



NATURE NOTES

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EDITORIAL



Hello there,

Recently, Wally and Wilbur have been receiving many sad letters from animals whose lives have been ruined by the current drought here in Victoria. Sheep, with their heavy wool coats have been among the hardest hit. Luckily, many Australian native plants and animals have special 'tricks' which help them to survive through the dry period. The humble yabby is one of these. Can you think of any others?

Australia is one of the driest countries in the world. In fact, a large number of

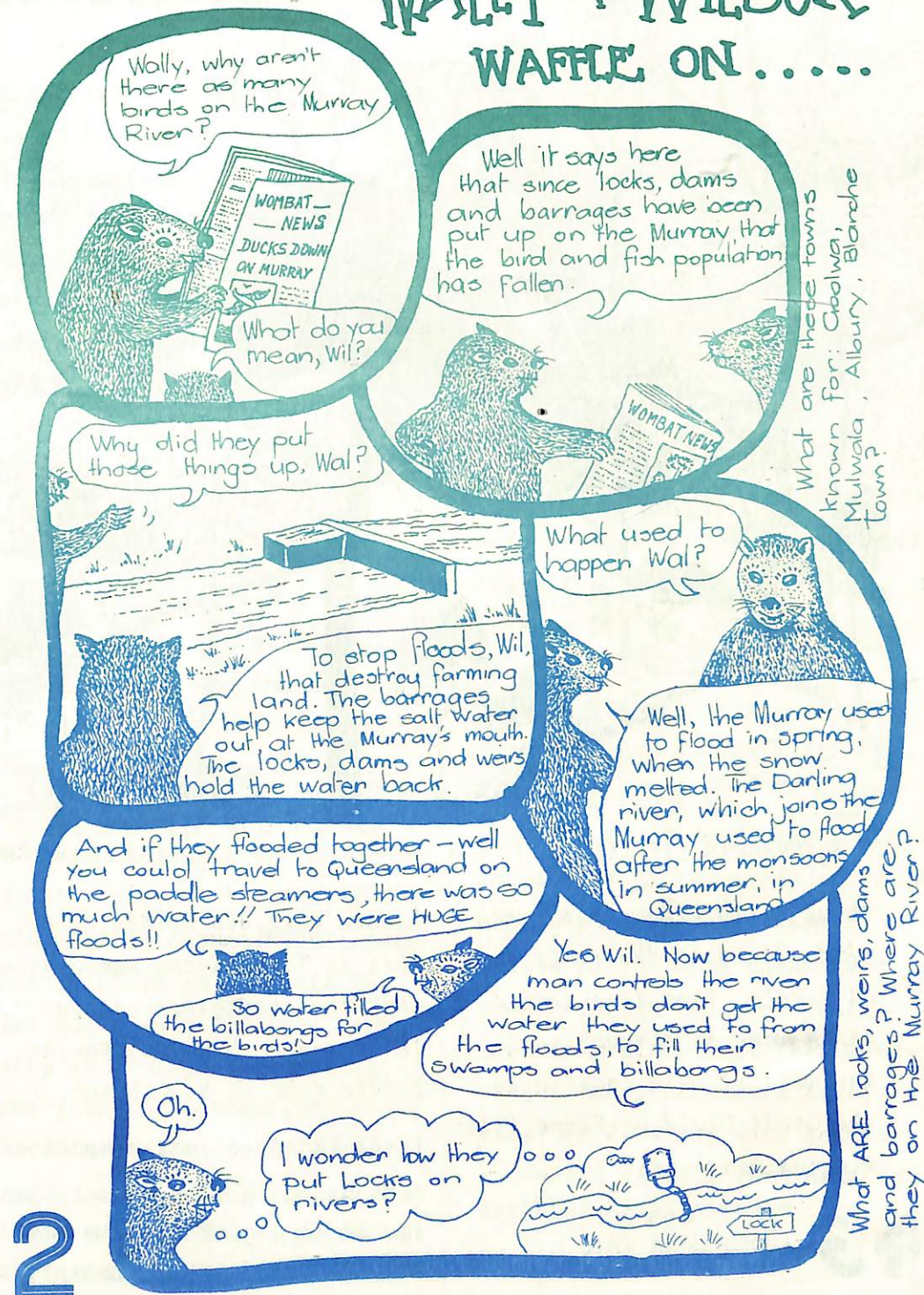
I rivers flow only in the weeks or months immediately after the wet season.

Besides having very few major river systems, the Australian continent has very few lakes, lagoons and ponds. The only permanent large 'lakeland' in the whole continent is in the highlands of Tasmania. Here, one can find hundreds of lakes and ponds, ranging in depth to 200 metres and in size to 150 square kilometres.

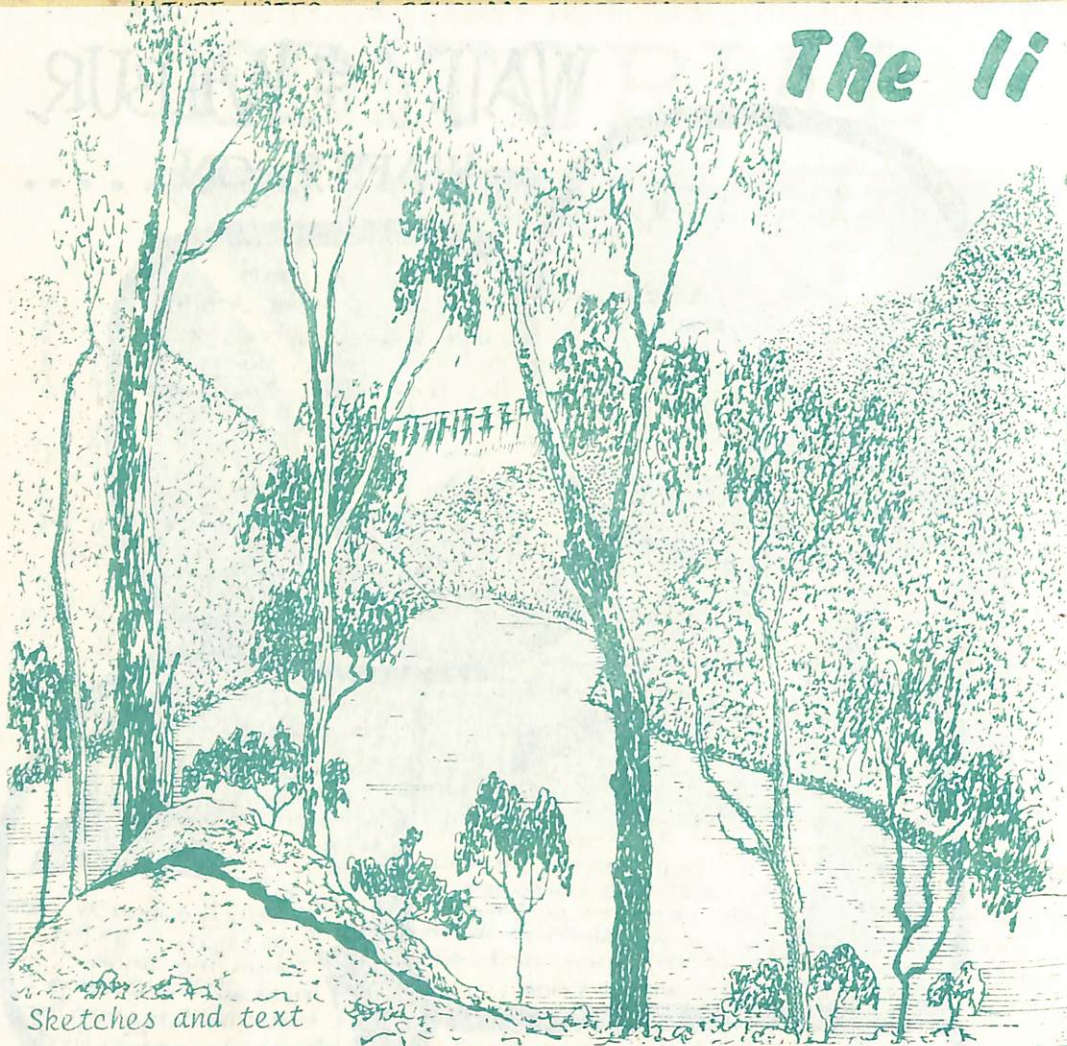
As they're not looking forward to a hot dry summer, Wally and Wilbur are wondering if any of our readers will join them in migrating to this southern paradise. Perhaps even I will join them.

CHEERIO FOR NOW,
Debra Brydon

WALLY & WILBUR WAFFLE ON.....



The little lake of Nigothuruk



Sketches and text

by FRANCIS LITTLE

Tarli Karng from the eastern end.

About fifty kilometres north of Heyfield is the small town of Licola. From this town, a track wanders through some of the wildest bush country in the Great Dividing Range. After winding north-east for 25

kilometres, it suddenly

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looks down into a hidden lake, 600 metres below. This is Tarli Karng-named from what the aborigines called Tarli Karngo Nigothuruka-the little lake of Nigothuruk. Tarli Karng is just 9 hectares surrounded by steep sides. Some say it is a glacial lake and that thousands of years a

was formed when the glacier carried huge rocks that gradually blocked the water with a giant 'barrier' at its western end. Two small creeks feed it. At the eastern end, something very odd happens. Here,

the Nigothuruk Creek tumbles down as a beautiful waterfall but before it quite reaches the lake it gets smaller and smaller, until it disappears into the sand altogether. What really happens, is that the water seeps through the sand onto the rocky bed and flows underground into the lake. At the north-western corner, Nightingale Creek trickles in. With all the water going into the lake, especially in Spring when melting snows feed the streams, you would expect the water level to climb until it reached the top of the western barrier. But it doesn't do that. Instead, it is like a sink

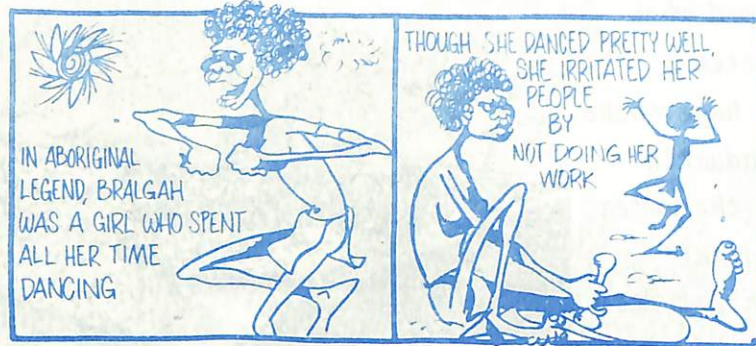


Tarli Karng from the western end

with a small plug hole. The level stays the same, for, at the barrier end the water passes underground until it comes seeping through as a spring to form a branch of the Wellington River. Tarli Karng is 50 metres deep and in it live many small trout. Most of the steep shore is pebbly but there is a small grassy patch where bushwalkers camp. Although the aborigines have long since left this wonderful lake, scientists still visit it to study rare snakes and other animals that hide in this secret corner of Victoria.

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THE 'BIRD' WHO BECAME A BIRD

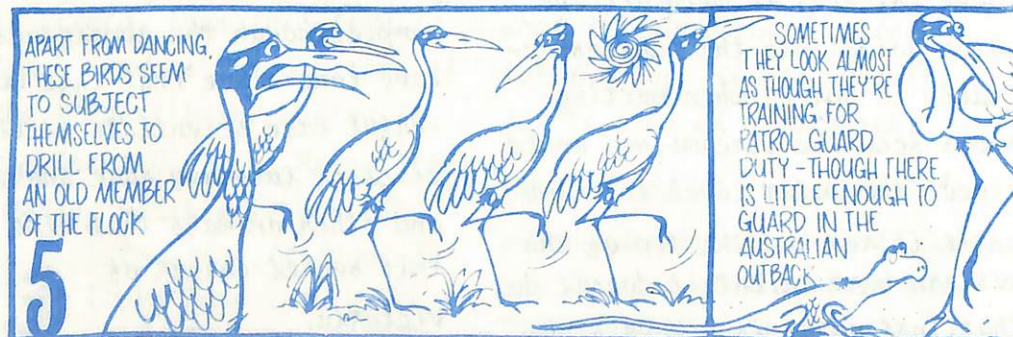


*Can you think of any other bird which belongs to the crane family of birds?

*Why do you think the brolgas have long legs?



FOR
REPRODUCING THIS
ARTICLE: Thanks to
'Wonders of Wildlife'
by Haddon and
Trengrave



*What are female brolgas often called?

*What does it mean if you crane your neck?

Hairy Bunter and the Lowland Sisters

BY D. BRYDON... ARTIST: Cindy Humman

TREKKING ACROSS THE COUNTRY-SIDE, THAT FAMOUS AUSTRALIAN NATURALIST **HAIRY BUNTLER**, IS JOINED BY THOSE OTHER FAMOUS AUSTRALIAN NATURALISTS, **THE LOWLAND SISTERS**, IN A QUEST TO SOLVE THE MANY MYSTERIES OF NATURE. THIS MONTH, THE TRIO ARE ENJOYING A PICNIC BY THE LOCAL SWAMP.

READ ON



WHEN HAIRY BEGINS TO ACT IN A VERY STRANGE WAY AND DROPS HIS DRUMSTICK...

THE GIRLS ARE USED TO HAIRY'S OFTEN STRANGE BEHAVIOUR AND ARE PATIENT WITH HIM...

DON'T WORRY HAIRY, IT'S ONLY A CHICKEN-LEG!



LOOK!
AH...UM...
HELP



...BUT AFTER HAIRY COLLAPSES IN A FAINTING SPELL, THE GIRLS REALISE THAT THINGS HAVE BECOME MORE SERIOUS, AND TRY TO REVIVE HIM...



THE SHOCKED WOMBAT REVIVES...

AH! -EXCUSEME SIR, I THINK YOU'RE MISTAKEN!... ALL OF US LIVING HERE AT THE SWAMP...

HAIRY IS EMBARRASSED WHEN A MERE BIRD CORRECTS HIM!



LARRY IS PERSUADED TO SHOW THE VISITORS HIS FOOT...

AND FINALLY THE WHOLE STORY COMES OUT...

WOW

GOSH!

OUT THERE, IN THE SWAMP, I SAW SOMEONE WALKING ON THE WATER! HE WASN'T IN THE WATER, GIRLS, BUT REALLY ON IT!

... ARE QUITE USED TO SUCH "MIRACLES". THE FACT IS, WHAT YOU THOUGHT YOU SAW WALKING ON THE WATER WAS REALLY MY MATE LARRY - LOTUS BIRD GETTING ABOUT THE SWAMP IN HIS USUAL WAY. ALTHOUGH HE'S SOMETIMES CALLED THE CHRIST BIRD, HE DOESN'T REALLY WALK ON THE WATER, BUT RUNS LIGHTLY OVER THE SMALL GROUPS OF FLOATING WATER PLANTS GROWING IN OUR SWAMP. HE CAN DO THIS BECAUSE HE'S SO LIGHT - ONLY 85 GRAMS!

... BUT IT SEEMS AS IF HAIRY HASN'T BEEN LISTENING TO THIS SCIENTIFIC EXPLANATION OF HIS "MIRACLE"



HELP MIRACLE!

* NAME THREE OTHER AUSTRALIAN WATERBIRDS WHICH HAVE LONG DAGGER-LIKE BEAKS? WHY IS THIS SHAPE BEAK USEFUL TO WATERBIRDS?

* USE THE GOULD LEAGUE BOOK "Birds of Victoria-Inland Waters" TO FIND THE NAMES OF 4 WATERBIRDS WHICH HAVE LONG STICK-LIKE LEGS. WHY DO YOU THINK THAT LONG LEGS WOULD BE USEFUL TO WATERBIRDS?

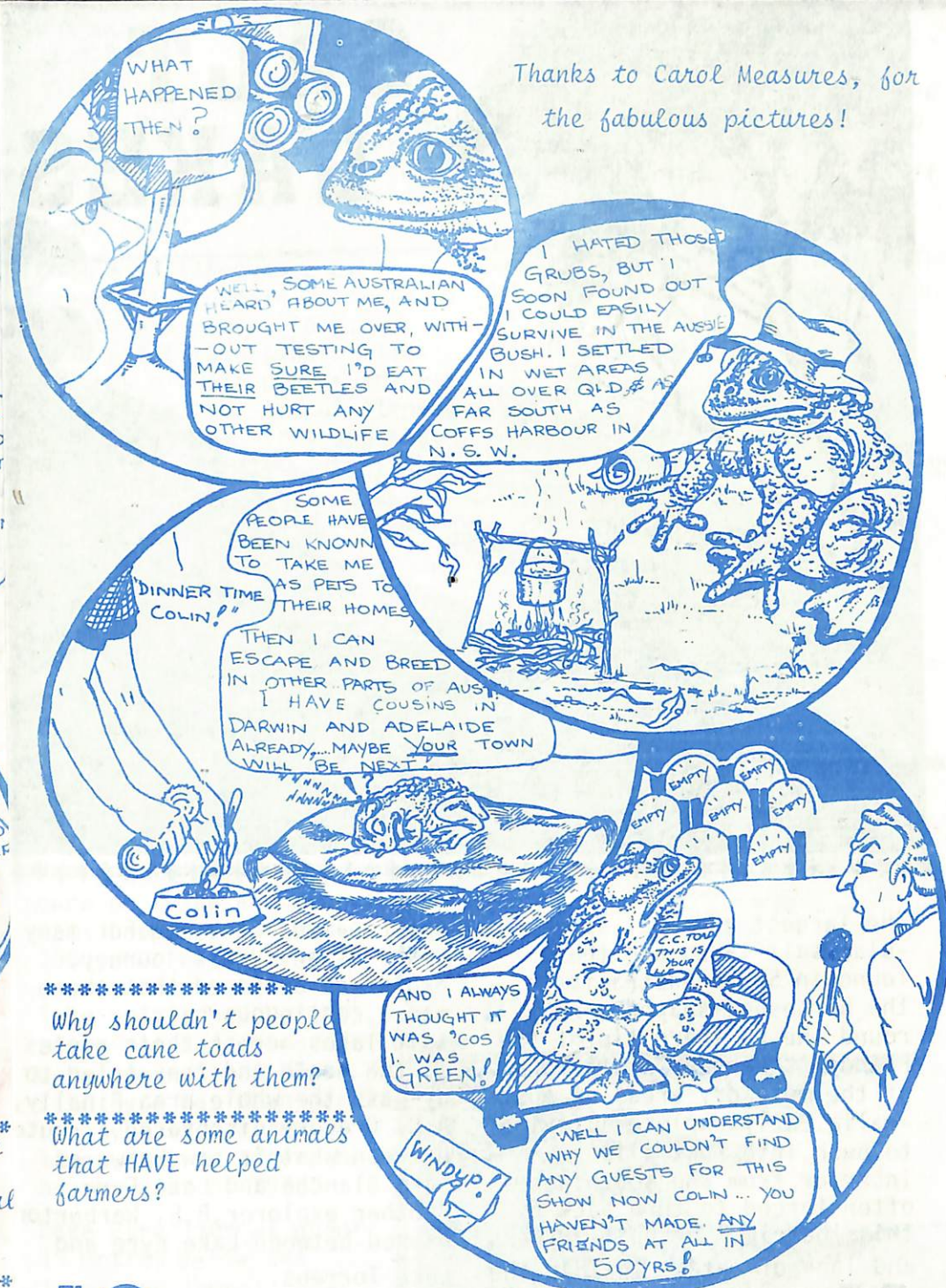
THIS IS YOUR LIFE.....

Colin Cane Toad!



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Prickly Pear and the rabbit are introduced pests. How did they come to Australia?



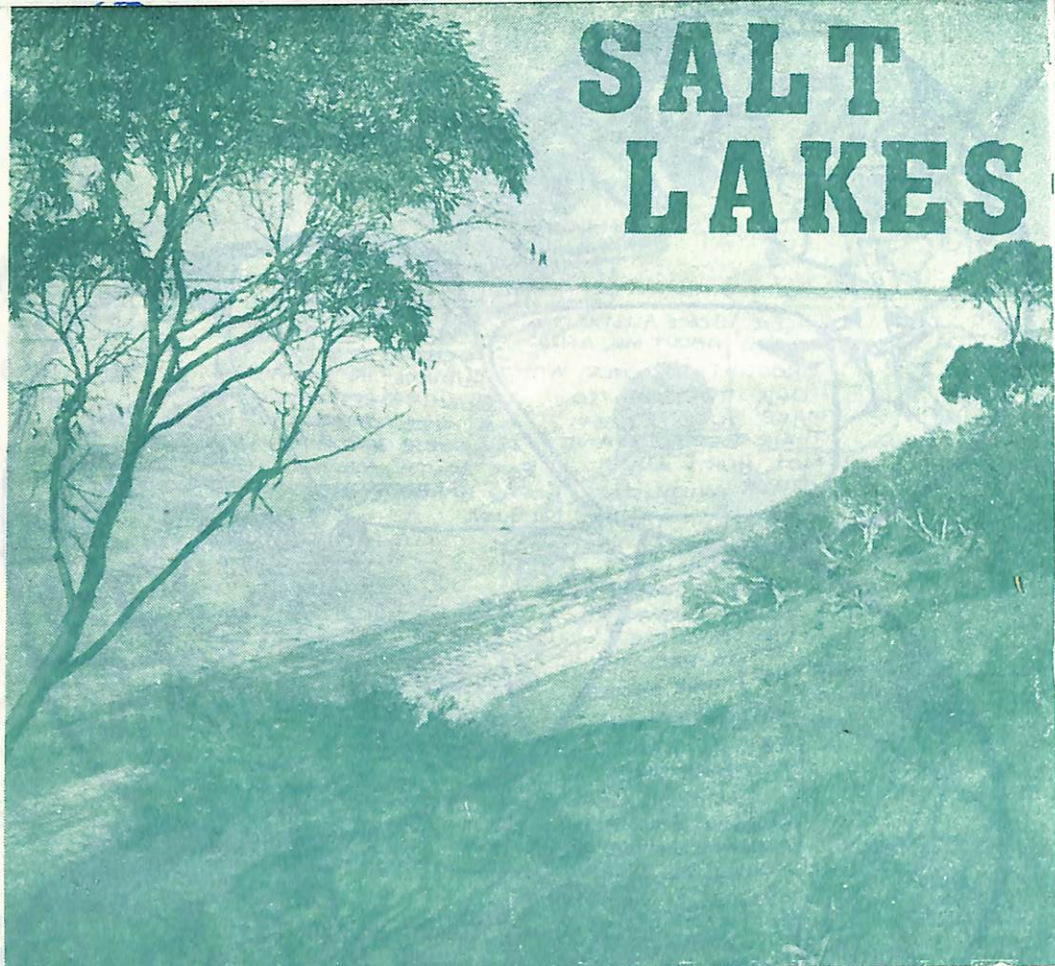
Thanks to Carol Measures, for the fabulous pictures!

Why shouldn't people take cane toads anywhere with them?

What are some animals that HAVE helped farmers?

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BY A. CARMICHAEL



SALT LAKES

not usually have any water in it. The area in which it lies is called absolute desert, for its rainfall is less than 125 mm. per year. What is the average yearly rainfall for the area in which you live? Is it the same every year?

From a distance, Lake Eyre appears to contain water. Those who take a closer look, however, find about 7800 square kilometres of salt plains. The air shimmering over the glistening salt creates a mirage, so that the surface of the lake looks like a sea of water.

While rivers such as the Georgina, Diamantina, Warburton, Thompson, Barcoo and Cooper's Creek all drain into Lake Eyre, it is so dry that the rivers simply disappear into the sand before any water gets to the lake itself. It takes two years with extra heavy rainfalls for water to flood Lake Eyre. Records show that it probably fills with water only once or twice a century! This happened in 1949-1950, when water over 2 metres deep covered the lake's salt bed. By 1953, all of it had dried out once again. Since then, Lake Eyre has been partly, partly filled a few times, such as after the heavy rains of 1973.

Lake Eyre lies at about 15 metres below sea level—the lowest point of land so far recorded in Australia. Scientists

now believe that it has been steadily sinking for about 100 million years. What may once have been a system of rivers flowing south into the sea through the Lake Eyre region was blocked off from the sea by the tilting of the land. Just as well this happened—all you salt lovers? The photo below shows the collection of salt from Lake Lefroy, in Western Australia.

*WHAT DOES THE TERM "AVERAGE YEARLY RAINFALL" MEAN?

*WHAT IS FOUND IN LAKE CALLABONNA THAT MAKES IT SUCH A SPECIAL SALT LAKE?

*WHAT ARE THE NAMES OF SOME VICTORIAN SALT LAKES?

*NAME A TOWN IN THE FLINDER'S RANGES.

The largest and most spectacular salt lakes are those found in South Australia, in the horseshoe-shaped area round the northern tip of the Flinder's Ranges. This is one of the most dry areas of Australia. Early explorers, trying to push into Australia's interior from the south, were often forced to turn back by this 'barrier' of heat, dryness and lack of water. In 1840, the

11 explorer, E.J. Eyre came on the shore of a vast salt lake, which was

later named after him. For many years after Eyre's journey, explorers believed that there was a continuous barrier of salt lakes across their routes to the north and they tried to by-pass the whole area. Finally, A.C. Gregory discovered a route between what is now known as Lake Blanche and Lake Eyre. Another explorer, P.E. Warburton, passed between Lake Eyre and Lake Torrens.

Although Lake Eyre is shown as a lake in your atlas, it does



Yabbies 13



yabbies are only one of the 0 different sorts of rayfish that are found in Australia. All crayfish belong to a larger group of animals called CRUSTACEANS. All of them have been put in this group because they have an outside shell, rather than an inside skeleton. Can you think of any other animals that have an outside shell? Which crustaceans do we eat? Do you think that this is fair? Why or why not?

Yabbies grow to about 18 cm. long. They have two nippers and vary in colour from black to olive, blue, pink and even yellow. They spend much of their time building a network of burrows in the soft sand and mud of their habitat. For this reason, they are often disliked by country people because of the damage their burrows can do to dams and irrigation channels.

Unlike many crayfish, yabbies have much softer shells. Their burrows help them to avoid predators such as fish and birds. Each yabby makes up to three entrances to its burrow. In popular yabby beds there may be up to 800 openings per square metre of surface! In such areas, the burrows often interconnect and it is this honeycombing which causes all the damage farmers complain about.

Yabbies can survive for long



periods in dams or lakes which have completely dried out. During droughts, scientists believe that they seal themselves in deep burrows which have a small pool of water at their lower end. When the drought breaks and the dried out dam fills with water once again, the yabbies emerge and multiply rapidly, even after several years.

The photograph above shows a female yabby 'in berry'. This is the phrase used when a female crayfish carries eggs on her underside. When the young hatch, they remain with their mother for some time. When they leave her protection they look exactly like 'mum', only in miniature.

Yabbies kept in the classroom can be a valuable addition to your class nature corner. Yabbies are active during spring, summer and autumn so there really is a great opportunity to go out and collect them, with your teacher's help or your parent's assistance. Useful items for a 'yabby hunt' are: a piece of string or cotton with a lump of meat attached and a small net. Why is the net important?

Yabbies and indeed all similar animals can be picked up quite easily, but you should be wary about careless handling. Can you suggest why? What is the correct way to handle such creatures? It is important to remember that although yabbies can survive out of water, the dry atmosphere of the classroom will cause gill chambers to dry out reasonably quickly. The animals should be returned to the water every 5 or 10 minutes for at least a short period.

Yabbies can be kept in an ordinary glass aquarium with a lid to keep out the dust. An air pump and filter may be necessary. Food should include meat (perhaps earthworms) and vegetable matter - raw carrot etc. Feeding need only be done 2-3 times a week.

by R. Hall

Fun with ferns:

by Catherine Mullin
of THE VICTORIAN STATE SCHOOLS' NURSERY

Ferns do not have leaves, flowers or seeds. The leaf like parts are called fronds. Look on the back of fern fronds to see small spots. These spots (Sori) are the little bags which contain spores.

When the spore ripens, the little bags (Sori) open and the spore blows away. When they reach the ground they act rather like seeds and new plants will grow.

It is great fun to take a spore print to show the spore patterns on different ferns.



1. Important - Pick the fronds when spore is ripe. You will be able to tell this by using a magnifying glass. The spore is ripe when the little bags (Sori) start to fold back and wither.



2. Place the frond on a sheet of white paper in a warm place away from draughts.

3. After a few days the spores will be released and will stain the paper so that you get a perfect impression or print of the spore pattern.