Ringwood Inspectorate\_ Vol 5 No 10 68 Price: Deach

FER GRIDIN

Name

HOLIDAYS!

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#### Dear Girls, Boys and Teachers,

With this issue we bring to a close Nature Notes for 1968, but it is our hope that its message will be with you during the coming vacation. We hope that some of the things you have learnt, the habits and interests that we may have aided you to acquire will help to make your holiday a more enjoyable one.

Nature Notes will be published in 1969 and will have a more attractive format including a new cover in colour. Other new features will include challenging tasks and experiments for you to carry out in a "Things For You To Do" section; a "Microscope Work" section and a "Test Your Knowledge" section as well as feature articles and a place for your letters.

The new cover and rising costs of production will force the Committee to reluctantly raise the price to 5 cents per copy or 50 cents for a yearly subscription (plus postage). However we hope that you will again be a subscriber for 1969. Thank you one and all for your wonderful support during this year.

Finally may I wish you a very happy and safe holiday full of lively and interesting observations.

> L.J.DELACCA EDITOR

> > Grade

Grasses belong to one of the largest families of flowering plants. You may wonder at me calling grasses flowering plants. Have you seen the flowers? To many of us the flowers pass unnoticed because there are no showy parts to attract us.

The grass stem has amazing strength. It is hollow but strengthened by solid parts - called nodes at regular intervals. Usually from these nodes a leaf arises. It may clasp the stem for a short way. The veins of a grass leaf are usually parallel. ■ We use the seed of many grasses for food. The grain is really a food store for a new plant. Wheat is probably our best known grass but what others can you think of? Did you think of cane sugar? Here the sugar is extracted from the stem of this grass.<sup>4</sup> Many other grasses are of great importance because they are pasture and fodder food for the flocks and herds kept by humans.

Grasses are able to produce numerous side-shoots and the more they are eaten the better they seem to grow.



Dec. Nature Notes--2

## SOME THINGS FOR YOU TO DO!

• Now is the time to start looking at the clever ways grasses have adopted to" have their seeds spread. flave you found black powder on Prairie Grass? This is smut which once had an important influence on Australia's Wheat Industry.

When the Wild Oats are ripe collect some seed. Place the seeds on a saucer, and drop some water on the awns - Watch carefully and you will see them move.

**Collect some spear grass** and notice how they get some bends in the long tail. Does anything happen when you put water on them?

The grasses we use as food should include wheat, oat, barley, muize, rve, rice millet and sugar cane.

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Rye

Maize

By Chaut unicidides 'Prairie Grass'



Avena fatua 'Wild Oats''





"He wore a long, grey, linen silk coat, large handkerchief tucked under the back of his brown felt hat to shelter his neck from the sun, leather knee pads for kneeling, pockets everywhere bulging with books, forceps, scissors and coloured tapes for marking ..... He wore boots with extremely heavy soles ....."

So, wrote one of William Farrer's friends when describing him.

Born on 3rd of April, 1845 in England, Farrer grew up to be a student, with the high ambition of being a doctor. In 1869 he found he had tuberculosis and decided to move to Australia to live.

As he travelled the countryside, mainly as a teacher, he saw many sheep dying, crops rotting and farmers ignorant that that science could help them. It was then that Farrer decided to begin the work which was to make Australian wheat world-famous.

In his travels, Farrer had noticed that even in the worst stricken crops, there were some healthy stalks of grain stalks that had escaped the deadly rust disease. He collected them, bred them, cross-fertilized the pollen of one species with another and patiently developed an altogether new strain of wheat - FEDERATION, he called it. Within nine years it was the most popular wheat in Australia. It resisted disease, did not need heavy rain and had full ears of grain. Farrer produced many other strains of wheat, but none so famous as this variety.

Farrer died in 1906, famous as a pioneer in scientific farming. His work has helped to feed the hungry people of this world.

ENDOSPERM

EMBRYO

OR GERM

## LOOK AT THE WHEAT GRAIN

COMMERCIAL PRODUCTS



We hope you have enjoyed this series of Men in Nature. Now, it is your turn to watch for men in nature.

5--Nature Notes Dec.



Bower-Birds are found only in Australia, New Guinea and its adjacent islands. When early explorers first found the stick bowers and decorated playgrounds of these birds it was thought that perhaps they had been built by aborigines. Then it was proved that birds actually build avenues of sticks, or poke moss and sticks around a young tree to decorate it and form a perpendicular bower.

Since then many people have been fascinated by these interesting birds, and have found time to study and photograph them. You may have seen some species in television programmes shown over the last year.

Ht is at his bower that the male noisily courts the female. He may pick up a decoration and prance about, holding it in his beak. Many are excellent mimics.

The cup-shaped stick nest is quite separate, and is built by the female. As far as is known, it is not visited at all by the male. Usually 1 to 3 eggs are laid, and many are beautifully marked.

Bower-Birds are not normally found near Melbourne, but you will see several species if you visit the Zoo or Healesville Sanctuary. One of the best-known is the Satin Bower-Bird, <u>Ptilonorhynchus violaceus</u>, found in heavy forests in eastern Australia as far south as part of Victoria. It is about 12 inches long, solid in the body, and mature males are black, which gleams a beautiful lilac-blue in the sunshine. Females and young males are mottled greeny-brown, and all have blue eyes. The bower consists of 2 parallel walls of twigs pushed into the ground. At one end, the ground is strewn with decorations coloured blue, greeny-yellow, grey or brown. These vary from things like parrots' feathers and flowers to bits of china and plastic.

The male may "paint" the bower-walls with chewed up charcoal or fruit or wood-pulp, an extraordinary habit for a bird.

The Spotted Bower-Bird Chalmydera maculata is found in dry inland Australia. It is mottled light and dark brown, and can erect a small pink frill of pretty feathers on the back of the neck. Males collect shells, dried bones and stones, and they like bright objects like cutlery and keys.

The beautiful black and gold Regent Bower-Bird Sericulus <u>chrysocephalus</u> is found in a small area on Australia's east <u>coast</u>. There are others, all interesting, and we still have lots to learn about them.

See what you can learn about these intriguing birds.

Spo Ch m

Spotted Bower Bird Chalmydera maculata

7--Nature Notes Dec.

(Birds to different scales.)

# Things To Look For-December

Kangaroo grass was once very common over much of Australia but it has disappeared with the introduction of farms by white people. It received its name from the large mobs of kangaroos which were usually found feeding on it.

Plants are about two feet high.

Loliumperenne

Perennial

Rye Grass

Can you recognise this plant?

Themeda australis Kangaroo Grass



Large Quaking Grass, or as it was once called "Shell Grass" is an introduced grass that is wide spread. It crowds out the native grasses and plants and can become a nuisance. "Lesser Quaking Grass" is much smaller in appearance and it too is

widespread. Perennial Rye Grass should be easily found.

Briza minor



Some of us will have the opportunity of visiting the sea or salt lakes. We usually recognise the Silver Gull and some of the others.

The white fronted tern or as it is sometimes called "Sea Swallow" is a dainty bird, looking immaculate in its plumage.

Look for it - perhaps you will be lucky enough to be able to sit and watch and keep a record of the birds you see. Find out a little more about them.



Den.

There are many ever lastings to be found. Are you the kind of naturalist that enjoys the plants you see so much that you leave them for öthers to discover and enjoy? I hope so.

Everlasting

A Have you found any of the "empty shells" of the cicada? They are really the larval case from which the adult has emerged.

"Shivery Grade" Larval case of cicada

White fronted Tern or Sea Swallow

: Variations

"These days the mention of the word "beetle" or "beatle" many people immediately think of four long-haired youths singing "Yeah, yeah, yeah, " then again many of us know beetles as hard-bodied insects of a large variety of shapes and colours which are often attracted to our lights on warm evenings.



Some beetles are BIOLUMINESCENT. This means that they produce light (not necessarily for the purpose that we would carry a torch). Fireflies are not flies but beetles. On the lower side of the female's body light producing organs are found. This enables the male to find his mate.
Do you know other creatures which produce light?

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By The Beetles \*

Whirligig Beetles feed on small insects while swimming on the surface of quiet ponds. Their eyes are divided, the lower half seeing in water and the upper half seeing in air. If you examine different types of water beetles you will find some other interesting variations.





Under side showing light organ.

Stag Beetles

(Lamprima

latrieller)

Rust-red Firefly (Metriorrhynchus species)

• The Stag beetle (Lamprima latriellei) and the Hercules beetles show a striking variation between the male and the female of the species. The male Stag beetle is larger, the jaws are more obvious and its colour is a much brighter green than the female. With the Hercules beetle the female is much smaller and has no horns.

Can you find other variations in beetles?

The editor would like to hear about them.

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Send your letters to :-

Editor, 'Nature Notes', S.S. No. 4860, BLACKBURN LAKE Florence Street, <u>NUNAWADING</u>, 3131.

Our first letter for December comes from Lynn Cribbes, Grade 3A, East Ringwood S.S.

▶ I am sending you three things I would like to know about please.

The egg, white with brown and grey spots, was lying on the ground in our yard. There was no nest in the trees near it.

The big moth was on the ground under a pine tree in the bush at Donvale.

We had two of the big cocons. They were found on a geranium in a garden in Box Hill and given to my sister Heather and me. We had them in our lounge room and fed them geranium leaves sprinkled with water. We wanted to see what they turned into. They used to move around the room. We were sad when Daddy stepped on one. We had them about three weeks. The other one died about three weeks inter.

I hope this is not too much to ask about in one letter.

BED.

Wattle Goat Moth.

Saunders' Case-moth.

It was very hard to identify the edg Lypn as it was badly broken on avrival but it may have been a sparrow's. Your big moth was also in a bad state of repair Dec. Nature Notes--12 but I'm sure it was a Wattle Goat Moth, the larvae of which do much damage to our acacias.

The larval case was that of Saunders' Case-moth. Casemoths are common, easily kept and of course are excellent subjects for study. You can find out more about this family in Leache's "Australian Nature Studies" P. 305-8.

#### \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

From Blackburn Lake Glenn Flood writes:-

On a trip to Sherbrooke Forest with my mother, we were hiking up a pathway when we heard a noise off the track. Amongst the bushes we came upon a young male lyre bird which had been banded. It was so tame that it scratched for food only three feet from us. Its body was a soft brown colour, and its tail just beginning to grow, showed signs of colour on the tips. By having this Natural Forest it will help protect our native animals and birds.

ED. There is an excellent movie colour film called "Menura" available from the Visual Education Centre. Produced by Harold Pollock, this film gives a fascinating insight into the life and habits of this truly remarkable Australian. Have you

seen it? If not it is too late for , this year but a good thought for next.



From Rebecca Thomson, Grade 6, Ferntree Gully North comes this letter.

"Menura"

The Lyre Bird

I live on the edge of the National Forest, we have a lot of gum trees in our 3/4 acre garden. Different birds are always around. We have a high verandah on which I put breadcrumps and little pieces of meat. The kookaburras that nest in our garden come down for the meat and often take it from our hands. Mostly its the sparrows that come to eat the bread. Once a magpie came and joined in.

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### CROSSWORD PUZZLE.

Sometimes in summer we see the little honeyeater birds getting nectar from the flowers, also we see lots of rosellas who

always seem to fly in a group.

From Karen Dargaville of Valkstone comes this interesting snippet of news. During the drought this year our family went to my Aunt's in Belgrave, where some magpies had become so tame they allowed her to touch them. With food scarce because of the drought they would beg her for scraps. One of the magpies had a broken leg and was not so tame as the others.

After spending a week with us in Melbourne my Aunt returned not expecting to see her pets but after about 10 minutes they flew down to renew acquaintances and ask for more scraps.

Crossword Clues. (See opposite page). Across.

plants abound.

ED.

Can you recognize

this honeyeater? He

is a frequent visitor

to our gardens, part-

icularly where native

Cayley returned to England with a vast collection of ......
 from Australia. (See Vol. 5, No. 2, p. 15), 8. Polinating insect,
 9. Thus, 10. Hard-stoned fruit yielding oil, 11. Deciduous tree,
 13. Old English (init.), 15. Reptiles, 18. That is (abbrev.),
 19. Evening, 20. Pronoun, 22. South Australia, 23. Preposition, 25. Relieve from pain, 26. Part of the diet of the ring-tail
 possum, (See Vol. 5, No. 2, p. 7), 28. The whole amount,
 30. Plant which grows from a corm, 34. Incline head, 35. Titles,
 36. Preposition, 37. Indefinite article, 38. Protective colouring,
 42. Street (abbrev.), 43. Celestial body, 44. Oily substance from animals.

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Down: 1. Observe, 2. Skin of animal, 3. Exists, 4. Smaller of the two groups of flowering plants, 5. Snare, 6. Part of a garment, 7. Botanical name of paperbarks, 12. Slightly wet, 14. A bird's feathers, 17. Ocean, 21. Part of window, 24. Negative, 27. Slope, 29. Marsupial, 31. Act, 32. Thoughts, 33. Powder for sniffing, 36. Social insect, 37. Like,

39. Melbourne University (init.), 40. Legislative Assembly (init),

41. Example (abbrev.).

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( Meryl and Hartley Tobin )

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PLANT LIFE:	NO
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MEN IN NATURE:	
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Mitchell No.9, Farrer No.10.	

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