

ature Notes

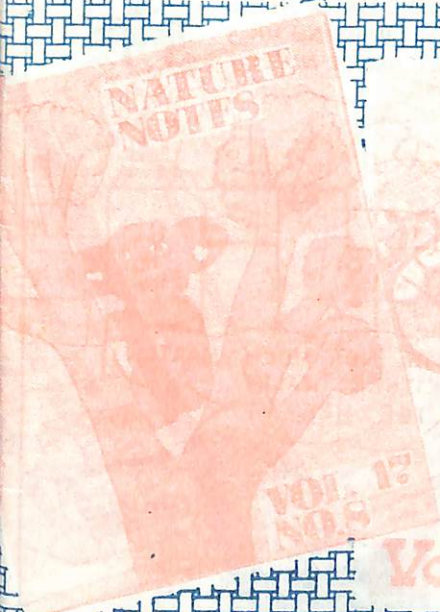
Nature Notes

Volume 10
No. 6



NATURE NOTES

VOL. 20. NO. 7.



ED'S PAGE —

Hi There!

This month at Nature Notes we're celebrating, because we're twenty years old! Our magazine began in 1964 as a part of the Gould League of Victoria's publication, and has grown to be a magazine in its own right. A lot of hard work by teachers has built the magazine, some of whom I will name here (Yes I know it's boring, but they really did do HEAPS of work for Nature Notes.) Mr. Pruden, Mr. Delacca, Mr. Rodgers, Mr. White, Mr. Coote, Mr. Legge, Mr. Lawry, Mr. Dwyer, Mr. Archibald, Mr Bull, Mr. Hall and Mrs. Brydon. (oops... and Mrs. Gibson!)

This month we have a competition, which we hope you all will enter - it's easy- all you have to do is color the picture of Wally in the centre pages in, and send it to-

NATURE NOTES

P.O. BOX 28

RINGWOOD EAST 3135

Wally of course will be the judge, and remember, you've got to be in it to win it! Good Luck!

Happy Reading
Mandy Carmichael,
Editor.

WALLY, COME BACK HERE
AND FINISH PRINTING OR
WE'LL NEVER GET NATURE NOTES
OUT ON TIME.

I DON'T LOOK ANY OLDER
THE DAY I WAS BORN,
DO I??

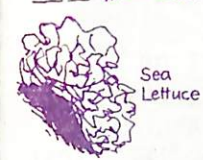
..YOU'RE NOT MUCH SMARTER
EITHER, WALLY
TEE..HEE!

I ♥
WALLY

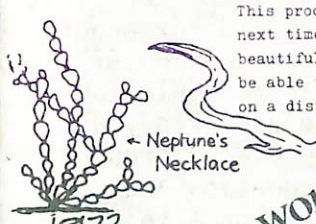
②

...with small, round, tooth-like scales all over it. Look-out if you get too close to it - even just the action of that skin brushing past you is enough to make a mess of our soft bodies, not to mention what the jaws and teeth can do!

There's something fishy about this ice-cream!



Sea Lettuce



Neptune's Necklace

It's Not Just Seaweed....

No doubt on your visits to the beach you will have come across large areas of common old seaweed. What you may not realise is that in certain places, seaweed is used for cattle food, as a fertilizer and even as a food for some of the peoples of Asia. Who's next for a plateful of nice fresh seaweed? Some seaweeds are used in making iodine, while a by-product is used in foods such as ice-cream, cheese, jams, paper, ink and cosmetics. This product is called algin, so next time you tuck into that beautiful "Dairy Queen", you be able to hear the waves on a distant shore.



Here's a few pages from Nature Notes of the past. Wow! There's Wally!



A stone axe is made from a piece of stone that has been shaped to give a fairly sharp cutting or chopping edge. The stone may have been formed simply by flaking small pieces of further by either grinding as that it has quite smooth surfaces or by hammering with another stone so that it has rough, unsmoothed surfaces like rock pebbles. Some axes were fitted with a wooden handle (or haft) while others were always held in the hand.

Two men, named Spencer and Gillen, who spent much time studying the aborigines more than fifty years ago, lived among many things they saw was the making of a stone axe by a member of the Warumpunga Tribe (from Central Australia).

A large pebble of a stone called diorite was chosen and was chipped roughly to size and shape by means of a small lump of quartzite (quite a hard rock). The initial chipping did not take long but had to be done very carefully because one careless blow could have broken away part of the cutting edge. The second step was the very tedious one of levelling the surface. For this the native used a small quartzite pebble, tapping the surface for many hours at a time over a period of two days. Each stroke removed a tiny fragment of pebble, which was covered with many tiny dents and all of the ridges well-made during the flaking had been smoothed down. In this stage, the third step, was the grinding down process. For

HUMANS the worst pests of all?

Well, not necessarily all of them are. The Aborigines knew how to live with nature without destroying it, (see Nature Notes vol. 10 no. 6 to find out how they but unfortunately it is taking some European Aust what we've done:

- WIPED OUT OF EXISTENCE - the small emu of King and Kangaroo Islands, the Helmsed Honeyeater of the Yarru Valley, (the last ones died this year we think!)
- Tasmanian Tiger (and even worse - the Tasmanian Aborigines as well!)
- all the original Koalas of South Australia, and all the original Plains Turkeys of Victoria.
- Can you find out about these and any more?
- Write and let us know please.

you guess how old Wally is? out, it you don't know!

Many animals and plants have at some stage been close to extinction, including: the Tasmanian Devil, Platypus, Koala, Mutton-bird, Grouse Parrot, Mallee Fowl, Lyrebird and many more.

INTRODUCED many of the pests from other countries mentioned in this magazine. Some were accidentally but many like the wild rabbit and blackberries were quite deliberate!

1973

MANIAN WOMBAT, the name implies, this wombat is found in Tasmania. It is also found on some of the islands around Tasmania including Flinders Island. They were once widespread but now they are rare on these islands. The Tasmanian Wombat is only about half the size of the mainland wombat. Also the Tasmanian Wombat has lighter colored hair and a finer coat.

species of wombat and two rain-land). very similar, these being the Common and the Tasmanian Wombat. The third fer-nosed Wombat. He too is found in a different type of neighbor-ly wombat.

a metre in length and can be found in rough mountains from northern N.S.W. in burrows which can extend a wombat is a very tough, in the cold highlands in Summer.

has few (if any) natural and his compulsive de-reason and the wombat's fences that had the's vermin. See if you high have been de-

had a little bit of his government declared Komhats a this only applied to wombats of the Melbourne-Albury railway the east, including Ringwood East classed as vermin and can be removed if they are thought to be pests.

PAGE ③

1970

A New Zoo

The Western Plains Zoo, at Dubbo in New South Wales is a place where animals can be observed in an area that is very close to their natural environment. They are not 'caged', rather they are separated from you, so you don't do them any harm, and vice-versa!

Dubbo is in central west New South Wales, and is set on a plain. There are the Warrumbungle mountain ranges nearby. The zoo was begun in 1973 on a 275 hectare site just out of the town. It is built on a grassy, undulating plain. The first thing that was built at the zoo was a dog, cat and fox proof fence. Can you guess why? Eventually the zoo opened in 1977, with animals from all over the world living there. Only four of the five continents are represented at the zoo. Can you guess which four? The zoo had some animals specially brought in from England, such as white rhinoceros, cheetahs and four African elephants. The elephants travelled on a ship, standing on the deck for the length of the trip.

THE FOUR ELEPHANTS, ON THEIR ARRIVAL AT THE ZOO.



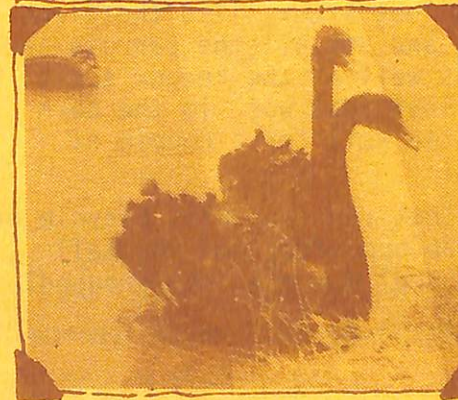
THEY LOOK A BIT SEASICK TO ME.

4

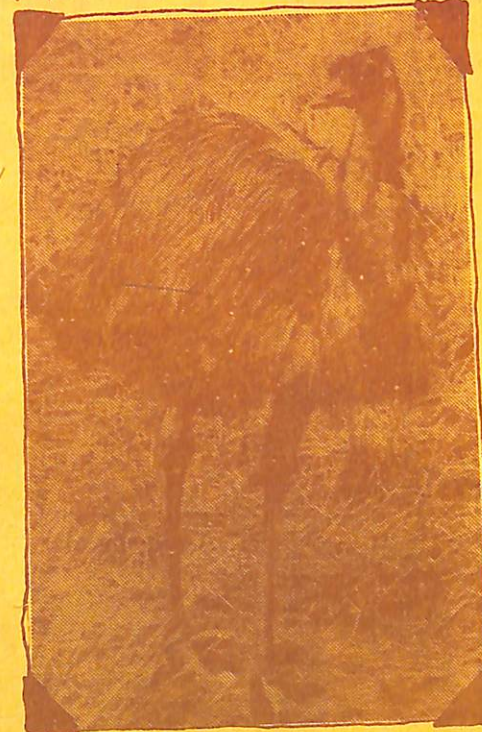
PHOTO TIME, SMILE PLEASE!



Here are some of the Australian animals at the zoo. Can you match them with their names?
Magpie goose
Black Swan
Emu
Red Kangaroo
Eastern Grey Kangaroo
(This kangaroo has a joey in its pouch)

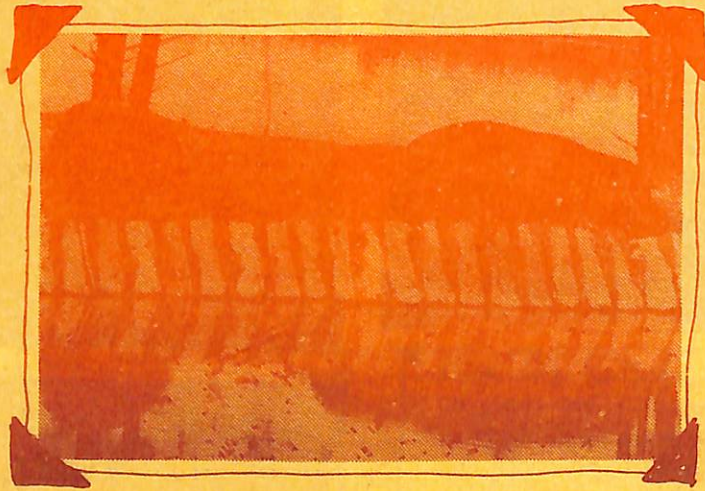


5



THE WESTERN

O.K. you say, it's just another zoo, but it's not, is it? Can you see the fences? Where are all the bars? The Western Plains Zoo has tried to give the animals as much freedom as possible. These animals nearly all live on grassy plains in the wild, and often will not breed unless they can roam around, and mingle with animals of their own kind. They often have important social groups which they need to belong to, to survive.



THE HIPPO
FAMILY,
RESTING.
(AS USUAL.)

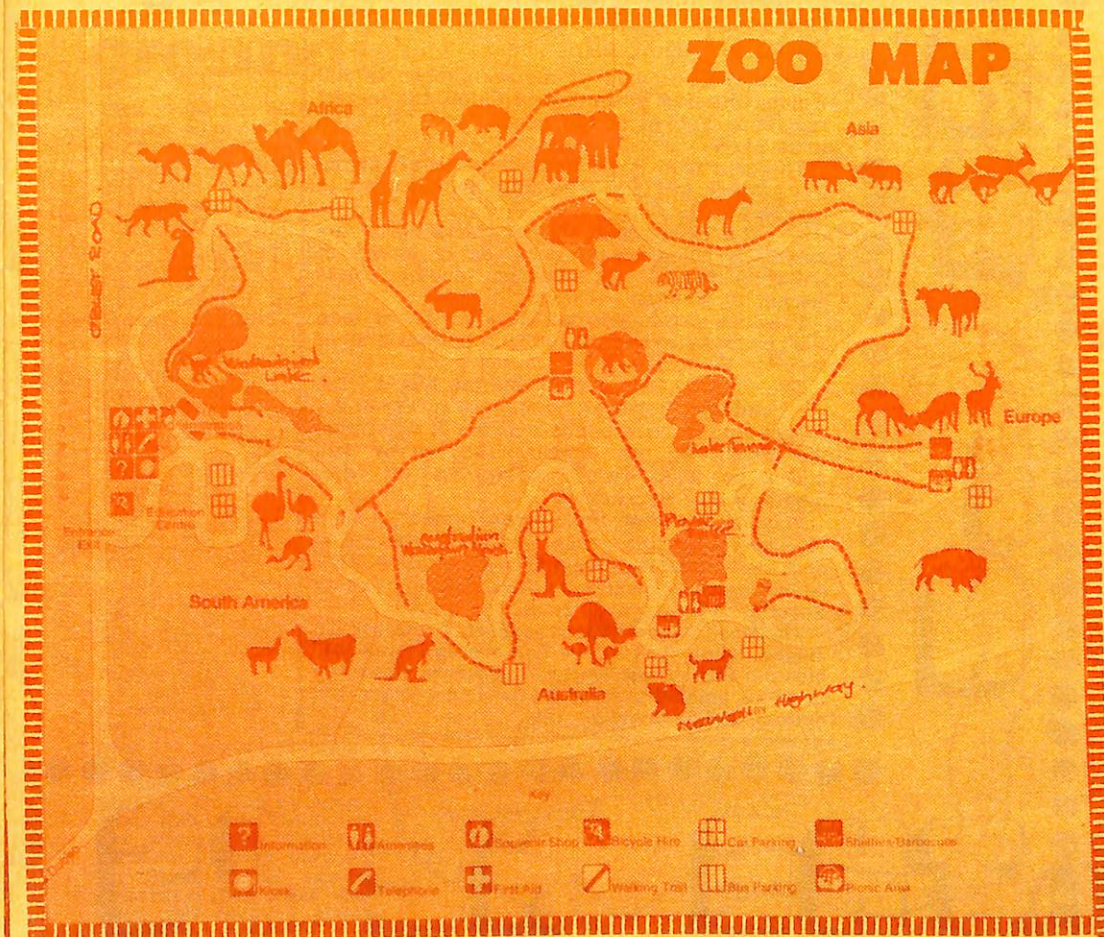
The animals are kept away from the people by the use of moats, and by hidden fences. At night, some of them have enclosures they live in for shelter. The giraffes, elephants and tigers have enclosures. Can you think why they might need them? There are special places at the zoo for sick, injured and orphaned animals, where they receive proper care. Some of the animals are tricky to look after, like the elephants. Once, they got into a barn, and ate all the carrots and bread that was stored in there, as well as the keeper's eye glasses and shirt, AND a tractor seat that was in the barn. The keeper said they didn't feel too well for a couple of days after their little adventure!

The zoo is set out in such a way that you can walk, bicycle or drive around it. Looking at the map opposite, can you tell what the animals drawn on the map are? How are they grouped? Why?

PLAINS ZOO

SOMETHING TO THINK ABOUT.

Have you ever wondered why we need zoos? Are they a good thing? Discuss this question with your class mates, and see what they think. Have you ever wondered what happens when animals are put into a zoo? They can hardly ever be let out into the wild again, because they may have picked up a strange disease in the zoo, and could transmit the germs to hundreds of other animals, wiping out whole species. What are some of the 'killer' diseases that animals can get, and can spread around?





China's panda population faces starvation

From MARK BAKER

PEKING, 10 July. — Many of China's fragile population of giant pandas are facing starvation because large areas of their bamboo forests are dying off.

About 90 per cent of arrow bamboo in the Wolong Reserve in south-west China, the largest remaining habitat of the panda, have flowered since May.

This will lead to an immediate die-off of the trees, which will then take three or four years to regenerate.

At least 132 pandas died of starvation in the mid-1970s when die-off occurred in forests of umbrella bamboo at Minshan, another main habitat in Sichuan province.

It is now estimated that there are fewer than 1000 pandas surviving in the wild — almost all of them in Sichuan.

The Chinese Government and the World Wildlife Fund have begun an emergency survey of the rugged and isolated panda habitats to determine the extent of the danger. The survey will determine what rescue operations or other measures are necessary.

Massive flowering of the arrow bamboo, a main food source for the panda, has been reported in both the Wolong Reserve, site of the Chinese-WWF panda research project, and the Baoxing County Reserve in western Sichuan.

The head of the Wolong project, Professor Hu Jinchu, said: "The arrow bamboo exploded into blossom this spring. We have observed flowering in small patches during the past few years, but nothing as alarming as this."

Can you think of a plan to save the Pandas?
Find out what other foods Pandas eat.
Why are there so few Pandas left in the world?

Hunt for sea bird unseen for 128 years

• Do you think the Petrel will be found?
• Find out more about the Petrel's life at sea. (I mean... when does it sleep?)

SUVIA, 1 June. — A British ornithologist is hunting a bird so elusive that it has not been seen for 128 years.

The McGillivray's Petrel was last spotted over Gau Island off Fiji in 1855. The bird was shot and stuffed by a visiting British scientific expedition.

The ornithologist, Mr Dick Watling, is leading a year-long search for the species, sponsored by the Fiji Museum and the Council for the Preservation of Birds.

"Petrels spend most of their life at sea, visiting land only at dusk to lay their eggs in holes in the ground," Mr Watling said. "McGillivray's petrels have only ever been seen in Fiji, they are elusive birds."

Worms go to ground!

THE internationally famous giant Gippsland earthworm has been placed on an endangered species list by a global environmental group.

The worm, which can grow as long as four metres, is found in only a small triangle in Gippsland, bordered by Loch Korumburra and Warra-gul.

A study by the International Union for Conservation of Nature, released recently in Switzerland, said the giant worm was one of 600 invertebrates (spineless animals) in danger.

The union said the species were falling victims to human civilisation.

The giant earthworm moves through the soil quite fast, making a "gurgle sucking" sound as it burrows, according to the union.

It said the worm secreted a milky fluid which was regarded by some to be good for treating rheumatism.

Monash University geographer, Dr Jim Peterson, who has been studying the worm with National Museum zoology curator, Dr Brian Smith, agreed yesterday that there was need for concern about the worm's future.

What sort of things would cause the giant earthworm to die?
Why does it only live in such a small area?
Is there any other place where giant worms live in Australia?
Why should we protect the worm?
What does the worm use as a defence against enemies?

FOR THESE CUPPINGS AND 'THE AGE'

Notes: P.O. Box 28, Ringwood East, 3135. GOOD LUCK!!

To celebrate our 20th birthday, we're having a **GIANT** coloring competition, with a **HEAP** of prizes. Make sure you send us your name, age and address; Send your entries to 'Nature Notes'



EUCALYPT TREE

CORREA

BILLY BUTTONS

FIELD DAISY

ROUGH FERN

STRIPED SKINK

SCENTED SUNDEW

GRISTLE FERN

MATTLE

YOU CAN GET ANYTHING YOU WANT AT

Wally's Restaurant!



After many embarrassing mistakes, Wally Wombat...

Hey waiter! What's this fly doing in my soup?

Oh, Breakfast!

That's not fair! Why do I get a fly in mine?



...eventually learns what sort of food to give to which sort of customer...

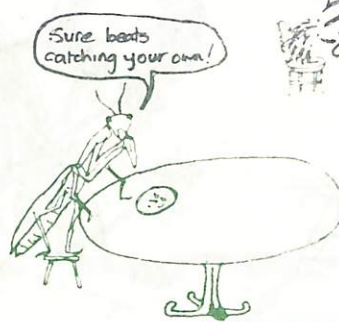
...and I'll finish off with a preserved caterpillar.

TONIGHT'S SPECIALTY
INSECTS!
TOMORROW LEAVES!

Hm Nice Mantis. Wonder is he on the Menu?



Sure beats catching your own!



Ants in my soup! Yuck!

...but it takes quite a lot of research to work out the menu.

Good grief - I never knew leaves could get so complicated! I wonder which sort they'll like the best?

Parallel Veins



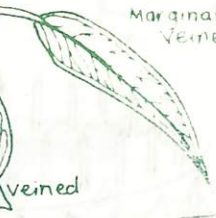
Net Veined



Loop Veined



Marginal Veined



* Can you help Wally find one of each sort of leaf? I tried but I couldn't.

Perhaps I should sort them out into groups according to their shape? I could sell 'Savoury Shape Leaves' and 'Crinkle Cut Leaves'!



Entire (12)



Serrate



Bi-serrate



Dentate



Crenate



Sinuate



Lobate



Cut



But all the hard work paid off & the money rolled in

Call insects having a feast on gum leaves!

What'll we have to eat next?

Turn your Manna Gum

I'm sure glad Wally branched out into this line of business!

* There are 3 names of native plants hidden in this frame - find them if you can!

TODAY'S SPECIALTY
GUM LEAVES
TOMORROW SEAWEED

I'm off to the bank, see ya!



When suddenly....

OK Fuzzy face! Make with the loot!

A silly galah and an old croc



You tell him 'Bess, You tell him!

I wonder what's holding up Wally?

...and even more suddenly

OK who turned off the lights?

That's funny, I haven't got any lights in my outdoor restaurant!

Yeah, who's the wise guy!?

The nocturnal animals make short work of the intruders in the darkness...

With his extraordinary night vision Wally spots an emu and clips him under the ear - which is quite hard to find for a crocodile

KAPOW!!

Ouch my poor hand!

...the light returns a few minutes later and business gets back to normal - except that an emu mistook the money bags for some worms and swallowed them to aid his digestion!

I wonder who did turn out the lights?



Well I've heard of barking on wales - but emus? That's just too ridiculous!

* Answer underlined in second last frame!

What does do now, Boss?

Oh Ethyl! Now I'm story broke!

That'll be the most rent she's ever had!



KEITH DUNN

THIS IS PAGE NO. 13. (I HOPE)

EROSION

CAUSES OF EROSION:

WIND

Puff-N-Roar is my name. I work with people driving windmills, blowing their yachts and even drying clothes. I can also pick up friends on the way, especially soil. I can take soil for a ride hundreds of kilometres away. When grasses and trees cover the land, I have little effect on the soil. But when it is exposed, I blow the light, fine soil particles first, then the heavier particles. Nearly all fertility in soils is found in the light particles, so when wind erosion occurs, I leave the land less productive, and the farmer suffers.



WATER

I'm Willful Water, Willie for short. I fall down from the sky, a terrible drop, but the plants catch and cushion my fall. They help me gently soak into the soil. If there are no plants and trees, I am dashed to the ground with a terrible splash! When we crash onto unprotected soil we move it away!

Move it boys!



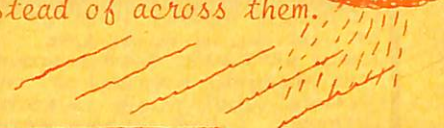
TYPES OF EROSION:

Sheet and Rill Erosion:

These occur where the protective vegetation has been removed. This may be from overgrazing or unwise clearing. Sheet erosion occurs when water is able to flow over bare areas of sloping ground. A whole layer of rich topsoil is lost!



Rill erosion occurs as water flows downhill and gathers into shallow depressions. Miniature streamlets form gullies called rills. This form of erosion is mostly seen on cultivated land where the ploughs have been dragged up and down the slopes, instead of across them.



TUNNEL EROSION:

Occurs in areas where topsoil is thin and forms a hard crust. When the subsoil beneath it becomes wet it dissolves away. Water may enter the subsoil through rabbit burrows, stump holes or old tree cavities. The water wears away the walls of the passages until long underground tunnels are formed. Then the thin layer of topsoil caves in and a long open gully can be seen.



GULLY EROSION:

Clearing of the hills and valleys together with grazing by hard hooved animals, increases the amount and speed of surface runoff and seepage. The roots of trees and grasses no longer bind the soil. Gullies develop when water streams onto unprotected land. Gullies cut into hillsides with alarming speed.

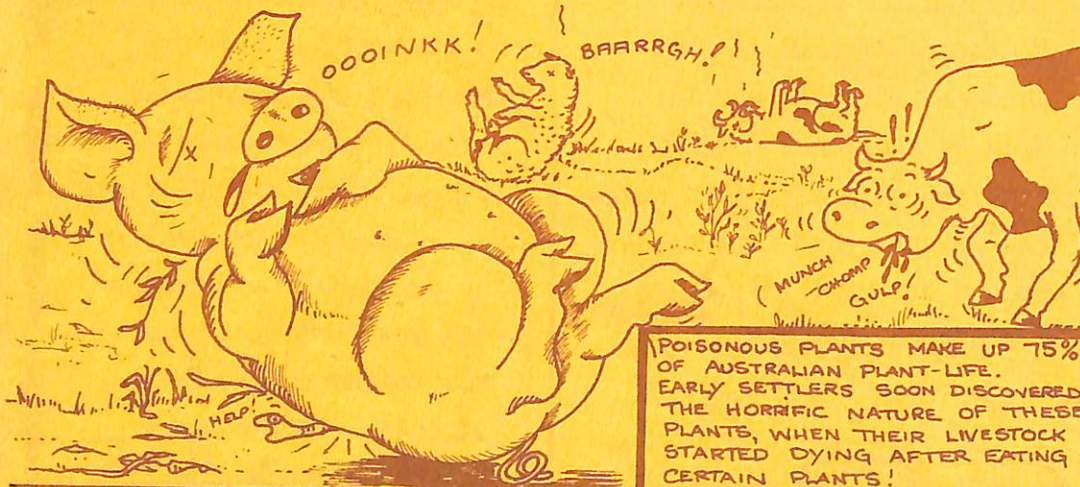


Hundreds of years are needed for the creation of just 2 centimetres of topsoil. Man can destroy that amount of soil in weeks! Soil is basic to man's existence. Without soil there can be no vegetation, no animals and consequently no people.

WHAT CAN WE DO TO CONSERVE SOIL?

BY DIANNE DARLEY

DANGER ON YOUR DOORSTEP!



POISONOUS PLANTS MAKE UP 75% OF AUSTRALIAN PLANT-LIFE. EARLY SETTLERS SOON DISCOVERED THE HORRIFIC NATURE OF THESE PLANTS, WHEN THEIR LIVESTOCK STARTED DYING AFTER EATING CERTAIN PLANTS!

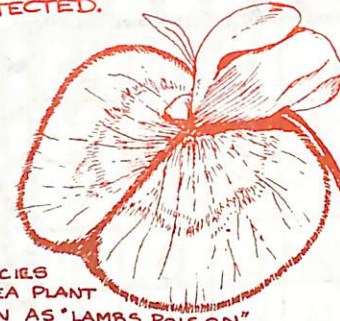


HEADACHE?
TRY OUR NEW
POISON BERRY
EXTRACT
GUARANTEED
RESULTS!

CURE ALL

ABORIGINES HAD DISCOVERED EARLY ON BY TRIAL AND ERROR, WHICH PLANTS WERE HARMFUL. SOME OF THESE POISONOUS PLANTS WERE PUT TO GOOD USE IN THEIR HUNTING. SOME TOXIC SUBSTANCES WERE USED FOR KILLING FISH IN SMALL WATERHOLES. OTHER USES FOR THE POISONOUS PLANTS WERE AS MEDICINES, BUT THIS ONLY CAME ABOUT AFTER WASHING AND DRYING TREATMENTS.

POD BEARING PLANTS SUCH AS THE ACACIAS ARE AMONG THE KNOWN POISONOUS PLANT VARIETY. MOST OF THE TOXIC PLANTS AMONG THE LEGUMINOSAE FAMILY HAVE A PEA SHAPED FLOWER SO ARE EASILY DETECTED.



A SPECIES OF PEA PLANT KNOWN AS "LAMBS POISON"

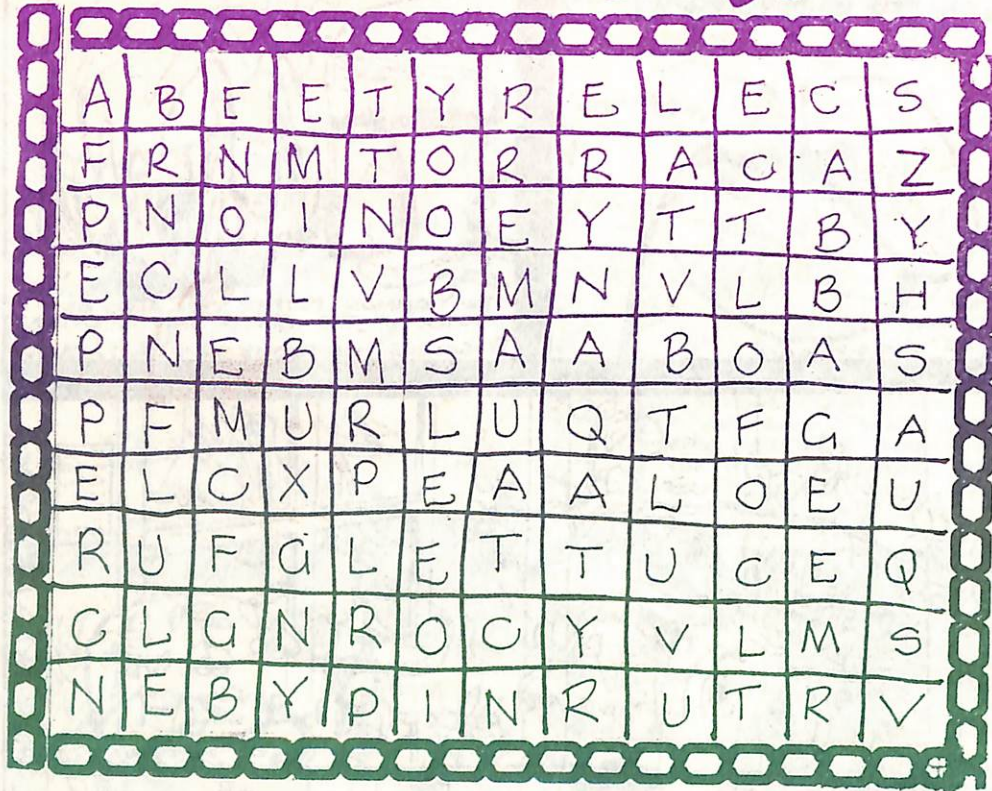


THE COMMON POTATO CAN ALSO BE A DANGER IF THE GREEN SKIN IS EATEN!! POISONOUS MUSHROOMS CAN BE FATAL!!!



A HOME GARDEN CAN CONTAIN UP TO 18 KNOWN TOXIC PLANTS SOME PLANTS HAVE POISONOUS BERRIES, OTHERS, BARK OR LEAVES. SOME CONTAIN POISONOUS IRRITANTS, WHICH AFFECT THE SKIN OF HUMANS. CAN YOU FIND THE POISONOUS PLANTS IN THE PICTURE? THEIR NAMES ARE:--
DAFFODIL. AZALEA. RHUBARB. ANGELS TRUMPET AND POISON IVY.

VEGIE WORD!



FIND THESE WORDS-

BET
CABBAGE

CARROT
CELERY

CORN

CUCUMBER

EGGPLANT

LETTUCE

MELON

ONION

PEA

PEPPER

POTATO

SQUASH

TURNIP

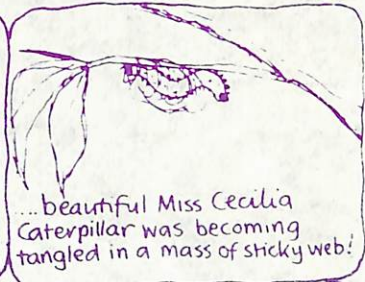
TOMATO

You can go sideways, backwards, diagonally or forwards!

A CASE FOR SUPER WALLY!

OUR CENTREFOLD HERO...

Our hero Wally Wombat was walking down the path one day when he saw a strange sight....



...beautiful Miss Cecilia Caterpillar was becoming tangled in a mass of sticky web!

Good grief! She'll get strangled and suffocate! I must free her - this is a case for Superwombat! ...er... or was it Wombatman?

Silly blindfold - I can't see a thing.



After spending 3 hours in the nearest telephone booth changing into his costume, Wally emerges...

...to find that Cecilia's 'prison' is complete.

Never fear Cecilia dear, the mighty Superwombat's here!

Wally takes drastic action to 'free' Cecilia!



If you don't mind, you stupid Wombat, I'm changing!

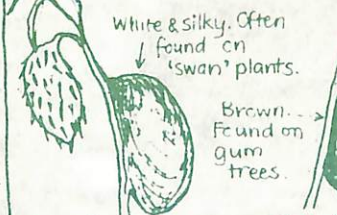


Let her be Wally, she needs her beauty sleep. She looks a bit grubby to me!

And sure enough, some months later, Wally noticed a beautiful moth emerge from Cecilia's cocoon....

Wow! It's amazing what make-up does for women! Now days!

Just so you don't make the same mistake as Wally, here are some common casemoths:



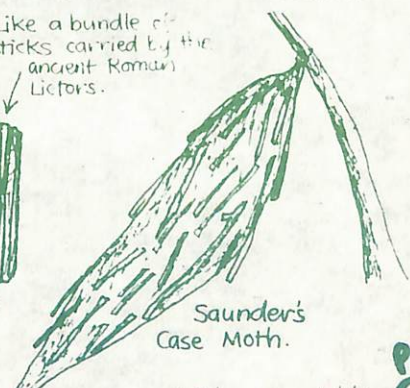
Wanderer Butterfly Cocoon.

Gum Emperor Moth's cocoon.

Like a bundle of sticks carried by the ancient Roman Lictors.



Lictor Case Moth.



Saunders's Case Moth.

These last two casemoths have portable homes as they can move around.

Can Turn Find already

NATURE NOTES

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NATURE
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