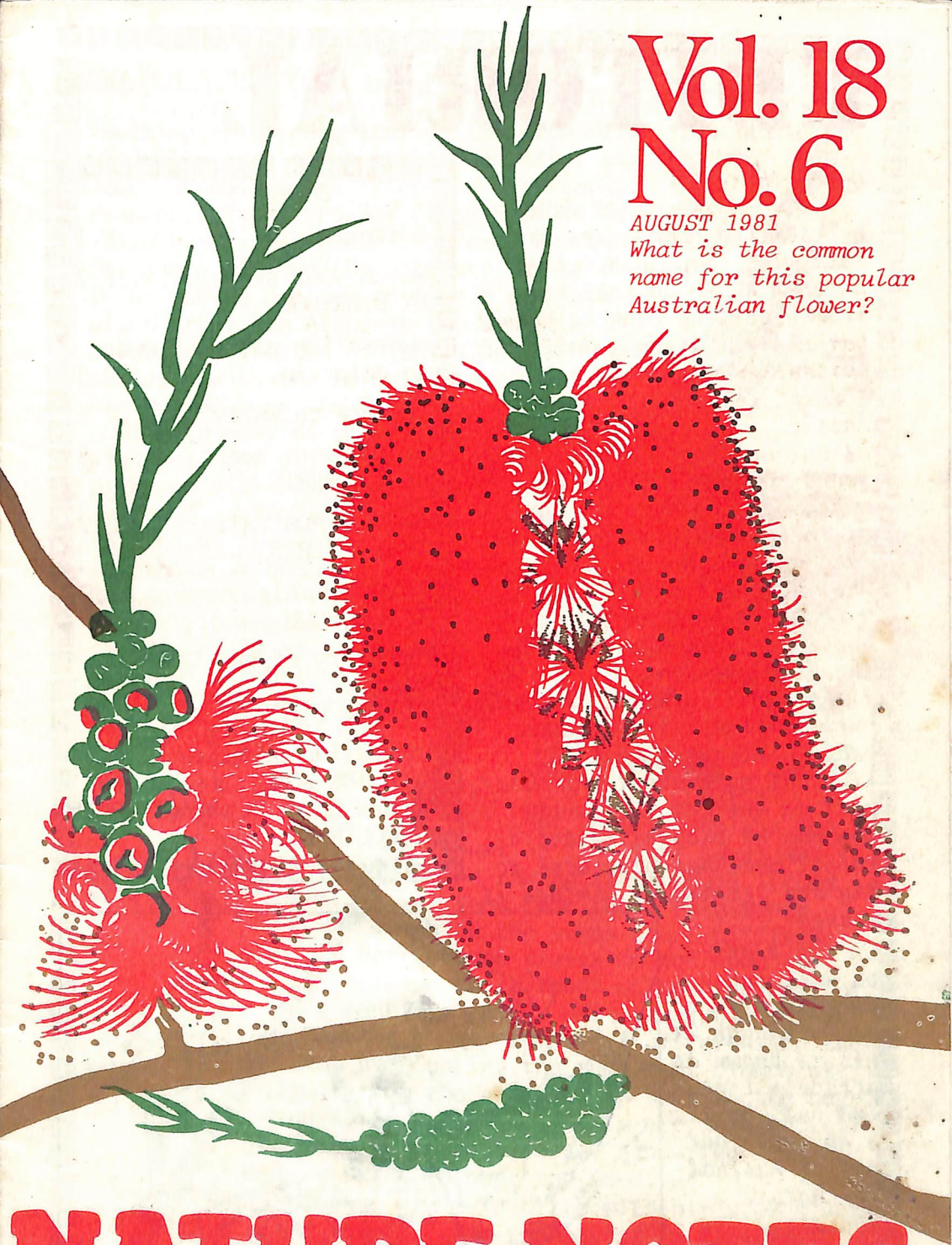


Vol. 18 No. 6

AUGUST 1981

*What is the common
name for this popular
Australian flower?*



NATURE NOTES

EDITORIAL

Hello there,

Now that Wally has settled down after his whirlwind trip 'O.S.', life here at Ringwood East is slowly getting back to normal. For the new friends Wally met abroad, we have written a special issue - just about Aussie'. Our country is full of unique plants and animals found nowhere else in the world. Can you name at least 6 of these? Sadly, many of these rare animals are dying out. Mrs. Dobson's article on Page 9 looks at this problem and, hopefully, will set you thinking about a solution to it. Are feral animals the only ones to blame? Perhaps you could use your library to find out more about the worst pest of the lot - the Rabbit. Why was he brought to Australia? What has been done to try and get rid of him? Has it worked?

On the right you will see a map with a line drawn through it. This is known as Wallace's Line. Find out why it is an important part of Australian nature studies.

Cheerio for now,
Debra Brydon



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WATCH YOUR STEP-YOU MAY BECOME FAMOUS LIKE...

...Francesco Borone, the poor fellow. While sleep-walking, this young Italian lad from Milan fell out a window, 18 feet above the ground. After gasping 'Ah, James, James!' to his friend, he died. Luckily for Francesco, James was Sir James Smith, a famous English botanist. Because Francesco had been helping Sir James' friend (Dr. Sibthorp) to study plants in Greece, he decided to name a new type of plant after him. Although the dead boy had never even visited Australia, an Australian native plant - the Boronia - was named after him. Do you know the Boronia - they are common in many of the gardens around Ringwood? Most of them are light or dark pink and either bell shaped or star-shaped. My favourite, however, is the 'Brown' or 'Sweet' boronia which has the most beautiful scent of any Australian wildflower I know. Strangely, boronias belong to the citrus family of plants. What other plants belong to this family? Try crushing some boronia leaves in your fingers - what do they smell like?



WAS YOUR GUESS CORRECT?

It's not hard to see why the flower on the front cover was named the Bottlebrush, is it? Did you know that those hard woody lumps on the stems are fruit? These Bottlebrush fruits do not open to release their seeds unless the heat of a bushfire passes over them. Unless this happens, a new clump of fruit grows on the stem. By counting the number of clumps of fruit from the growing tip back to the beginning of a stem, botanists are able to tell how many years have passed since the last bushfire burnt through the area.

Bottlebrushes are a favorite with birds, bees, ants and other insects when the nectar is flowing. If you are planting a native garden in your school yard, don't forget the Bottlebrush. What other colors apart from red, do they come in?

Who are we?

Artist:
W. Prohasky



These unusual looking Australian flowers grow in no other country of the world. See if you can match the drawings of them on these pages with their JUMBLED UP names-WARATAH, COMMON HEATH (Victoria's floral emblem), KANGAROO PAW, GREVILLEA, BORONIA, WATTLE and BANKSIA. Color them in with their correct color or colors-remember, some of them can be found in more than one color-like roses.



DEAR WALLY...

This is Wally's first letter for 1981, readers. Don't let it be his last!



The kookaburra is part of the kingfisher family. Kookaburras feed on snakes and lizards. They seize the snake behind the head and kill it by dropping it from a great height or going to a perch and battering the snake before eating it. Kookaburras also feed on young birds. They also make raids on farmyards for ducklings and baby chicks. Kookaburras are from the eastern and southern part of Australia.

By Robby Novella

Thanks for writing in to Wally, Robby. He's been raving on about your letter all week but he still can't work out why kookaburras 'batter' their snakes when it would be a lot easier to eat them raw! By the way, did you know that kookaburras are also known as the Laughing Jackass or the Bushman's Clock? The second name probably comes from the bird's supposed habit of making the call three times a day.

THE BARRIER REEF

The Australian Great Barrier Reef is the world's longest coral reef, taking up over 2027km in length. It's really a couple of smaller reefs that make up the whole of the barrier reef. It was discovered by - (guess who) - yes, our own Captain Cook! Reefs are usually found on the eastern side of a continent; can you guess why?

Coral, which makes up the main part of the reef, is a living organism, called a polyp. It is closely related to the jellyfish family and the sea anemones. There are as many as 350 types of corals on the reef, thenames of them including staghorn coral, mushroom coral and brain coral. Can you find them drawn around the page?

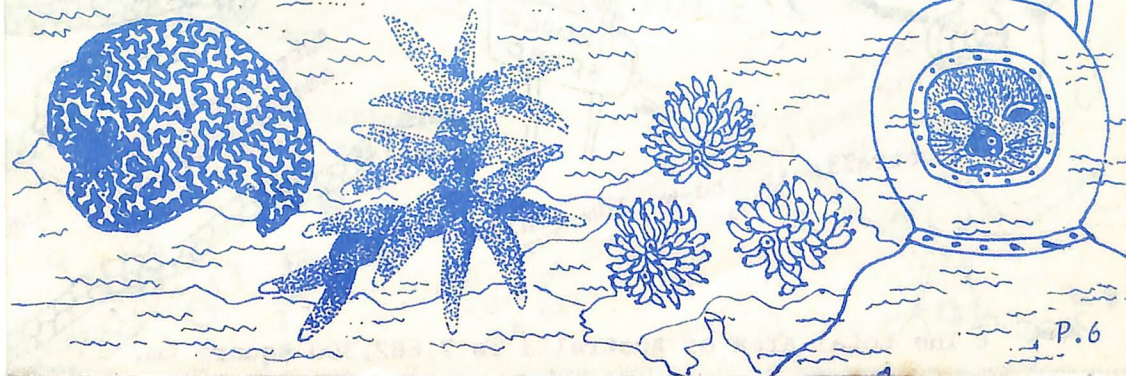
The coral polyp is a fleshy looking carnivore, which has tentacles in groups of six, to help it feed at night. It has a bony skeleton, which when it dies leaves the sharp, jagged tree-like structures most of us have come to know as coral.

Coral has been known to live up to 100 years old, and still baffles scientists over how it grows and how they can measure it.

Coral only grows in warm, shallow waters like those off the Queensland coast.

* Can you think of any dangers to our reef?

* Find out about the "Crown of Thorns" starfish.



AMAZING AUSTRALIA!

Here are some AMAZING facts you may not know, about our mighty country!
See how many you do know, then test your friends on their knowledge of Australia!

Australia has 19,320 km of coastline.

Australia is the worlds largest island.

Australia's most deadly snake is the Taipan

The flying fox of Queensland is our largest bat.

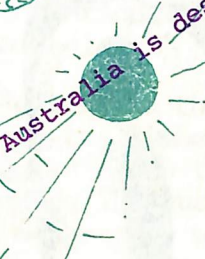


Ayers Rock is 335 m high.



The largest Australian animal is the red kangaroo which can stand up to 2.13 m tall.

38% of Australia is desert



Our largest bird is the emu.



Australia's hottest day on record was 53.1°C at Cloncurry on 13th January 1889

The Platypus is the world's only venomous mammal.



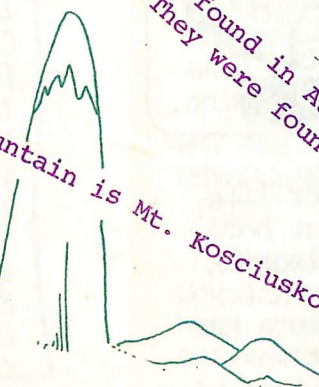
95% of the world's opals are mined in Australia



Australia is the worlds smallest continent.

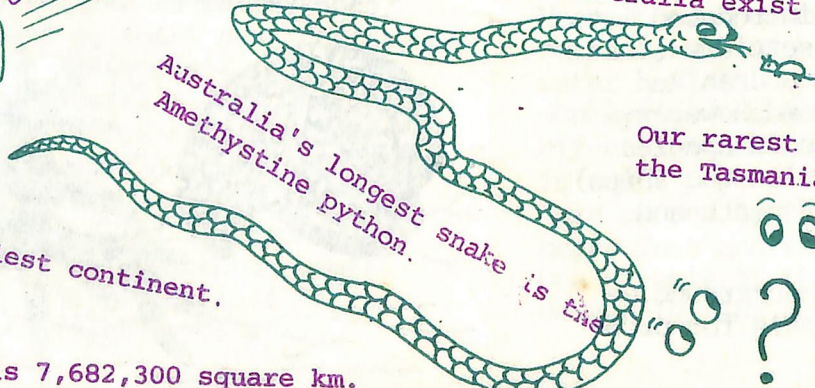
A kangaroo has been timed at 56kmh.

The highest mountain is Mt. Kosciusko in N.S.W.



The largest caves in Australia exist under the Nullabor Plains.

Australia's longest snake is the Amethystine python.

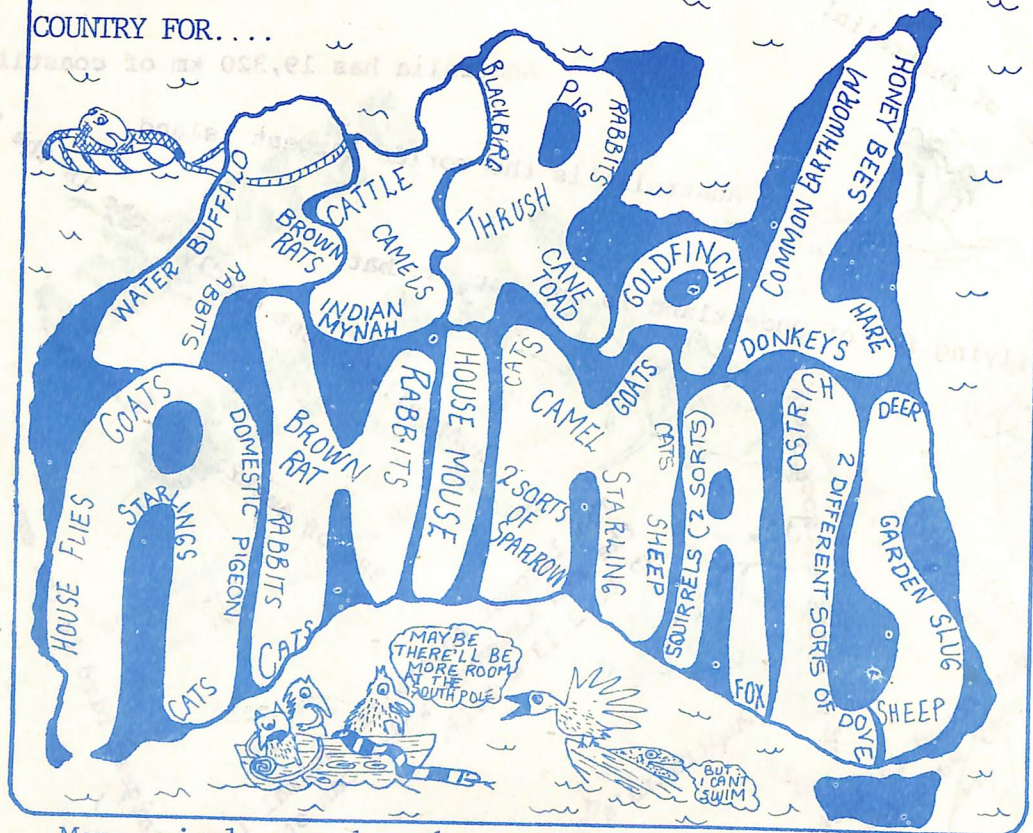


Our rarest animal is the Tasmanian Tiger.

The largest pearl found in Australian waters was "Star of the West" found near Broome in 1917. It the size of a sparrow's egg.



IS THERE ROOM IN OUR
COUNTRY FOR....



Many animals were brought to the new colony of Sydney Cove by the new settlers. They were required as food and transport for the settlers who did not know how to live off the land like the aborigines. Cattle, sheep, horses, goats and other domestic animals were introduced to this land for the first time.

However, it was not only for food and transport that these animals were brought to Australia. The new settlers found that life was hard and many of them missed their old way of life, they longed for the bush-green colors of

England and the familiar bird and plant life left far behind them at home. (One of the rumours floating about at the time was that Australian native flowers had no perfume: Ed.) Thus it was that European plants, birds, fish and game animals for hunting were introduced into what the new settlers considered to be a drab and hostile bushland. However, many less welcome species arrived (often on the ships), such as insect pests and vermin.

From this background, we can see the basis for prob-

lems which are today destroying Australia's wildlife and environment. Many of these animals escaped into the wilds of the continent and were able to survive, breed and flourish. Living on our native species (or its food) they grew to be strong robust animals. Part of the reason for this was that many of our native animals had never before been forced to contend with very many predatory animals. What does it mean if an animal is described as a predator?

To this day, the descendants of these first FERAL animals roam free in all parts of Australia. We use the word 'feral' when describing these uncontrolled animals: the word means wild and untamed but it is usually used to describe non-native animals.

WHY ARE FERAL ANIMALS SO UNPOPULAR WITH CONSERVATIONISTS?

Carnivorous animals like dogs, cats, foxes and pigs have a direct effect on native fauna in that they can hunt many rare species of animals to extinction. Heavy-hooved animals in the outback, such as cattle, water buffalo, horses and donkeys have a more subtle effect. The habitat they live in can't cope with the damage caused by their sharp heavy feet and their grazing. One example of this kind of damage is that done by the

enormous herds of feral goats living in the Flinder's Ranges, in South Australia. These goats just love to eat the tender green buds of new growth on young plants. After a drought, when the soil is dry and not many plants are keen on growing, the goats strip the area. Slowly, the dirt falls apart and blows away as the dead plants' roots stop holding the soil together - this is called erosion. Gradually, the area becomes useless.

It has been estimated that on one station in the Kimberleys that there would be up to ten thousand donkeys. The quantities of food and water they would need are enormous, apart from the damage their sharp hooves would do.

The problems caused by feral animals are many and varied. Perhaps it is already too late to really solve them all. Maybe one answer will lie in the commercial use of some of these animals as pet food, skins, or other things. However, more research needs to be done to find ways of controlling or getting rid of the threat to our environment - including our native animals and plants.

P.S. I forgot to mention Feral White man!

ANSWERS TO 'CROSSOUT'
Ostrich, Goldfish, Starling,
Sparrow, Mynah, Thrush, Blackbird,
Cane Toad, Bees, Fly, Hare, Garden
Snail, Slug, Earthworm, Rabbits,
House Mouse, Water Buffalo, Dog,
Cat, Fox, Deer, Horse, Donkey,
Squirrels, Camel, Sheep.

The Black



where they are the state's symbol, but all over southern Australia and as far up as Townsville on the east coast. They like to live in lakes or shallow river ESTUARIES, for there they can sift the river or lake beds for food. From a beakful of mud and water, they drain out any tiny water life, such as worms or snails. They also eat water plants from the shallow water or graze on land plants close to the water's edge.

In Europe before 1700, to talk of a black swan would have been a joke. As far as anyone there knew, all swans were white. To say "as white as a swan" was to show how snowy white something was.

Then, in 1697, a Dutch NAVIGATOR, William Vlaming, landed in southern Western Australia-near where Fremantle is situated today. To his surprise, he saw hundreds and hundreds of black swans and he named the river where he first saw them the 'Swan River'. When the British made the first settlement there in 1829, they first called the new town the Swan River Colony. What is it called today?

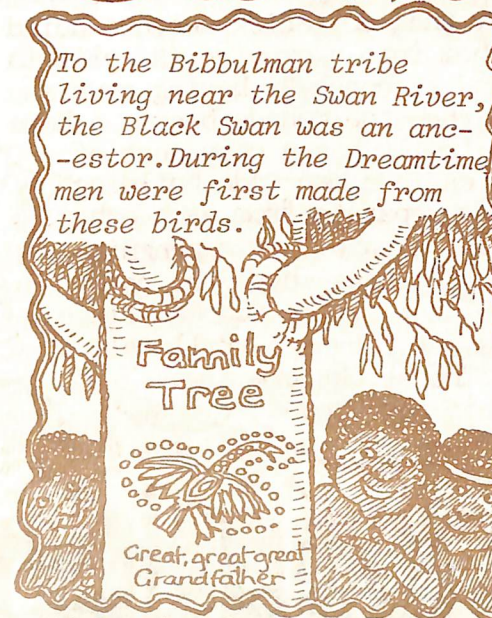
Black swans are found not only in Western Australia,
P.11



Swan

BY ANN GIBSON

ARTIST: Cindy Hunnam



To the Bibbulman tribe living near the Swan River, the Black Swan was an ancestor. During the Dreamtime men were first made from these birds.

flight, they have a musical cry called bugling. The male has a distinctly deeper voice and longer call than the female.

Despite the males' louder, longer call, Black swans practise sex equality. Both co-operate to build a mound of sticks, weeds and plants for their nest. While one bird builds, its mate will be collecting nest material and passing it to the other. Their nest is usually built in reeds or bushes on the water's edge and there the female lays usually 5-6 pale greenish eggs. Again, both parents co-operate to sit on the eggs to INCUBATE them. When the eggs hatch, the cygnets are almost white.

Cygnets go from white, to grey, to brown and it is not

until after their first moult that they get their white under wing feathers and black body feathers. Each year all adult birds moult their main flight feathers. During this dangerous time, they are completely unable to fly, so the swans choose to stay on a large area of water for safety. Here they float until their feathers grow again. Did you know that Black Swans are protected by law in all states?

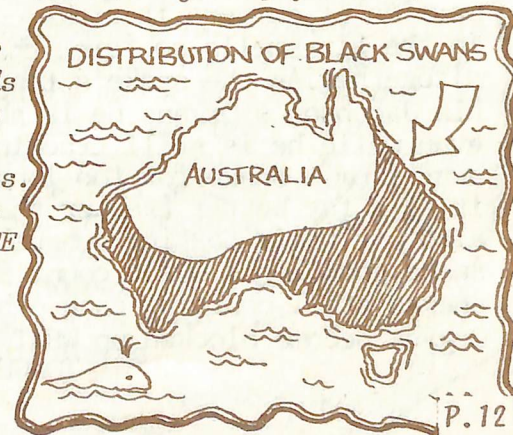
THINGS TO DO:

Look up the meaning of the words typed in capital letters.

Find a picture of the Western Australian state symbol. What are the symbols of the other states?

Find out more about the Dutch explorers who discovered the west coast of Australia long before Captain Cook sailed around the east coast on 1770.

Who discovered Tasmania (after the aborigines, of course)



RATS THAT BUILD APARTMENT BLOCKS...

Although stick-nest rats are now thought to be extinct on the Australian mainland, a small number of them still live on the islands off South Australia. Not many animals build their own home - can you think of any that do? Stick-nesters build up mounds of sticks, wedging them into a crevice (a split in the rock) for extra support and strength. By having several entrances and burrows beneath them, the mounds become a home for several rat families. Each family has a cosy nest of grass and fur. Just like families in a man made building, the rat families are completely separate from each other. Sometimes mounds are built above a rabbit or a penguin burrow. This often happens in hot places where the rats need extra protection from the heat of the sun. Rat flats don't use 'pink bats', of course, but they are still well insulated. What does this mean? The sticks are always so carefully woven together - this also means that they are strong enough

not to be pulled apart by
by hungry
animals.

australian oddities

HOW TO TASTE LOTS OF GOOD FOOD AND NOT GET FAT...

Are you one of those people (I was one until this morning) who thinks that the forked tongue of a snake is the part that bites you? Well, like me, you are wrong! The flicking tongue of the snake is one of the most useful tools in the animal world. It shoots in and out of the mouth through a 'pipe' formed by grooves in its jaw. Thus, the snake's mouth has no need to open at all. Every time the tongue is flicked out it quivers. What does this mean? As it quivers, it picks up just about every tiny smell in the air - smells so faint that humans would miss them altogether. As the snake's tongue flicks in and out of his Jacobson's Organs, he is able to taste his next meal even while he is still tracking it down. Few animals can get away from a snake for too long. Because of its tasting tongue, it is a far better tracker than a dog or any other animal. Snakes also use their tasting tongue to meet up with a partner. To a snake, good looks don't count! Scientists have watched blind-folded snakes still courting each other, but stopping if their Jacobson's Organs become blocked up. WHAT OTHER ANIMALS HAVE A FLICKING TONGUE?

THE WORLD'S MOST PERFECT CHILDREN?

There are several birds in Australia that build mounds for their young instead of nests but the Mallee fowl is one of the best known. 'Dad' Mallee fowl builds the mound (which can be up to 1½ m. high) and until he is sure it is 33.5 degrees centigrade inside, he will not allow 'mum' to begin laying her eggs. If the temperature is too low, he will add more leaves to the mound. If it is too hot, he will open up the mound with his beak and allow the cooling air to get in. 50 to 80 days after the Mallee fowl egg has been laid, it hatches. Without even a hello or a goodbye to its parents, the baby fowl heads straight off for the bush, never to be seen again. So much for being grateful for all the hard work! Yet Brush turkey mums living on Savo Island (in the Solomon Islands) see even less of their children. Born with feathers, these babies know how to fly as soon as they are hatched - and so, fly off. They also know how to feed themselves so unlike most other animals, they can ditch mum and dad at an early age.

NO! NOT THE WOMBATS, WALLY

BIRD POLICE COURTS...

I hope that you have never been called a bird-brain - it means that you have done something which is just plain dumb. Birds have always been thought of as silly but this is not really being fair to them. Although they don't think as well as we do, birds 'know' how to act without even having to think. This 'knowing' is called INSTINCT. By instinct, many animals know that they must live in groups if they are going to stay alive. Also by instinct, many animals 'know' they must punish wrong-doers in their group. Often, these animals seem to have a court and trial. Sometimes it is easy for watching humans to guess at what the crime may have been. For example, crows and cockatoos may kill a 'look-out' if he or she does not warn them in time of an enemy coming closer - just like the 'olden days', when a soldier on sentry duty was shot in time of war if he fell asleep at his post. Alec Chisolm, a bird watcher, wrote this about a 'crow court' he watched in Scotland: Numerous crows formed a ring and cawed viciously at one of their number, who stood in the centre of the circle listening intently to each 'speaker' - after which they tore him to pieces."

So if you ever have to go to court, remember how lucky you are to be a human and not a bird!

Nature Notes CROSSOUT

HIDDEN IN THE CROSSOUT
BELOW ARE A NUMBER OF
ANIMALS WHICH HAVE BECOME
"COMPETITORS" FOR OUR LAND.
MOST ARE DOMESTIC ANIMALS
BUT SOME ARE JUST PESTS.

Draw a line through the words as you find them—remember,
they may be HORIZONTAL, VERTICAL or DIAGONAL.

G	A	R	D	E	N	S	N	A	I	L
B	S	D	G	H	O	Q	H	A	R	E
E	T	A	U	O	L	U	K	S	S	M
E	I	O	L	U	A	I	E	Y	T	A
S	B	T	S	S	F	R	W	L	A	C
E	B	E	P	E	F	R	O	F	R	P
H	A	N	Y	M	U	E	R	M	L	D
C	R	A	E	O	B	L	R	R	I	R
N	E	C	K	U	R	S	A	O	N	I
I	T	F	N	S	E	G	P	W	G	B
F	H	S	O	E	T	O	S	H	S	K
D	O	T	D	X	A	D	T	T	H	C
L	R	E	E	D	W	A	A	R	E	A
O	S	T	R	I	C	H	M	A	E	L
G	E	H	S	U	R	H	T	E	P	B
E										

ANSWERS ON PAGE TEN