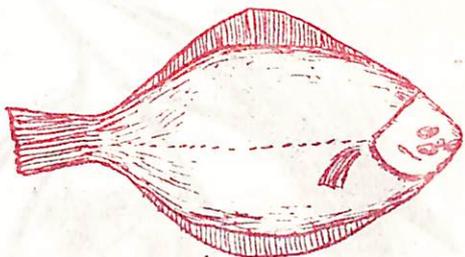


Nature Notes

Ringwood Inspectorate — Vol 5 No 8 — Price: 4c each

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Dear Girls and Boys,

The wonders of animal and plant life are all about us, in backyards and bush, in creek, swamp and sea. Every day we see something in nature that excites us, or amazes us, or delights us - that is if we have an observant eye, a keen ear and a curious mind. Perhaps the most wonderful thing about nature is the will to live, no matter how difficult life may be. Mosquito, frog, tortoise, bell bird or towering mountain ash - no matter what the form or life, it has found its method of survival. What a delightful experience it is to learn about these methods! We walk along a bush track, turn a stone, dig the ground, climb a tree or peer into the water and immediately we find life is some stage or form - and we begin to wonder why, how and what, about so many things.

Solving these problems - thinking, watching, listening, sketching, making notes and sharing experiences - and so we begin to enjoy the delights of nature.

I hope that our magazine will help you to enjoy and understand this fascinating subject.

L. J. DELACCA
Editor.

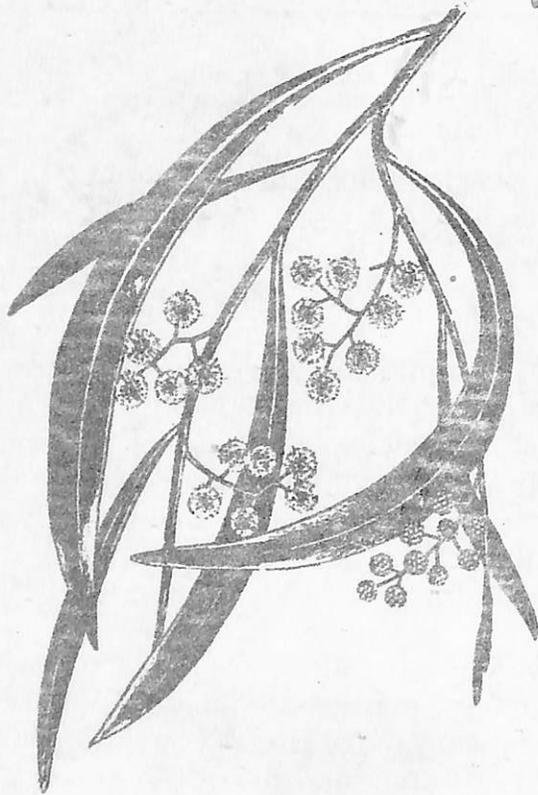
Identify
these
things which
begin with
"F"



Name _____

Grade _____

Things to Look for



Acacia saligna

Have you seen this large shrub growing in your school ground? It is one which is well known near East Camberwell Station. Flowering time is late in October or early November. What other wattles are flowering at this time?



Milkmaids

(*Burchardia umbellata*)

The leaves are long and narrow with a sheath at the base. The flowers are in groups at the end of a thin green stalk. How many parts to the flower are there?

It flowers in spring and summer throughout most of Australia. What is the exact date of flowering in your area?

OCTOBER

● Children around Melbourne may not be familiar with this bird because I do not know of any record of it being found here, but if we could travel to the Brisbane Range near Bacchus Marsh or farther north, we would be likely to see it.

It has an unusual nesting habit so find out what it is and also what other names are sometimes given this bird.



● Rainbow Bird



Bearded Greenhood

● This is an unusual greenhood orchid and sometimes is very difficult to find.

There are many other orchids you will find about now. Try to discover their names.



● Bearded Greenhood

● When you discover a bird's nest do not spoil your discovery by going too close. Observe from a distance.



● Thornbill Nest

Introduced Birds

★ Not all the birds we see are natives of Australia. Several birds have been introduced to our country; sometimes, because the people wanted a reminder of their homeland and sometimes to attack insect enemies.

Here are some of the birds which have adopted Australia as their homeland.

INDIAN MYNAH

"An' I swagger an' scold an' strut an' I swagger," says the Indian Mynah, as described by C. J. Dennis, the poet.

Released in Melbourne in 1862, the Indian Mynah is slowly spreading throughout the countryside. As a scavenger around the city and suburbs and often in schoolgrounds, he is considered a useful bird. In 1883 a large number of these birds were trapped in Melbourne and released in Queensland in an effort to combat grasshoppers and cane-beetles.

Watch for him around your schoolground.



INDIAN MYNAH

Oct. Nature Notes--4

GOLD FINCH



Several species of the Finch family have thrived since they were released in Australia. The Grass Finch was introduced from South-east Asia and the House and the Tree Sparrow, the Goldfinch and the Greenfinch were introduced from Britain. (It should be noted that we have many native finches.)

In just over 100 years the House Sparrow has occupied most of Australia. It was released in

Melbourne in 1863 and in 1894 it reached the Western Australian border. In that State it is banned because these birds can cause considerable destruction to the wheat crops.

The delicate twittering of the Goldfinch can be heard in farm and orchard lands. Considered a friend because it eats seeds, especially those of thistles, the goldfinch was originally introduced in New South Wales and Victoria.

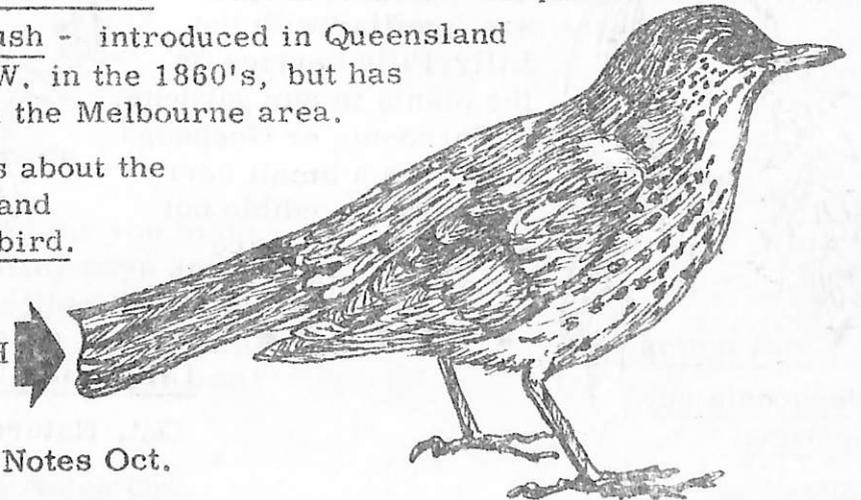
OTHER INTRODUCED BIRDS

Indian Turtle-dove - released in various places after 1870.

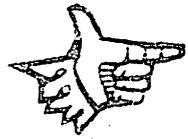
Song Thrush - introduced in Queensland and N. S. W. in the 1860's, but has thrived in the Melbourne area.

Find facts about the Starling and the Blackbird.

SONG THRUSH



5--Nature Notes Oct.



Fruits of

Australian Plants.....

Many of the fruits of Australian plants are very hard. Most of these remain on the parent plant for years - until the plant is damaged, possibly by fire.

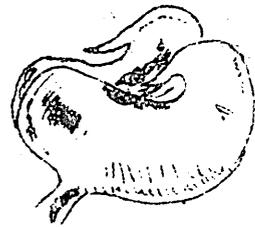
Then the seed of years of growing is released and often blown away with a light wind because the seeds are winged.

Banksias, Hakea, Xylomelum all produce very hard wood fruits which contain winged seeds. Can you find others like this?



Saw Banksia
(Banksia serrata)

Xylomelum
Woody Pear.



Hakea rostrata



Persoonia sp.
Geebung.

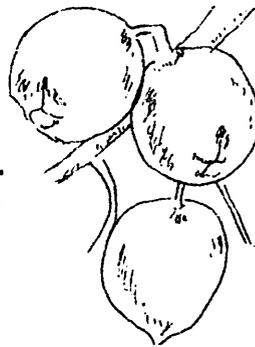
Sometimes the fruit is a berry. Many of us are familiar with the Lilly-Pilly berries on the plants in our gardens.

Persoonia or Geebung also have a small berry. Often this is edible but sometimes they are bitter to taste.

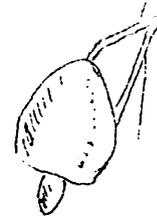


Lilly-Pilly berries

Oct. Nature Notes--6



Native
Cherry
(Exocarpus)



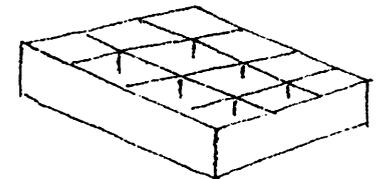
What looks like a fruit of the Native Cherry-Exocarpus is really a fleshy stalk which has become enlarged and often reddish colour.

Quandong (Santalum sp.) are rather rare these days but sometimes we find them particularly in Mallee country. The fruits are about an inch in diameter, mostly a seed but the fleshy outer cover is edible. The early settlers made jam or jelly from this. Today we sometimes see the seed sold as marbles in games. e.g. Chinese Checkers.

The Queensland Nut (Macadamia sp.) is about the same size as the Quandong but has a very hard shell. The fruit is very tasty.

Quandong
(Santalum sp.)

Something for you to do. I know many boys and girls who have made a collection of the fruits and nuts of Australian plants. Why not start your own?

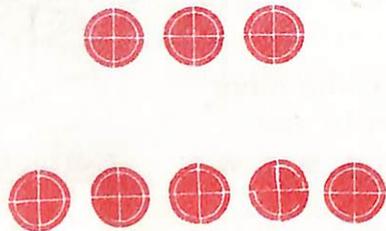


Collection Box.

KOOKABURRA

The well-known laughing voice of the Kookaburra (*Dacelo gigas*) makes it an easy species to identify. It is often seen in suburban areas, sometimes perched on a telephone wire with its head cocked enquiringly on one side as it waits for food. This may be small animals such as mice and rats, or insects, snakes and occasionally fish. In picnic areas individuals become quite tame, and they will also visit garden bird-tables for meat and scraps.

Kookaburras belong to the Kingfisher family, and are found throughout Australia in forested areas from Queensland through New South Wales and Victoria to South Australia. They have been introduced to Tasmania and Western Australia. A closely related species the Blue-winged Kookaburra (*Dacelo leachii*) is found in northern and western Australia, and in New Guinea, which has an additional two species of this group.



They usually nest in horizontal hollows in trees, not in deep hollows as some parrots use. There are records also of nesting in tunnels in banks, in termite mounds and in haystacks. They have on occasion used horizontally placed hollow limbs deliberately provided for them in a garden. Two to four roundish white eggs are laid, and these are incubated for between three and four weeks, and the young remain in the nest for about a month.

The rollocking chorus by a group of these birds can be quite deafening at close range, but is always enjoyable to Australians who have a special liking for "Old Jack", the Kookaburra

Girls and boys why not see what you can find out about this jolly fellow. Perhaps if you live on a large block you may be able to erect a garden table and make an even closer acquaintance with "Old Jack".



Bird Study Near Home

You have districts rich in bird life at your door-step, girls and boys. Because of the bush-land nearby, and sometimes right at our homes, schools and playgrounds, everyone has a wonderful opportunity to get first-hand knowledge of the fascinating ways of birds.

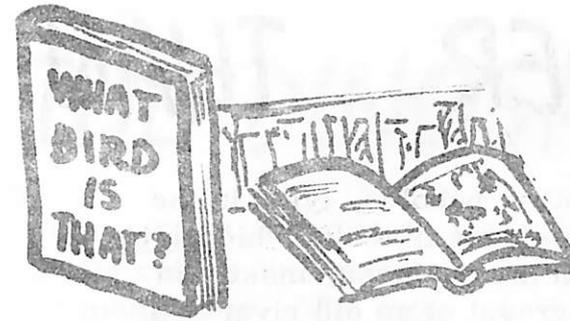
★ THE BIRD WATCHER'S EQUIPMENT.

1. Notebook and pencil - jot down shape, size, main colours, call, kind of flight, movements of the feet, what the bird was doing. Record these before you forget them.
2. A Reference Book - several good books will be available at school for study before and after you make your observations. "The Bird Lover" magazine will be useful too.
3. Dull clothing - make yourself as inconspicuous as possible as birds have much sharper eyesight than we do.
4. Do not disturb - move quietly and never damage or cause harm to a bird or its nest.
5. Best Times - early morning and late afternoon are best times to see birds at their busiest. Select good vantage point near nest and wait patiently. Windy days are usually unsatisfactory.

★ KEEN WATCHERS LIKE MORE INFORMATION.

Try to collect several points of interest about a few birds, rather than go tracking after many birds for just a little information. Here are some other points to watch for:

- (a) Arrival dates of male and female for nesting time in the area.
- (b) Food supply - are insects plentiful, trees in blossom, grubs and worms easily found in the soil?
- (c) Description and frequency of the bird's song during the day and season.
- (d) Does the bird defend its nesting territory?



(e) Of what is the nest made?

Is it well hidden from enemies?

(f) Kind of food fed to the young.

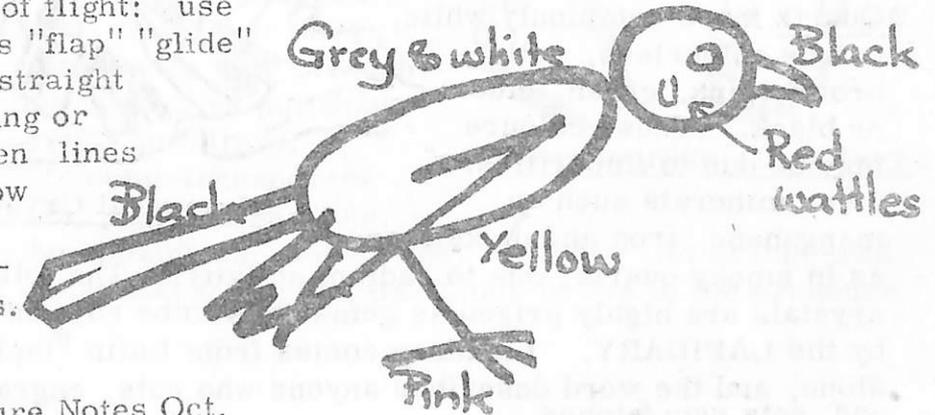
(g) Feeding habits and care of the young.

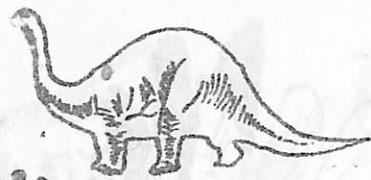
(h) Flying ability of the fledglings; activities after leaving nest?

(i) Seasonal changes in colours of feathers.

★ QUICK SKETCHES FOR OBSERVATIONS:

1. Feather detail: write colours as on diagram below.
2. Kind of flight: use words "flap" "glide" with straight curving or uneven lines to show the movements.





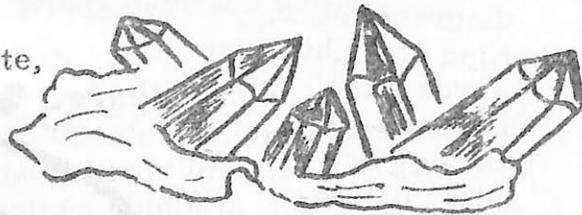
OLDER THAN

* A dull rounded pebble among other pebbles, lying in the gravel of a stream, may be a gem-stone its colour hidden by dirt. Gemstones may be found in many places, mostly in creeks and rivers, in the buried gravel of an old river bed where one kind of rock joins another. Nearly all gemstones are minerals, some more rare than others. They are the flowers of the rocks.

The oldest rocks in Australia date back at least 2000 million years when the forces that created the gemstones were active so that the stones we pick up may be older than the dinosaurs. Wind, rain and frost have broken even the hardest rocks, and running water, a most energetic excavator, has carried vast loads of material towards the sea with every fall of rain. Rivers and streams have carved away the faces of the mountains, pounding rocks into pebbles and sand.

Some of the gemstones are varieties of quartz which is one of the most common minerals of the earth's crust. At different temperatures, quartz crystallizes in different ways. When conditions permit, it can form hexagonal crystals, like six-pointed towers. But often the crystal is broken. If a point is formed at both ends, the crystal is called a HERKIMER DIAMOND.

Quartz more commonly white, can be colourless, yellow brown, pink, green, blue or black. These colours may be due to impurities, other minerals such as manganese, iron and nickel, or as in smoky quartz, due to radium activity. The following crystals are highly prized as gemstones to be cut and polished by the LAPIDARY. Lapidary comes from Latin "lapis" - a stone, and the word describes anyone who cuts, engraves and sets gem-stones.



Hexagonal Crystals

THE DINOSAURS



● Amethyst is a violet-coloured crystal, its colour due, maybe, to traces of manganese. The name amethyst comes from the Greek "amethystos" which meant a cure for drunkenness. They are very popular as birth-stones.



Amethyst

● Rose Quartz has a pale-pink appearance, due probably to traces of manganese and Smoky Quartz (also called Cairngorm) varies in colour from smoky yellow to brown and black.

● Citrine is a yellow or golden form of quartz.



Tiger's Eye

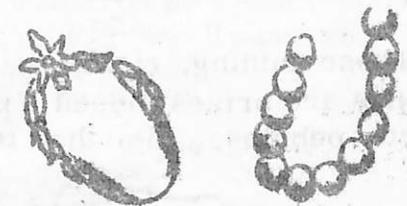


Needles of rutile in quartz.

Some crystals include air-bubbles or the fibres of other minerals.

- "Grass-Stone" contains long, inter-lacing light, brown needles of rutile.
- "Cat's Eye" and "Tiger's Eye" gleam with intrusions of asbestos, and
- Aventurine is translucent green, showing glistening flecks of mica.

The crypto-crystalline forms of quartz in which the tightly-packed crystals are so small that their structure can be seen only through a microscope, are often polished to make costume jewellery.



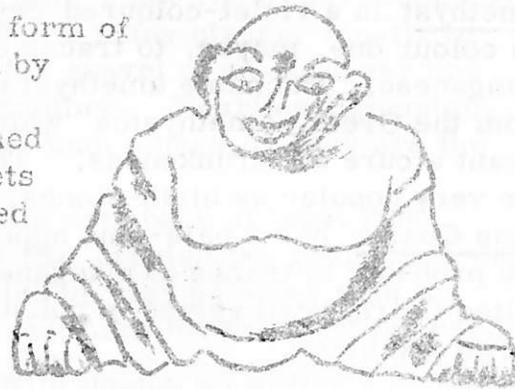
Chrysoprase Jewellery.

● Chalcedony is semi-transparent with a smooth, waxy appearance, and it may be colourless, white, grey or blue. An orange-red variety is called Carnelian and its colour is due to the presence of iron.



GEMSTONES (continued)

● Chrysoprase is a deep-green form of chalcedony, its colour caused by the traces of nickel, and it is much sought after to be polished for jewellery - rings, bracelets and necklaces - or to be carved into ornaments.



A Buddha image carved from chrysoprase.

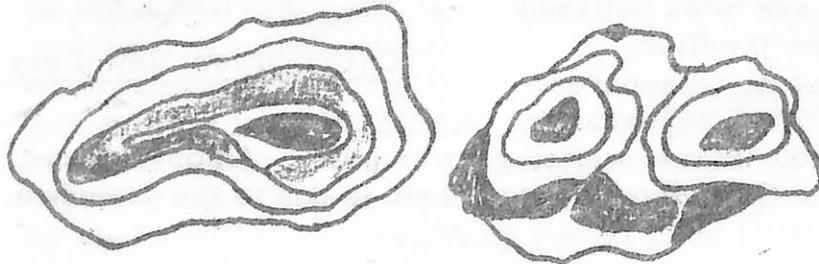


● Agate is an opaque chalcedony with a banded or variegated appearance and a pebble of red may be Jasper; both substances are highly valued for carved ornaments such as book-ends and ash-trays.



Jasper is red or brown. If it is striped it is called Ribbonstone.

★ Those shining, richly-coloured stones are prizes indeed - pretty, pretty pebbles, older than the dinosaurs.



Agate has coloured "eyes" or bands of variegated colour.

Men in Nature



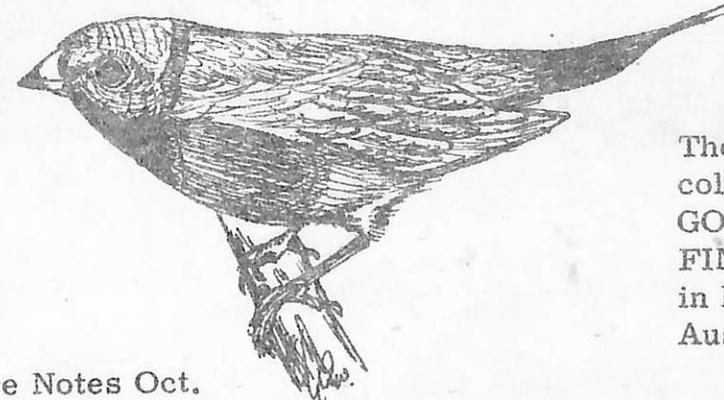
JOHN GOULD (1804 - 1880)

As a boy of fourteen years of age, John Gould worked with his father who was a gardener at the Royal Gardens, Windsor in England. Here his interest in birds was aroused.

His marriage at the age of 23 was indeed fortunate for his wife was a talented artist and was very interested in her husband's work.

In 1832, he published a book dealing with birds of the Himalaya Mountains. After finishing a book called "Birds of Europe", he began his famous "Birds of Australia". He soon found that he did not have enough knowledge of Australian birds, so he visited our country in 1838. For two years he studied our birds, raising the known number in Australia from 300 to 600.

His "Birds of Australia" was published in 36 parts over eight years. Unfortunately, his wife died in 1841 and other artists were engaged to help him finish the work. By the time of his death he had produced over 3,000 coloured pictures, and had published over 200 scientific papers about birds. Today we remember him as "John Gould - the Bird Man."



The many-coloured GOULDIAN FINCH is found in Northern Australia.

Nature News

Like Old Mother Hubbard's cupboard our mailbag is rather empty this month so we are holding over most of the few letters we have received until next month and just printing this very interesting one from Norwood State School. This letter tells us about some excellent happenings that have been taking place in the school grounds. Angela Hoare of Grade 5 takes up the story.

NORWOOD TREE PROJECT

The Norwood Tree project is one of the most exciting and interesting events in the school's history. We have planted many varieties of acacias and some eucalypts as well. There are five stages to this project.

1. April .. Lunch time fete, raised \$59.20.
2. May (a) Children and teacher prepared ground.
(b) 50 trees, 9 shrubs and stakes bought.
3. June .. Trees planted and tied to stakes. Labels made, good rainfall in first four weeks and inches of new growth noted in most wattles.
4. July .. First flower buds on some wattles.

Everyone is proud of the work we have put into the trees. Shade is one of the reasons for this project. The second is, the trees in growth are perfect for study and provide a beautiful setting for our school.

ARTICLES IN THIS ISSUE

Older Than The Dinosaurs

Mrs. M. Pollard

Things to Look For and Fruits of Aust. Plants

F. J. C. Rogers

Introduced Birds and Men in Nature

G. White

Bird Study Near Home

D. Williams

Kookaburra

Mrs. E. McCulloch

Cover Design

G. White

Answers Vol. 5 No. 7 (Cover) From bottom up then to right.

1. Earwig, 2. Everlasting 3. Eagle, 4. Eel, 5. Echidna, 6. Earth Star, 7. Egret.

NEXT ISSUE due at Depots on THURSDAY, 7th NOVEMBER.