

Budget Report...

PRICE RISES FOR BOTH NATURE NOTES AND PROBE IN 1979:

During the current volume of Nature Notes and Probe, the Committee and part-time staff have had many problems arise concerning the effective continuation of both magazines. The growing popularity clearly has placed an extra burden on the editing, printing and distribution of the magazines. Recent price increases in postage rates mean that in 1979 our postage costs will effectively double. Since we are a nonprofit organization such charges cannot be absorbed. These increased charges therefore must be passed on to our subscribers.

In order to cope with our increasing popularity, the Committee, next year will be seeking assistance from people outside - other than the present staff and this necessarily involves futher expense. We hope that you - our subscriber/s will not find the increases unreasonable. Much care has been taken in the setting of the new rates to ensure that the price is kept well within the means of children whilst maintaining high standard, unique publications.

All magazines will be posted from the commencement of 1979, This means that concessions to schools in the Ringwood/Blackburn area will not apply. We have experienced difficulty in gaining regular drivers for

"Nature Notes needs

the editor!"

SUPPORT

WALLY

WOMB AT

you in 79 - even

deliveries. In many instances mothers who work at collating and packaging have also volunteered for additional delivery duties with the result that 'willing helpers' have been over-worked.

Nev Rates: Nature Notes....\$2.00. Probe......\$1.00. MINIMUM CHARGE: \$2.00.

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The good news is that with this set of subscription rates 10 issues of both magazines will again be prepared in 1979

The Committee had consid-

ered reducing the number of issues by half and even ending Probe altogether. However, rather than take such a negative course of action the price rises were the only way out. I urge all of our loyal band of subscribers to support us again in 1979 - price rises and all. An order form for 1979 will appear in Nature Notes next month.

Editor.

and

Away!

One of the things man has always been trying to do is fly - especially to glide like an eagle. In this day of jet travel, gliding has become

Up

popular again. The Rogallo designed gliders - like the one above - have given people the feel of what it's like to glide like a bird or the possum on the front cover. Whereas glider possums may volplane for about 100m, the hang gliders of today can stay aloft for at least 12hours and travel over 40kms! Unfortunately however, the accident record of the hang gliders is not quite as good as the possums' - two people are killed every week in the USA trying to glide. Schools are being set up in Australia to teach people how to do it properly - rather than just jump off the nearest cliff with a set of wings!

Find out what you can about the history of flight. How is it that gliders can actually rise in the air and not just keep on falling? Why is there a statue of Icarus at Tullamarine Airport - and who was he? Can you make a better model glider than the usual paper dart?





The vegetables we use are parts of plants. They are usually the store houses in which the plant has stored food that it doesn't need at the moment.

Roots are common storehouses and carrots, parsnips, turnips and radishes have been used by humans for a long time. Many of these vegetables keep well.

Stalks of celery and asparagus are used for food. The potato is really an underground stem which is often called a tuber.

We eat the seeds of some plants - peas, beans, corn. But in some cases, we eat the fruit but throw away the seeds pumpkin, marrow, squashes. In others we eat fruit and seeds tomatoes, cucumbers and french beans.

Lettuce, silver beet or spinach cabbage, brussel sprouts are grown because the leaves are used for food. Sometimes people use the leaves of other vegetables too.

What other fruits do we use for food? Many of the fruits we eat raw, we do not need to cook.

Can you name these foods?



FOOD



Nature Notes., September, 1978.

The vegetables that we grow in our gardens were once the wild plants in many countries but we can raise them successfully in our gardens. Vegetables are a very important part of our diet because we need at least two kinds of vegetables besides potato each day.

Early man went down to the river to drink. He had to be wary of the wild animals which also claimed the water as theirs. As cattle and sheep were tamed a new food and a new drink - milk - was used. Today we use parts of plants to make other drinks - tea, coffee, cocoa.

When man began to till the soil, the cereal grasses were his first crops. We grow wheat and oats in abundance in Australia.

Can you name any other important grain foods and the countries in which they grow best?

What manufactured foods can we make from each one?



THE MALLEE FOWL.A.Orme

Lowan or Mallee Fowl of North Western Victoria was in danger of extermination until, in Hattah Lakes, Little Desert and Wathe State Faunal Reserve, breading populations thrived.

Mallee Fowl is the only mound-building bird inhabiting arid areas of low humidity. In these areas prequent temperature fluctuation makes things difficult for the bird to control heat for underground incubation of eggs.

The adult birds are about the size of a small turkey being well camouplaged by their grey colouring and slow movement with 'motionless' pauses. The diet of the birds con-



sists mainly of the seeds from wattles, cassia and turpentine bush. In winter the birds eat insects and the buds -nd flowers of small plants. They can exist without water, gaining moisture from their source of hood.

During autumn, Lowan begins work on his mound. An old mound is opened up and deepened to several metres. Dry leaves and twigs are scraped into the hole. Organic material mixed with sand is also scraped into the hole to form an egg chamber. When sufficient rain has fallen... enough to saturate the organic material, the egg chamber is covered with sand and the organic material starts to ferment. By the end of Winter the birds have covered the fermenting material with two or three metres of sand and the mound is approximately three metres high. (The mound can measure 5 metres in diameter!) During September and October, the male bird tests the temperature of the egg chamber almost daily. When the temperature reaches about 35 degrees C., egg laying can commence.

Egg Laying. The Mallee hen lays the first egg in October. The male bird excavates the nesting chamber, selects the site and tests the temperature. The female lays the egg and departs leaving the male to rebuild the mound. Eggs are laid at intervals of one week and a clutch numbers fifteen to twenty eggs. At the onset of very hot weather egg laying ceases. Although egg laying extends over four months incubation takes six to eight weeks - chicks are hatching while laying

is in progress. As already mentioned, it is the male bird's job to maintain the temperature of the mound. Each morning he opens the mound, tests the temperature with tongue and beak then adopts one of several procedures to adjust the temperature.



The incubating heat of the nesting cham- organic/ ber comes from fermenting organic material and of course the sun. According to the weather i.e., the changing seasons, the mound will be opened to decrease heat or as days become cooler, it will be opened to make use of the midday sun.

Hatching. On hatching, the chicks struggle to the surface unaided, rest and dry out. They then feed in the scrub on insects and herbs. On the second day, they are usually able to fly and roost at night on low branches.

It is an interesting feature of the Mallee Fowl's life cycle that it mates for life. Perhaps you can investigate further this unusual bird. Please let us know about any experiences you may have had in watching the work of the birds at first hand.

Cruc or the Southern Cross

To deervers in the Southern Hemisphere, the Southern Cross is a jevel omong the considerations. It is visible throughout the year at all places south of 3+°S. It assumes different positions as it apparently ardes daily around the Sauth Celestial Aste. All of the stars of a constellations are not the same distance from us, although they annear to le. In reality are may le hundreds or trausands of light years further away from us than the others.

It has four linght stars that form a kite shape with a fainter star. Together they form a rough cross. If you evend its length four times awards the horizon where it truches the horizon is south. The Southern Cross is important too lecouse it forms part of te national flags of Australia, and New Lealand. When you are autiside on a clear right, if you look into the sky and

diserve the Southern Cross you can always tell which way you are found



* * * * * * * * * * * * * * * SHOMO! CHOMP

> This month's book prize has been won by Stuart Robertson , Ringwood East Primary School. Stuart provides us with the well known example of how to find North without using a compass. Do you know where to look to find the Southern Cross? On the next clear evening, see if you can spot it!

RIDDLE., from Ann Cengia of Glenorchy, Tasmania. Q. What stands on one leg and has its heart in its head? A. A cabbage!



THE CUCKOO THAT ISN'T :

One of the most elegant birds of the outer Melbourne suburbs is a slim, pale grey-blue bird with a black head and chin. This chap masquerades under the name of Black-faced Cuckoo Shrike -. the cuckoo part of which obviously comes from its gracefully undulating Black-faced flight. But there the resemblance ends. Cuckoo-Shrike In no way does this "cuckoo" leave her (330mm. long) eggs in another birds nest. Her own nest is usually a slight saucer-shaped one of twigs and web placed on the horizontal fork of a branch. Often they build in the same fork year after year. They are good friends of man as their main diet is made up of insects, grubs and berries. Watch for this fine feathered fellow and find out more about him. This could lead to a search for information about the real cuckoos and their unusual habits.

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WHAT'S IN A NAME ?

Have you ever heard of an animal called a <u>Chuditch</u>? Neither had I until recently. Probably if we lived in Western Australia we would hear about it more often for the Chuditch is the W.A. equivalent of our Eastern Quoll





or Native Cat. The Native Cat is not at all related to the domestic cat. A mature Chuditch averages about 71cm which includes a 30cm tail. The animals (in color olive grey under many white spots) were slaughtered in great numbers by the early settlers because of

their voracious attacks on the farmers' hens and chickens. The farmers paid later for the slaughter with a huge rise in the mice population and a consequent decimation of wheat crops. The Quoll has now become very rare in Victoria and the Chuditch is even less common in W.A., altough they are now fully protected by the law. The baby Chuditch is only 5mm long at birth, but doubles its size in 4 days. The babies live inside mother's pouch for over two months - but after about 5 months they are fully independent. (Can you see now why the Native Cat is NOT related to the domestic cat? What is the name we give to pouched animals?) One interesting thing is that Father Chuditch appears never to help support his family in any way! Take note Dads.





HONEY IS BEE-UTIFÙL :

Hands up those who like honey on their toast? If this question had been asked of Egyptian girls and boys 4,000 years ago, their answer would probably be similar to yours. The same could be said of Greek, Roman and Anglo-Saxon children at other times during history.

Did you know that each year bees in Australia produce between 16 and 23 million kilograms of honey, of which over 1/3 is sent overseas? The rest we eat at a rate of over 1kg per person per year. 80% of our exports go to Britain, while Japan is our quickest developing market.

Have you ever thought about what honey is made of? It is 4/5 natural sugars, 1/5 moisture with trace elements (i.e. tiny quantities of metals, iodine etc.) thrown in for good measure. Honey is not only a natural energy-giver but has anti-bacterial properties which make it a safe and wholesome food for babies as well as adults. In the Caucasus Mountains of the U.S.S.R. the bee-keepers are noted for their longevity - some living to the ripe old age of 130 to 140 years! If you want more information on honey, write to:

The Australian Honey Board,

00000 647 George St., Sydney, N.S.W. 2000.

P.S. 1 gallon of nectar provides enough energy for a bee to cruise 4 million miles at 7m.p.h! Let's see you convert that to metrics!

NATURE NOTES...SEPTEMBER, 1978.



RINGWOOD EAST PRIMARY SCHOOL.





WOULD YOU BELIEVE ?

* That Gum Emperor Moths can take between 4 weeks and 2 years to emerge from their cocoons.

- * That it is not only birds that migrate across oceans - the Wanderer butterfly is a native of South America but has spread all around the world under its own steam.
- \mathbf{X} Each $2\frac{1}{2}$ cm. long Colombian tree frog contains enough venom for 50 lethal poisoned arrows.

An octopus has three hearts.

Tarantulas can live for two and a half years without food.

* That because a snake's teeth slope backwards, once it has started to swallow its prey it cannot disgorge it. So if two snakes fix on the same breakfast at the same time, the larger snake ends up by swallowing the other snake as well! (wonder what he meant when he said)

Martin Com

* That stranded whales may not die because of double pneumonia from temperature extremes or through collapsed internal organs because of lack of water support, but they may in fact get themselves stranded because they are already dying

Annon and anno

What a name! I can'f) (5even spell it myself.

* That the original name given to Australia's strangest animal. Platypus anatinus (= flatfooted-creature, like-a-duck), is not its proper name, because the word platypus had already been used by another scientist to name a beetle. The other name given to the "platypus" by the second European scientist to be sent a skin in the late 18th century, was Ornithorhynchus paradoxus (= creature-with-abird s-beak, which-is-a-puzzle), but according to the rules for naming animals, the 'atinus' part of the first name must still be used. So the proper name for the "platypus" is Ornithorhynchus anatinus.



Once upon a time there lived a young echidna who wandered far away from his home and friends.





He waiked so far that he came But as he watched this strange at last to the sea, and he was sight he was seen by a fish, who amazed at all the water he saw, asked him to enter the water.



the sea to play with the fish,

but soon was out of his depth.



Then, sad to relate, he was drowned and was promptly eaten by the cunning fish. And that, of course, was a lesson to all other echidnas never to leave their cosy homes to go to the sea again.





But the fish was soon punished for eating this youngster! All its sharp spines stuck into his flesh and the points came out through his skin. And that's how fish first got their fins and spiny tails.

NATURE NOTES...September, 1978.

SOME VICTORIAN WILDFLOWERS FOUND AT THIS TIME OF YEAR..

PUZZLE PAGE ?!?

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The answer to this <u>TELE-WORDS</u> puzzle spells out what the wildflowers are... (There are 15 letters making.three words.)

Aotus, Ballarat, Beard Heath, Beard Orchid, Bossiaea, Greenhood, Glycine, Heath, Helmet Orchid, Hovea Indigo, Karalla, Prickly Moses, Red Box, Silver Wattle, Tree Violet

The names used for this puzzle are taken from pages 50-73 of <u>Wildlife Diary</u> by W. Waddell. This book is available from the Gould[®]League.

Q. Why didn't the butterflies go to the dance? A. iggud yrow v som ry asmogg

 Q. How do elephants get up oak trees? A. ; γυίρου μο γγς həyγ ùəym (Louise Ionn.)
Q. Why are flowers lazy? A. ; pəq uγ punoş shumyu əyu həyγ əsnbəəg
Q. When is a baseball player like a spider? A.; səyyş səyəyə əy uəym
Q. Why did the watch-dog run in a circle? A. ; con şəswiyy puym ol (Kylie Easton.)

Tongue Twister...

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SIMON SHOWED SHONA SIXTY - SIX SHY SHEEP: (Karen Gaylard.) Nature Notes...P.O.Box 28. Ringwood East, 3135, Phone: 879 1263.