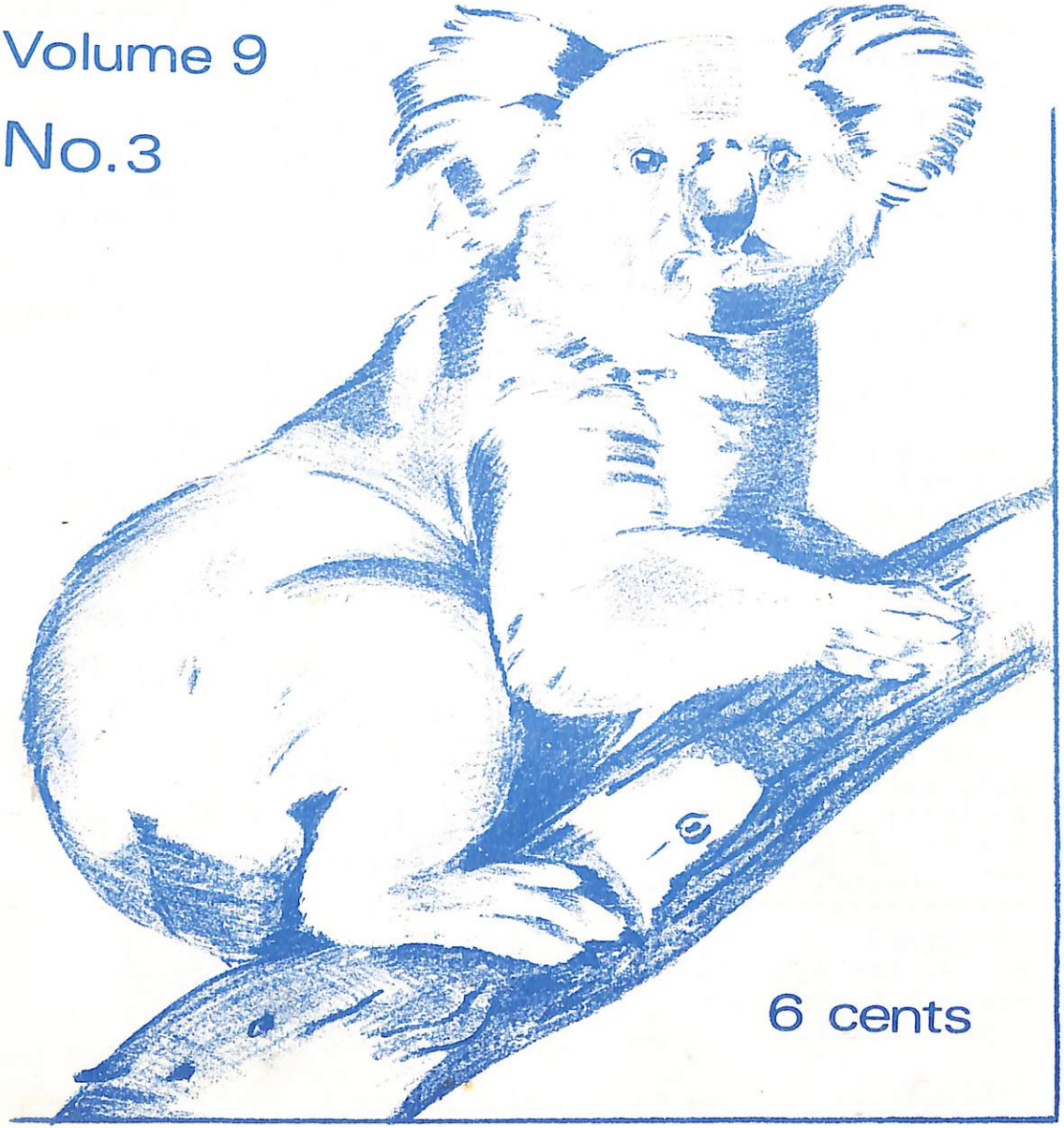
Nature Notes

Ringwood Inspectorate

Volume 9

No.3



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Contents

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Cover Drawing:
H.J.Lawry.
Artists:
Mrs.Sharpin.
Mrs.Hensler.

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CATEGORY B.

Dear Girls and Boys,

Have you seen anything of interest in the field of science lately? Please write in and let me know if you have won't you. Remember, this is YOUR magazine and contributing to it will make it even more personally yours.

You know, there is a wealth of material around us when we take the trouble to look. Examine the leaves of any tree or shrub, pull off some bark, turn a rock over or lift a concrete slab and I know you will find something of interest.

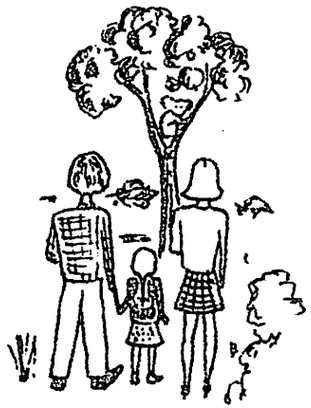
Finding out all about your discoveries can be even more fun. How do you go about this? An easy way is to ask someone and if they don't know leave them to find out for you. Easy, but no fun! REAL ENJOYMENT and REAL LEARNING arise out of:

making careful on the spot observations,
making careful long term observations,
taking notes,
making diagrams,
library research,
taking photos,
interviews and correspondence with experts.

In the end YOU will be the expert. Why don't you try some scientific investigations of your own? I hope you will...

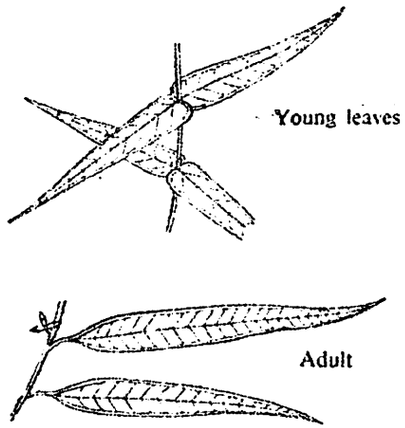
Until next month,
H.J.Lawry.

LIVE Teddy Bears



Everybody loves the cuddly koala. Possibly you have seen one in a zoo or sanctuary. Some of you may have been lucky enough to have seen one out in the bush.

Do you know what the koala's favourite food is? Nearly everyone knows that gum leaves are the food koalas love. But did you know that only a few eucalypts really suit their needs, or that the one they really like most of all may poison them?



This particular tree is the manna gum. At certain times of the year a build-up of prussic acid makes the leaves quite poisonous to eat. The young leaves are dangerous at all times and must be avoided. Isn't it wonderful that the koalas know by instinct not to eat these leaves? The other suitable trees include red gum, blue gum, swamp gum and yellow box.

SOMETHING FOR YOU TO DO.

Contact your local Forestry Office and find out whether there are suitable eucalypts for koalas in your area.

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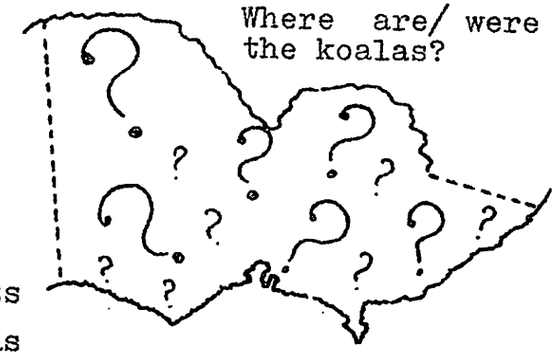
Talk to older residents and find out whether koalas were once natural to your area and, if so, what became of them.



Where are/ were the koalas?

PUZZLES PAGE

☆ This is a CLUELESS CROSSWORD. Only the WORDS are given- you have to make up the CLUES and fit them in! Ten have been done for you to help you out.

Clues for the ten words included could be:

Toad. A relation to the frog.
Heat. Some snakes can trace animals by the ..... they produce.
Eggs. Frogs coat these in a slippery substance for protection.
Tiger. A variety of snake.
Drop. Some lizards do this with their tails.
Amphibians. Crocodiles are this.
Reptiles. Crocodiles are this also.
Mamba. A very dangerous snake.
Fangs. Venom is carried in a sac behind the snakes .....
Frill. An Australian lizard has this around its neck.

HERE ARE YOUR WORDS TO FIT IN.(DON'T FORGET TO MAKE UP YOUR CLUES)
Cobra, Newt, Turtles, Gecko, Boa, Goanna, Viper, Crocodile, Python, Iguana, Adder, Alligator.

* * * * * * * * * * *

☆ Name one plant or tree that disperses its SEEDS by:
1. flicking them out of pods 2. parachutes 3. sprinkling them 4. floating them away on water 5. on wings.

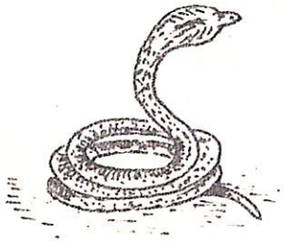
* * * * * * * * * * *

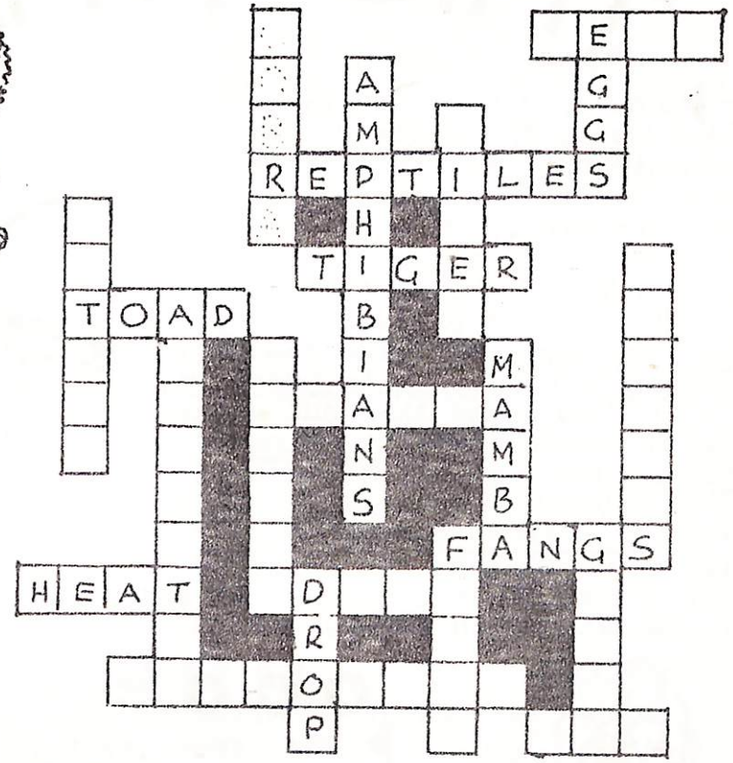
☆ Two of these are Birds of Prey, two climb, two run two wade and two swim

Which are which?

cormorant/heron/owl/emu/osprey/parrot/ flamingo/ostrich/penguin /woodpecker.

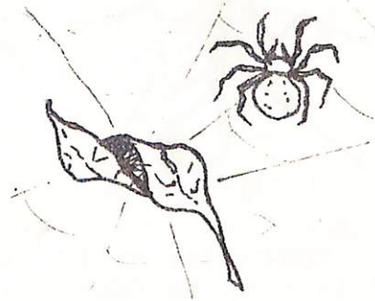
??????????????????????????





LETTER BOX

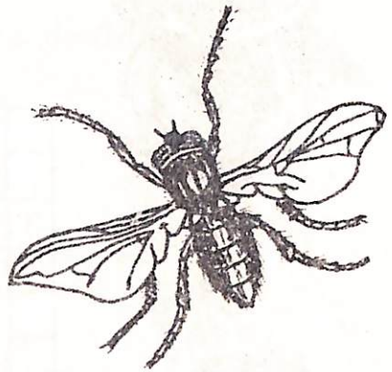
A little while ago our grade went to a park on a nature walk. We brought back some specimens. I saw a spider on his house which was made of leaves stuck together. It was very interesting. There were beetles too, and I managed to catch a shield bug in my bug catcher.



Bernise Brown Gr.4A Nunawading South P.S

Thank you for telling us something about your nature walk Bernise. Perhaps others at your school might like to write in about their observations. (Ed.)

THIS 'n THAT



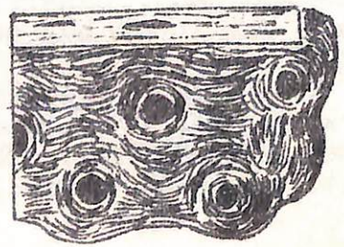
Have you ever wondered where flies go in the winter? Most of them die but the few that remain hibernate in the warmest spot they can find, perhaps under the bark of a tree or in the crack of a fence post. They reawaken and emerge to start breeding in spring. And how they breed! The female HOUSE FLY may lay up to 900 eggs, 150 at a time and the adult stage may be reached in less than a week in our warm climate.

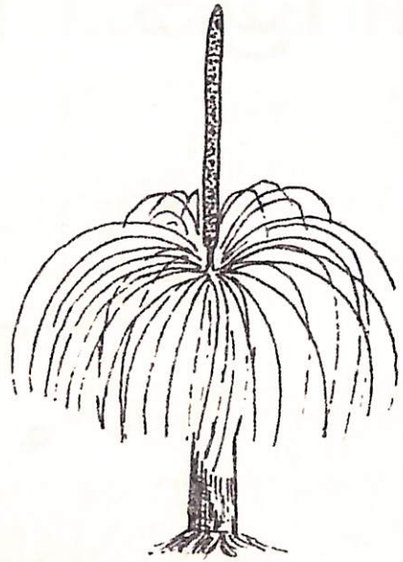
Did you know that HOUSE FLIES have been known to carry 3½ million bacteria per fly? Is it any wonder that we would like to be rid of these lethal pests? Find out which diseases are spread by flies and what Man is doing about them.

✪ ✪ ✪

The other day I watched fascinated as a mud-dauber wasp completed the building of its nest. It flew backwards and forwards from a nearby source of mud skilfully plastering each ball of mud into place, then returning for more. No wonder she is called the potter wasp sometimes.

One remarkable thing about this wasp is that she places live caterpillars in the nest for the larva to eat when they hatch. Can you suggest how this is achieved?

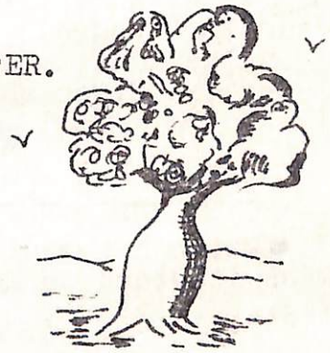




A common plant in forest areas is the ancient grass tree, or, as it is better known, the black boy. Strangely it is neither grass nor tree, but is in fact a lily and a "Living fossil." It was one of the earliest plants to grow on our earth, evolving long before the eucalypts. The grass tree is a slow grower. If you see a 10 foot specimen it may be over a hundred years old. If possible, study the leaf bases and collect a few dead ones. Heat these and make some gum. The resin of this strange plant has been used to make a special lacquer. We can also get sugar, a fuel and some chemical from the pith. Collect some black boy seeds and try to grow them. Keep records of what you did and when.

✪ ✪ ✪

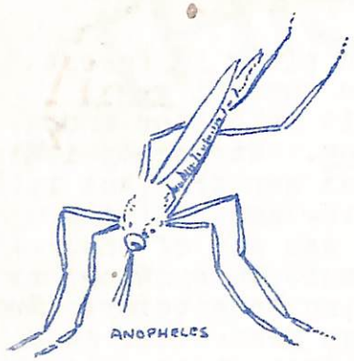
One of man's basic needs is WATER. Have you ever thought about other sources of man's refreshment apart from water? The northern bottle-tree provides a surprising amount of sweet refreshing juice from its inner bark and stem. In America the giant cactus can store up to a ton of water for use in the dry season



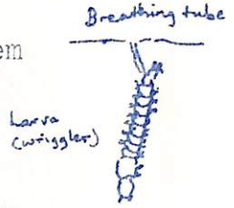
Central and South America has a "cow" or "milk" tree which gives pleasant, nourishing milk-like juice. Then coconuts and water melons have long been used to quench man's thirst.

WHY NOT TRY A PROJECT AROUND THIS THEME?

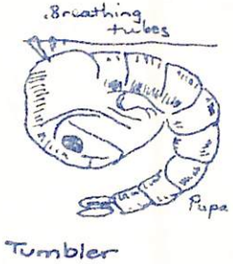
Things To Look For - in PONDS



Any water is a breeding place for mosquitoes. We don't only have to look in ponds or dams or tanks but can find them in old tins, fire buckets, spouting or even flower vases.



The female mosquito lays her eggs in groups which float as a raft on the water surface. When the eggs hatch we call the larva wrigglers. These creatures breathe air through a small tube placed near the end of their tail.



After some time the wriggler turns into a "tumbler" (pupa) which breathes through its "ears". Soon the adult steps out on to the surface of the water and flies away.

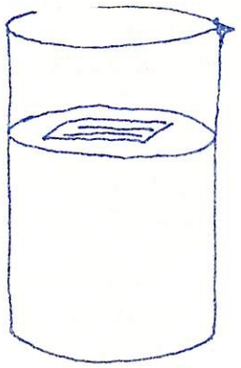
* * * * *

THINGS FOR YOU TO DO

● Watch a mosquito when it is trying to bite you. Does it stand on its head or does it sit down to bite you.....?

● The anopheles mosquito is the carrier of the dreadful disease called malaria. Perhaps you can find out something about it. Look up information about Sir Ronald Ross.

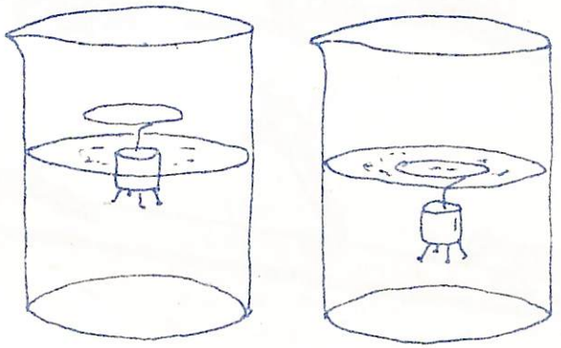
● You may wonder why the raft floats on the water. On the next page you will find some interesting experiments for you to try.



● Take a glass and fill it with water- about 2/3 full. Place a small piece of absorbent paper on the surface and quickly place two sewing needles on it. After some time the paper should sink to the bottom, but what has happened to the needles?

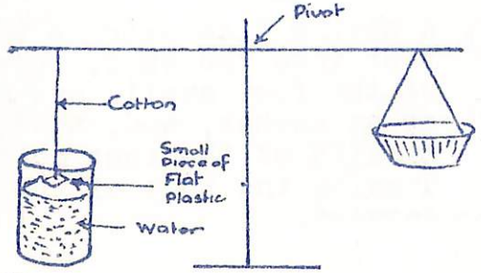
Will a comb float? Place one carefully on the surface of the water and see if it will.

● A much more difficult experiment is one using Mensburghe's Float. This interesting toy depends upon the same principle of SURFACE TENSION. It consists of a cork into which several small pins have been placed. On the other end is a small loop of wire: do you see how it is shaped in the diagram?



I wonder if you can make one of these and operate it satisfactorily.

* * * * * * *



● Another simple experiment along the same lines is illustrated opposite. Place pins in the paper cup and see how many it will take to break the tension. Try other liquids too. (Ed.)

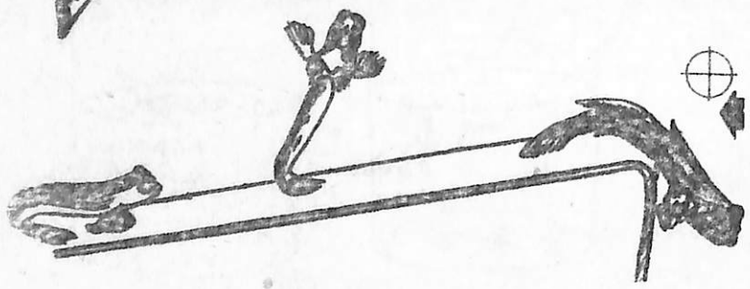
Movements of Animals

Have you ever wondered about the many different ways our animals move? While searching through some back copies of Nature Notes I found these three examples, which have been reproduced for your enjoyment.

CAN YOU THINK OF SOME OTHERS?

If you can, please write in and tell us about them. Make your own rough drawings to describe the movement and our artists will do the rest. (Editor)

Six small feet up front and two "grippers" at the back enable the "Looper" caterpillar to move along.



On a ramp, the Mud-Skipper shows how he can move. Sometimes they use their tails to make yard-long jumps.

☆☆☆

How does a SNAIL move?
Watch a SAUNDERS CASE-MOTH climb up a PANE OF GLASS.
How does it do it?

A moving Clam extends its foot into the sand, the tip of the foot swells and acts as an anchor, and, the muscles of the foot contract, drawing the body of the clam forward.

DOES IT REALLY MATTER?

Does it REALLY matter if all the kangaroos are killed and none are left for people to see and enjoy? Is the lyrebird or the helmeted honey-eater really important? What is more valuable: a few hundred acres of natural bushland left untouched or the same land cleared to make way for houses, shops or farms?

Some people think ..... "You can't stop progress."

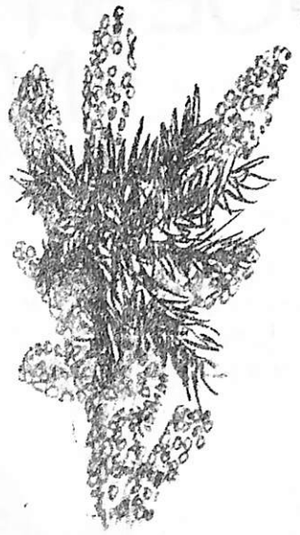
Some people think "Conservation!"
Some don't care.
What do YOU think?
I think it does matter. Here are some reasons.

Helmeted Honey-eater.

Conservation means the wise use of natural resources. Notice the word "wise". It is the important word in the sentence! What has happened since European man has brought "progress" to Australia? Some of this progress is good, some of it is not so good. Let us examine the not so good!

What do you know of the danger to the Great Barrier Reef? Do you know that the Crown of Thorns Starfish, a

poisonous, spiny, starfish is eating the limestone of the coral of many reefs that stretch along Queensland's coast, and killing them?



Crown of Thorns Starfish

Do you know that the Kangaroo Island and King Island variety of emu has become extinct? That eleven species of marsupial have become extinct in Eastern Australia? The beautiful Night Parrot hasn't been seen for years? On Cat Island in Bass Strait there were 2,500 pairs of breeding gannets. Today there are only 12 pairs.

Many of the creatures which were once numerous in Victoria are no longer to be seen. Is this right? What can we do wisely for conservation?

We are still destroying the natural life of Australia by bush-fires-by pesticides-by hunting for sport and commercial use-and by clearing forest land and swamps.

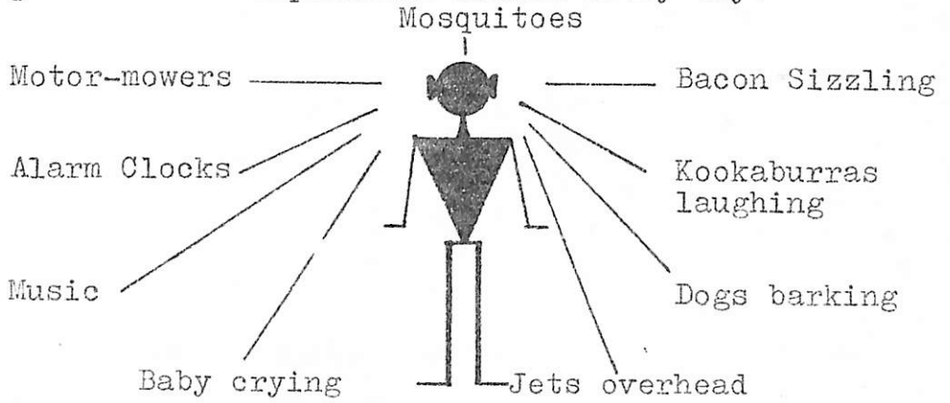
We can't stop progress but we can progress wisely and have large national parks all over Australia so that our native fauna and flora can survive.

You can be careful not to destroy things when you go into the bush, to the beach, to lakes or rivers. Once anything becomes extinct we never see it again alive in its natural state. Wise conservation should be the ideal of every person and every government.

★ HEAR! HEAR!

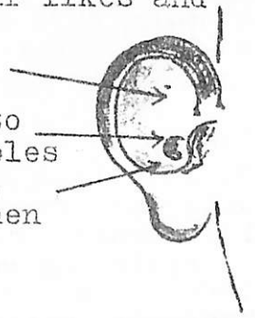
What a strange world it would be without our sense of hearing! During the next few issues of Nature Notes we will have a look at Man and how sound, listening and hearing affect him.

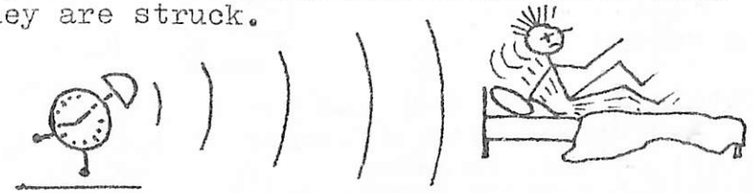
SOUNDS AROUND US. We are exposed to a variety of pleasant and unpleasant sounds every day:



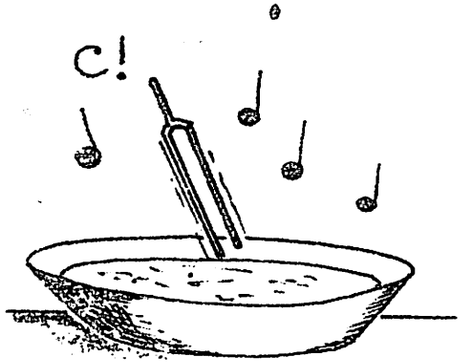
Which sounds do you and your friends like to hear? Perhaps you could classify or group your likes and dislikes.

SOUND CATCHERS. Our ears are designed to catch sound. You have all seen the ripples caused by dropping a stone into a pond. Objects send out similar sound waves when they are struck.





If you strike a tuning fork and dip it into a dish of water you will get a better idea of sound waves.



Watch for Sound Waves.

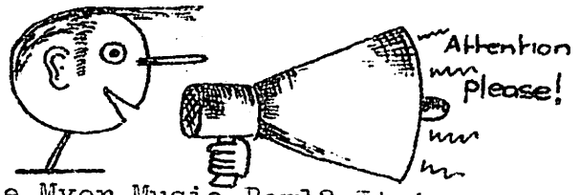
AIDS TO BETTER HEARING:

Man is always trying to improve his hearing.

Name the instruments used - (a) when there is a large assembly indoors or outdoors.

(b) when you wish to talk to someone a long way off.

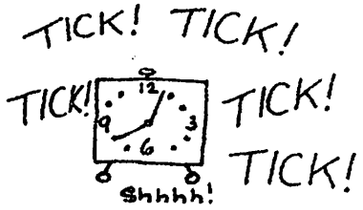
(c) by a doctor who wishes to hear your heart-beat.



Have you been to the Myer Music Bowl? It is a strange shape isn't it? What is the purpose of the shape?

HEARING CAN BE UNPLEASANT. People who live in cities are becoming more aware of Noise Pollution. Experiments have been carried out to design quieter trains, trams and motor cars.

Sound-proofing or insulation is most important today. Perhaps you could talk to an architect or a factory owner to see what can be done to limit the volume of noise.



AN EXPERIMENT. Obtain a noisy clock and see if you can deaden the sound. Experiment with different materials to find the simplest method. Remember to try a variety of methods. OF COURSE THE CLOCK SHOULD STILL BE IN WORKING ORDER AT THE FINISH!

YOUR SCHOOL.

Is there any sound proofing in your school building?

Have you any suggestions for cutting down any unnecessary noise at school? If you have, I am sure your Principal would like to hear them.

--**********--

We will continue Mr.Tyrrell's interesting article next month.I am sure you will all be looking forward to learning more about " sound ". (Ed.)

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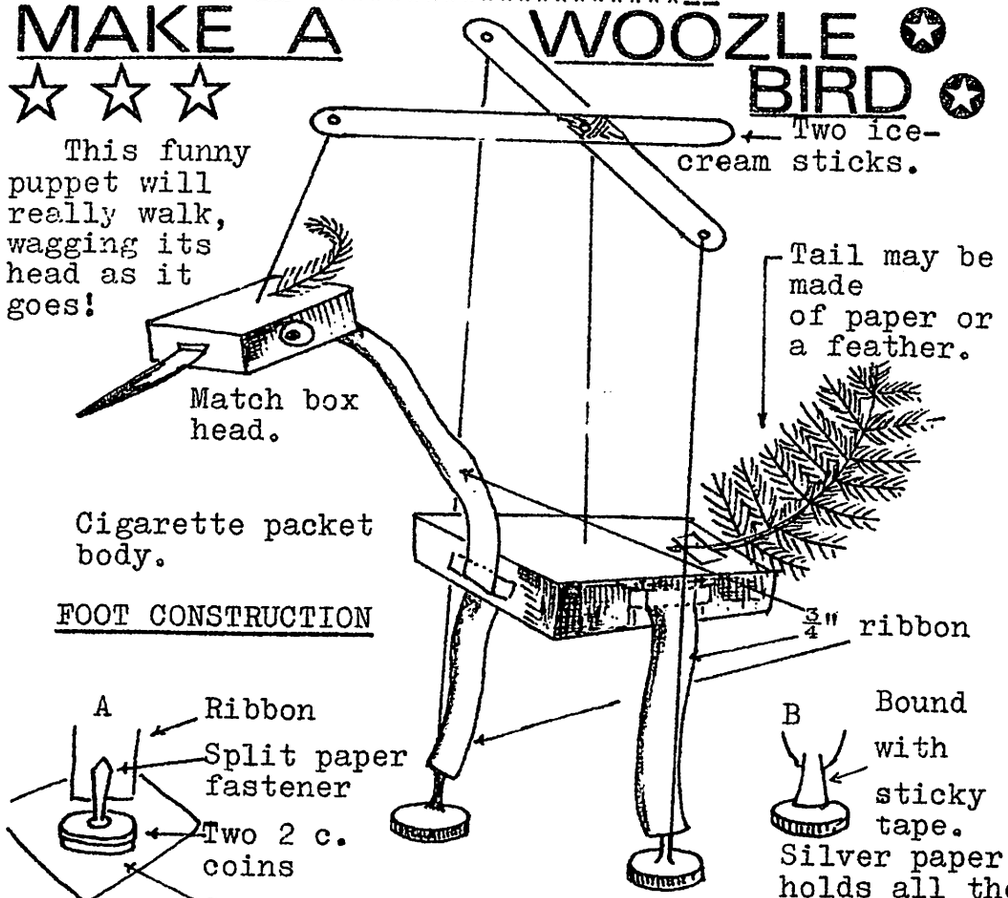
MAKE A WOOZLE BIRD

☆☆☆

This funny puppet will really walk, wagging its head as it goes!



FOOT CONSTRUCTION

FUN WITH PEANUTS

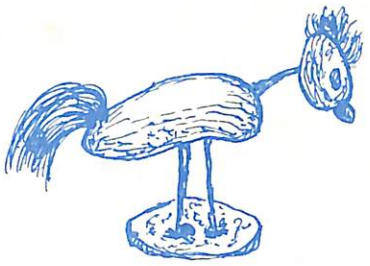
Make Peanut Animals.

You will need unshelled peanuts, material scraps, pipe cleaners, cotton reels or styrofoan for bases, small dry branches, nail polish (for face features).

Let peanut shapes suggest animal forms - tails, ears, legs are pushed into tiny holes pierced in peanut shells with pin or needle. Perhaps a drop of glue will make them firm.

Glue "animals" to twigs and the base.

How many animals can you make?



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Did you guess the name of last month's "Mystery Creature".....? It was a Cup Moth larva.

★★★

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