

THE
NATURE YEAR



AUGUST

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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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CONTENTS



THE WORLD · 6



NORTH ASIA · 12



EAST AFRICA · 18



AUSTRALIA · 24



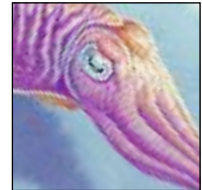
ARCTIC · 8



NORTH AMERICA · 14



AFRICA · 20



AUSTRALIA · 26



EUROPE · 10



NORTH AMERICA · 16



INDONESIA · 22



THINGS TO DO · 28

THE WORLD IN AUGUST

IN THE NORTHERN hemisphere it is still high summer, although there are signs, particularly in northern regions, that autumn is on the way. Meanwhile, winter draws to a close in the south. Many animals mate so that their young are born in time for the summer months of plenty.

Animals feast on ripening summer fruits: starlings and blackbirds perch in the branches of blackthorn and elderberry bushes to pick at their berries; squirrels crack open young, green hazelnuts before they fall to the ground.



In the tall grass beside a field, a harvest mouse peeks out of her grass nest. She is about to give birth to her third litter of young this summer. Nearby, a grasshopper chirrups to mark its territory and a warbler calls out to its mate.

In North America, black bears are raising their cubs. They are good climbers and often shimmy up trees to escape danger or look for food. Honey is a favourite food, rich in nutrients that help the bears gain weight before winter sets in. Luckily the bees' stings cannot penetrate the bear's fur.

In much of southern Africa, it is the middle of the dry season. A herd of elephants have gathered near a water hole in the shade of a forest. The elephants keep cool by sucking up water with their long, flexible trunks and spraying it over their backs.



An elephant douses itself in water to stay cool in the hot dry season.

ARCTIC

BY AUGUST, the Arctic sea ice has completely broken up. With their way cleared of ice, hundreds of beluga whales migrate north. They are heading for the river inlets of Canada's Arctic islands.

In the shallow water, adults rub against the gravelly river bed to scrape away a layer of dead, yellowed skin, revealing a new, white layer beneath it. Belugas are the only species of whale or dolphin known to undergo a seasonal moult.

As well as moulting, females give birth to their young. The newborn calves spend their first months in the relative safety of the inlets before braving the open ocean.

The belugas will leave in autumn, before the shallow inlets freeze again. If they delay their departure, they risk getting trapped by the ice and so being unable to rise to the surface to breathe.



EUROPE

ALL SUMMER LONG a queen bumblebee has been busy raising new workers, which are all females. Each “worker egg” is fertilized by sperm, stored in the queen’s body since she mated last summer.

Towards the end of the summer, she lays a batch of unfertilized eggs, which develop into male bees. She also lays several fertilized eggs in unusually large egg cells. The young from these eggs are given extra food so that they will grow into new queens.

The new queens leave the nest about a week after the males, who wait for them to emerge. After the bees mate, the males die. The new queens look for burrows where they will hibernate for the winter. The old queen and her workers will all die in the autumn.



A pair of workers push pollen into the top of the egg cells. The unusually large larva in the centre of the nest will develop into a queen.



NORTH ASIA

AFTER A LONG DRY SPELL, the rains finally come to India, ushering in a period of wet weather called the monsoon season. From an overhanging branch, a fishing cat surveys the river beneath for fish. As a fish appears, the cat darts a paw into the water to grab it.

The metre-long cat lives along the banks of rivers, streams and mangrove swamps. Besides fish, crabs, and frogs, it also preys on animals that come to the water to drink, including goats and even small wild boar. During the long dry season, it goes after mice and birds.

Sometimes, the fishing cat may leap into the water itself, even diving beneath the surface in pursuit of prey. It has slightly webbed feet and waterproof fur so it is well equipped for hunting in the water.

NORTH AMERICA

IN LATE SUMMER, sockeye salmon are swimming upriver to the headwaters where they were born. Here they will lay their eggs and die. First they face an exhausting and perilous journey, battling against strong currents, waterfalls and scores of hungry brown bears.

The fish are at their most vulnerable when they leap from the water to clear waterfalls. This is precisely where the bears gather, ready to catch one in their powerful jaws. Bears are usually solitary, territorial animals, but the promise of bountiful fish and their rich, oily eggs brings dozens of them to the same stretch of river.



NORTH AMERICA

AS DUSK FALLS in southwestern USA, hundreds of thousands of free-tailed bats fly out of caves in search of food. The bats arrived back in the spring to feast on the summer's insects. They eat about half their own weight each night.

While here, the bats settle in caves where females give birth to their young. By the time they are about six weeks old, the young bats can fly, and infants join their mothers on hunting expeditions.

In autumn, the bats will head south to Mexico.



Bats hang upside down to sleep. At night, the bats leave their roosts to feed outside the cave.

EAST AFRICA

BY AUGUST, the grasslands of East Africa have begun to dry up and the wildebeest are migrating north in search of lush pastures. But the dry season has already taken its toll on the wildebeest: many are weak and hungry.

While a starving wildebeest may not make the juiciest meal, it should make an easy one. A pack of hyenas will stalk an individual for hours until it is completely exhausted, at which point they finally move in for the kill. The hyenas eat everything, even bones, which they crush with their powerful jaws.





Male hippos use their upper canine teeth to push rivals away, slashing out at them with their long, sharp lower canines.



AFRICA

DURING THE DRY SEASON, waterholes rapidly shrink, and hippos find themselves crowded in large groups of more than 100 individuals. Bulls, used to ruling their own territory, engage in fierce battles for dominance. Fights usually end when one male gives in to a stronger rival, but some end in serious injury or even death. Most males bear scars from previous fights.

Giraffes also crowd together around tall acacia trees, the last food available in the dry savannah. Most plant-eaters have long since left in search of fresh pastures. But the giraffes, with their two-metre-long necks, can reach the leaves on the highest branches.



INDONESIA

FIVE WEEKS AFTER MATING, the female Komodo dragon looks for a place to lay her eggs. She either digs a burrow deep into the side of a sandy slope, or takes over one abandoned by another animal. Crawling into the burrow, she lays between 12 and 30 soft-shelled eggs.

The eggs are laid one or two metres from the surface so that they do not get too hot in the sun. Conditions must be perfect for the eggs to hatch.

The mother guards her nest for a month or two. This is mainly to prevent another nesting mother from digging up the eggs. She leaves long before the eggs hatch.



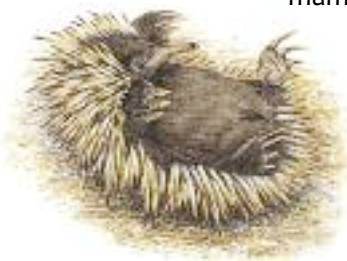
AUSTRALIA

RED KANGAROOS breed all year round, but the peak breeding time is in the spring. In the last months of winter, males fight one another over reproductive females, “boxing” with their fists and kicking out with their strong back feet.

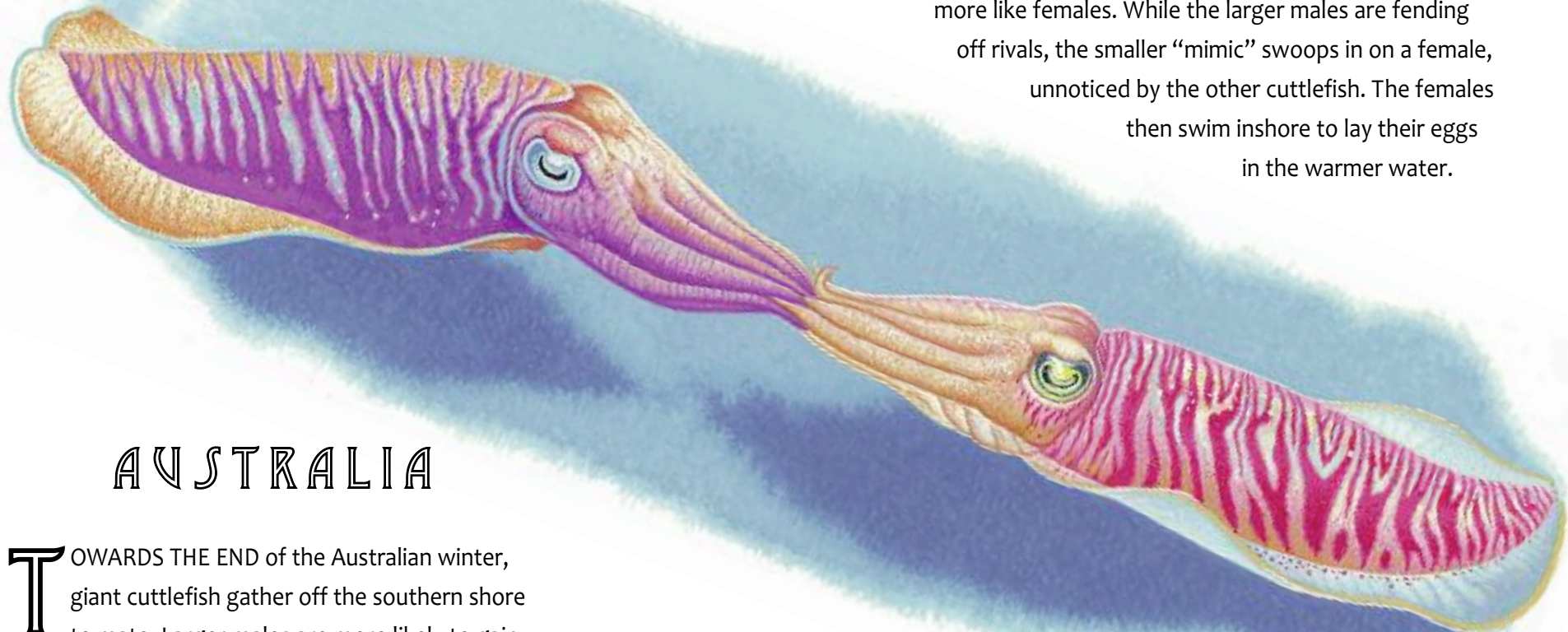
Spring is also the breeding season for the echidna, or spiny anteater. As temperatures rise, echidnas emerge from hibernation. Males search for a female and pursue her. During courtship, a single female may be followed by a “train” of up to ten males.

After mating, the female lays a single egg and tucks it in a pouch on her front. Echidnas are a type of monotreme: mammals that lay eggs. 10 days

later, the young echidna, called a puggle, hatches. It stays in its mother’s pouch until it is too prickly for her to bear.



While kicking with their back legs, males may support their weight with their strong tails.



Males usually change colour to show their interest in females, but small males may change colour to look more like females. While the larger males are fending off rivals, the smaller “mimic” swoops in on a female, unnoticed by the other cuttlefish. The females then swim inshore to lay their eggs in the warmer water.

AUSTRALIA

TOWARDS THE END of the Australian winter, giant cuttlefish gather off the southern shore to mate. Larger males are more likely to gain attention, so smaller males, too small to fight for dominance, must work hard to be noticed by females.

Cuttlefish face each other and grasp tentacles to mate

THINGS TO DO:

MAKE A BIRD HIDE



Many wild animals are startled easily and will run or fly at the first sign of humans.

The best way to watch them is by staying out of sight in a camouflaged shelter called a hide. Always check with an adult that an area is safe before you build your hide there.

1 Make a teepee out of several branches propped together and tied at the top with some string.

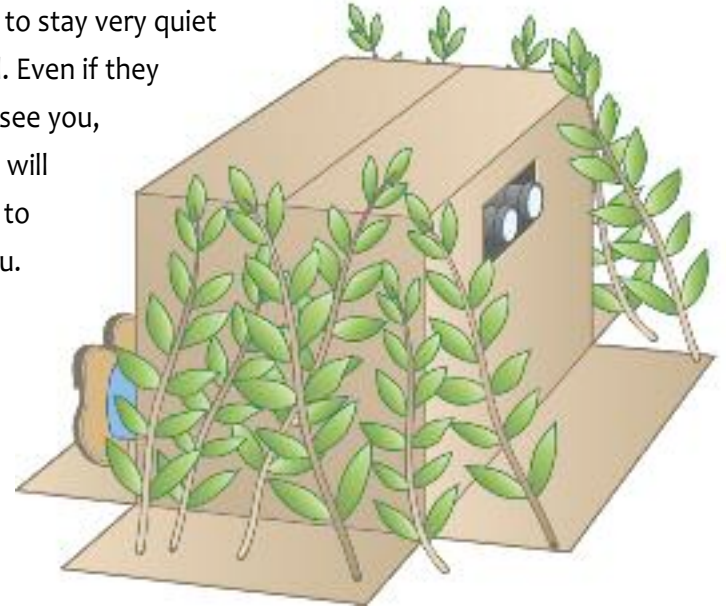
2 Camouflage the teepee with leaves and twigs. Make sure you leave a space so that you can crawl inside the hide.



3 Alternatively, you can make a hide out of an old cardboard box. Prop it up so that you can climb in from one side. On the other side, cut an opening, big enough to fit a pair of binoculars through.

4 Prop some branches and leaves against the box to help disguise it.

5 When you are inside your hide, be sure to stay very quiet and still. Even if they cannot see you, animals will be able to hear you.



THINGS TO DO: SEE HOW PLANTS DRINK

This activity lets you see how water is sucked up through the stem of a plant.

1 Place a celery stick in a jar of water mixed with red ink or food colouring.

2 Watch the celery over a few days. Pink areas show where the water has reached. Stripes running the length of the stem show where water travels up it.



3 Split the stem of a white flower in two. Place one half in a glass of ordinary water and one in glass of the red water.

4 Look at the flower in a few hours. One half will be coloured by the dye.

NATURE WATCH



Fruit on trees 10



Ripening berries 20



Wasps 30



A bird of prey circling 40



An empty bird's nest 50

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

