animal and it was a pronghorn. I chose the pronghorn because while I was flipping through pages in non-fiction books, I found a photo of an interesting looking pronghorn.

