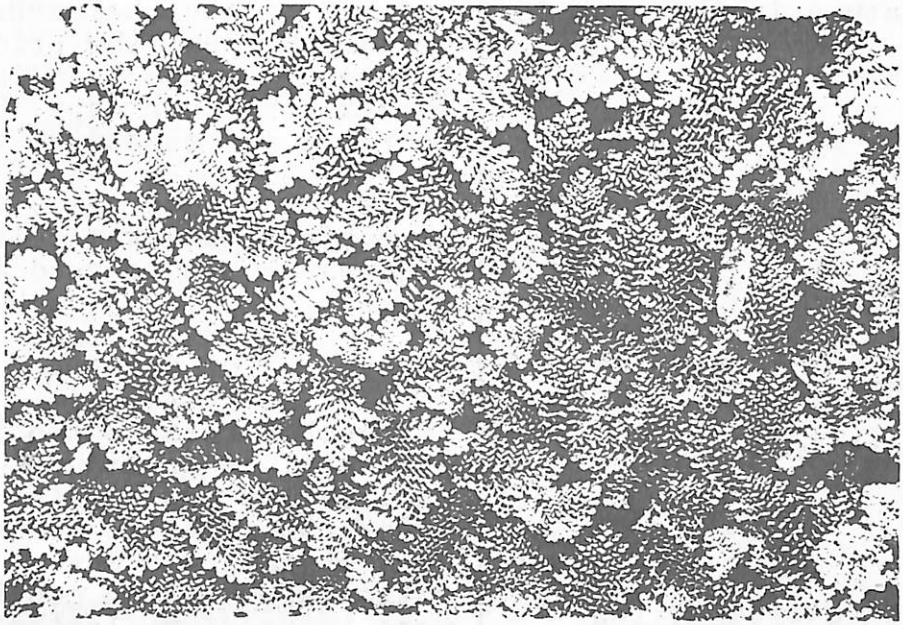
nature notes



ferny azolla photo. f. rogers

vol 8 no 1 6 cents

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The free-floating fern Azolla pinnata

Next issue: 7/3/71

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editorial

Nature Notes would like to welcome new readers, and welcome back previous readers. At the end of 1970 the Education Department appionted two editors to take over the work of Mr. Delacca. It is hoped that Nature Notes will continue to be of the same high standard set by Mr. Delacca and his team of helpers.

As you know, the price of Nature Notes has been increased to six cents per copy. This increase was caused by rising costs.

If any reader has a topic or subject they would like discussed, please send the suggestion to:

Nature Notes,
P.O. Box 30
Nunawading, 3131.

The "Letters to the Editor" page will be continued. Just send in letters telling of interesting things you have seen or things you want information about. Each month, the most interesting letter will gain for its writer a book prize.

Finally, the editors would like to wish all of you an interesting and happy year.

M. J. Coote,
I. H. Legg, editors.

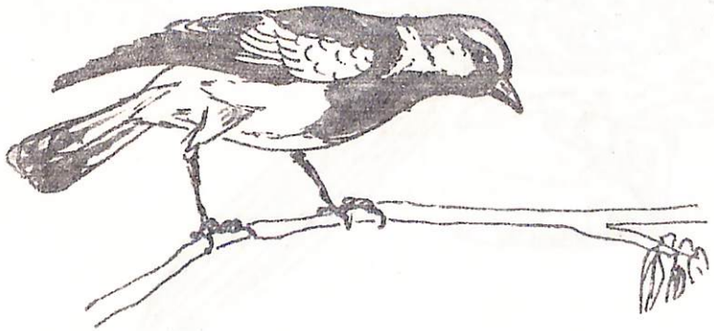
birds of our neighbourhoods

In some of our schools near the city, birds such as these may be the only birds seen. For many children from other countries, these birds are their first "native" Australian animals. Let us take a good look at some of these entertaining and valuable birds.

A common visitor to most suburbs is the mud-lark, or magpie-lark. Have you watched it? You might think it is a small magpie. It has a loud call and sometimes sings in duet. You will see two of them perched, while one calls "tee-a-wit", and is joined by the other answering "tee-tee".

By the way, can you tell the male from the female? It is easy once you know. Look for the apron under the chin, that is on the female. If you find the neat nest, see which material is mostly used to build it. Sometimes its flight is erratic; it will swerve and dip and turn sharply, especially when it is excited.

And now, here is the most interesting thing about this bird. The farmer depends upon it a lot. Perhaps you could find out about this. Why does our wool industry owe this bird so much?



Mud-lark
or
Magpie-lark

Is it a Male
or a Female?

Finally, is it really a small magpie? Get hold of a good book of bird pictures; perhaps page 153 - 155 of Mr. Robin Hill's book Australian Birds. Look at these pictures closely. Look at the birds' beaks. Look closely at the eyes. What about the legs and tail? Are the sizes and shapes of the head and neck exactly the same? And now, are the mudlark and the magpie the same kind of bird in every way?

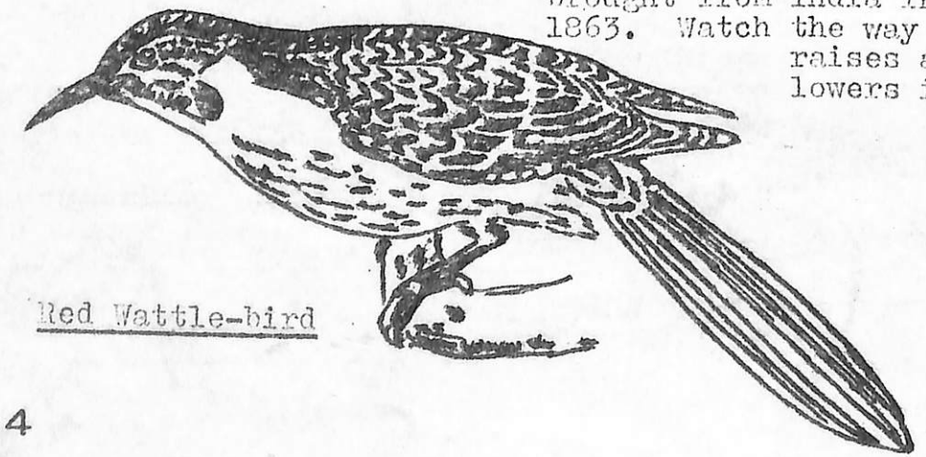
You will probably hear the red wattle bird before you see it. The raucous cry sounds like "tobacco-box, tobacco-box" as it flops around the tree searching for blossom. It is the largest of the honey eaters found on our mainland. Is it called a wattle bird for a special reason? Which other birds have wattles? Once this now protected bird was shot in large numbers for the table. The red wattle bird was the most persistent visitor to our bird feeders last year at Blackburn Lake.

The introduced Indian Mynah is one of the commonest birds found in most of our playgrounds. It was first brought to Melbourne in 1962 and soon thrived in our climate. It is useful as a scavenger in the city streets, but has made itself unpopular by pushing out the native birds.

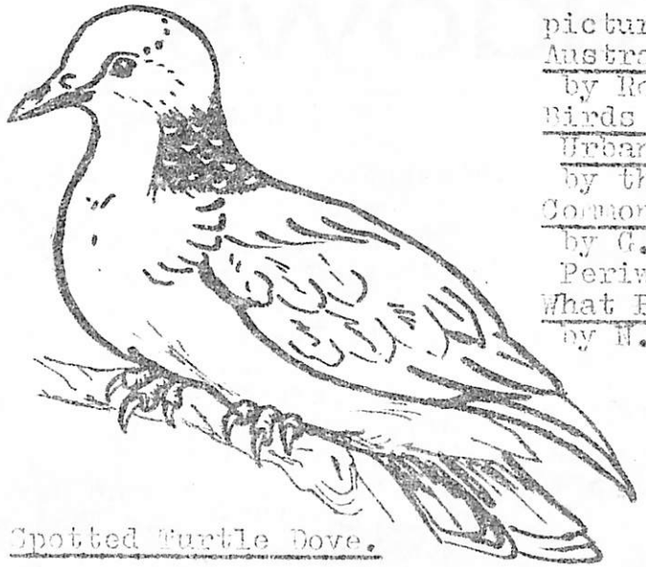
The Spotted Turtle Dove is another common introduced bird. It was brought from India in 1863. Watch the way it raises and lowers its tail when it lands on the ground. Turtle doves are ground feeders and are useful as scavengers.

Watch out for these common birds and try to find out more of their habits. Further information and coloured pictures may be found in:

Australian Birds: by Robin Hill,
Birds of Victoria - Urban Areas: by the Gould League,
Common City Birds: by G. Chapman, a Periwinkle Publication,
What Bird is That? by M. Gayley.



Red Wattle-bird



Spotted Turtle Dove.

Indian Mynah.

AVAGO WITH NATURE NOTES.

At last the Teacher's Handbook is nearly completed and will be available next month. Subscribing schools will receive complimentary copies. There are forty-eight closely packed pages of ideas on how to get the best out of the new science course. Copies will be available to teachers at the price of $1.00 each.

shadows

FOR our first science topic this year, let us talk about shadows.

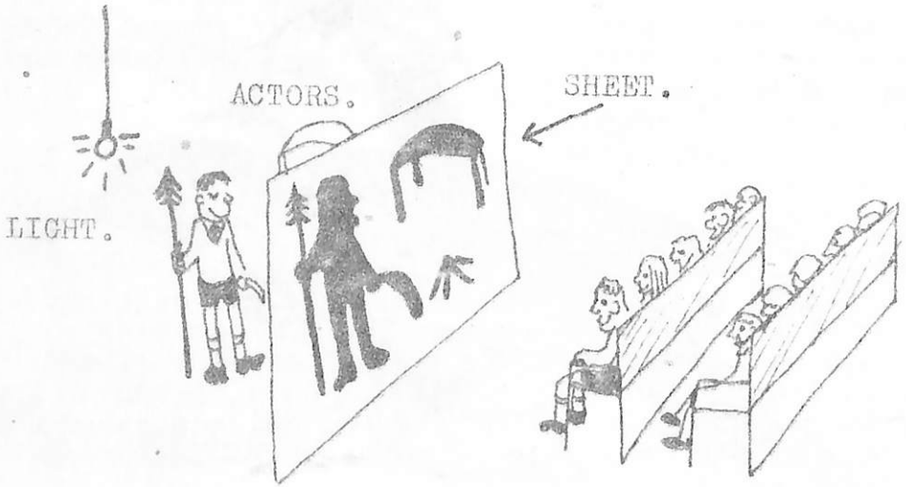
What causes shadows?
Do all things have shadows?
Try to find something that does not have a shadow.
Does an object that has a certain shadow, always have that same shadow?
Can you find out at what times a certain shadow may disappear?

ABOUT DIRECTIONS:
Sometimes you see shadows pointing in one direction and when you come to look at them later, they are pointing in another direction.
Why is this?

ABOUT LENGTHS:
At different times of the day, your shadow is of a different length.
At which time of the day (or night) is your shadow the longest?

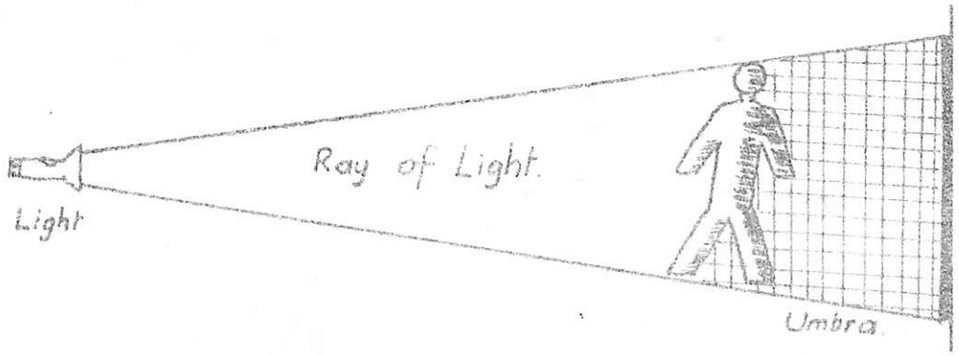
YOU CAN HAVE FUN WITH SHADOWS.

1. Making shapes of animals with your hands.
2. Shadow acting.

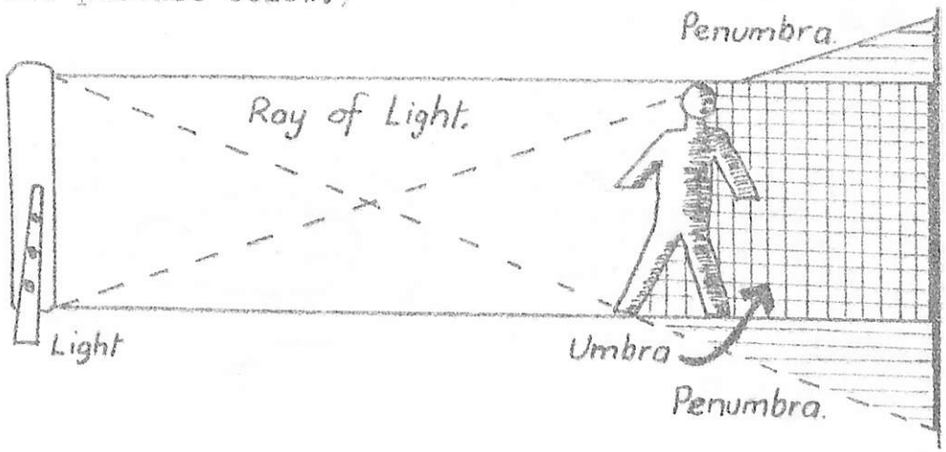


FOR THE SCIENCE-MINDED.

With a small light source, we have a complete shadow. (See picture below.) This is called the umbra.



With a larger light source, we have an umbra, and a partial shadow - the penumbra. (See picture below.)



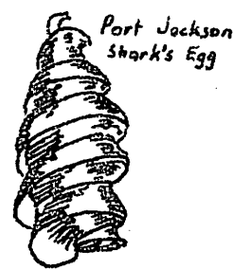
things to look for in march

Many of you spent some time during the holidays near the beach. I only managed to get there for one day, but there were many interesting things, some of which I did not know about and had to look them up in the books I have. Did you find any of these on the sand or in the rock pools?

This was a hollow, flattened substance a little over an inch long. It was bronzy-red in colour and has some stiff curls at both ends. It was the egg of a dog-fish.

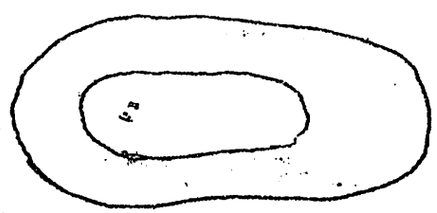
Dogfish Egg

This spirally twisted mass was about 3 to 4 inches long, a dark brown to black in colour. It was a Port Jackson shark's egg.



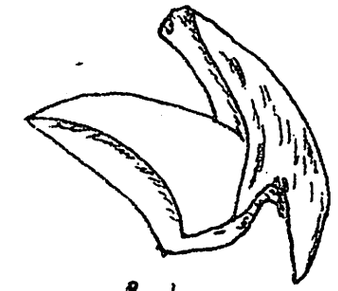
Port Jackson Shark's Egg

This shell was white, oblong, and about three inches long. Shortly after I found this shell I discovered the live animal in a rock-pool. It was black, very tough and leathery. Among its many names I think I like "Duckbill" best.



Shell

I thought I had found a cockatoo's beak but what was it? I had to look in many books before I found it was part of the beak of an octopus, - a part was missing.

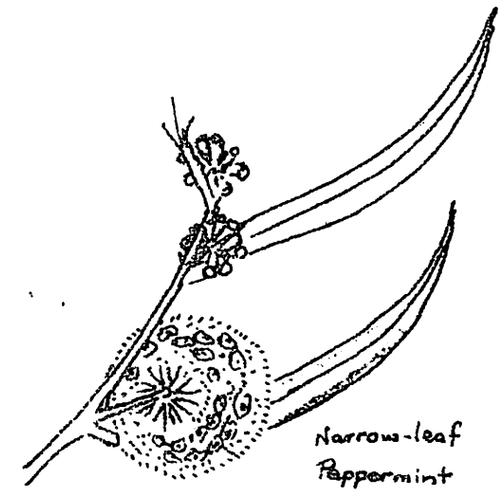


Beak

Do you know the eucalypt trees that are in flower during February and March?

One of the local ones is likely to be Narrow-leaf Peppermint.

Sugar Gum is also in flower. This species came from South Australia but it has been widely planted, particularly around schools in the Wimmera and Mallee areas.



Narrow-leaf Peppermint

Eucalyptus radiata

If you can find these trees, try to find out more about them by keeping a record of their flowering. They are often visited by gang-gangs and galahs which feed upon the gumnuts and young buds. Other birds may be seen in these trees from time to time.

February and March is a good time to look at the weeds around your school-ground. Some of them you will know already. Which ones do you think have escaped from gardens?

Eucalyptus cladocalyx
Sugar Gum.

in the news

a rare bird

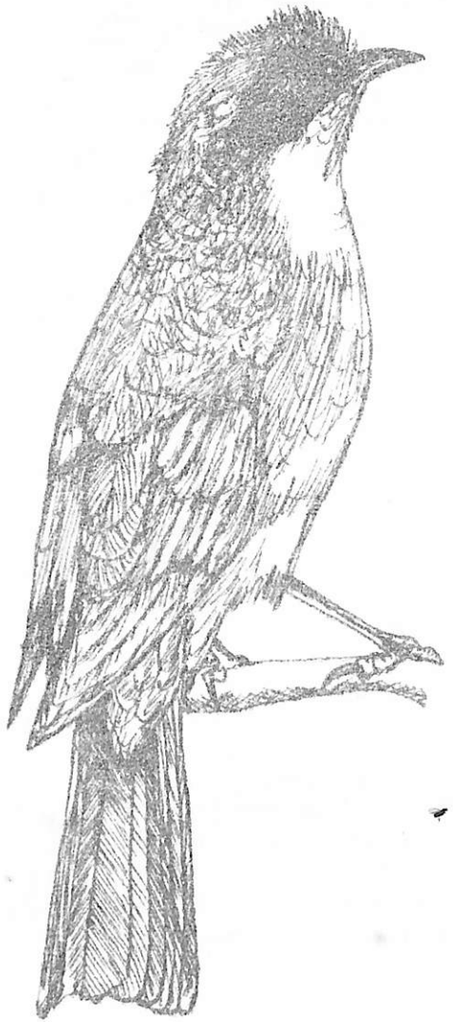
JUST EAST of Melbourne is the Yellingbo Wildlife Reserve. In 1967 this reserve was set aside to protect the Helmeted Honeyeater. At that time this bird was rapidly dying out.

To look at this bird you would think it was a Yellow-tufted Honeyeater. But the golden head crest or "helmet" makes it a different species.

Like other honeyeaters, it eats insects as well as nectar and it favours manna gum, swamp gum, melaleucas and tea trees as places to find food. You can see why the clearing away of manna gums and other native trees has caused the near extinction of this bird.

Although it lives in the scrub near water in summer, it moves to the larger timber areas in winter. It builds a deep, cup shaped nest of bark and grass in a small bush or tree. There are usually two flesh-coloured eggs with red-brown spots and purplish blotches laid in the spring.

I hope you can get Dad or Mum to take you to Yellingbo to see these rare birds.



too much water

EVERYBODY must have seen the pictures of flooded farmlands in the newspapers. People were shocked at the amount of money needed for repairs and replanting and restocking of paddocks. Much of the native wildlife has been destroyed.

Of course, there are simple reasons why flooding occurs in some areas and not in others. There may be too much water for the present drainage system. As you know, there is a set pattern to the gutters, streams, rivers and pipes. This pattern suits the usual amount of water.

Heavy rain or melting snow may suddenly bring too much water to the system.

As well as this the system may be damaged or blocked by silt and rubbish.

In both cases, the water cannot escape as usual, so the system floods.

When you come to think of it, man has always moved to the banks of large rivers to do his farming. The damage done by floods is compensated by the rich silt left behind. Have a close look some large maps of the Yellow River in China, the Mississippi River in the United States, or the Nile in Egypt.

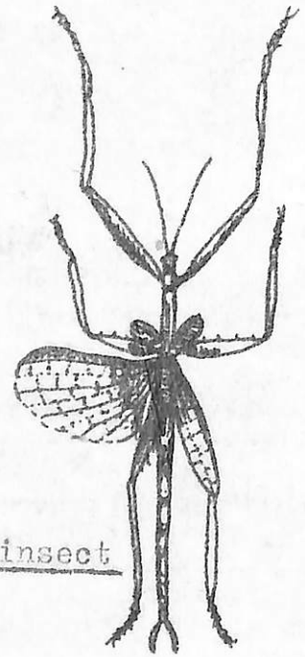
Things to do or Find Out.

1. Make a map of your local drainage system.
2. Make a map of the drainage system in your schoolground.
   a. Show directions of flow.
   b. Show underground pipes.
   c. Does water flow into the schoolground from anywhere?
   d. Does your schoolground have any drainage problems? You may be able to suggest some answers.
3. What is a delta?
4. What is a levee?
5. How do engineers work to prevent floods?

letters to the editor

From Ross Paterson of Surrey Hills.

"While climbing a tree I spotted a twig-like insect. It had the exact colour of the branches around it. It had six long slender legs with a long slender body and two feelers at the head end. I went away for two hours and then I came back to see whether it was still there. Surprisingly enough though, I had difficulty finding it. I gave it a push with my finger, then it flew away. I knew it was a stick insect but I didn't think stick insects had wings. What would it be then? "



Stick-insect

Ed. You were correct John, it was a male stick insect. Some stick insects can fly. As you noticed, these insects are masters of camouflage. For more information, see Australian Nature Studies, by Leach, in the section headed: "Phasmids".

John Duggan writes:

"Recently, when we went down to our holiday house in Mt. Martha, we spotted some swallows nesting in the wire of the television aerial. The nest is made out of mud with twigs in the interior where there are three young birds. We threw out some bread crumbs and we watched the female pick them up and give them to the young ones. It is interesting to watch as the little birds peck into their mother's beak.

Other birds with yellow bellies and brown backs are also around the house. Could you please tell me what these birds are called?

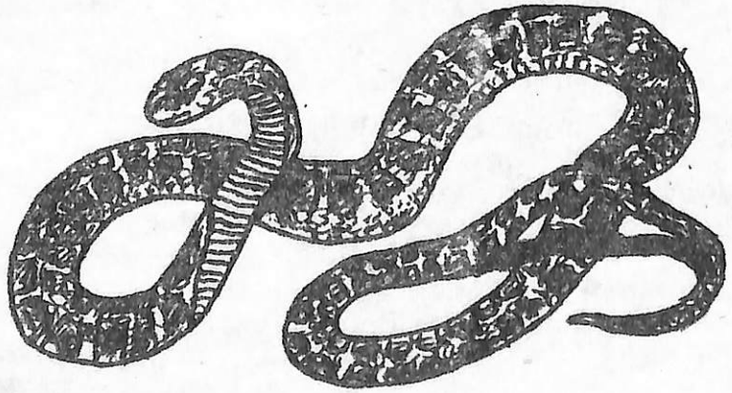
ED. In the next issue of Nature Notes John, we will be talking about swallows. Unfortunately John you have not really given us enough information to identify the other birds. Tell us more about their size, beaks and colours.

Pam Halliwell (Blackburn Lake School) writes:

"Up at Nagambie my father was mowing the lawns. He looked under some tin and there was a tiger snake. It was dark olive green on the back and white underneath. It was about 3'6" long. It had two poison fangs in the upper jaw. Dad shot it and brought it to us on a rake. It was wriggling due to its still active nerves. Then Dad threw it in the Goulburn River.

Snakes have a habit of lying under tins or bags and when the sun shines they become warmed through the tin or bag.

ED. What you say is quite true Pam, we must be careful when lifting up tins or pieces of wood. Your letter has raised an important problem: should we kill snakes or not? Perhaps other readers would like to write in to tell us their views.



Tiger Snake.

prize letter

During the year the best letter received each month will gain for the writer a book prize. The children who won books last year were very pleased with their prizes. The following letter from John Krohn was received by Nature Notes.

"Dear Editor,

I was very pleased to have my letter published in "Nature Notes" and wish to thank you for the Periwinkle book "Common City Birds", which arrived safely during the first week of the May term holidays.

I wish to apologise for the delay in sending you this letter, but I have been working on a project for the "Australian Social Studies Scholarship Competition", which closes on June 30th., and which I only finished last week.

A chapter in my book, "What is a Bird?" supplied me with information for a chart on the digestive and respiratory systems in birds. Our teacher, Mrs. Love, gives extra marks for such charts. The text and illustrations in the book help me greatly to identify birds I often see in this district.

Yours sincerely,

John Krohn."

- - - - -

Ed. Thank you John, for your letter. It is pleasing to know that the book you won was so useful.

As John has found, the Periwinkle series of books is an extremely good series. We are fortunate in that we can again offer these books as prizes in 1971.

There are over sixteen titles in the Periwinkle series.

the moon

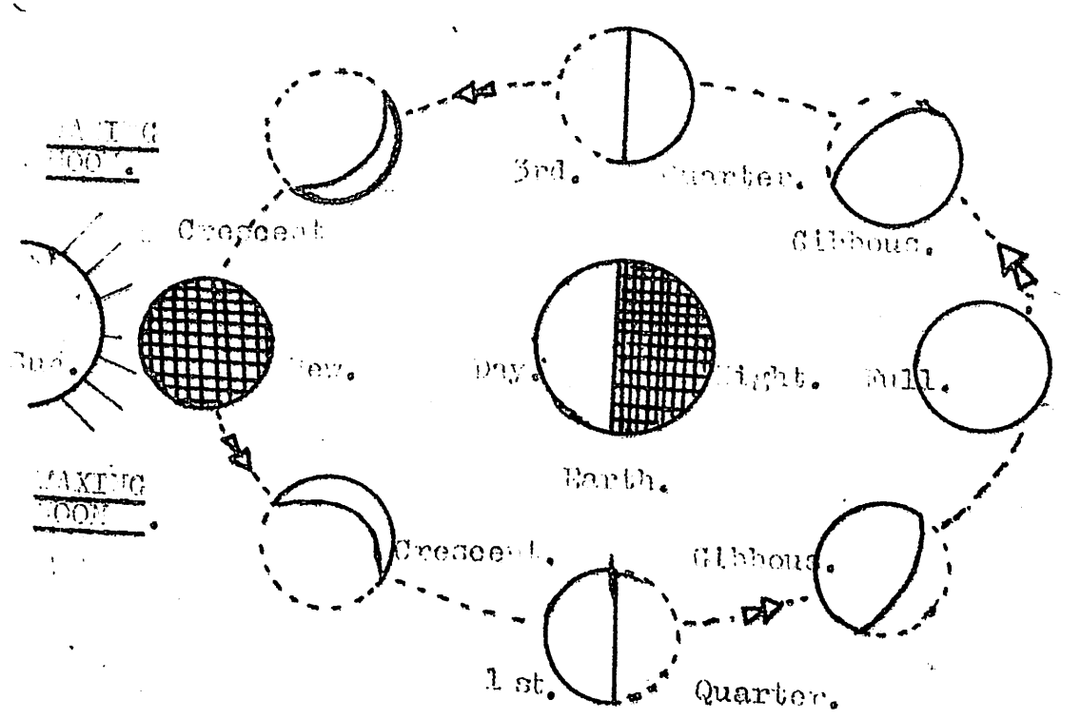
The Moon revolves around the Earth once in every 29 days. The reflected light which we see comes from the Sun. During the Lunar Month (29 days) the Moon appears to change its shape and size. These changes are called the phases of the Moon.

At the New Moon position, the Moon is between the Earth and the Sun and we cannot see it.

Gradually the New Moon appears as a thin crescent. By following the chart below, you will see how the Moon waxes and wanes during the 29 days.

(Gibbous means 'bulging' or 'rounded'.)

PHASES OF THE MOON.



quiz

The answers to this quiz are to be found in this month's magazine. See if you can answer all the questions without looking back through the pages. You may however, want to read through the magazine again very quickly before looking at any of the questions.

1. What is the common name for Meliphaga cassidix?
2. Do some stick insects have wings?
3. How can you tell a male mudlark from a female mudlark?
4. What colour is a Port Jackson shark's egg?
5. What type of eucalypt has been used in schools in the Mallee area?
6. What are two reasons for the sudden flooding of river valleys?

NATURE NOTES COMMITTEE:

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