

I'd take Dancer and Prancel any day!

A MERRY CHRISTMAS!

A'SAFE HOLIDAY

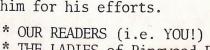
AND A

This issue of Nature Notes is the final for 1977. What a busy year it has been. No doubt in your school year you have had many new experiences. We hope that in some way Nature Notes and Probe have been The able to help you in these experiences.

1977 ends on a somewhat sad note for us as it is Mrs. Gibson's last issue of Probe as she is to travel overseas in 1978. I'm sure that all readers of Probe and Nature Notes would wish Mrs. Gibson a happy time in England next year. Mrs. Gibson has been the very first editor of Probe and was responsible for setting up the magazine. Before working on Probe she was a regular worker in preparing Nature Notes for delivery when the magazine was at Blackburn Lake Primary School. On behalf of our many readers and

committee members past and present, I extend to Yes... and I'd like ho Mrs. Gibson a big thankyou for her efforts and send a cheerio to all my an enjoyable year in 1978. Friends and

Mr. Dyer, whom you will remember as editor of Nature Notes in 1975 - 1976 and who has remained as a committee member this year also leaves Ringwood East and Nature Notes. (He also created Wally for us.) His work too has greatly extended the appeal of Nature Notes. We wish him well in his studies in 1978 and thank him for his efforts.



* THE LADIES of Ringwood East Primary School Mothers' Club who collate, pack and deliver Nature Notes and Probe and who help with the drawing and printing too!

* OUR COMMITTEE for their continuing interest and work in preparing interesting articles for you to read.

Nature Notes will be back again in 1978. Have you re-ordered? Why not do it now! All that remains for me to say is... Happy Christmas, have a safe and enjoyable holiday and we'll see you in 1978.

NATURE NOTES... December, 1977.

MOLLUSCS



If someone came up to you and asked, "Do you know what a Univalve is or for that matter a Bivalve?" Would you be puzzled as to how to reply? Such terms refer to a large number of animals that inhabit our beaches - Molluscs, (the word Mollusc comes from the latin word meaning "soft"- a strange description for shells, don't you think!)

There are five sub-groups of molluscs:- When "shell"-hunting this summer, this guide may

help you.



LIMPET

BIVALVES. The shell is in two pieces, hinged together such as clams, mussels, oysters and scallops.

TOP SHELL

These are the one-shelled Moll-UNIVALVES. uscs, like limpets, cowries, cone shells, sea and garden snails.



Those in which the shell is in CHITONS. the form of eight plates, held together by a surrounding girdle. They are found on rocks near the low tide level.

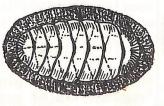
CEPHALOPODA. These creatures have no external shells but hard inside shells. For example, the "bones" of cuttlefish are very common on our beaches. Also in the group are squid and octopus.

HAIRY MUSSEL

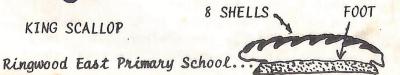
SCAPHOPODA. The shell is in the form of a curved tube, like an elephant's tusk.



CHITON



KING SCALLOP





GOULD'S SQUID



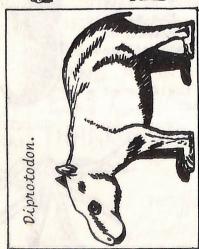
PAINTED

LADY

This 'n' That Goes







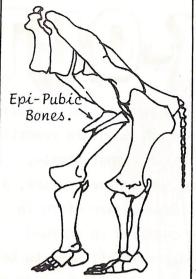
When I think of Prehistoric Animals I usually think of the dinosaur and like creatures of the Northern Hemisphere and forget that Australia too had its pre-historic inhabitants. Perhaps I should say "has "instead of "had "for our marsupials belong to a family that have not changed much in their two million years in our land.

The marsupials - pouched animals are much older in time than the <u>placental</u> mammals which have evolved overseas. In Europe and North America the mammal's arrival meant the end of their marsupials, but because of Australia's isolation placental mammals did not reach Australia (except for bats, rats and the dingo) until the arrival of the white man and so our marsupials have survived or at least some of them have - the others we have managed to wipe out.

The average weight of a 'modern 'wombat would be about 36 kg. In ancient times a giant wombat called Phascolonus gigas weighing about a quarter of a tonne and standing at least twice as tall as Wally roamed our land. The kangaroos and wallabies of those days were also much larger than those of today.

Back even further in time we find the <u>monotremes</u> which came into existence at the end of the dinosaur period when reptiles were beginning to evolve into mammals. No need to tell you that the only two survivers in the world of this tamily are found in Australia - the egg laying mammals - Can you name them? Of course you can.

The largest marsupial known to have lived in our land was the Diprotodon. The evidence of this animal has been pieced together over many years from fossils of bone fragments. It wasn, t until 1892 that a complete skeleton was found on the dry bed of Lake Callabonna in South Australia. Another 14 years saw the skeleton completely assembled at the Museum. This giant was about





Ichthyosaur.

the size of a rhinoceros and probably weighed about two tonnes. How do we know it was a marsupial? Well, all marsupials have two bones called epi-pubic bones or pouch bones extending feom the pelvic region. Placental mammals to not have these.

Now let us go back even further in time to the Mesozoic Era - the age of reptiles. Did you realize that we had our own dinosaurs too? (The word Dinosaur comes from a Greek word "saurus" meaning a lizard or reptile.) Although we haven't yet unearthed a complete dinosaur skeleton we have found parts of several, the most common being Rhaetosaurus. Even though less than half its skeleton has been collected the weight is more than a tonne and enough to prove that he was a pretty big chap - being approximately 15metres in length. When Rhaetosaurus lived here the map of Australia was very different. Over half of Queensland lay under water and the sauropods enjoyed a good living on the lush vegetation growing in the lakes. We know from their weak jaws that they liked nothing better than a soft plant liet.

However we also had flesh eaters in this period. These strode on two legs and a claw from one tound at Cape Patterson in Victoria was identified as that of Megalosaurus - not a match for Tyrannosaurus Rex but enough to meet on a dark night, for their footprints were about 40 cms. long.

The remains of some giant swimming reptiles have been found. The Kronosaurus queenslandicus lived in Australia's inland sea in the Cretactous Period. This terror was about 14 metres long with a head about one quarter the total length and armed with huge, sharp, interlocking teeth.

Well girls and boys, this is as far back as I have space to use this month. A book that will help you go further back in time is: Prehistoric Australia, by Hans Minchan. Good hunting!

PREHISTORIC .

Holiday Dongers LOOK OUT



DROWNINGS



ing far and wide - to beaches, mountain resorts and various national parks. For most people, holidays are a happy time, an exploring time, a finding out time. On holidays we are often in unfamiliar territory and engaging in unusual activities. There are dangers we all need to be aware of. Drownings, fires and traffic accidents are just a few. Many who travel interstate will no doubt know of the Portugese Man of War jellyfish and the stonefish. Sharks are an ever present source of danger during the holiday period. However, don't let these dangers put you off swimming because even crossing the roads is still a more dangerous thing to do. More children are killed by cars than by sharks each year. Indeed, the backyard swimming pool appears to be more of a problem these days than the

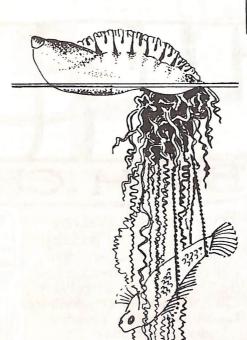
During the holidays many of you will be travell-

TRAFFIC ACCIDENTS



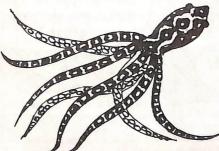
beach. If you have a pool, is it under the watchful eye of adults at ALL times? What about when its not in use?
Whatever you do during the holiday period, take care...
make sure that you have a happy and safe holiday.

KEEP ON THE LOOK OUT.





and related animals have stinging cells which can affect a human being seriously. The tentacles, richly armed with these stinging cells are used to get food into the mouth. The stinging cells shoot out threads which numb the prey. One such customer you are likely to meet as you travel around N.S.W., especially Manly beach, is the Portugese Man of War or 'Blue-bottle'. The poison contained in the stinging cells, according to the International Wildlife Encyclopedia is 75% as strong as a cobra's venom. The tubes shot out by the Blue-bottle contain hooks, barbs and spikes of different shapes and 'sizes - these tubes can even penetrate a rubber glove and will penetrate deep into the skin of small creatures so that the poison flows easily into the trapped creature. Not a nice fellow to tangle with is he?

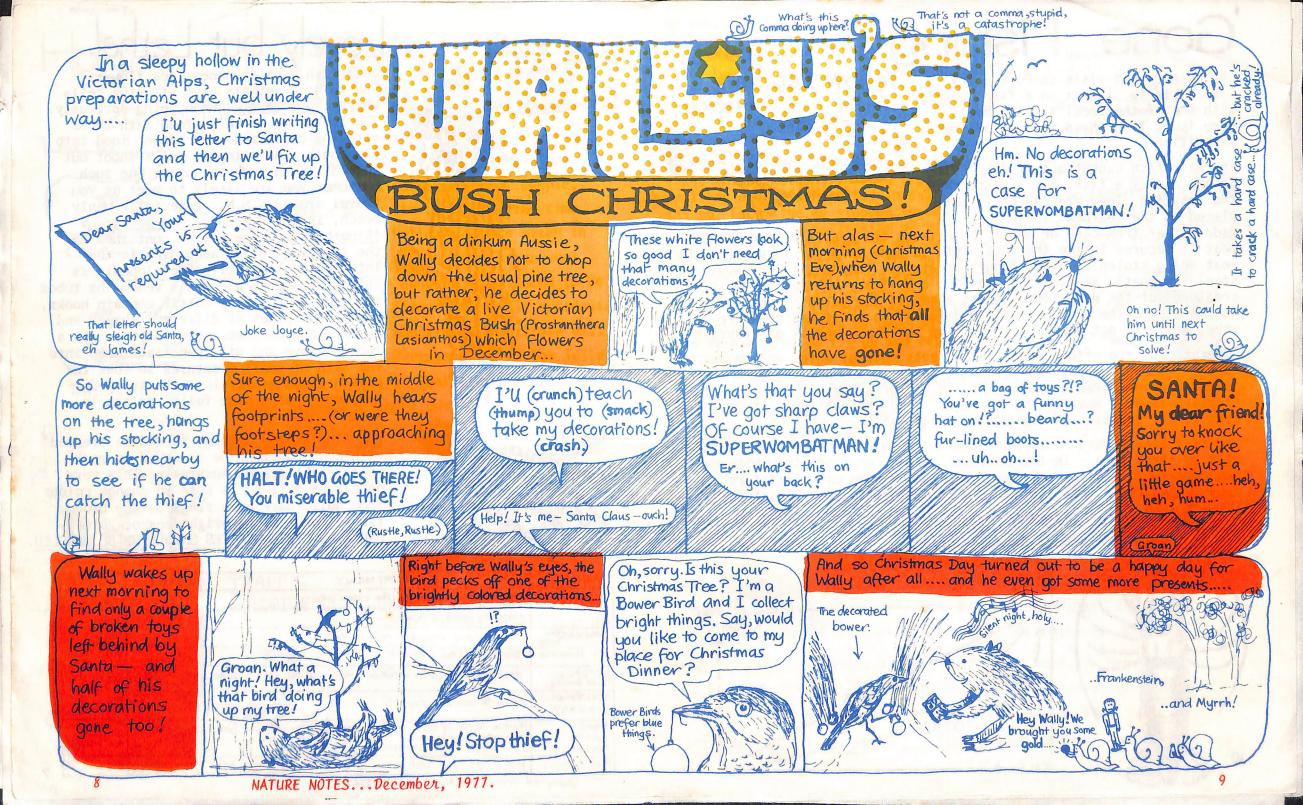


The Blue Ringed Octopus should be treated with much caution. He is found in rock pools right around Australia. This very dangerous mollusc is able to change colour from dull, dark blue rings on the brownish yellow body to bright peacock blue.

UNDER NO CIRCUMSTANCES SHOULD HE BE HANDLED.

ANIMAL	TREATMENT	ANTIVENENE	HOSPITAL?
SNAKES.	•Put a tourniquet around the bitten limb. •Rest limb - get patient to nospital quickly -but without panic. •Identify snake if possible.	For most snakebites.	Yes.
SPIDERS Red Back	No tourniquet needed - rest patient.	Yes.	Yes.
FunnelWeb	Tourniquet - don't loosen it.	No.	Yes.
OCTOPUS. (Blue Ringed)	Keep up artificial respiration until you get to a hospital.	No.	Yes.
STONEFISH.	Bothe in warm water.	Yes. No.	Yes. Yes.
BEES. WASPS. BULLANTS.	Remove stinging barb without squeezing poison sac. (Use knife edge.) Anthistamene cream may be necessary.	No.	Only if you're allergic to the bite.
PLATY PUS.	Pain killers and rest.	No.	No.

(Adapted from 'THE AGE' Nov. 8, 1976)



Gone Fishing - C. Bull. Yellow Leather-

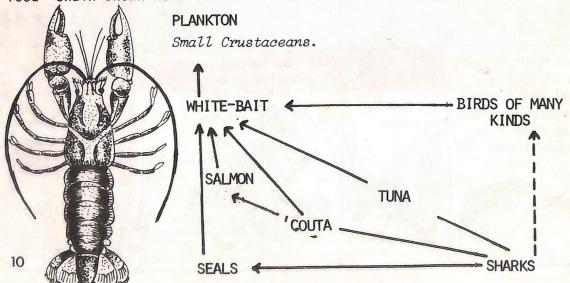
During a recent visit to Port Fairy in S.W. Victoria, I went on a fishing trip with one of the local fishing boats. Here is my first hand account of that expedition.

The main fish caught out of Port Fairy is not really a fish, but a crustacean.. the crayfish. They are caught in pots placed on the sea-bed. These pots are

made either from cane or metal. To attract the crayfish into the pot meat is secured inside the pots. This is done in order to prevent the meat being stolen by other hungry creatures. Incidently, who would steal the meat? We consider crayfish a delicacy but so do many other creatures of the deep. Its biggest enemy is the octopus. Once trapped inside a pot, the cray is totally defenceless as it has no-where to move, so it is not uncommon to pull up the empty shells of crayfish.

Other things are often caught in the pots most of which end up as 'bait'. Among the crop we gained on our trip was a 3 kg. leatherjacket and innumerable king-crabs. In Victoria the minimum size of crayfish is 8cm. But this is measured in an unusual way... frim the eyes to the junction of the body and the tail.

The seas around Port Fairy were teeming with fish, from small whitebait to large tuna. In the constant search for food, the white-bait had come to Port Fairy and had brought with them many predators. The food chain shown here indicates the 'hunters' and the 'hunted'.



On this particular trip we were after tuna and it wasn't long before we saw the birds feeding on a shoal of whitebait. Behind the shoal were the tuna. When tuna feed they come to the surface and frequently break the water. When it is rough, they often look as though they are flying.

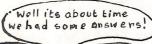


Bonito luna

Our first attempt at catching a tuna resulted in the breaking of our line, which incidently had a breaking strength of 54½ kg.We then tried trolling and this resulted in catching 14 fish, the largest being about 15½ kg. Each time we stopped to haul in our catch, we immediately attracted a large collection of birds looking for a hand-out. Albatrosses came closest to the boat. I noticed three types: the Shy Albatross, the Black-browed Albatross and the Yellow-nosed Albatross. There were many other birds around but by What a

far the most spectacular was the Australian Gannet..diving headlong into the water from heights of over 30 metres, then re-emerging to fly up and repeat the performance.

Another visitor we had on our expedition was a vagabond seal who thought the fishing was a game. He played tug-of-war with our lines and 'lost' us a few fish. but I'll tell you more about seals sometime in the future.



iacket

Answers - at last!

Frustrating business this is!



CROSSWORD SOLUTION. .. VOL. 14. NO. 8. P. 16

ACROSS: 2. Chirps, 6. Chain, 8. Asps, 9. Leaf. 11. Age, 12. Mid, 13. Spine, 16. Casemoths, 20. Opal, 21. Eta, 23. Hue, 24. Leis, 25. Spins, 27. Ketch, 28. Adds, 30. Silk, 31. Ribbed.

DOWN: 1. Tins, 2. Cases, 3. Hip, 4. Pet, 5. Seed, 7. Hag, 9. Lictor, 10. Fly, 14. Eyeless, 15. Sheet, 16. C.O., 17. Aphid, 18. Saunders, 19. Sticks, 22. Ash, 24. Leaves, 26. Palm, 29. Alps.

LAST MONTH'S 'MYSTERY MESSAGE' ... Order your 1978 issues of Probe and NATURE NOTES... December, 1977. Nature Notes SOON!

LOGUSTS OR GRASSHOPPERS

With the onset of the summer months, grasshoppers will be about. You will perhaps notice them in the countryside as you travel to your favourite holiday spot. You will most certainly see a collection of them on the radiator of your car. dead of course. During the hot summer months it is not uncommon to read in our daily newspapers that there are plague grasshoppers in northern Victoria. In such proportions the grasshopper becomes a pest.

Grasshoppers belong to two groups: 1. The Short-feelered grasshoppers (Acrididae) may become a serious plague and are THEN called locusts.

2. The Long-feelered grasshoppers (Tettigoniidae) live singley on trees and are usually harmless. As Leach points out in his book, Australian Nature Studies, "The name locust is a source of confusion; it is applied to the short-feelered grasshoppers, though they are called grasshoppers until they become gregarious. (Living in larger groups) The name is also applied to the Cicada..the musical locust. To avoid confusion, the name locust should be used as little as possible."

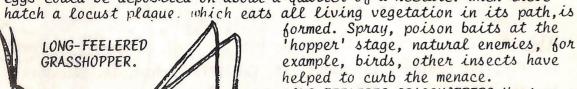
SHORT-FEELERED GRASSHOPPERS.

The female places 30-40 eggs in a hole in the ground and surrounds them with a jelly-like fluid which hardens and protects the eggs. The hatching period varies between 2 weeks and several months. On hatching, the young insects, known as 'hoppers' make their way to the



surface. They resemble the adult, with the exception that they have no wings and the hind lags are not so large. After five or six successive moults, over a period of six weeks, the adult is formed. Wings appear when the adult is half grown.

Grasshoppers sometimes swarm, resulting in -normous numbers of eggs being laid - an estimate has suggested perhaps more than 400,000,000 eggs could be deposited on about a quarter of a hectare. When these hatch a locust plague, which eats all living vegetation in its path.



LONG-FEELERED GRASSHOPPERS. Masters of camouflage, many of these insects live in trees, hence many are green.

NATURE NOTES.... December, 1977.

A Legend of the Morning Star.



hong, long age a black named Millyan the eagle-hawk lived with his wife in a tree.



They killed so many people that cut lost the blacks decided that Mullyan and his wife must die



Co Mullyan and his wife died and could never harm people again. But as the flames died about in the morning three aparks nose into the sky and are now three stars, one of which is very bright.



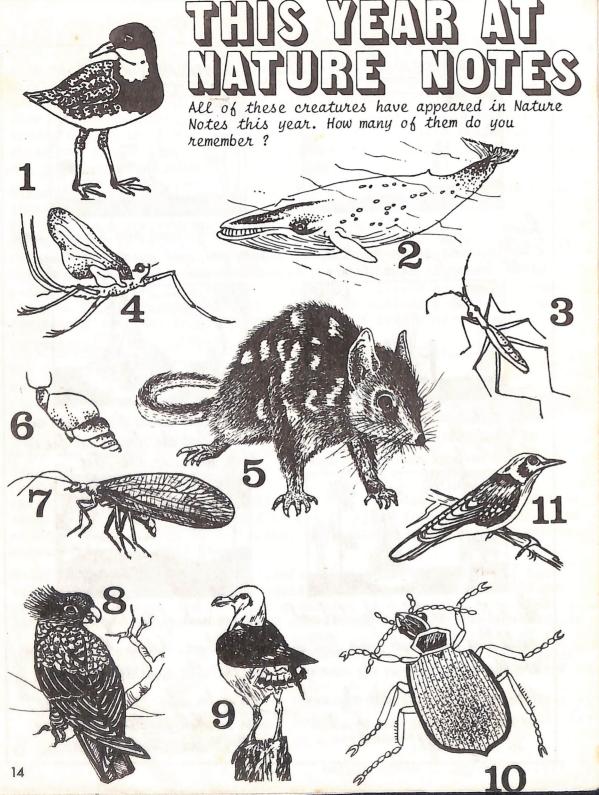
Both Mullyan and his wife were very wil, and used to kill any blacks who passed by their home.



So one right while the two evil ones were asleep, the blacks set fire to their home in the tree.



On one side of the bright star is a small one; that is Mullyan's arm. On the other side is a larger one; that is his sife. But the bright stor is Mullyan himself, and we call it the efforcing often.



A Sometime Visitor

Many years ago, perhaps it was in 1968, our beaches were invaded by hundreds of beautiful creatures. I found many of them washed up near Inverloch. They are called The Paper Nautilus or Argonaut and both these names are famous in literature of the sea. Can you remember who sailed in the original Nautilus or who were the Argonauts?

Graham Pizzey who writes for one of our newspapers suggests that we may soon see another
horde of these creatures on our shores so
watch for them. In order to watch for them you need to know a little
about them. The Paper Nautilus is a small octopus - not usually the
most handsome of creatures. But this particular octopus has a special
gland which secretes a limey substance which forms a very beautiful
paper thin shell about 12 cm. across and about 5 - 6 cm. deep. Although
the octopus travels in the shell it is not attached to it. The shell's
main purpose seems to be as a cradle for the eggs of the octopus, a
cradle strong yet light enough to drift on the ocean currents and keep
pace with the food supply.

Watch for this beauty. The drawing may help you to identify her and the octopus has usually left the shell when it reaches the shore.

Order Form for 1978.

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10 issues of each magazine again in 1978.



A special Myff,
Hankyou
to Mrs. Rohasky,
Mrs. Cossidy
Lomie
Richardson for
their drawings

Wally has lost his way \\
nome. Can you help him?

One Left

Take away the wombat and leave the wallaby.

2. BLJEULEBBYFTITSLHE

Take away the jellyfish and leave the Blue-bottle

3. MMAMRSMUPAIALL

Take away the mammal and leave the marsupial.

4. TEAGROULET

Take away the fish and leave the bird.

, BUSSCHOFRIRECH

Take away the bushfire and leave the scorch.

Jig~Words

Fit the groups of letters together to make 9 letter words answering the clues.

- I. DAC , IAN , DAL , UND , MAT , HSH , (Two dogs)
- 2. CKB , NCH , GOL , IRD , BLA , DFI , (Two birds)
- GRE , CAH , TLE , LEA , VIL , MOT . (Two flowers)
- 4. OOT , LON , DIC , EME , BAN , PAD . (Two marsupials)
 - Q. Why do elephants paint the soles of their feet yellow?
 - 16 A. So they can float unseen, upside down in custard. Women

