

Animal Study

Background Information

Animals live everywhere on the earth — on land, in the sea, and in the air. Many animals have adapted to living in extreme climates, including places that are extraordinarily hot or cold, wet or dry. Even the floors of the deepest waters, where there is no light, teem with animal life.

There are a number of ways of studying animals. One major way is to group animals according to the characteristics they have in common. For example, animals can be grouped by the uses humans make of them. Domesticated animals, the first kind of animal explored in this subsection, fall into this grouping. Animals can also be grouped by **habitat**, the environment where the animals live. The next two kinds of animals explored in this subsection are grouped by habitat: aquatic animals and forest animals. The final three kinds of animals explored in this section are grouped by type, age, and location: birds, animal young, and animals around the world. Each grouping allows the students to link what they are studying in other subjects, especially cultural and physical geography, with zoology.

Domesticated Animals

While many animals are wild and live in their natural habitats, some have been **domesticated**, meaning that they have become accustomed to living near humans and in many cases being cared for by humans. For centuries, humans have bred and fed animals and used them for food,

clothing, and transportation. Some people have also kept animals simply because they liked them or were interested in studying them.

The first animals to be domesticated were probably dogs. Historians believe that dogs were domesticated anywhere from 15,000 to 40,000 years ago and were likely at first used for food. Today, working dogs do many important jobs around the world. They act as seeing-eye dogs, rescue dogs, guard dogs, sheep dogs, sled dogs, hunting dogs, and sniffing dogs.



Farming involves raising plants and animals, whether for sale or for use by the farmer. Each type of farming makes use of several different domesticated animals. The meat industry, for example, uses cattle, sheep, goats, pigs, and poultry. Poultry includes chickens, ducks, geese, and turkeys. The dairy industry uses cows, goats, and poultry. The fiber and leather industries use sheep, cattle, goats, and



animals that are not usually domesticated, such as crocodiles.

Some farms are small, and some are huge. Small-scale farming often involves a small number of several different farm animals, such as a few chickens, a cow, a couple of pigs, and goats. Large-scale farming, which is becoming increasingly common, is highly specialized. It involves raising a large number of a single type of animal, such as turkeys, on one farm.

In some parts of the world, domesticated animals are used instead of cars and trucks to carry both objects and humans. For example, domesticated elephants in Thailand and Myanmar have been used for centuries to log forests and carry goods and people. In the deserts of Asia and North Africa, people often use domesticated **camels** to carry objects and humans. Camels are large, four-legged animals recognizable by their humps.

Arabian camels, also known as dromedaries, have one hump, and Bactrian camels have two. The humps, which store fat that can be used when food is scarce, are one reason camels can survive on long trips carrying objects and people over hot desert regions.

Did You Know?

- Particular types of animals bred and used by humans for certain qualities are called **breeds**. For example, some breeds of cattle produce especially large quantities of milk, which makes them popular as dairy cattle, and some breeds develop bulk, which makes them popular as meat. In the US, common dairy breeds are Holstein-Friesian, Guernsey, Jersey, Ayrshire, and Brown Swiss.
- Historians believe that cattle have been domesticated for 10,500 years.
- Like many farm animals, camels are **ruminants**, which means that they chew and swallow their food, then regurgitate some into the mouth and chew on it some more, further digesting the food. The regurgitated food is called a **cud**. Other examples of ruminants include deer, goats, cows, sheep, and **llamas**, long-haired, four-legged animals from South America.

ACTIVITY 1

Identifying and Naming Domesticated Animals

Purpose

To learn to identify common domesticated animals.

Material

Whiteboard and marker.

A working set and control set of pictures and labels of common domesticated animals. These can be made by the Montessori teacher to represent domestic animals in your region of the world.

Books, pictures, and videos of domesticated animals.

Zoology journals and pencils.

Presentation

- Most Montessori teachers present this concept in Year 1.
- Announce that the students will have an opportunity to investigate animals that work with humans. This activity can be presented in parts over one or several days.

Part 1

- Define and discuss the domestication of animals and ask the students to describe domesticated animals with which they are familiar. On the whiteboard make a list of the domesticated animals described by the students.



- Explain that domesticated animals have many uses in other parts of the world. Describe and discuss a few examples, such as camels and elephants.

Part 2

- Follow the procedure for presenting nomenclature material (see the section at the front of the manual).
- Continue until all of the nomenclature pictures and labels have been laid out.
- Encourage the students to continue matching the cards on their own, using the control set to check their work.
- Invite the students to explore the resources provided.
- Ask the students to use their journals to draw a scene from any part of the world and include two or more domesticated animals at work with humans.



Extensions

- Create definition cards and practice matching them to the labels and pictures.
- Write a simple story about the scene drawn.
- Act out a typical day in the life of two different kinds of domesticated animals.
- Visit a local farm and observe farm animals.
- Research and make a poster showing pictures of domesticated animals at work around the world, such as cattle, dogs, goats, sheep, ducks, camels, llamas, elephants, and chickens.
- Research a domesticated animal, then write a short illustrated report on the animal, naming the animal and saying where it lives in the world, what it eats, and how it is used by humans.