

**THE
NATURE YEAR**



MARCH

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Created and produced by Nicholas Harris, Sarah Hartley, Katie Sexton,
Ruth Symons and Erica Williams, Orpheus Books Ltd

Text by Ruth Symons

Scientific consultant: Chris Jarvis, Oxford University
Museum of Natural History

Illustrated by Martin Camm and Ian Jackson

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THE WORLD IN MARCH

IN THE NORTHERN half of the world, periods of mild weather break up the cold. More spring flowers appear and, on warmer days, hibernators start to emerge. In the southern hemisphere, autumn has arrived. Young animals, born in the height of summer, race to put on weight before the start of winter.

In the northern hemisphere, the days are becoming longer and temperatures are rising. Trees start to grow fresh new leaves and blossom flowers on some boughs. There is a flurry of animal activity, too.



On a warm day, a queen bumblebee emerges from her winter hibernation. She buzzes around a willow catkin, feeding on its nectar. In the same tree, a robin guards her nest of small white eggs. The robin chicks will hatch in just two weeks, and soon become independent.

In Europe and North America, animals emerge from their winter hibernation. After months without food, their fat reserves are running low, and it is crucial that they eat before long. They may even need to retreat to their burrows if temperatures drop again.



A hedgehog ventures out after months of hibernation



Off the coasts of New Zealand, dusky dolphins group in their thousands to feed on seasonal schools of squid and fish that swim in deeper waters. The dolphins perform acrobatic jumps, and slap the water with their fins. This scares the fish, so that they crowd together into tight groups and are easier to catch.



ARCTIC

AFTER MONTHS IN her maternity den, a female polar bear steps into the open with her two cubs. She must keep a constant look out for danger. Hungry adult males are known to attack cubs when other food is scarce.

After months without food, while suckling her cubs, the mother now desperately needs a meal. She uses her excellent sense of smell to find a breathing hole—a break in the ice where seals come up for air. Crouching by the hole, the polar bear silently waits. As soon as a seal appears, she grabs it with a paw and pulls it on to the ice. The young bears eat the red meat of the seal, which is high in protein, needed for growth. The mother prefers to eat the fatty blubber. This helps her to gain strength and weight.



ARCTIC

ON A FLOATING LUMP OF ICE, a harp seal pup cries out for its mother. She left her pup momentarily while she went in search of food. On her return, she recognizes it by its cry and its scent.

The pup feeds on its mother's rich, fatty milk up to three times a day, for about two weeks. It grows quickly in size, building up a thick layer of body fat, called blubber, that will help it survive the severe cold. Until that time, it is kept warm by its soft, white fur—which also helps to camouflage it from predators.

When the pups are two weeks old, they will shed their white fur to reveal short, grey coats. At the same time, their mothers will return to the open ocean to feed and to mate, leaving the pups to survive on their own.



EUROPE

IN MARCH, HARES can often be seen boxing. This occurs throughout the year, but is most common in spring, when the breeding season is at its peak.

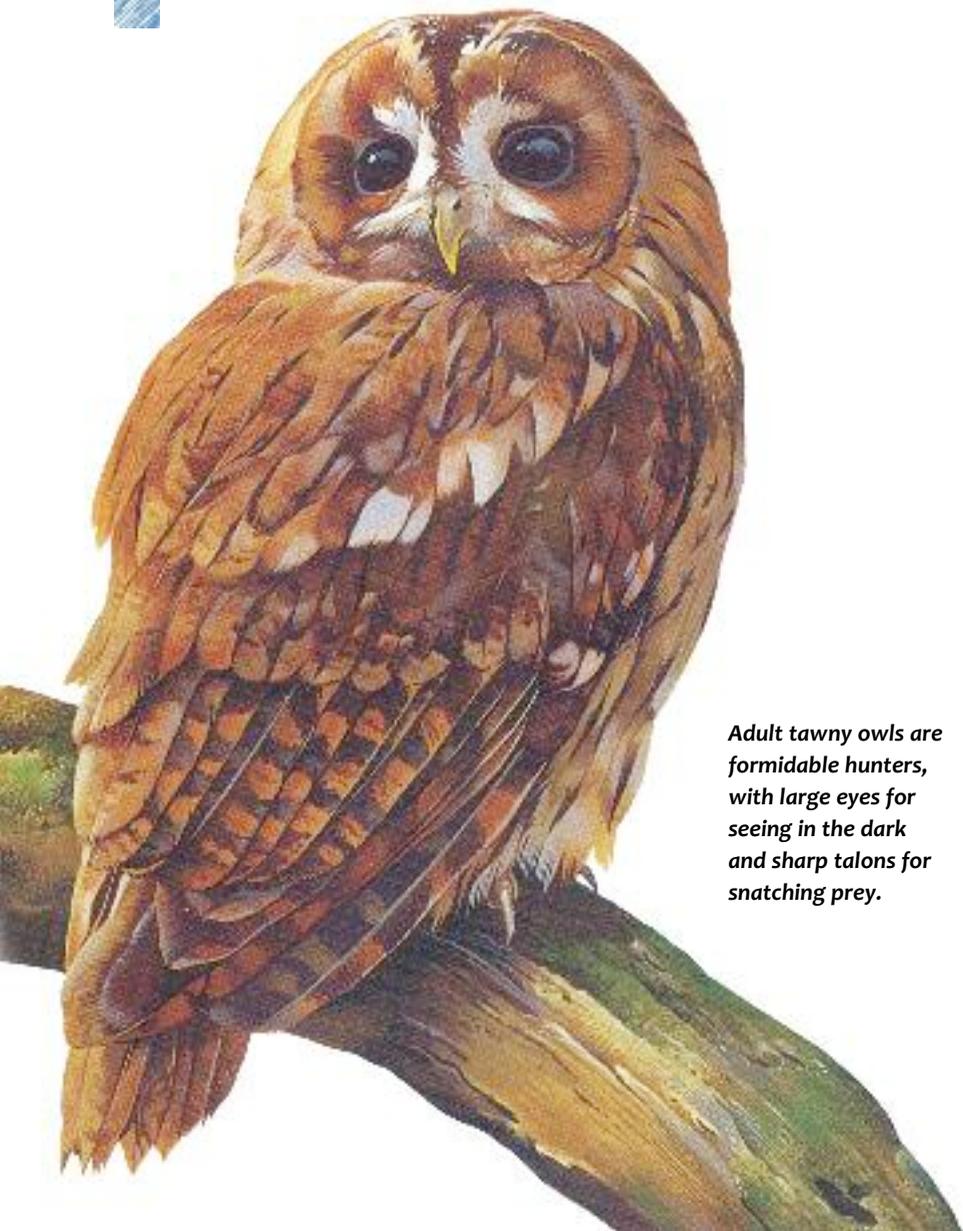
The contests are between a female and an amorous male. The hares rise up on their back legs and strike one another with their forepaws. The male is smaller and weaker than the female and can be hurt by her claws and teeth. But if he is persistent and shows off his strength, she may choose him as a mate.

Five or six weeks after mating, the female gives birth to a litter of baby hares, called leverets. The newborn hares are ready to run at the first sign of danger. They lie hidden in hollows of flattened grass called forms.

To escape from predators, hares use their long, strong legs to run at over 55 km/h.



AFTER TEN WEEKS inside their sett, some badger cubs are about to venture out for the first time. They are still suckling on their mother's milk, but will start to fend for themselves over the next month. First, they must learn how to find food.



Adult tawny owls are formidable hunters, with large eyes for seeing in the dark and sharp talons for snatching prey.

EUROPE

TAWNY OWLS ARE skilled night-time hunters, swooping silently down on their prey—mice, birds, frogs or insects—which they then swallow whole. During the day, they rest in tree hollows, well camouflaged against the browns and blacks of the tree.

The owls mate and lay their eggs in early spring. The female stays with the eggs to keep them warm, while the male brings her food. After a month, the first eggs hatch. The young owls are covered in fluffy grey feathers, called down (right). As the owlet grows, its down will be replaced with stronger feathers, better equipped for flight, and the owl will get its adult markings.



EUROPE

ON THE STEPPES of Russia, it is the start of the mating season for the great bustards. The male seeks to attract a mate by displaying his impressive feathers. The females watch every male before they pick a mate. Having done so, they stand beside the male of their choice, sometimes plucking at his feathers.

A male bustard may mate with up to five females in one season. He takes no part in raising the young, which hatch close to the spot where their parents courted.



Elsewhere in Europe, the first of the year's migrant birds are arriving from the south. Among the first to return each spring are the willow warblers from Africa (left).



A male bustard struts with his tail held high, taking gulps of air to inflate an air sac under his throat, which puffs out yet more feathers. To complete the spectacle, he stamps on the ground while spinning around.

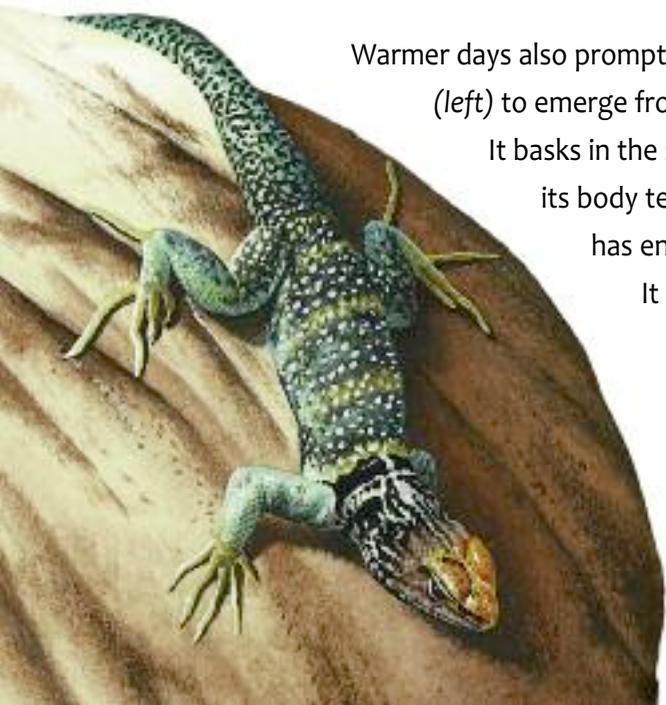
NORTH AMERICA

WITH THE ARRIVAL OF SPRING, California's Colorado Desert bursts into bloom. Darting between the flowers are hummingbirds and butterflies, which feed on the flowers' nectar. Among them, a Costa's hummingbird hovers over a flowering cactus, dipping its tiny beak into a flower. It may visit up to 1000 flowers a day. It takes all the water it needs from the nectar of flowers, so it can actually survive without drinking.

Warmer days also prompt the collared lizard (left) to emerge from its deep sleep.

It basks in the sun on a rock to raise its body temperature, until it has enough energy to hunt.

It then goes in pursuit of insects, its food.



A Costa's hummingbird hovers by a cactus flower. Its wings beat at up to 70 times a second while it sips nectar. Flowers are clustered at the tips of the plant's stems, away from its prickles, so that they are easy to approach.



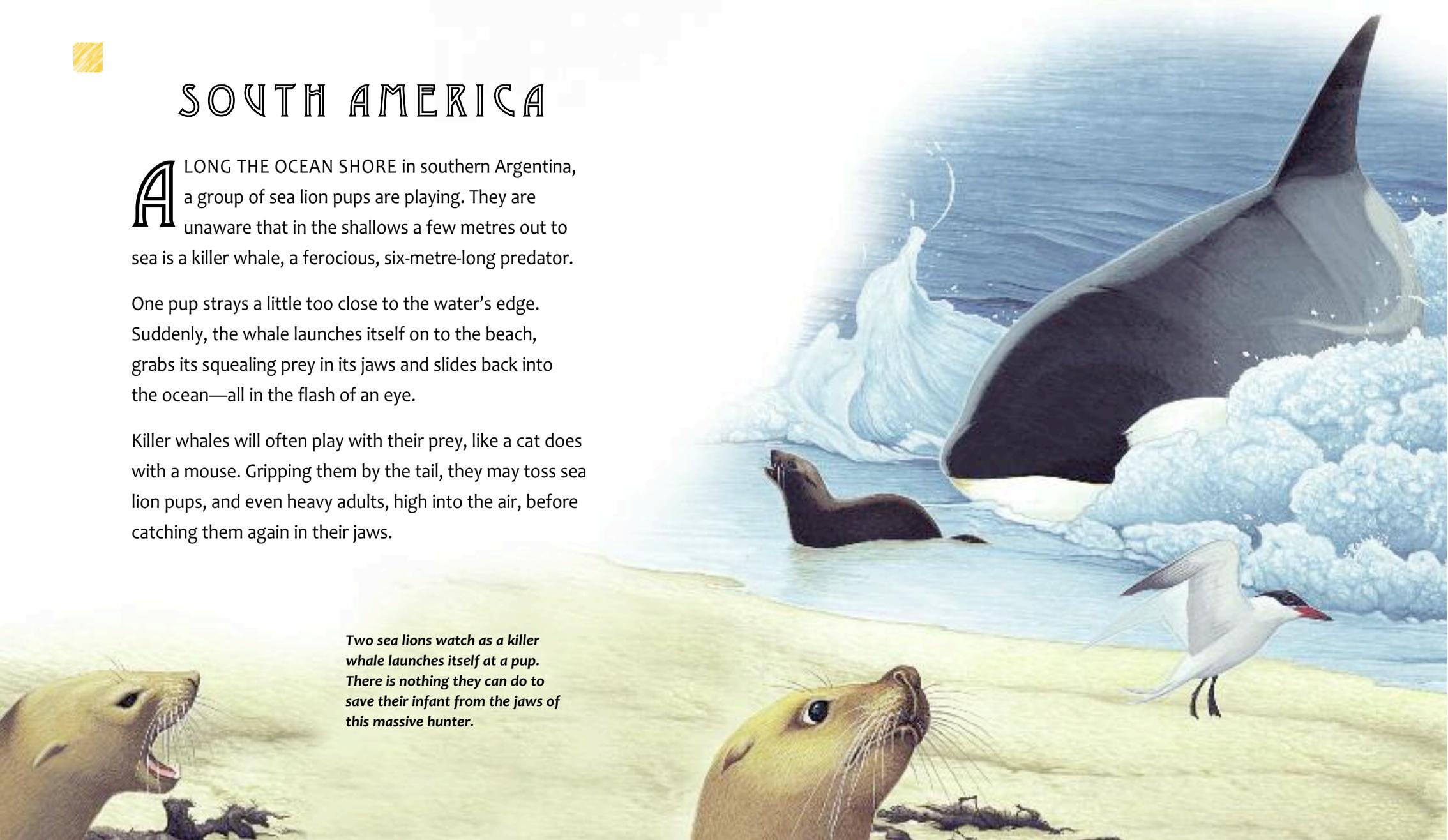
SOUTH AMERICA

A LONG THE OCEAN SHORE in southern Argentina, a group of sea lion pups are playing. They are unaware that in the shallows a few metres out to sea is a killer whale, a ferocious, six-metre-long predator.

One pup strays a little too close to the water's edge. Suddenly, the whale launches itself on to the beach, grabs its squealing prey in its jaws and slides back into the ocean—all in the flash of an eye.

Killer whales will often play with their prey, like a cat does with a mouse. Gripping them by the tail, they may toss sea lion pups, and even heavy adults, high into the air, before catching them again in their jaws.

Two sea lions watch as a killer whale launches itself at a pup. There is nothing they can do to save their infant from the jaws of this massive hunter.



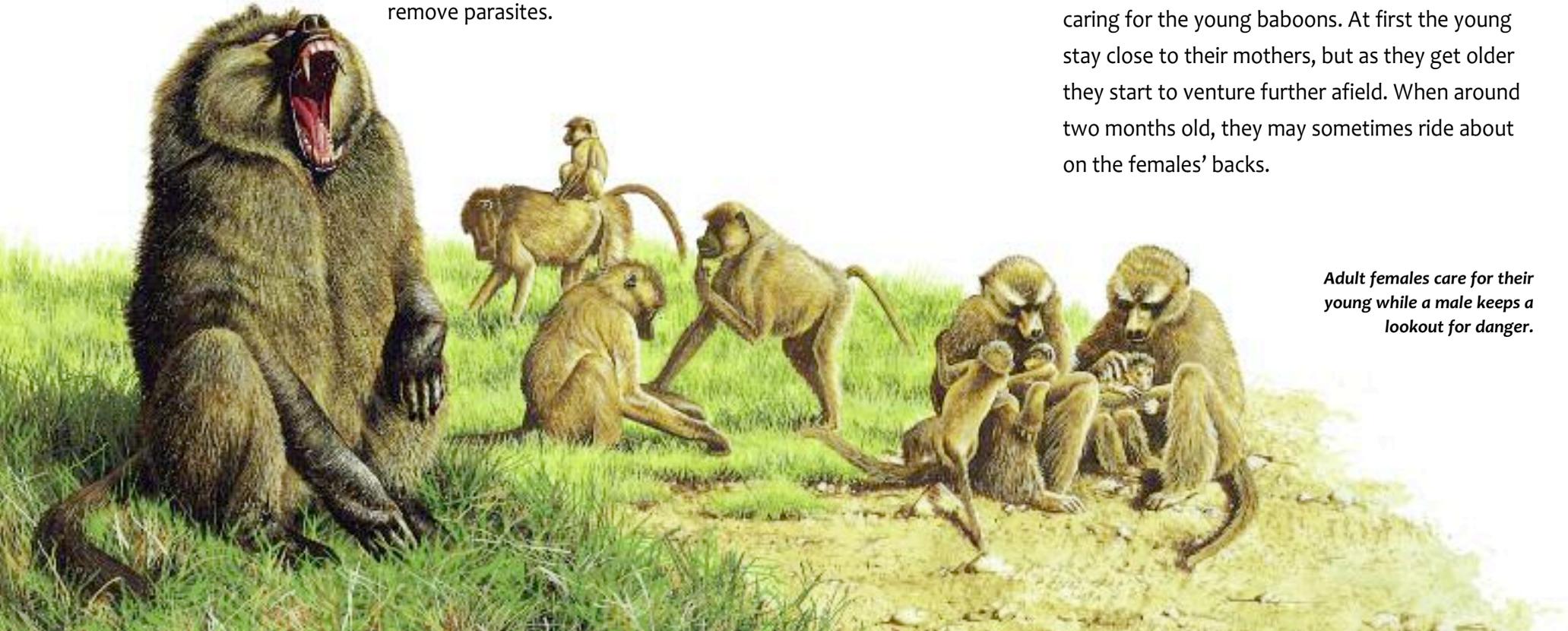
AFRICA

A TROOP OF around 50 baboons are milling around the open grassland of the savannah. Some forage for grass, roots and berries, while others are busy grooming—picking at each other's skin to remove parasites.

The troop is headed by several adult males. These are the strongest individuals. They fight off enemies and decide when and where the troop will move on.

All the females in the troop share the task of caring for the young baboons. At first the young stay close to their mothers, but as they get older they start to venture further afield. When around two months old, they may sometimes ride about on the females' backs.

Adult females care for their young while a male keeps a lookout for danger.



AUSTRALIA

AT DAYBREAK, a flock of bats gather to roost. They hang upside down in a tree, gripping the branches with their claws. March is the start of the mating season of the grey-headed flying fox, a bat so-called because of its fox-like face.

Two months earlier, the males established territories which included groups, or “harems”, of around five females. The males aggressively defend their territory from intruders.

Most mating takes place during the day, when the bats are in their roosts. When night falls, the bats leave to forage for food. They feed mostly on pollen, nectar and fruit, and may fly up to 50 kilometres in their search.





A whale shark feasts on coral spawn on the Ningaloo Reef

AUSTRALIA

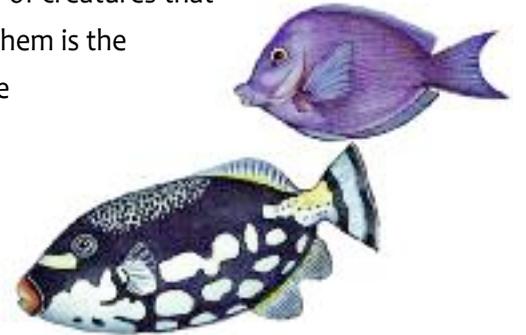
CORAL IS FORMED from the skeletons of tiny animals called polyps. They build up a skeleton around their soft bodies and when they die, the casings are left behind. The coral polyps live in huge colonies. Over hundreds of years, banks of coral, called reefs, build up.



In the Ningaloo Reef, on the western coast of Australia, the polyps reproduce at the same time each year, a few days after the full moon in March or early April. The reef waters burst into colour as the corals spawn—releasing eggs and sperm into the waters.

This event attracts a number of creatures that feed on the spawn. Among them is the largest fish in the world—the 12-metre-long whale shark.

The coral reef is teeming with colourful fish, such as this angelfish (above), triggerfish (right) and surgeonfish (far right).



THINGS TO DO: MAKING A BIRD'S NEST



In the spring, birds start to gather twigs, leaves, moss, mud and feathers to build their nests with. Can you use the same materials to build your own bird's nest?

1 Weave small, flexible twigs into a circular shape to make the base of your nest. If the base feels insecure, line it with a little mud and leave to harden.

For an extra challenge, try using just one hand (remember, a bird does it all with its beak). You could work alongside a friend like a pair of birds.



2 Line the inside of the nest with soft materials, such as grass, moss and feathers. Only use materials you find on the ground—do not pull twigs or leaves off plants.

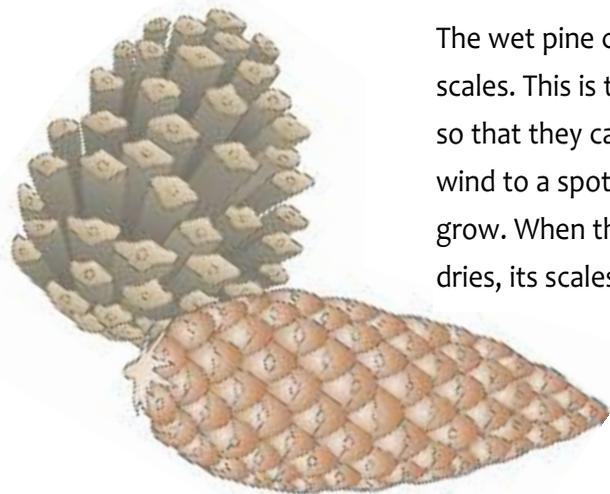
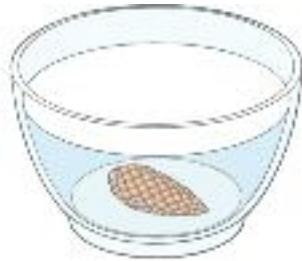
3 Once the nest is made, put it to the test. Look for small objects, such as stones, that can act as eggs. Do they stay in the nest?

Always wash your hands after handling natural materials.



THINGS TO DO: LOOKING AT PINE CONES

Look for two pine cones on the forest floor or under a tree in your local park or garden. Place one in a bowl of water for 10 minutes and keep the other one dry. What difference can you see between the cones?



The wet pine cone has shut its scales. This is to keep its seeds dry so that they can float away on the wind to a spot where they can grow. When the wet pine cone dries, its scales will open again.

NATURE WATCH



Primroses 10



Birds gathering nesting materials 20



Frogspawn 30



Flying bumblebee 40



Flowering gorse 50

See how many of these things that typically happen in March you can spot. Award yourself the points on the right!

