

Elephants Never Forget

Elephants are big—*really* big. They are the largest land animals in the world. They are also clever and sensitive. Elephants have good memories—they can remember their relatives for a long time. They care for their families and appear to show sadness when loved ones die. These animals are strong and gentle. They are also in danger. Today, many herds of wild elephants are fighting to survive.

Many thousands of years ago, large elephant-like mammals called American mastodons and woolly mammoths roamed the earth. These ancient relatives of today's elephants are now **extinct**.



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Elephants in Africa

About 10 feet tall at shoulder

Males weigh up to 13,200 pounds

Huge ears cover shoulders

Flat back with a dip in the middle

Long tusks on both males and females

Skin is more wrinkled and brownish-grey

Flat crown of head with no dent in middle



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Elephants in Asia

8–10 feet tall at shoulder

Males weigh up to 11,000 pounds

Large ears don't reach shoulders

Rounded back

Shorter tusks, only found on some males

Skin is less wrinkled; grey to brown, with pink patches

Crown of head has a dome shape with dent in middle



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Today, there are two main groups of elephants—African and Asian. They are easy to tell apart if you know what to look for. Scientists have also discovered that African elephants may include two different **species**—forest elephants and **savannah** elephants. Savannah elephants are larger than forest elephants. Their ears are bigger and their tusks are more curved.

All elephants are **herbivores**. They eat grasses, bark, twigs, leaves, and fruit. They can spend 18 hours each day eating. An adult elephant might eat more than 400 pounds of food in one day. They also need about 30–50 gallons of water each day. They travel long distances to find it.



manatee



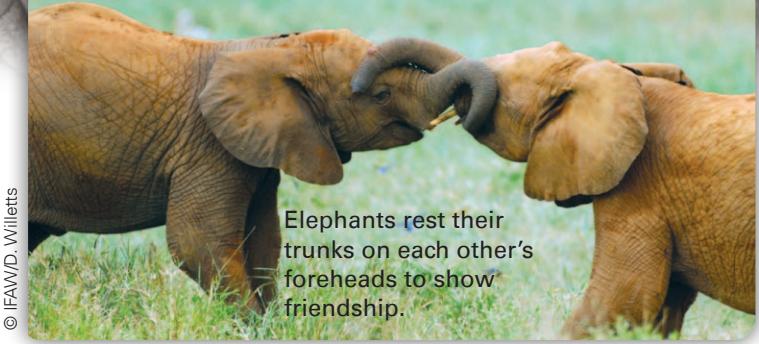
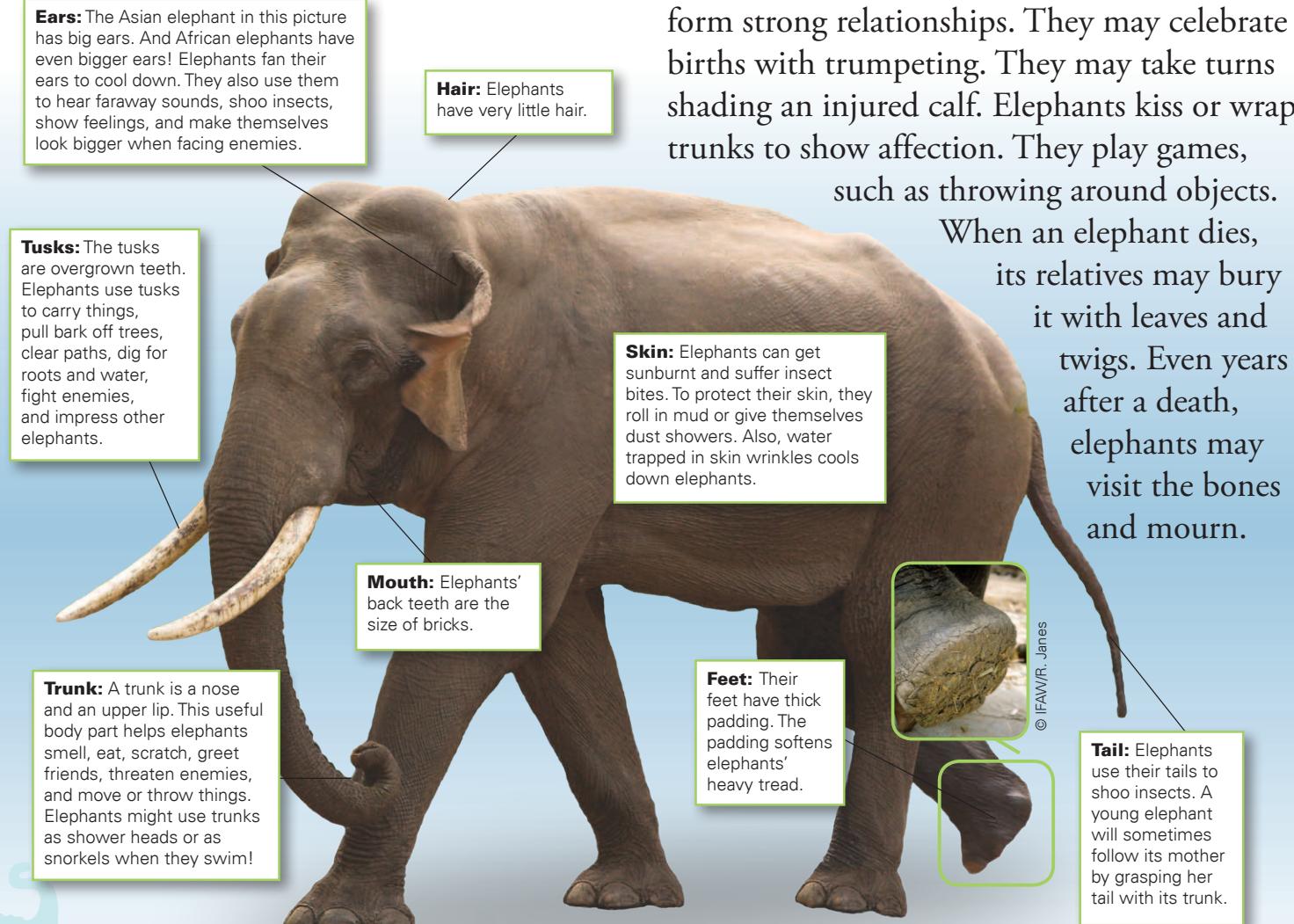
hyrax

Believe it or not, these animals are relatives of elephants!

Big Is Just the Beginning

Elephants' bodies have many unusual and useful parts. Their trunk and tusks are great tools for eating, communicating, and other tasks. Elephants' large ears and feet are useful too. In fact, most things about their bodies help them to survive.

Besides having amazing bodies, elephants have amazing brains! One thing their brains help them do is work well together in groups. Elephants live in family groups of female elephants of all ages and young male elephants. Females stay with the same group for their whole lives. Males usually leave the group when they are between 12 and 17 years old. They live alone or together in small herds.



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Elephants rest their trunks on each other's foreheads to show friendship.

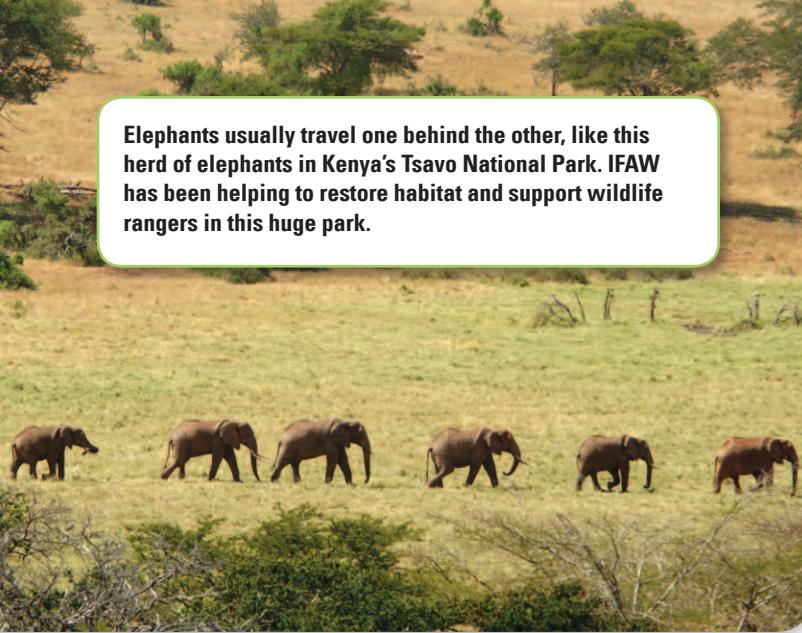
An older female elephant called a **matriarch** leads each group. She keeps the elephants safely together and helps them find food and water. She makes important decisions, such as when to charge and when to flee from danger. She also teaches other females about caring for their young.

Elephants show their amazing memories by remembering relatives after years of being apart. When they meet, they sometimes turn in circles, flap their ears, and trumpet loudly.

Elephants have emotions, and the females form strong relationships. They may celebrate births with trumpeting. They may take turns shading an injured calf. Elephants kiss or wrap trunks to show affection. They play games, such as throwing around objects.

When an elephant dies, its relatives may bury it with leaves and twigs. Even years after a death, elephants may visit the bones and mourn.

Elephants usually travel one behind the other, like this herd of elephants in Kenya's Tsavo National Park. IFAW has been helping to restore habitat and support wildlife rangers in this huge park.



Elephants that live on the savannah eat the sprouts of trees and shrubs. This keeps the plants from growing out of control and blocking sunlight. If sunlight did not reach the savannah's grasses, they would die. Antelopes and other animals that graze on the grasses would disappear. And the **carnivores** that depend on those grazers for food would disappear too. During the dry season, savannah elephants use their tusks to dig water holes that other animals can use. These water holes may be the only sources of water in the area.

Key Roles of Elephants

Scientists consider elephants to be **keystone species**. This means they have an important role in maintaining the **biodiversity**—the wide variety of plant and animal species—of their **ecosystems**.

One way elephants help their ecosystems is by eating. As elephants in a forest eat, they create gaps in the vegetation. These gaps allow new plants to grow and create pathways for other animals. In West Africa, forest elephants are the only animals big enough to eat the branches of some large trees. They spread the seeds from these trees through their dung. The dung fertilizes the seeds as they grow into new plants. Many of these trees would disappear without the help of elephants.

It's a Fact!

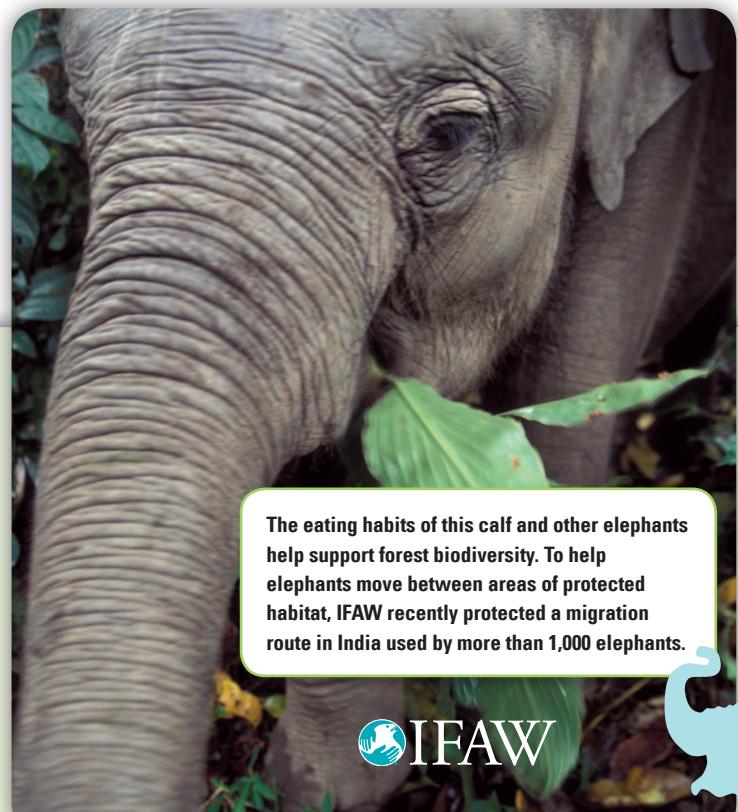
- An elephant trunk has tens of thousands of muscles. A whole human body has fewer than 650!
- Elephants can collect water in a special pouch in their throat. They can spray it later, when they get hot.
- Baby elephants suck their trunks, just as children suck their thumbs.

Long-Distance Communication

Elephants communicate by grunting, whistling, snorting, bellowing, rumbling, trumpeting, and more. Some sounds elephants make are too low for humans to hear. But other elephants may hear these sounds from more than 5 miles away. These sounds help elephant groups communicate for weeks without ever getting close together.

Elephants also communicate by stomping. These sounds may travel 20 miles or more through the ground.

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The eating habits of this calf and other elephants help support forest biodiversity. To help elephants move between areas of protected habitat, IFAW recently protected a migration route in India used by more than 1,000 elephants.

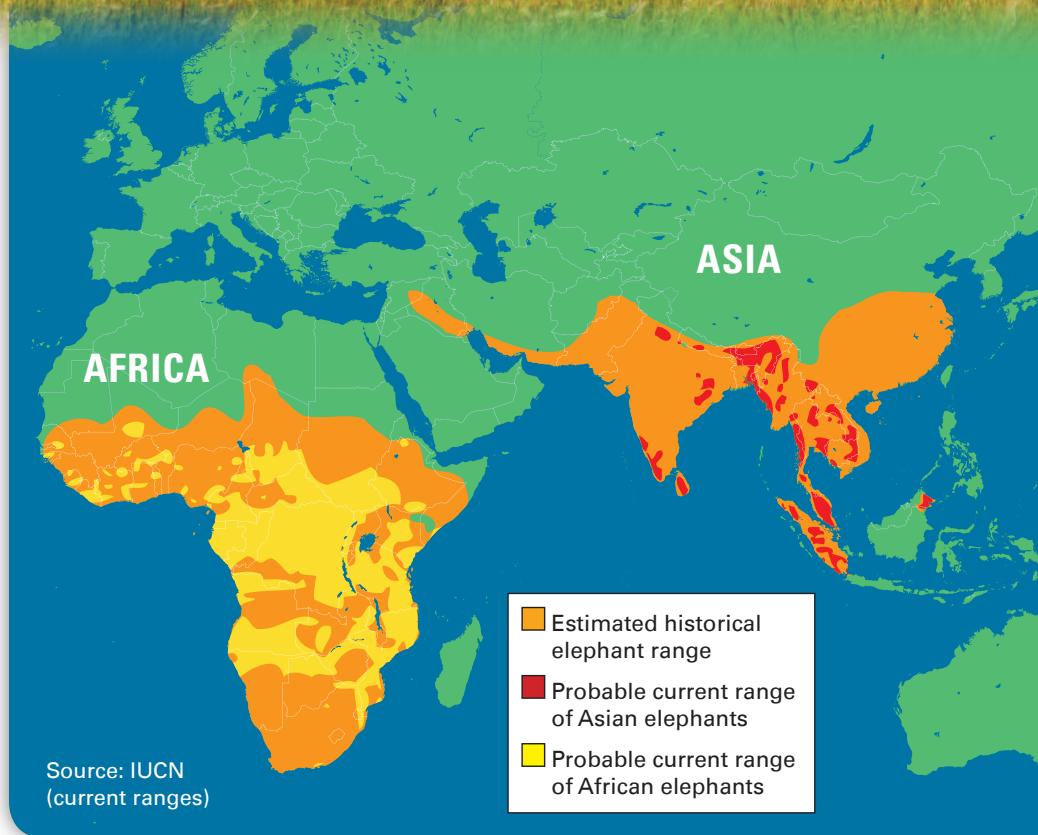
Room to Roam

African elephants used to roam through much of Africa. However, their **range** is now smaller because people are clearing more land for farming and living space.

Today, elephants live in parts of 37 African countries. They live in protected parks and places with little human settlement. The range of Asian elephants has also shrunk. They now live in parts of 14 Asian countries, in forest, scrub, and grassland areas.

As elephants are being crowded out of their habitats, they are being left with small patches of disconnected land. This **habitat fragmentation** creates more conflicts between people and elephants. Roads and railways have cut off many of the old elephant **migration** routes. Or, the routes take herds through new farms and settlements. Herds have trouble getting to food and water. They also may not meet other elephant groups, so the elephants have fewer choices of mates. This is not healthy for the elephant population.

Because of these problems, **conservation** groups are working to protect elephants' habitats and migration routes. They are also protecting strips of land that connect one patch of habitat to another. Elephants can move safely between areas of their habitat along these **elephant corridors**.



Climate Change

Climate change happens when gases in the air keep heat near the earth. This causes the earth to warm over time. Climate change can cause many problems, such as floods or droughts (long periods without rain). During a drought, there may not be enough water for animals and people.

Protecting elephant habitats—especially forests—can limit the effects of climate change. Forests capture some of the gases that otherwise trap heat. Therefore, protecting elephant habitat may be helpful for all plants and animals—even people.



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Elephants and Us

Elephants are important to the history, lives and culture of people in Asia and Africa. They are gods in some religions. They are celebrated at festivals. They are included in weddings. For hundreds of years, people have used elephants as work animals for transportation and for lifting heavy objects. They have even been trained and used in wars. Today, tour guides use them to carry people and to frighten away predators.



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China's last rain forest, Xishuangbanna (shee-shuang-bahn-nah), has fewer than 300 elephants—the last ones in China. Elephants in China face many challenges due to human activities. In 2003, IFAW began to help people find new ways to make money, so they wouldn't need to farm in elephants' habitat. IFAW also helped teach people about elephant conservation.

To the Rescue

An IFAW rescue and **rehabilitation** centre in Assam, India helps Asian elephant calves who are injured or orphaned before they are old enough to survive on their own. When a calf is found in trouble, rescuers first try to bring it back to its herd. If that isn't possible, the calves are raised at the centre until they are one to two years old. Then they are released into a protected wildlife reserve. As of 2011, 13 orphaned elephant calves had been released back to the wild.



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In recent years, problems between elephants and people have grown. Elephants have had to

compete with people for space, food, and water. They sometimes wander into villages and fields, looking for food. Farmers drive elephants away to protect their farms, often killing or injuring elephants. People may also be killed by elephants during these clashes.

Sometimes, people have turned to culling, or killing some elephants to control the elephant population. They may kill individual elephants or entire families. It is very disturbing to elephants that see the killings. They may become very sad, avoid other elephants, or act more aggressively.

In some African countries, people can connect protected areas to make 'mega-parks' where people and elephants don't meet. In ways such as this, people are working to stop conflicts between people and elephants *before* they happen.

Jumbo Move

In Malawi, Africa, IFAW safely moved an entire herd of 83 elephants to prevent conflicts with people.

The elephants are now roaming free in a protected wildlife reserve in another part of the country.

This IFAW project shows that conflicts between humans and elephants don't have to end in violence.



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In India and other Asian countries, elephant keepers, called mahouts, train elephants to carry people and other loads. The elephants shown here help patrol for poachers.



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The Trouble with Tusks

Millions of wild elephants once roamed the continents of Africa and Asia. But scientists believe that there are only half as many elephants now as there were about 100 years ago.

One of the biggest reasons for this is the killing of elephants for their ivory tusks. Ivory has been used by people for thousands of years. It is used to make piano keys, fancy chopsticks, and other luxury trinkets. But the only way to get ivory is from a dead elephant.

The buying and selling of ivory was banned following a 1989 agreement among governments. But elephants are still illegally **poached** because many people still want to buy ivory, and there is not enough protected habitat. Also, in many poor countries, it is difficult to enforce the laws.



Internet Trading

The Internet has become an easy place for people to illegally trade wildlife and wildlife products. IFAW discovered that close to three-quarters of wildlife products offered online in 11 countries were real elephant ivory. As a result, the Internet auction site eBay banned the sale of ivory at the start of 2009. People can help save elephants by choosing not to buy ivory online or anywhere else.

Ivory and the Law

In 1989, a treaty called the Convention on International Trade in Endangered Species (CITES) gave all wild elephants the highest level of protection. The buying and selling of ivory and other body parts from African and Asian elephants was banned.

But a change in the agreement allowed ivory **stockpiles** to be sold a few times since then. The sellers said the ivory came from elephants that had died naturally, but many people think that the elephants had been killed.

Conservationists say that if it is legal to sell any ivory, there's always the chance for poachers to smuggle illegal ivory and sell it. And it's impossible for people to tell the difference between legal and illegal ivory.



Many people around the world believe that the ivory trade must be completely stopped for African and Asian elephants to survive.

Conservation organizations are working to protect elephants from poachers. They help enforce the ban on trading ivory and work to teach people not to buy ivory products of any kind.

In addition, scientists have a new way to help end elephant poaching. They are now able to examine ivory and figure out which living elephants are relatives of the elephants that were killed for the ivory. This research tells scientists where the ivory came from and where elephants were killed.

This helps law enforcement officials and other people working to protect elephants to identify the places where a lot of poaching is taking place.

Saving Elephants

If the ivory trade is allowed to grow and elephants' habitats continue to shrink, then elephants will continue to be in serious danger. Conservation groups are working hard to save elephants. Governments, organizations, businesses, and communities must all work together to protect elephants and their habitats.

Elephants are extremely important for conservation. Protecting elephants means that more plants and animals and more ecosystems will also be conserved. The extinction of elephants would be terrible for many other species. And it would be a tragic loss of one of the wisest and most beloved of all animals.



This African elephant mother and calf roam at the foot of Mount Kilimanjaro in Amboseli National Park, Kenya, where IFAW works with renowned elephant scientist Cynthia Moss. Moss has followed these elephants since 1972. Her findings have provided incredible insights into elephant society, intelligence, and ecology. IFAW also supports community conservation projects with local Masai groups and partners with the Kenya Wildlife Service on anti-poaching efforts.

Glossary

biodiversity: biological diversity; a measurement of variation in species, genes, and living communities in an area

carnivores: meat-eating animals

conservation: the protection or careful use of something, such as a species or a natural resource

ecosystems: interacting communities of plants, animals, and the nonliving components of the environments in which these plants and animals live

elephant corridors: pathways that elephants travel between habitat areas

endangered species: species that are in great danger of dying out completely

extinct: no longer living (as in a species that no longer lives on Earth)

genetic diversity*: variety in the code for inherited traits of an entire species

habitat fragmentation: the process of breaking up a habitat into smaller and more disconnected patches

herbivores: animals that eat only plants

keystone species: species that strongly affect the structure and function of an ecosystem, as a keystone in an arch affects its strength

matriarch: the female leader of a family group

migration: the movement of animals from one place to another

poached: hunted and killed illegally

range: the entire area where a type of wild animal lives

rehabilitation: restoration to a state of health or normal activity after a period of difficulty

savannah: a flat grassland without many trees

smuggling: illegally moving goods into or out of a country

species: a group of living things that are similar and can have babies

stockpiles: large, stored-up supplies

