NATURE NOTES

RINGWOOD INSPECTORATE...

VOL 3: NO.8 September 3¢

DEAR GIRLS AND BOYS,

This issue presents a booklet entitled 'Eucalypts of the Ringwood Area'. We hope, that by careful thought and observation, you may be able to identify the eucalypts in your area, using the book as a guide. Your teacher will help you find the meaning of some of the difficult words. (Note: remove the centre pages to make the booklet complete.)

No doubt many of you managed to visit the 'Nature Show' during the holidays. It was an exciting exhibition with many items of interest. Many people were attracted to the gem-stone cutting display where members of the Hawthorn Junior Naturalists' Club demonstrated the art of cutting and polishing gems. Here we saw the process of making a beautiful gem from an ordinary looking piece of rough stone. If you didn't manage to get there this year make every effort to go along in 1967.

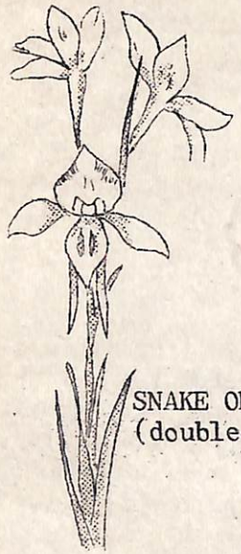
MAKE SURE YOU TAKE NOTE OF THE IMPORTANT ANNOUNCEMENT ON THE BACK PAGE.

Children! Don't forget to send in letters describing your observations and any interesting experience you may have had. We are very interested in any items you have discovered.

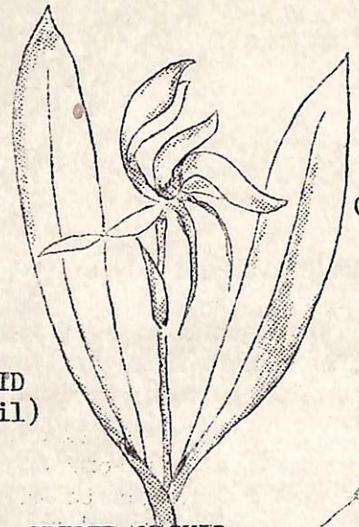
Best wishes to you all,

The Editor.

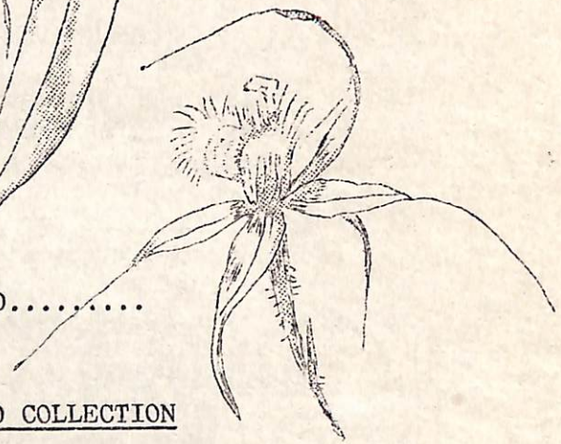
WHAT TO WATCH FOR IN OCTOBER



SNAKE ORCHID
(double-tail)



COMMON BIRD ORCHID

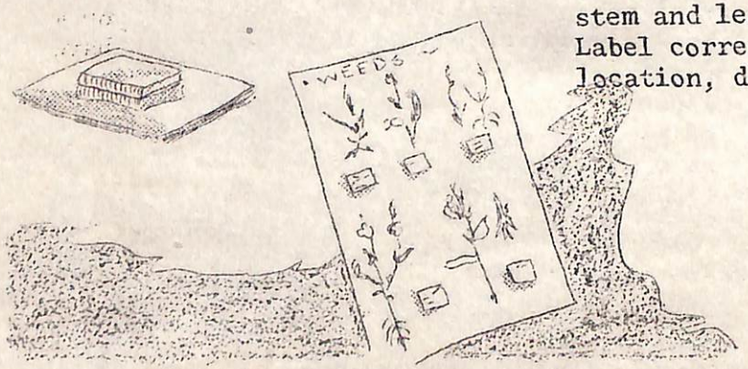


SPIDER ORCHID.....

MORE ORCHIDS FOR YOU TO FIND.

NOW IS A GOOD TIME TO BEGIN A WEED COLLECTION

Press your samples between weighted newspapers.
For the first few days, change the paper daily.
Make sure the weeds a perfectly dry before mounting.



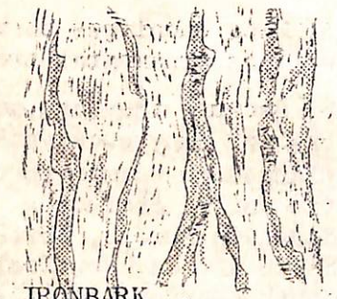
Mount on large cards. Try to include the roots and flower as well as the stem and leaves.
Label correctly, with name and location, date and finder's name.

EUCALYPTS
OF RINGWOOD AREA

The large group of eucalypts may be placed into groups according to the particular type of bark. Once we have this group we must look at the foliage (both juvenile and adult), inflorescence, buds and fruit.

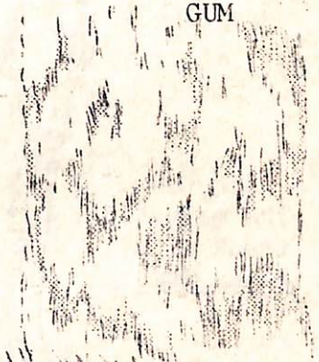
One group easily recognized is the Stringybarks. Thick, loose, fibrous bark covers the trunk and branches. The Gums have smooth bark which is periodically shed in long strips. The Ironbark has bark which persists like the stringybark. Since the tree is constantly growing the outer layers of bark split and become deeply furrowed. Two other groups have similar bark. Box bark is usually grey, somewhat soft and flakes into small pieces. The odour from the crushed leaves of peppermint help to distinguish it from others,

SAMPLES OF BARK



IRONBARK

STRINGYBARK



GUM

BOX

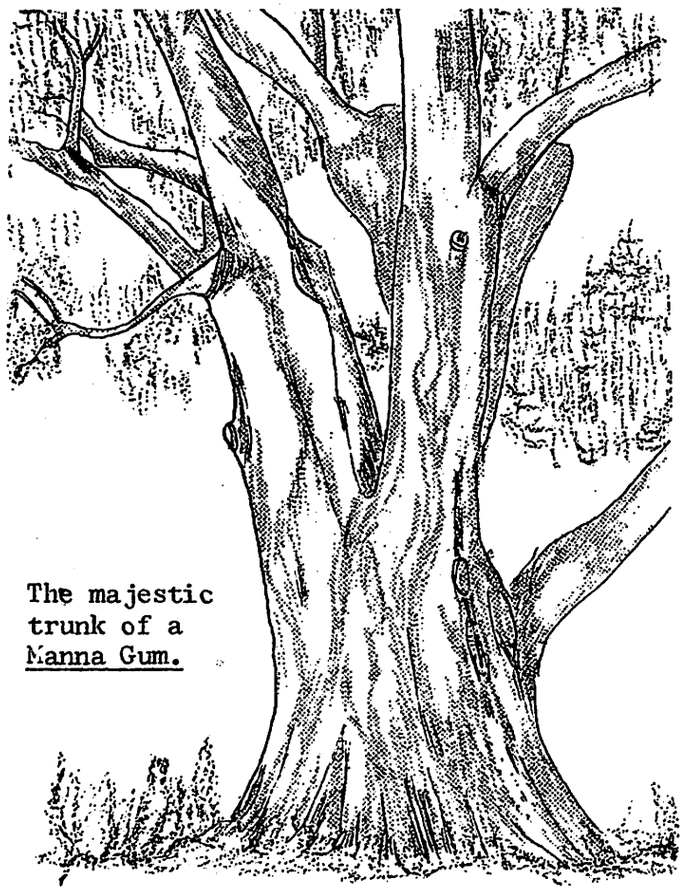
PEPPER-
MINT

EUCALYPTS

The Eucalypt is a type native to Australia and the Islands of the North. They have been evolving on this isolated continent for more than 10 million years. Messmate was the first species examined, being named in 1788. Many were already named by the aborigines, such as, Jarrah and Mallee - names which are still used today.

Now, more than 500 species are described, including about 75 in Victoria. Seven of these occur only in this state.

Eucalypts are very important to the people of Australia for many reasons.....



The majestic trunk of a Manna Gum.

1. The bulk of hardwood timber comes from Australia eucalypts; some is exported. Examples are jarrah and Karri.

2. Large amounts have been and still are used for fuel, eg: Mallee roots.

3. Eucalyptus regnans (Mountain Ash) is the basis for the Tasmanian paper industry.

4. Oils, such as eucalyptus, are derived from these trees.

5. Many eucalypts serve well as ornamental trees.

6. Because they are quick-growing many eucalypts are planted in warmer parts of the world, including Southern Europe, North & South Africa, New Zealand, South America and California. In California citrus orchards often use eucalypts as a windbreak, while in Australia the same purpose is served by a pine from California. Why this is so is not quite clear.

AIDS TO IDENTIFICATION

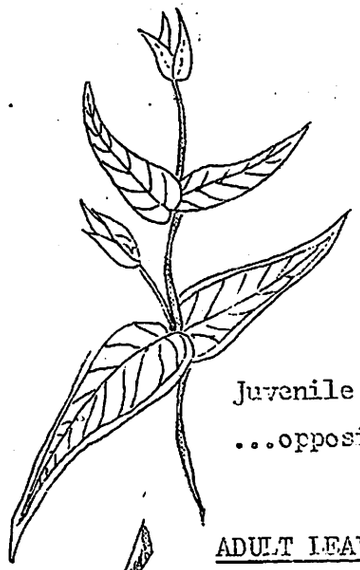
Arrangement of Buds - see last page of booklet.

Bark - see front page of booklet.

JUVENILE LEAVES

Juvenile leaves of SWAMP GUM.

...short stalked, ovate to orbicular.....



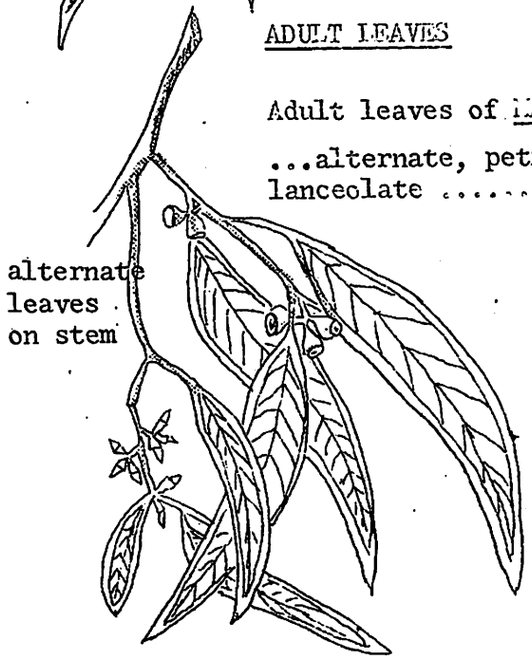
Juvenile leaves of MANNA GUM

...opposite and stalkless (sessile)

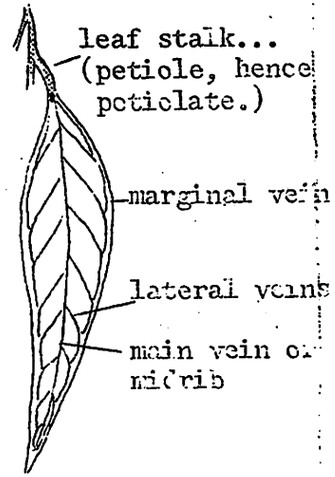
ADULT LEAVES

Adult leaves of MANNA GUM

...alternate, petiolate, lanceolate .....



alternate leaves on stem



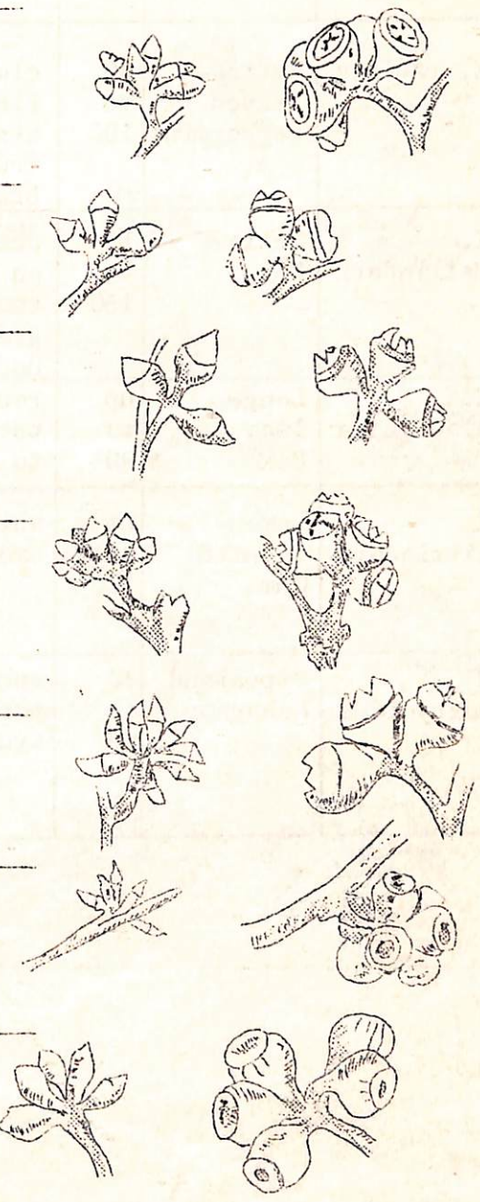
leaf stalk... (petiole, hence petiolate.)

marginal vein

lateral veins

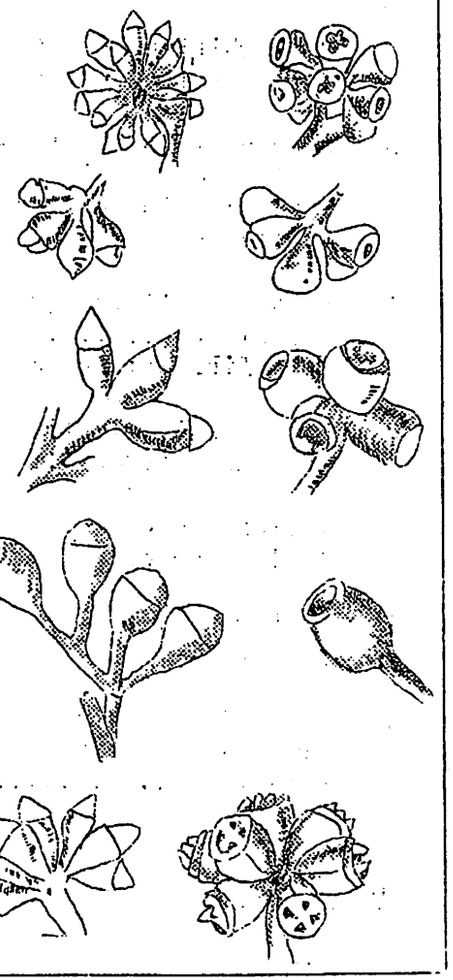
main vein or midrib

BOTANICAL NAME	COMMON NAME	HEIGHT	BARK	JUVENILE LEAVES	width	length	ADULT LEAVES	width	length	FLOWERING PERIOD
E. ovata	Swamp Gum	up to 100'	Rough at butt; Smooth & ribbony on trunk & branch	Opp. for 4 or more pairs. Ovate to orbicular, undulate	1½ to 3"	1-3"	Ovate to broadly lanceolate, cariaceous & often glossy		3 to 5"	Apr. to Nov.
E. rubida	Candlebark Gum	30 to 100'	White with plum patches. Peels in ribbons or flakes	Opp. for ind. no. of pairs. Rounded & glaucous	¾ to 2½"	1 to 2"	Lanceolate; glossy, light green.	¾ to 2"	4 to 10"	Jan., Feb,
E. viminalis	Manna Gum	50 to 100'	Rough and persistent at butt white on trunk branches	Opp. for ind. no. of pairs. Pale green, sessile to stem clasping.	2 to 4"	½ to 1"	Alternate, petiolate, lanceolate, pale green.	½ to 1"	4 to 7"	Jan. Dec.
E. cephalocarpa	Silver or Mealy Stringybark	up to 100'		Opp. for ind. no. of pairs. Very glaucous, cordate to lanceolate.	1½ to 1¾"	1½ to 2"	Alternate, petiolate, narrow to broad lanceolate, subglaucous.		4 to 6"	May July
E. macrorrhyncha	Red Stringybark	up to 150'	Stringy, persistent on stem and large branches.	Opp. 5-6 pairs orbicular to elliptical	1 to 2"	1"	alternate narrow lanceolate	½ to ¾"	3 to 5"	Feb.
E. yangura (syn. E. eugenoides)	White Stringybark	50 to 100'	Reddish, brown fibrous and persistent to small branches	Opp. 4-5 pairs elliptical & softly hairy, pale beneath.	1 to 2½"	¾ to 1"	alt. lanceolate thin, shining above, pale beneath.	½ to 1"	2 to 5"	Dec. to Jan.
E. obliqua	Messmate	50 to 200'	Fibrous, deeply furrowed and persistent to small branches.	Opp. 3-4 pairs petiolate and broad lanceolate	3"	1½"	alt. petiolate obliquely lanceolate	1"	4 to 6"	Jan. to Feb.



BOTANICAL NAME	COMMON NAME	HEIGHT	BARK	JUVENILE LEAVES		
					Width	length
E. radiata	Narrow-leaved Peppermint	30 to 100	closely fibrous, persistent on trunk & lower branches	opp. for indef. no. of pairs. sessile, glandular, lanceolate.	½ to ¾"	1½ to 3"
E. melliodora	Yellow Box	50 to 150'	scaly fibrous on trunk smooth branch. greenish yell. under bark	opp. 3-5prs. sub-glaucous elliptical	½ to 1"	¾ to 2"
E. elaeophora	Long-leaved Box	up to 90'	rough scaly persistent to small bra.	pale green opposite sessile round	1½ to 4"	1½ to 5"
E. citriodora	Lemon-scented Gum	up to 100'	white, clean smooth	opp. 4-5 prs. petiolate oblong rough and hairy	1 to 2½"	2½ to 6"
E. botryoides	Gippsland Mahogany	40 to 80'	sub-fibrous persistent trunk main branches.	opp. 3-4 prs. ovate, thin undulate very	1 to 2½"	2 to 3"

ADULT LEAVES	width	length	FLOWERING PERIOD
alternate, petiolate, lanceolate, thin.	½ to 1"	2½ to 6"	Oct. to Dec.
alternate, narrow to broad lanceolate.	¼ to 1"	2¾ to 1"	Sept. to Feb.
alternate lanceolate dark to pale green.	¾ to 1¼"	4 to 9"	Mar. to July
alternate, stronly lemon-scented	⅓ to ¾"	4 to 6½"	June to July
alternate, lanceolate dark green, very fine venation.	1 to 2½"	4 to 5"	Jan. to Mar.



A KEY TO THE EUCALYPTS OF THE RINGWOOD AREA:

Bark whitish, smooth (or at least peeling off in ribbons . Gums
Bark persistent for at least 20 feet .... A

A Lateral veins of leaves close together, upper surface of the leaf darker .... B
Lateral veins not very close together, upper surface of the leaf not darker C

B Bark tessallated (tile-like); inflorescence - a panicle .... Bloodwoods
Bark fibrous; inflorescence - an umbel .... Mahoganies

C Bark distinctly fibrous .... Stringybarks
Bark not fibrous .... D

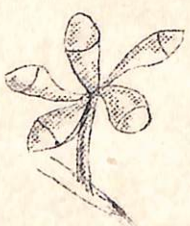
D Inflorescence - a panicle .... Boxes
Inflorescence - an umbel .... E

E Bark black, hard, deeply corrugated .... Ironbarks
Bark not hard, not corrugated .... F

F Operculum small; juvenile leaves not orbicular ...... Peppermints
Operculum as long as calyx tube; juvenile leaves orbicular .... False Boxes

INFLORESCENCE

UMBEL



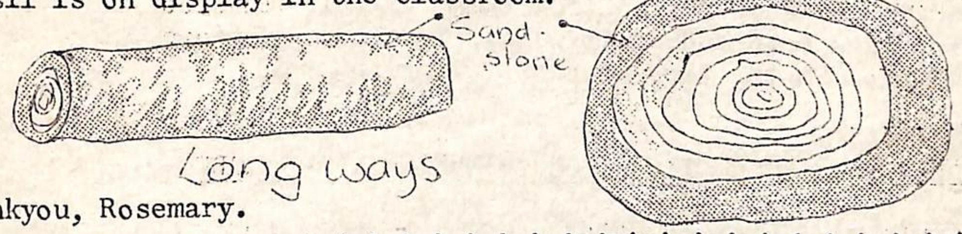
Single cluster of buds

PANICLE

Spray of clusters

The first letter to open 'Mailbag' this issue is from Rosemary Christensen of Norwood State School.

In Ringwood I found a fossil of a piece of wood enclosed by sandstone. Many fossils are hard parts of plants and animals that have been petrified. Petrified means changed to stone. Petrified wood may be beautiful. For example, this is how a fossil is formed: suppose a bone is buried in the ground. The water in the ground may dissolve the bone little by little and leave some mineral in its place. At last none of the real bone is left, instead a bone of stone remains. Trunks of trees are petrified in the same way. In my piece of wood there are different coloured brown rings. A piece of fossil is on display in the classroom.



Thankyou, Rosemary.

:-:

SEND YOUR LETTERS TO:- The Editor, 'Nature Notes',
State School No. 454, BURWOOD EAST,
Highbury Road,
GLEN WAVERLEY.

NEXT ISSUE will be available on Wednesday, 19th October.

:-:

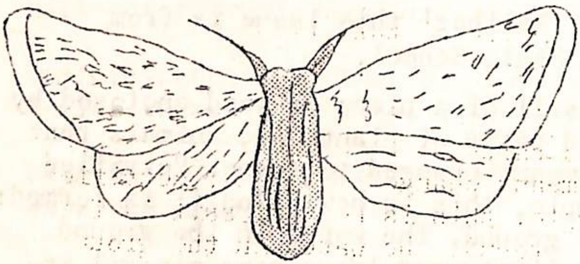
MAKE SURE YOU CHECK THE COMPETITION DETAILS ON THE NEXT PAGE!!!

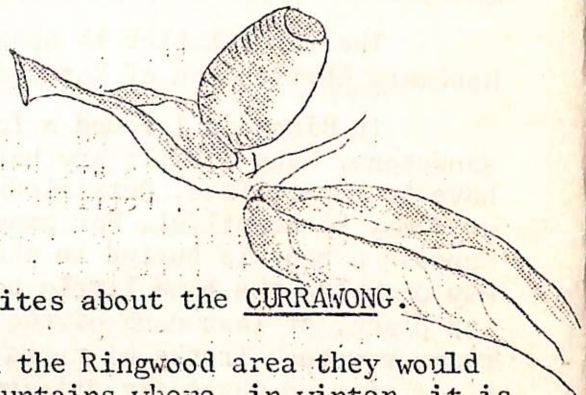
MAIL BAG: continued.

The final letters for this issue also come from Norwood S.S. Judith Irving writes ....

On Sunday we went to Bendigo to see if we could find some gold. We went down a dry creek bed and I found a strange cocoon which is very hard and a grey green colour. It was on a small gum tree. My teacher looked up 'The Wonderland of Nature' and it was under the title of "Caterpillar with a Sting". It is called a Cup-Moth Cocoon. If you touch the caterpillar it will give you a most painful sting. Yesterday I was given the August 'Nature Notes' and on the second page was a picture of it. Friends of mine found about a dozen of these caterpillars or 'Chinese Junks'.

Here are Judith's drawings; and, thanks very much for your interesting item By the way, did you find any gold?





Annamalia Chimenton (Gr. V) writes about the CURRAWONG.

If you have seen Currawongs in the Ringwood area they would probably have come down from the mountains where, in winter, it is cold and there is no food for them. Here in Ringwood they find shelter and food and it is warmer for them. They are large dark birds with white on the tips of their wings and tail.

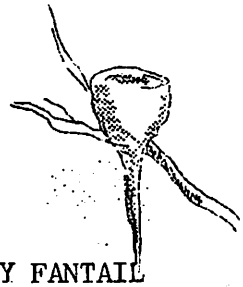
ANNOUNCING A COMPETITION FOR CHILDREN IN ALL GRADES.

DESIGN a COVER for NATURE NOTES

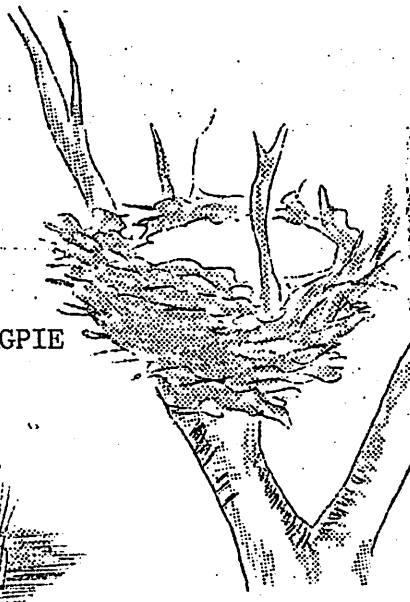
You may use Indian Ink or Soft Pencil. Unfortunately, we cannot print coloured sketches. You should leave a space measuring 5inches wide and 4 inches high to contain the Editorial. Entries close on 28th. October and should be sent to the Editor, address on page 15.

1st PRIZE will be A BOOK AWARD to the value of at least $3.
4 Honourable Mentions will receive 1 year's free sub. to N.N.

NESTS



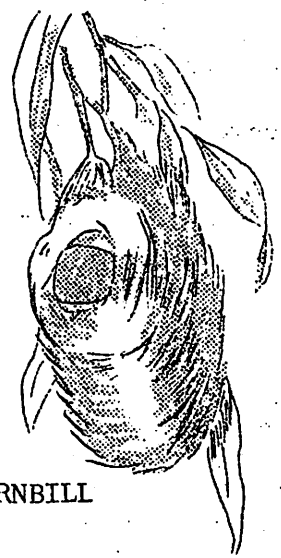
GREY FANTAIL



MAGPIE

FAIRY MARTIN

GROUND LARK



THORNBILL

This month is very important in the Bird World because this is the nesting season for most birds.

These few illustrations may help you recognize some more nests. Don't forget to refer to the last few issues of 'Nature Notes' for the articles about nests.

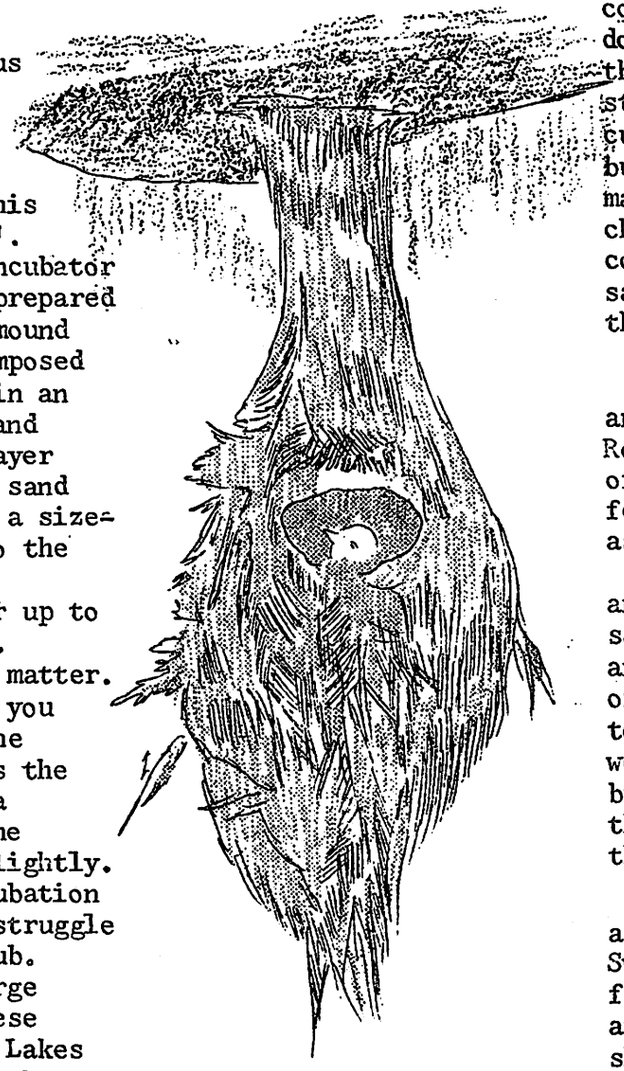
What materials do birds use to build nests?
Where do they build?
How high in the tree?
Who does most of the work or is it shared?

Ask these and many other questions when observing the birds in action. By careful watching your answers will be forthcoming.

STRANGE NESTS

We have been talking about nests of birds for many months now, and this month I thought we may have a closer look at some of the more curious types.

Surely no bird has a more novel method of hatching her babies than that of the Malle Fowl of north-eastern Victoria. For a very good reason this remarkable bird is often called the 'incubator bird'. Just like domestic chickens are hatched in a huge incubator so the baby Lowans are hatched in a huge incubator prepared by the parent birds. The 'nest' consists of a huge mound (up to 45 feet in circumference and 5 feet high) composed of decaying vegetation and sand. The eggs are laid in an upright position with two or three inches of soft sand between each egg and also between the egg and the layer of damp leaves which followed. Succeeding layers of sand and moist vegetation are scratched into place until a sizeable mound is formed. The sand forms a protection to the eggs which are extremely thin-skinned. It has been discovered that some of these mounds may be used for up to fifty years by the succeeding generations of Lowans. Heat is generated in the nest by decaying vegetable matter. If you have a correctly built compost heap at home you will find that the inside of it is quite warm for the same reason as in the mound. Even more remarkable is the fact that the birds are able to keep the 'nest' at a desired temperature of between 92° and 94° during the incubation period. If it is too warm they open it slightly. If too cool, they add more leaves. The average incubation time is about 57 days and as the chicks hatch they struggle out of the mound unaided, then take-off for the scrub. It is thought that the babies take two hours to emerge from the nest. Would you like to discover one of these remarkable nests? In the bush country around Hattah Lakes (about 45 miles south of Mildura) these fairly rare, but highly interesting nests may still be found. Can you find the names of any more Australian birds which build similar nests?



ROCK WARBLER at nest which is hanging from inside a cave roof.

A very common bird of the forest borders is the YELLOW-TAILED THORNBILL, or, as he is more familiarly known, the Tomtit. There is nothing common about his nest, however. It is built in two stories - the only bird to construct a double storied home! First comes the fibrous dome-shaped structure with its entrance at the side and this is topped by a roughly formed open cup-shaped structure. What is its purpose? Is it to discourage cuckoos? Is it a roosting place for male birds? Is it built to satisfy the building urge of the male bird which may remain unsatisfied after the completion of the egg chamber? Perhaps each of these solutions is partly correct. None of them are thought to be completely satisfactory. Perhaps you can discover a better reason for the upper deck.

In the rugged sandstone areas around Sydney is found another very distinctive bird - the ROCK WARBLER or Rock Robin. These areas are the only habitat in the whole of Australia for this most remarkable bird is one of the few to have its name based on its nest as he is also known as Cave Bird and Hanging Dick.

The dome-shaped structure is composed of bark fibre and grasses, coated with moss, cobwebs and spiders' egg sacs, lined with fine bark fibres and feathers. The nest, and here is the curious part, is attached to the underside of the rock with spider webbing. Possibly saliva is used to cement the web strands to the rock - surely, a wonderful piece of architecture. Sometimes these nests are built under rock ledges at the rear of a waterfall with the birds having to fly through the spray to reach the nest.

Other birds with homes which may be termed as strange are the Orange-winged Sitella or Nuthatch, The Grey Swiftlets of Dunk Island near the Barrier Reef, the familiar Fairy Martin, the beautiful Rainbow Bird and the shrewd Rifle Bird which almost always wraps a shed snakeskin around its nest for protection.

When walking through the bush, girls and boys, watch out for any curious nests. Remember! At this time of the year birds are most active in the nesting field.

DID YOU ASK: 'HOW FAR DOES 'NATURE NOTES' REACH'?

The letter below must take all records to date. It comes from Meredith Arkwookrum (7 y.o. Gr. II) who lives at an aboriginal mission station on the Gulf of Carpentaria, Northern Territory.

Meredith writes:

At Arunku we have goannas in the bush. They are brown and hard to find. Some of the goannas are three feet long. We kill goannas with a spear, then we cook them on a fire in the village.

ED: It was very good to hear from Meredith. I wonder if any other children who read 'Nature Notes' have eaten goanna. The nearest I have come to goanna is wichetty grubs, which I found quite tasty. Perhaps you could write to us again, Meredith.

.-.

WALKABOUT OFFER

In the latest issue of Walkabout there is an outstanding offer for coloured prints of Australian Wild Life. They are quite cheap and beautifully printed.

Ask your teacher or Librarian to get them for the school. They will be a welcome addition to the picture collection in any library.

NEXT ISSUE

Our next issue should prove to be quite different than to our usual set-up. We are calling it 'SWAMP LIFE ISSUE' and will cover many aspects of nature to be found around a swamp.

If you have any ideas do write and tell us about them.

COMPETITION

Make sure you refer to the back pages for the details of the design a cover competition. Here is a chance for any of you interested in Art work to play an important part in 'Nature Notes'. Unfortunately we cannot accept colour work as we are unable to print it.

ARTICLES IN THIS ISSUE were provided by:

'Strange Nests' .... Mr. Len Delacca (Norwood S.S.)
'Eucalypts of the Ringwood Area' ... Mr. F. Rogers (Ringwood S.S.)