

nature notes



vol. 8 no.5

6 cents

contents

Earth Day:	
V. Serventy...	3
Black and White Birds:	
L. Delacca...	5
Quiz:	
F. Rogers...	8
Lenses:	
L. Delacca...	10
Native Garden:	
Vermont P. School	13
Letters...	14
Notices...	16

Cover: Eucalyptus-
Lehmannii;
photo - F. Rogers

Solution to last month's
puzzle picture:
Mud dauber wasp's nest;
opposite side to the
picture in Vol 8 No 2.

Registered at G.P.O.
for transmission by
post as a periodical.
Category B.

FROM THE PRINCIPAL.

Dear Girls and Boys,

When I was asked to write this letter I wondered what would be the topic. As I sit in my office and gaze through the window I see part of Blackburn Lake's Native Plant Garden, with its bird bath and bird feeder.

Have you a native plant sanctuary at your school? Do you know the names of any of the plants growing there apart from just "gum trees"? In this eastern area of Melbourne there are many lucky schools where such trees and plants are left to grow. I have been in schools where there was not one single tree growing in the school ground!

I am sure that the editors of Nature Notes would be glad to hear of native plants growing in your school ground or home gardens.

Children, do learn to appreciate the trees and plants about you. They are a wonderful part of Nature.

Hoping to hear from you soon,

W. E. Lynch.
Principal, Blackburn
Lake P. S.

ANSWERS TO QUIZ - SEE PAGE 8:

1. Gootamundra Wattle: (Acacia baileyana)
2. Mt. Morgan Wattle: (Acacia podalyriaefolia)
3. Golden Wattle: (Acacia pycnantha)
4. Early Nancy: (Angullaria dioica)
5. White-eared Honeyeater.
6. White-plumed Honeyeater.
7. Hakea laurina: (Pin-cushion Hakea)
8. Common Correa: (Correa reflexa)

earth day

This month we have something special for you. Those of you who watch "Nature Walkabout", "Around the Bush" or "Rolf's Walkabout" on television, will know about Mr. Vincent Serventy.

Here is a special letter to the readers of "Nature Notes" from Mr. Serventy:

Dear Girls and Boys,

Do you enjoy watching "Nature Walkabout"? Well we enjoyed making it and hope to make more television programmes about Australian wildlife. You may have seen my programme "Around the Bush" and also the programme "Rolf's Walkabout" which my wife and I organised.

When Rolf Harris came to us we decided to have a camping trip together just for the fun of it. However Rolf is also interested in wildlife conservation and we thought this would be a marvellous chance to show what we still have in the Northern Territory and what we can keep if we take care.

By taking care, I mean setting aside enough national parks and making sure we have a good national park service to look after them. It is agreed that at least five per cent of any country should be set aside as parks. In Australia we only have one-point-five per cent.

Also we need lots of small bushland parks in the suburbs where most people live. We need good laws to stop pollution destroying plants and animals. We must make sure that we have good laws to stop any of our plants and animals being exterminated.

Now you may wonder what you can do to help. Many ideas on conservation can be carried out by children. In New South Wales, many children are running Earth Day projects. Are you running a conservation project which you are going to celebrate on Friday September 24th? If not, make sure you have some kind of celebration on that day. The magazine "Wildlife in Australia" has lots of ideas on what can be done. 3.

REMEMBER: THE FUTURE OF OUR WILDLIFE IS IN
YOUR HANDS AS WELL AS MINE.

V. Serventy.

* * * * *

DO YOU CARE FOR AUSTRALIA?

DO YOU WANT:-



- our open spaces covered with rubbish
- our beaches, caves and reefs mined
- our creeks choked with rubbish
- our rivers and beaches poisoned by detergents, pesticides and sewage
- our fish killed, birds gone
- our bays and beaches unfit for swimming

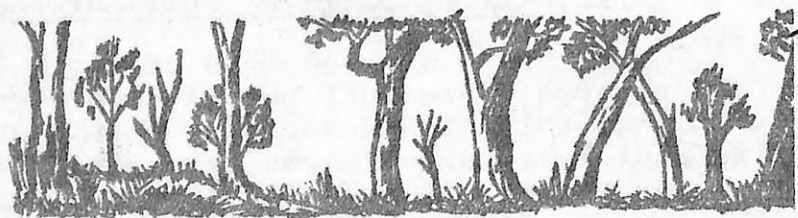
WILL YOU HELP IN THE CONSERVATION FIGHT?

* * * * *

HOW WE CAN TAKE CARE:

Make this the topic for your next classroom discussion. Here are some ideas to get you thinking.

- YOUR HOME: construction, power, detergents, rubbish.
- YOUR GARDEN: water, native plants, pesticides.
- YOUR CAR: its use, its fuel, litter bags, walking.
- YOUR DISTRICT: housing, factories, parks, "cleanathons".
- YOUR STATE: working with councillors and politicians.



Some people say that the real enemy is us; perhaps this is being too hard. If we are careful and sensible then the best ally is us.

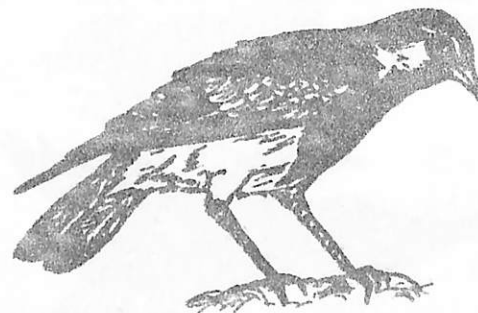
REMEMBER: THE FUTURE IS IN OUR HANDS.

black + white birds

AUSTRALIA has long been noted the world over for the unique quality of its native birds and mammals. In the forefront of the feathered fauna there is a distinctive group which have always shown up because of the contrast of their black and white covering. The birds in this group are different in so many ways to the more brightly coloured species among our birdlife.

Without exception they appear to have adapted themselves very well to encroaching civilization. Their motto seems to be: "If you can't beat them, join them." And so we see the magpie, mudlark and willy wagtail as very common sights in our city streets.

Perhaps one of the main reasons for them getting on so well with man is the tremendous amount of good that they do for us. The mudlark likes nothing better than a feed of pondsnails - the host to the notorious sheep killer liver fluke; so no pondsnails - no liver fluke.

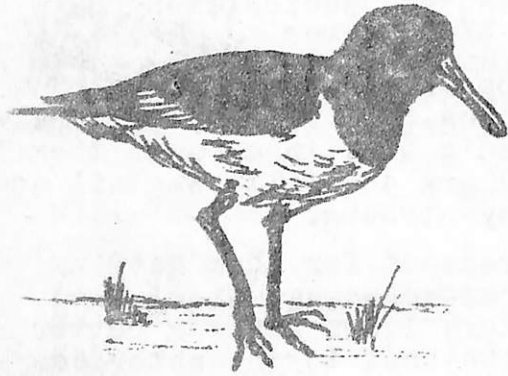


Mudlark.

These birds have found camouflage unnecessary - in fact they seem to have adopted a quite aggressive attitude to anything that invades their domain. The female of the species is just as handsome as her mate and incidentally, have you learned how to tell the female from the male mudlark? Look for the apron under the chin. Who usually wears the apron at home? There is nothing silent about these pied songsters, from the melodious carolling

of the magpie to the sedate "Sweet Pretty Creature" of Willy Wagtail.

Most girls and boys are pretty familiar with the magpies, even if only from a football viewpoint. Most, in the outer suburbs at any rate, have noted the peculiar aerial antics of the mudlark or peewee. And of course the Willy wagtail is the favourite of many girls and boys, especially our cousins in the country.



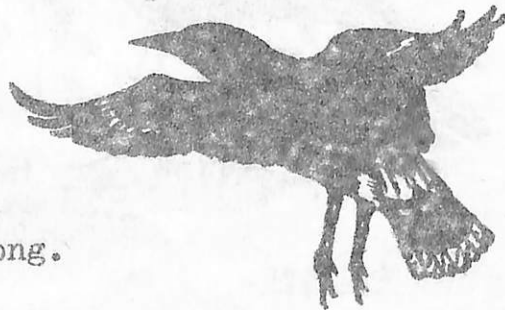
Pied Oystercatcher.



Pied Butcherbird.

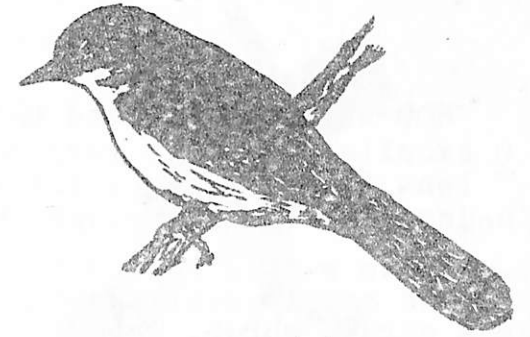
How many of you have listened breathlessly to the glorious singing of the pied butcher bird? You will have to travel north from Melbourne to do so but you will find it worthwhile, especially on an early autumn morning. Can you find out why butcher birds are so named?

I have had many reports recently of large black birds with white patches on wings and tail, frequenting school food bins and council rubbish dumps. This bird, a winter visitor to our cities and towns, is the Pied Currawong. The Periwinkle book "Common City Birds" by Graeme Chapman will tell you all about this cheeky raider.



Pied Currawong.

You may be forgiven if you mistake our next black and white bird for its friendly cousin the Willy Wagtail. Very similar, not quite the same, but just as friendly is the Restless Flycatcher or Scissors Grinder. See how quickly you can discover how he is different from cousin Willy. If you find this difficult, Robin Hill's "Australian Birds" will help you.



Restless Flycatcher.

One curious habit of this famous bird group is their apparent liking for each other's company. Never was the old saying "Birds of a feather flock together" more true than in this case. Frequently, different species have been known to nest in the same tree - a most unusual occurrence in the bird world. Most friendly to one another are the wagtails, mudlarks and scissors grinders; but the magpie is more often on the outer, preferring to go it alone.



Hooded Robin.



White-backed Magpie.

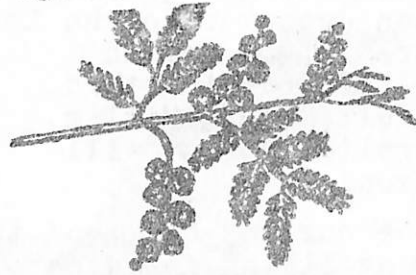
Yes girls and boys, the members of this important bird group have many things in common besides their colour. If you cannot discover them all for yourselves, Alex Chisholm's "Bird Wonders of Australia" will suggest many more for you.

quiz

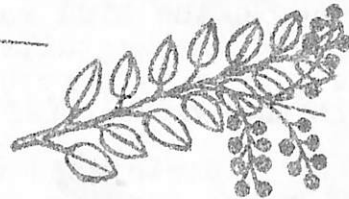
HOW WELL do you read Nature Notes? A score of 7-8 is excellent, 5-6 is very good, 4 is fair. With a score of less than 4 I suggest that you get out your past issues and browse through them again.

1. This wattle is widely planted and is well known as a garden shrub. The flowers appear during July. The common name is aboriginal for turtles, swamp or low lying and was first written as

Tooramundra. In the 1830's John Thurley called his station "Cootamundra" and this area was later called "Village of Cootamundra".



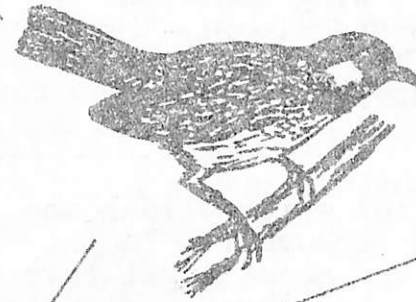
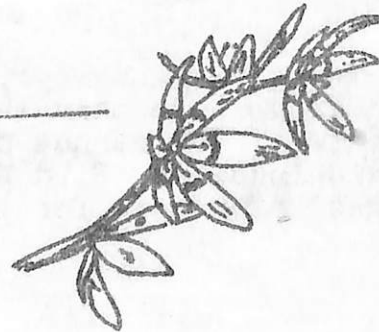
2. This plant naturally occurs in Western Queensland but it is much grown in gardens.



3. This plant is the floral emblem of Australia and unlike the other two it is spread over a very great area of Australia.

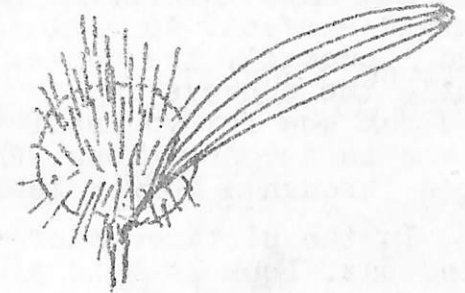
4. This flower is one of the harbingers of Spring. When do you first notice its flowers?

Here is a clue for those who enjoy crossword puzzles: "this girl was first out of bed this morning".



5 & 6. Have a close look at these two birds. They are two of our more common honeyeaters. The first makes a "chock-chock" call while the other is a dull green all over and has a call that sounds like: "chickowee".

7. The flowers of this plant look like a bunch of white pins sticking in a red cushion. If you can find one of these plants near your home, watch it from time to time. You may see the two birds in the picture above feeding on it.



8. These flowers may be red or yellowy green and appear during winter.



The answers to this quiz are printed upside-down on page 2.

lenses

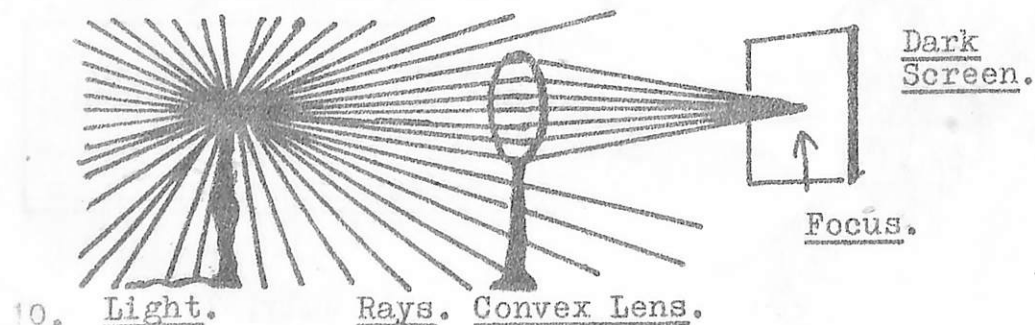
DO YOU REMEMBER that butterfly's wing that you found last week? How hard it was to see clearly the delicate tracery of the pattern on the wing! Then someone had the bright idea of using a magnifying glass or hand lens.

WHAT IS A LENS?

It is really quite a simple object which alters the direction of the light rays passing through it. In the March issue of this magazine we talked about light rays and reflections; you can also be talking about reflection if you just say that it is altering the direction of the rays of light.

Lenses have been with us for a long time; they have been found in the tombs of Ancient Rome. Today they are made of purest glass, quartz or even plastic; and may have two curved surfaces, or one flat and one curved surface. We call the two main shapes "convex" and "concave". The convex one is thicker in the middle while the concave one is thinner in the middle. So now you can see for yourself that our ordinary magnifying glass is a convex lens. What happens when light rays pass through a convex lens?

In the picture underneath you can see how you can find out. Look at this picture very carefully and then try the experiment for yourself. There is also a very good trick that you can use; if you put a little smoke between the lens and the screen it will help to make the light rays more easily seen.



YOU HAVE PROBABLY NOTICED that when you are viewing a film, the image on the screen is sometimes blurry. After they have passed through the lens of the projector the light rays come together at a single point which we call the focus. Now if you think about this for a while you may be able to work out for yourself why the image on the screen is blurred and indistinct. What would you need to do to make the image clear again?

SOME THINGS TO DO:

1. Did you know that you can make your own lens? You do not need your own glass grinding factory and you do not need to be an optician. The next time you are first to finish your bottle of milk in school, don't throw away the top. While you are waiting for the others to finish their milk, make a small hole in your bottletop. Now place a drop of water in the hole. Where can you find water in a classroom without a tap? Well look around you: fish tank, flower vase..... Anyway, try the drop of water as a magnifying glass. Does it work? What shape is the drop of water?

2. Make a list of articles which have or use a lens. A pair of spectacles will help to start your list!!

3. On a sunny day, use your lens to make a bright spot of light on a sheet of paper. What happens after a while? Can you say why it happens? If you remember what we have been talking about on the other page, you will be able to call the bright spot of light on the paper a different name.

Side View
of Lens.



Convex.

Concave.

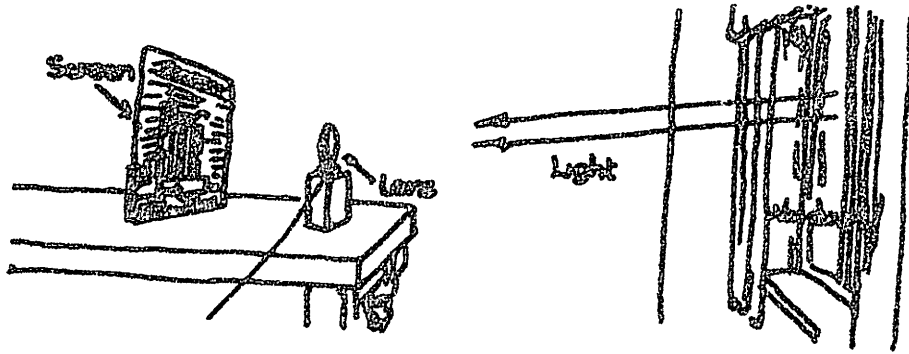
REMEMBER: always be careful of fire. Can you see one way in which bushfires start? A round goldfish bowl is another convex lens. If you left the bowl on a window-sill in direct sunlight in summer, and the focus happened to fall on a curtain, it could set it alight. But goldfish keepers know that goldfish should never be left in bright sunlight.

July, 71.

11.

THE LENS (Continued.)

4. Did you know that you can make your own picture? You will need a screen to show the picture on; a postcard will do. You will also need a lens, some plasticine, match boxes and a light source. Now arrange these items as they are shown in the picture.



Use plasticine to hold the lens in place.

What do you notice about the image on the screen?

5. Fill a large round bottle with water. Lay it on a newspaper. What do you notice about the print?

6. You might find this next trick quite spooky! Take a piece of card and draw on it a head facing to the right. Fill two glass jars with water. Arrange jars as in the picture. When you look at the drawing through the jars, what do you notice about it?



If your school has a microscope, you may want to try looking at some of these through it: a drop of pond water; a hair; some dust; a flower petal; an insect's leg or even a butterfly's wing; and now we are back to where we started.
SO GOOD VIEWING!

native garden

AN IDEA FOR YOU TO USE:

This month we have a letter from Grade 6A at Vermont Primary School. We are printing it for you to read here, but it would be a good idea to go along to Vermont School at some time to see how it is working out.

Dear Editor,

We thought the front garden in our school needed a bit of a face lift so our grade decided to make it into a native garden. We have seen many beautiful native trees and shrubs in Vermont and nearby suburbs and felt that we could make our school ground a brighter place in which to live and play. We also knew that native shrubs attract native birds like the honeyeaters.

The first job was preparation. We had to remove the old plants already growing there and put in some fresh soil as the old soil was exhausted.

The school committee also bought some rocks and the local scout group gave us some tree trunks and branches. With the help of our teachers we set the rocks and tree trunks in the soil to give a landscaping effect.

Then came planting time. First we scattered "sweet smelling" blood and bone around and dug it in. Planting consisted of digging a hole, a little blood and bone on the bottom, a little soil, then the careful placing of the plant so that the soil around it reached the level of the other soil. We were careful not to disturb the soil around the plant as we removed the plastic covering.

Most of the shrubs we put in were grevillias and banksias because we know the birds like them, but we also planted a Wallangarra Gum which is noted for its white trunk. We think a native garden in every school in Melbourne would be of benefit to native birds in the suburbs.

July, 71. 13.

letters

Dear Editor,

While rowing up the Yarra River with my family we decided to stop by a shady willow-tree near shore. I stepped out of the boat and saw quite a large nest in the willow-tree. I climbed up the tree to have a look at the nest. To my surprise, in the nest was a possum.

A while back I heard tapping and scratching on our house roof. I went outside to have a look and I saw a possum in one of our trees. I quickly ran into the house to get a biscuit. This he took from my hands without fuss and happily munched away. Are all possums as tame as this?

John Masanauskas, Vermont P. S.



Ring-tailed
Possum.

Ed. Yes John, possums do sometimes build nests. We think your friendly possum has been tamed by someone; normally they are not as tame as this. Did your possum look like the one in this picture John? You see there are many different types of possums in Australia, and yours could have been any one of about nine types. I suggest that the next time you write to us about your observations, try to tell us as much as

you can about them. Have a close look at a good book on possums and you will see that we would need to be told all about the markings on the fur, the shape of the tail, the shape of the head and perhaps a careful drawing of the possum would help us too.

prize letter

This month's "Periwinkle" book goes to Stephen Griffin of Lilydale Primary School. Stephen's letter shows a keen interest in fungi. We hope that Volume 8 Number 3 of Nature Notes was of some help to you - Stephen.

Dear Editor,

Last Sunday, when walking in a paddock near Clégg Road Mt. Evelyn, I found a large Fly Agaric (toadstool). An area of about 50 yards square, around the place I found the fungus, was absolutely covered in the same species. I also found a brown type of toadstool with a sticky-wet top and white spores. I measured the Fly Agaric and found that it was 32 inches around and 12½ inches diameter. Around the stalk was 7 inches at the bottom and 3 inches around the top. It was dried up and a bit shrivelled and was probably bigger before this occurred.

Two days after I found the Fly Agaric, I was walking home from school when I found what I thought was a Shaggy Cap. Closer observation made me think differently, because around the top was bright red. Otherwise it was exactly the same as a Shaggy Cap.

A TYPICAL AGARIC OR GILLED FUNGUS.

Cap or Pileus

Torn pieces
of a veil

Ring or Annulus

Basal Cup
or Volva

Gills or
Lamellae

Stem or
Stipe

Mycelial
Threads



notices

NATURE NOTES HANDBOOK.

The Nature Notes Committee
is pleased to announce that
the Nature Notes Handbook
is now available.

This 46 page book is crammed
with information for
teachers and children.

Cost is 50c plus postage.
Schools that subscribe to
Nature Notes will each
receive a complementary
copy.

* * * * *

BACK COPIES.

Nature Notes also has a
limited number of volumes
6 and 7 available. There
are ten issues in each.
Cost is 50c plus postage.