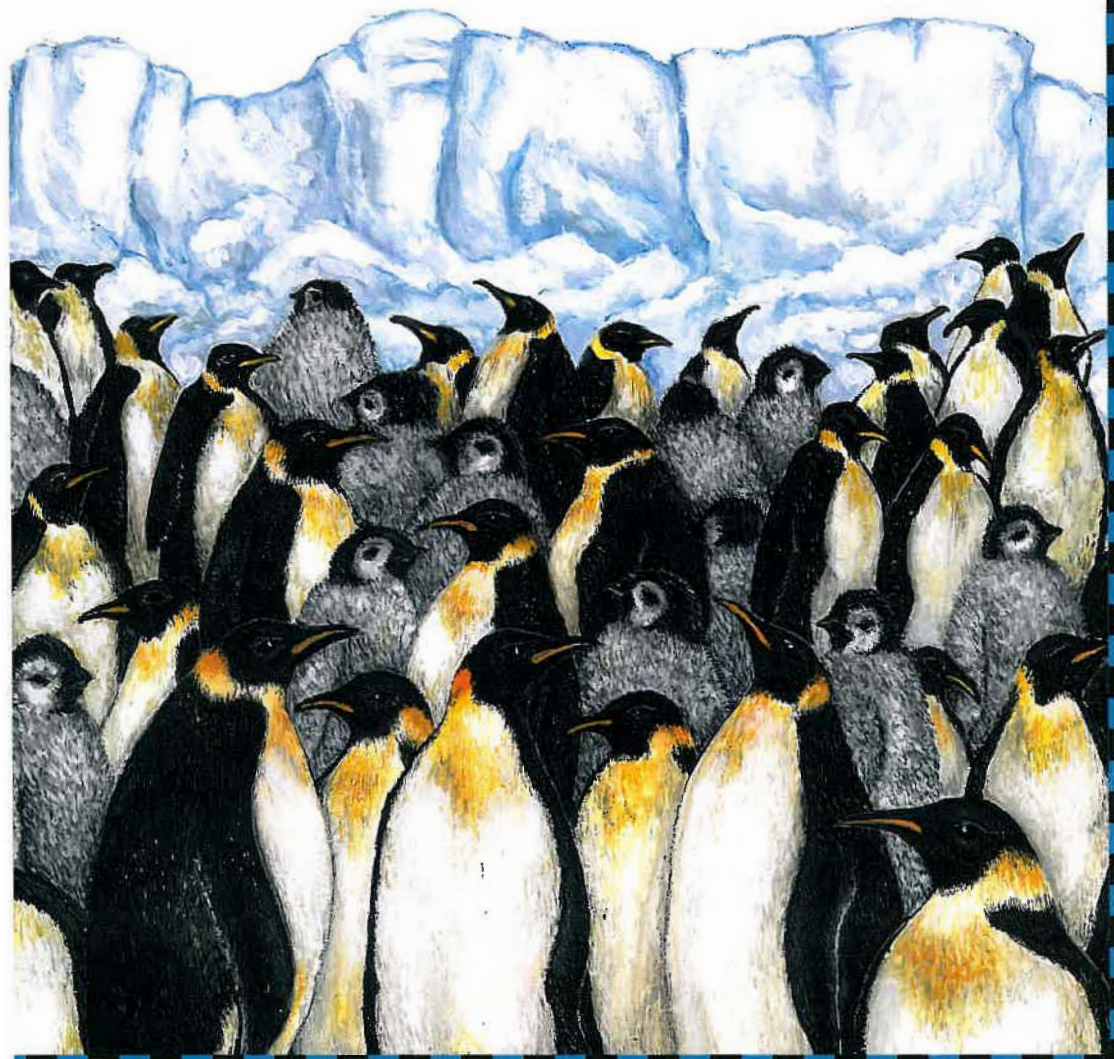


# Strength in Numbers



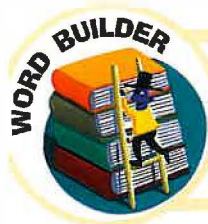


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# Features



If you think *ladybird* is a strange name, turn to page 6 to see what this little beetle is called in other countries.

Read about the damage caused by swarms of locusts. Then find out what locals mean when they say, "If you can't beat them, eat them!" in **Swarm Warning** on page 10.



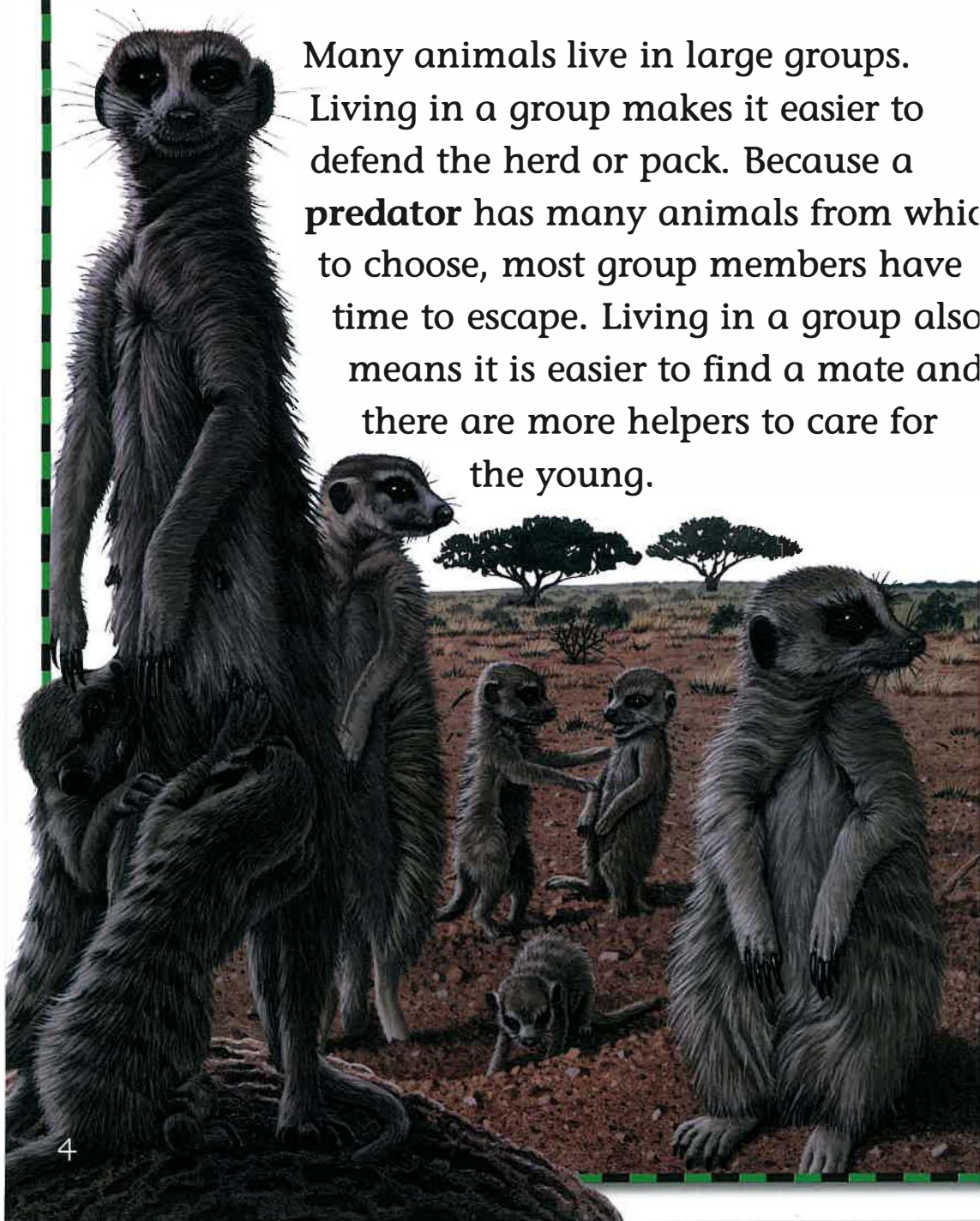
For the inside story on an insect that uses teamwork to build a nest taller than an elephant, see **Master Builders** on page 18.

How many eggs does a spider lay?  
Turn to page 21 for fascinating facts.



# Safety in Numbers

Many animals live in large groups. Living in a group makes it easier to defend the herd or pack. Because a predator has many animals from which to choose, most group members have time to escape. Living in a group also means it is easier to find a mate and there are more helpers to care for the young.





Wildebeest have good hearing but poor smell. Zebras have a good sense of smell. Together they can warn each other of predators.



Meerkats live together in packs. When a meerkat spots a predator it lets out a shrill cry. The pack then escapes to the safety of its underground burrows.

# Shelter in Numbers

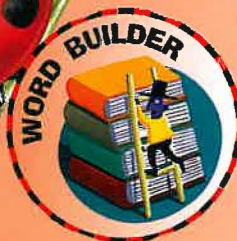
Penguins and gulls often nest in colonies of thousands of birds. Living in a colony, where many animals are watching for predators, keeps the chicks safe.

Ladybirds do not usually live in a group. However, they gather into a **swarm** to make their own shelter at the end of summer. They **hibernate** together through the cold weather.



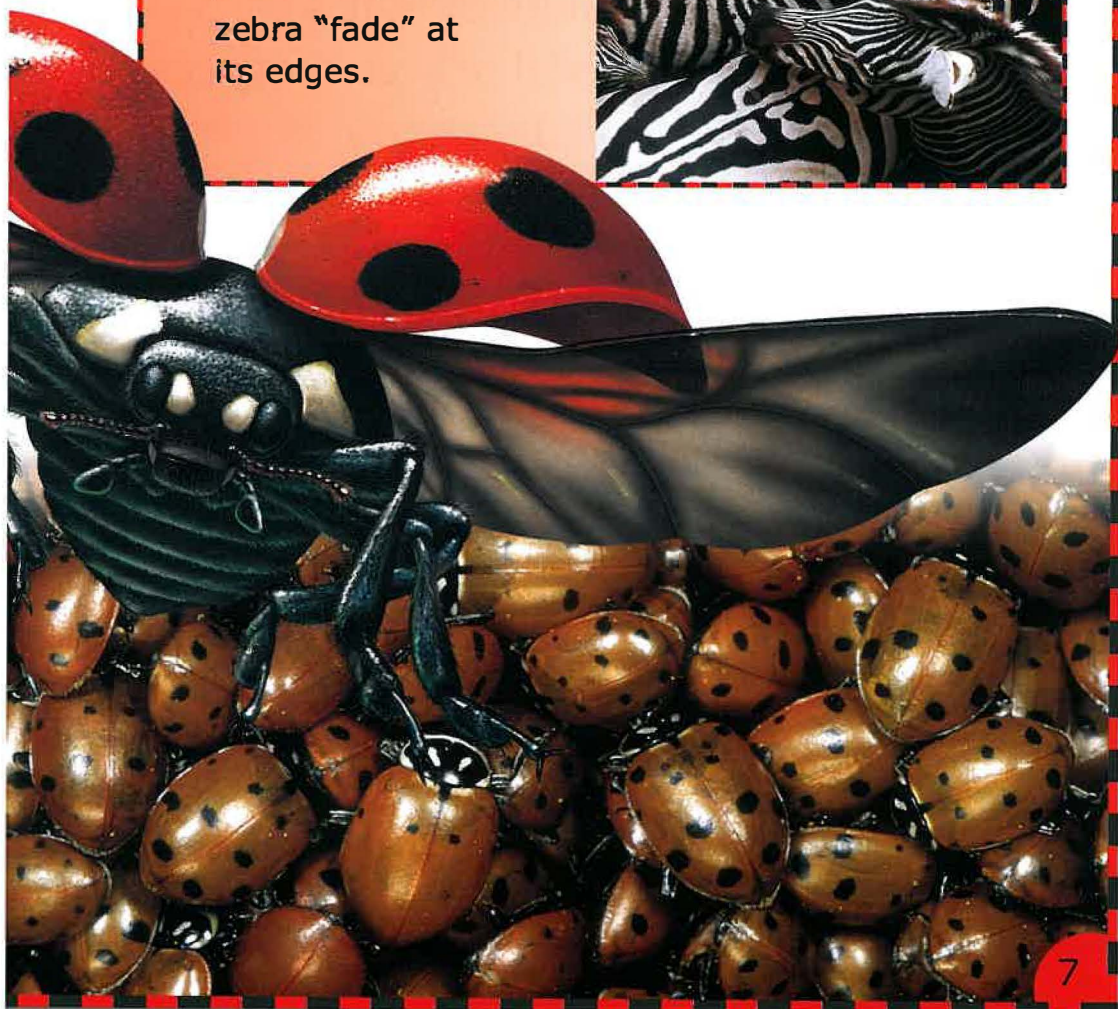
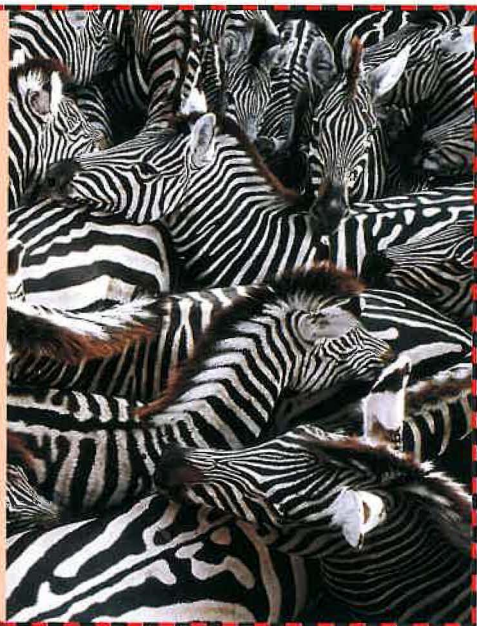
If you think *ladybird* is a strange name, take a look at what this little beetle is called in other countries:

- Flower Lady (China)
- Water Delivery-Man's Daughter (Iraq)
- Indra's Cowherd (India)
- Crop Picker (Africa)
- Good News (Iran)





Zebra stripes make it difficult for a predator to see one zebra in a herd. They also make it hard to see the outline of just one zebra. The stripes seem to make the zebra "fade" at its edges.



The page is framed by a black and yellow checkered border. At the top, several bees are shown in flight against a white background. Below the title, a large, detailed illustration of a bee's head and thorax is centered, with its wings spread. Other bees are scattered around the page, some in flight and some on the ground. The text is positioned in the middle of the page, between the top and bottom illustrations of bees.

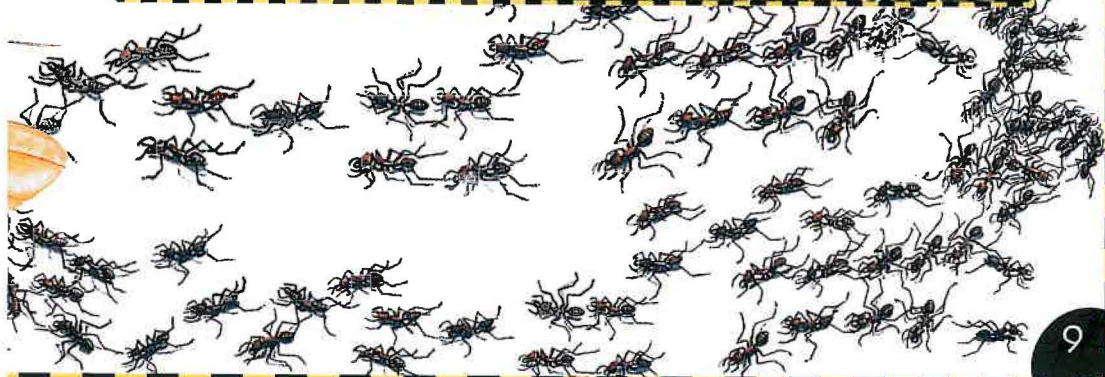
# Power in Numbers

Many insects find strength in numbers. Some insects are powerful or even dangerous only because they work in groups. The sting of one killer bee is no worse than the sting of any other kind of bee. However, killer bees defend themselves by attacking in huge numbers. Killer bees are very dangerous because they work in large groups.





One African driver ant is harmless. However, these ants can travel in swarms of 20 million! When a large swarm attacks it kills everything in its path.





# Swarm Warning



Locusts usually live alone. However, they gather in groups and **migrate** to new feeding grounds when there is not enough food. A swarm of locusts can contain a million insects per hectare. With "strength in numbers", swarms can fly 5,000 kilometres in five days, eating everything they can find.


Sometimes swarms of locusts are so big they shut out the sunlight. They can also make travelling in aeroplanes, cars and trains dangerous.


*A locust swarm means disaster for this farmer in West Africa.*




**If You Can't Beat Them, Eat Them!**  
Some people have decided that if locusts eat their crops, they will eat the locusts!

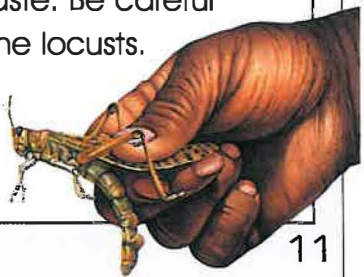
## A Locust Recipe Used in Cambodia

 **Step 1** Take 30 to 40 dead adult locusts.

 **Step 2** Slit the abdomen lengthwise. Stuff a peanut inside.

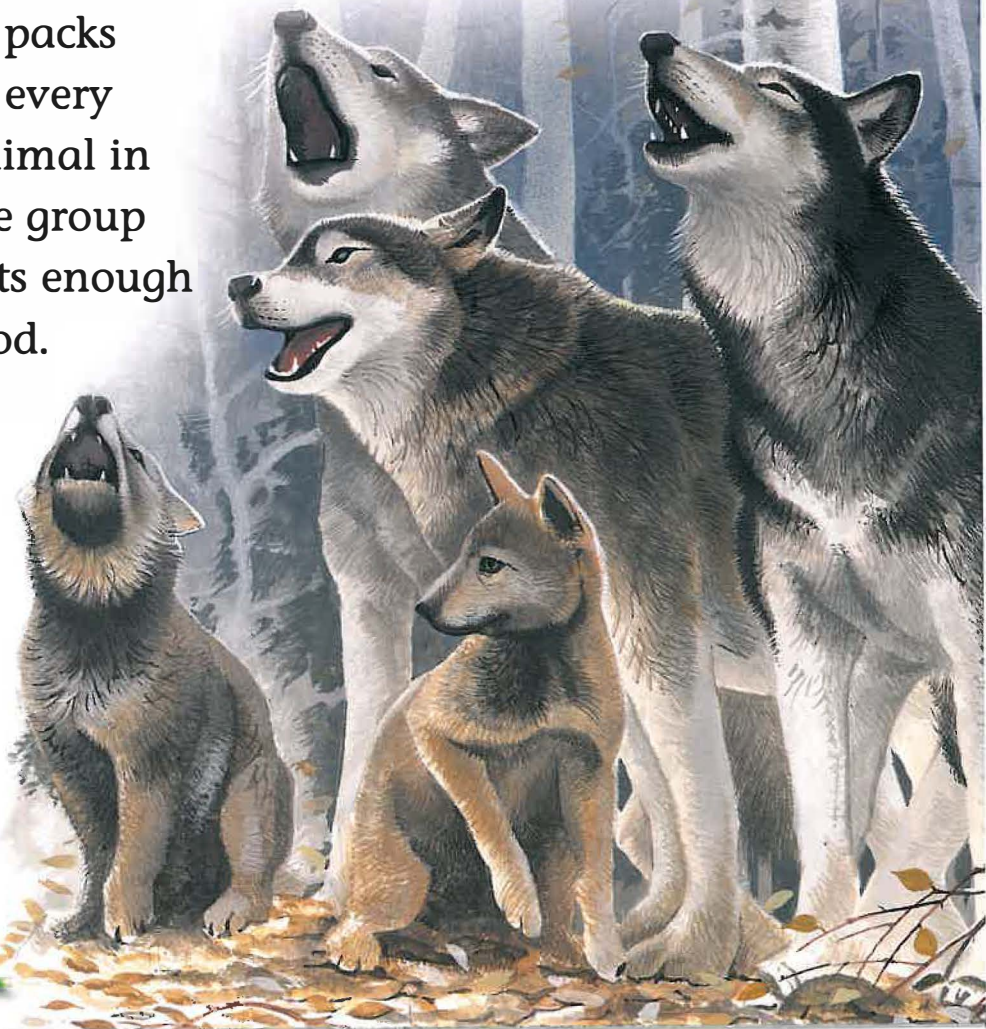
 **Step 3** Lightly fry the locusts in a wok or frying pan. Add oil and salt to taste. Be careful not to burn the locusts.

 **Step 4** Enjoy!



# Hunting in Numbers

Many animals such as lions, hyenas, wolves and wild dogs work together to find food. By hunting in groups of up to twenty members they are able to catch and kill larger prey. Some animals such as African hunting dogs also hunt and eat in packs so every animal in the group gets enough food.





In a pride of lions the lionesses do the hunting. Then they share their prey with the rest of the pride.

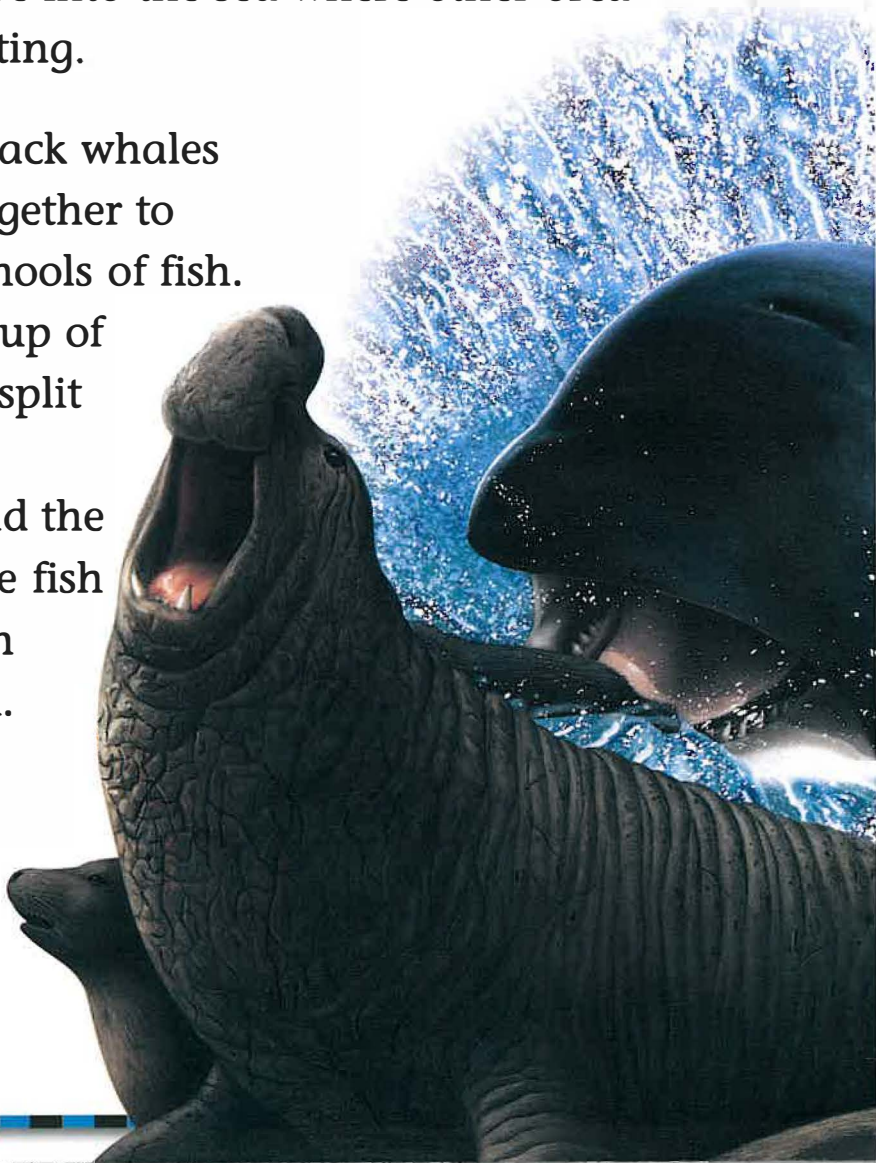


# Team Power

Some ocean animals such as orca also hunt together. One orca may frighten a group of seals by coming very close to shore. The seals then try to escape into the sea where other orca are waiting.

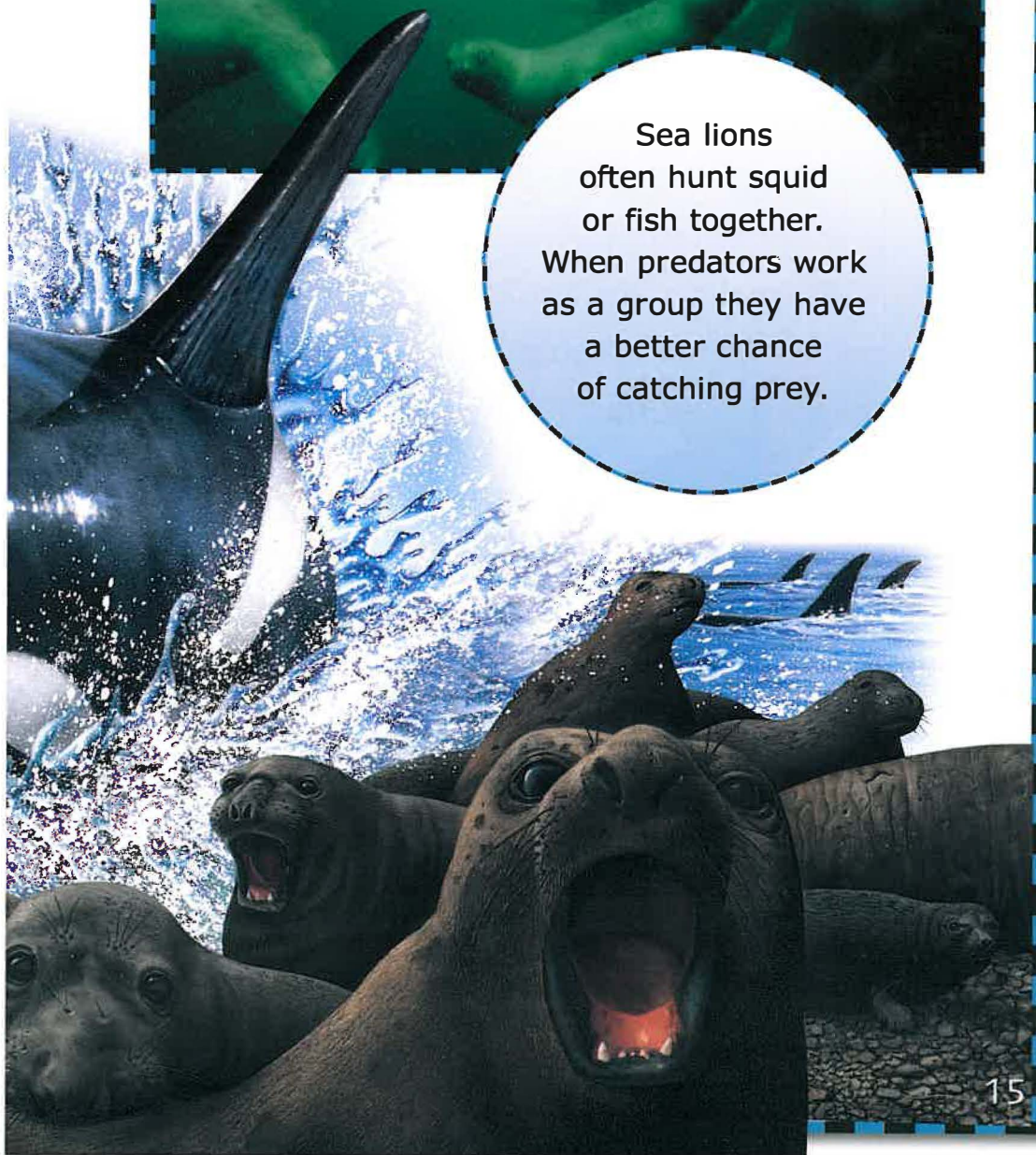
Humpback whales work together to herd schools of fish.

The group of whales split up and surround the fish. The fish are then trapped.





Sea lions  
often hunt squid  
or fish together.  
When predators work  
as a group they have  
a better chance  
of catching prey.

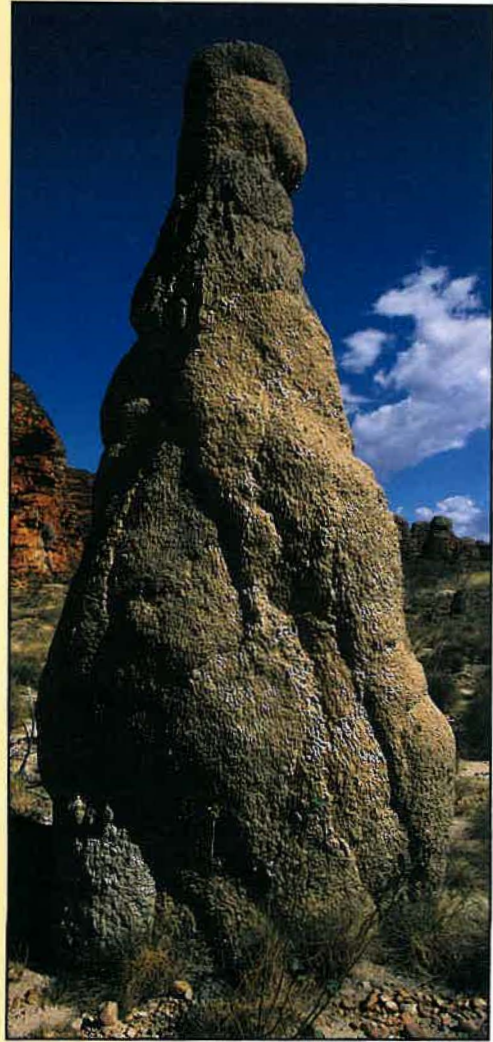




# Master Builders

Of all animals, termites are the master builders. Termites work together to build huge, strong nests called mounds. Termite mounds can be 6 metres tall and go deep underground. Scientists think that some mounds may have been used for more than 4,000 years.

Termite mounds are carefully planned. They have many tunnels to keep fresh air flowing. This is similar to built-in air conditioning.



Around the world termites build different kinds of nests. This termite mound is in Western Australia.



## Inside a Termite Mound

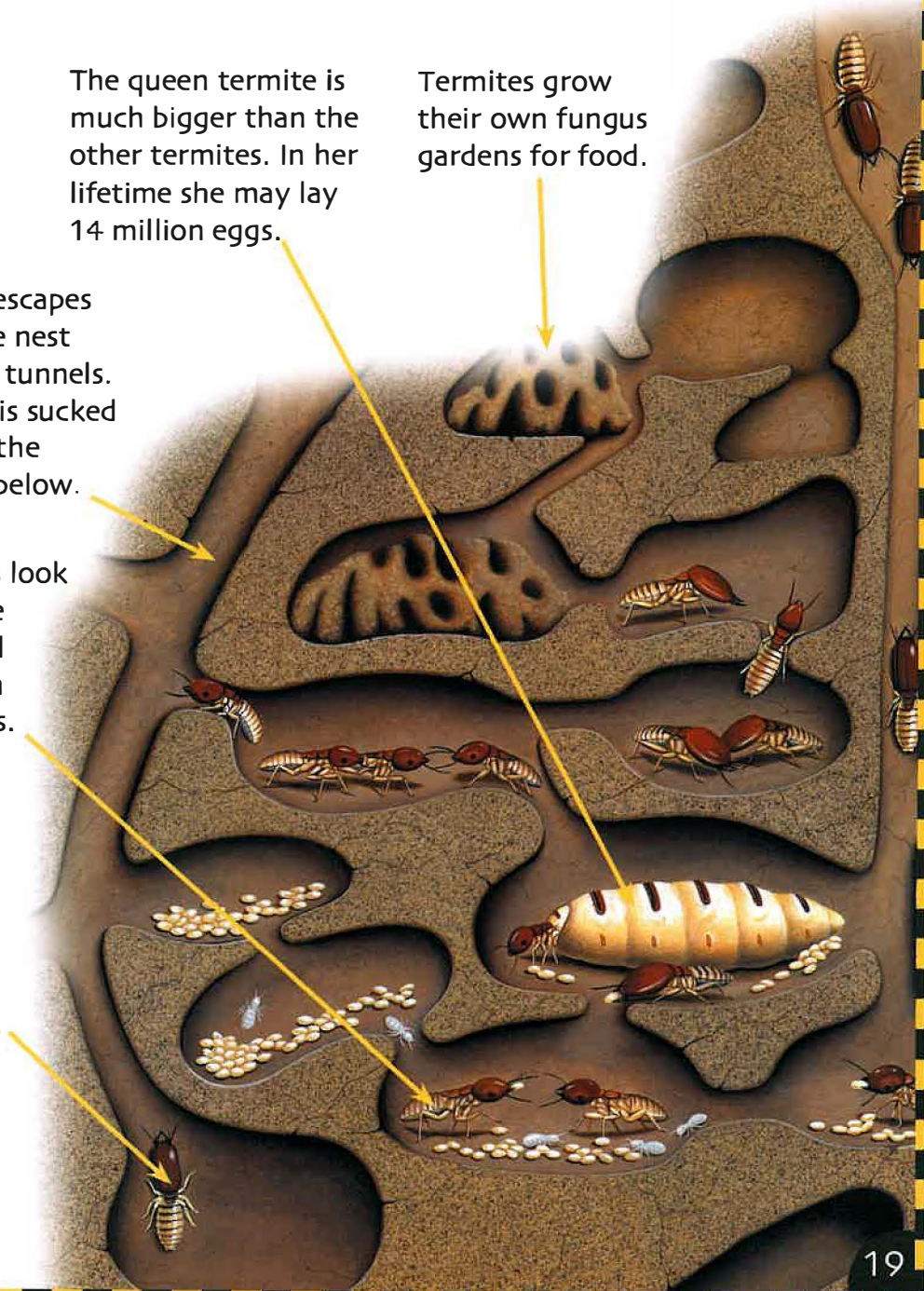
The queen termite is much bigger than the other termites. In her lifetime she may lay 14 million eggs.

Termites grow their own fungus gardens for food.

Hot air escapes from the nest through tunnels. Cool air is sucked in from the ground below.

Workers look after the eggs and young in nurseries.

Soldier termites protect the nest.



# Glossary

**hibernate** – to rest in a state similar to a very deep sleep. Many animals hibernate through the winter when food is hard to find.

**migrate** – to move from one country or area to another. Locusts migrate when they don't have enough food. Many birds migrate to warmer areas for the winter.

**predator** – an animal that lives by killing and eating other animals

**prey** – an animal that is hunted and eaten by another animal

**reptile** – a cold-blooded animal that crawls on its belly or creeps on short legs. Many reptiles lay eggs and do not look after their young.

**swarm** – a large number of insects moving as a group



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# Discussion Starters

- 1 Sometimes people also rely on strength in numbers. What are two ways people use the strength, safety or cooperation of a large group?
- 2 Some animals do not use strength in numbers. What are two kinds of animals that live by themselves or in small family groups? Why don't they need the safety of a large group?
- 3 Out of all the animals discussed in this book which do you admire the most? Why?

