

Activity 2.1.1 Harnessing the Wild

Purpose

Have you ever walked through the zoo and wondered why the lions and tigers and bears are behind bars while you can wander peacefully through the petting zoo of sheep and goats? Domestication is bringing a wild animal species under human control. What makes an animal domesticated?

An animal must have six characteristics to be completely domesticated. An animal's diet must be flexible, the animal must have a fast growth rate, be able to be bred in captivity, behave calmly and predictably, have a flight zone that can be managed, and accept humans as their leaders within a social hierarchy. If an animal species has all six of these characteristics, the species can be domesticated. Sometimes animals can return to the wild after domestication and survive in the wild. These animals become feral. Common feral populations include horses, cats, dogs, goats, and pigs. An individual animal from a wild species trained and manipulated by a human is not domesticated. A tame animal can be trained but its offspring will retain wild instincts.

As you continue your journey through the zoo, you observe the elephant trainer working with the elephant. Is the elephant wild, tame, or domesticated? How does a person domesticate a species?

Materials

Per student:

- Highlighter
- Pencil
- Computer with Internet access
- Agriscience Library
- *Agriscience Notebook*

Procedure

In this activity, you will use the characteristics of domestication to determine what it takes to domesticate an animal. Table 1 is a list of exhibits you saw on your last trip to the zoo.

Table 1. Zoo Exhibits

Domestic Animals	Wild Animals
Alpaca	Antelope
Canary	Baboon
Guide Dog	Beaver
Ferret	Elephant
Guinea pig	Gazelle
Laboratory mice	Lion
Mustang	Ostrich
Rabbit	Panda
Reindeer	Warthog
Water buffalo	Wolf

Part One – Choosing Animals

Select one domestic animal and two wild animals from Table 1. Record your choices in Table 2 in the appropriate space provided.

Part Two – Research

Research each animal and determine its diet, growth rate, reproductive habits, disposition, temperament, and social structures. Record the information in Table 2 of *Activity 2.1.1 Student Worksheet*.

Part Three – Identifying Domestication

On Table 2, highlight any factor that prevents the wild animals from being domesticated. Refer to your notes from the *Domestication* presentation to help you. In the space provided under Table 2 of *Activity 2.1.1 Student Worksheet*, write a summary of your findings. Compare the characteristics of the domestic animal with the wild animals you chose. Why do you feel humans were able to domesticate that animal?

Conclusion

1. Based on your experience and knowledge so far, is it beneficial to animals to be domesticated? Explain?

In certain cases, domesticating animals can be beneficial. Sometimes it is used to breed and reproduce animals faster to maintain their species which is very beneficial for the world.

2. What is the difference between taming wild animals and domesticating them?

The difference between taming wild animals and domesticating them is that taming an animal applies to only a few animals in the species, while domesticating means taming the species as a whole.

3. In your opinion, why can one animal be domesticated while another animal in a closely related species, i.e. dogs and wolves, cannot?

One animal can be while another in a closely related species cannot be, because they have different temperaments and dogs have been domesticated a long time while wolves have not been domesticated at all.

****Be prepared to share your responses to Conclusion questions in class.***

Name: _____

Activity 2.1.1 Student Worksheet

Table 2. Animal Information

	Domestic Animal	Wild Animal 1	Wild Animal 2
Name of Animal	Rabbit	Panda	Wolf
Diet	Mostly grass hay, but also fresh food, leafy greens	Mostly bamboo, leaves, and stems	Large hoofed animals, other small mammals, and dead animals
Growth Rate	Depends on litter and birth weight—heavier bunnies grow faster and temperature, and will be almost fully grown from 6 to 8 months	Can grow very fast in a couple of years,	Grow very fast in the span of weeks and months
Ability to Breed in Captivity	Very capable, can give birth to a small litter in about 33 days	Has a very low success rate	Usually goes well because they have both males and females
Disposition	Can be a pet, but not the ideal pet for young kids, can be defensive	Mild mannered, and mostly loners	Natural hunter, social, intelligent, alert
Temperament	Different depending on the breed but it takes a long time to trust a person to touch them but very social	Uncommunicative and eccentric, like being alone	high strung, reactive, nervous
Social Hierarchy	Demonstrates dominance by establishing who grooms who	Mainly solitary but do communicate sometimes with each other. Offspring stay with their mothers for a few years	Live in packs, extended family group with alpha male and female pair and offspring