



SPOT THE INTRUDER!
see page 4.....

NATURE NOTES

ED'S PAGE —

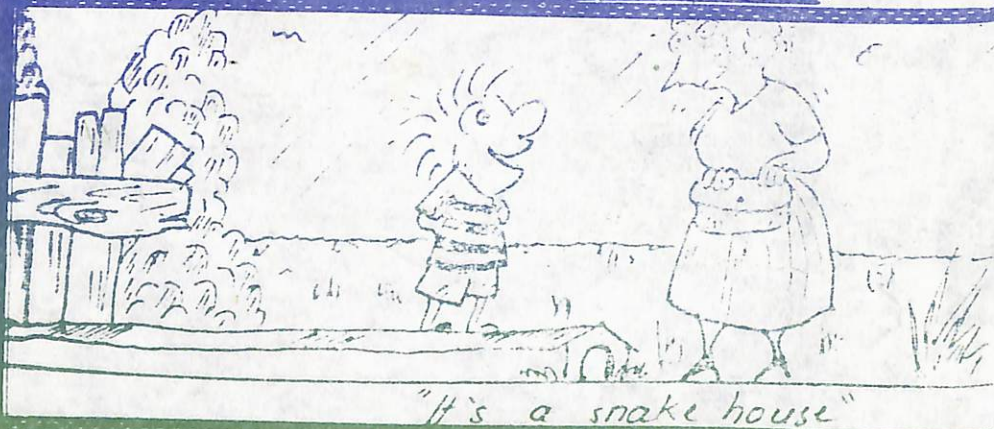
Hi there!

This month at Nature Notes we're having a look at plants and animals that need each other, or help each other to survive in some way.

There are many different relationships between plants and animals in nature, can you think of any of them? Well, if you read this month's magazine you'll find out about a few of them at least.

Happy Reading
Mandy Carmichael
Editor.

THANKS TO NEIL SONNEMAN
FOR THE CARTOON!



"It's a snake house"

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A BIG THANK YOU TO ALL
THE MUMS AT RINGWOOD
EAST P.S. FOR THEIR HELP!



What does "decay" mean?

It means to become rotten, to deteriorate, to waste away. This happens so that the rotting vegetation and leaf litter does not accumulate, but is decomposed back into the soil. This makes the soil very fertile, which aids the growth of plant life in the forest.

How does decay take place?

A large army of small creatures are always at work on leaf litter and decaying matter. The world of small creatures includes soil insects, mites, springtails, millipedes, centipedes, beetles, flies, wasps, spiders, scorpions, ants, termites, velvet worms, snails, silverfish, earwigs and cockroaches.



ants.

DECAY on the FOREST FLOOR



A PILL
MILLIPEDE.



A VELVET
WORM ... looks like a slug,
and scavenges dead insects.

*LAYERS OF THE FOREST:

Emergent
Canopy
Understorey
Floor.



What would happen if decay-ing did not occur? Huge amounts of leaf litter, made up of leaves, strips of bark, twigs and branches would gradually build up and up. This would slowly kill off any plant life on the forest floor and destroy the growth of the trees in the forest also. Can you predict what else might occur?



A Giant
Snail.

BY DIANNE DARLEY

PILFERING

A parasite is a plant that takes some or all of its food from another plant. In Australia we have several parasitic plants, nearly all of which occur in the forest and woodland areas of our continent. In the rainforests parasitic plants live high in the canopy of the forest, and are hard to see. In more open woodland, the parasites can grow on all parts of the tree they use as the 'host'. Parasites have no roots as such. They have attaching parts, which suck nutrients from the host plants though, which can often lead to the death of the host.

The mistletoe is perhaps the best known of our parasitic plants. It lives on eucalypts, and mimics the foliage of the host tree, so it will not look attractive to cattle or other animals that may eat it. It does, however attract birds, that distribute its seeds around the countryside. The birds are attracted to its bright flowers and the mistletoe's seeds are passed through the birds' droppings, to another place where they can grow.



PARASITES

The Western Australian christmas tree is another of our parasitic plants. The christmas tree looks like it is just a normal tree, until you discover that its roots link up with those of any other tree nearby for food and moisture. It has been known to link up with trees 120m away! This tree will parasitise any plant near it. It has been found with its roots wrapped around a crop of carrots for its food supply! The christmas tree often occurs in clusters. These groups of trees have been found to be all the one tree, with types of 'suckers' that stay attached to the same root system. If you poisoned one tree the whole group of trees would die.



CHRISTMAS TREE
ENCIRCLING ROOT
OF HOST PLANT.



CHRISTMAS TREE
SEED AND FLOWERS.



The sandalwood tree is another parasite, that has to be planted near other trees to survive. It also uses a root system to link into another tree's roots. (They aren't true roots though) The quandong is a parasite, whose fruit was eaten by both aborigines and early settlers. It too has a parasitic root system.



A GERMINATING
MISTLETOE SEED
STUCK TO THE
HOST BRANCH



SUCKER PADS OF
THE MISTLETOE.

WANISHING

Have you ever wondered what happens to animals' bodies when they die? There would be great piles of dead bodies around the country side if nature hadn't thought of a way to deal with the problem. Also, since the white man has been in Australia, the amount of dead wildlife has increased drastically, with road injuries and the introduction of foreign animals (such as sheep and cattle, which are often killed by floods, droughts and overstocking) Well clever nature has a way of dealing with this, by having an army of animals that depend on the dead bodies (called carrion) of other animals for survival.

The Tasmanian Devil is so good at his job, he now appears on the scene after a gunshot, as he knows that the sound of a gun is associated with carrion. Dingoes are known scavengers, which are very effective at cleaning up the environment, as are rats and mice which take care of the smaller carcasses.

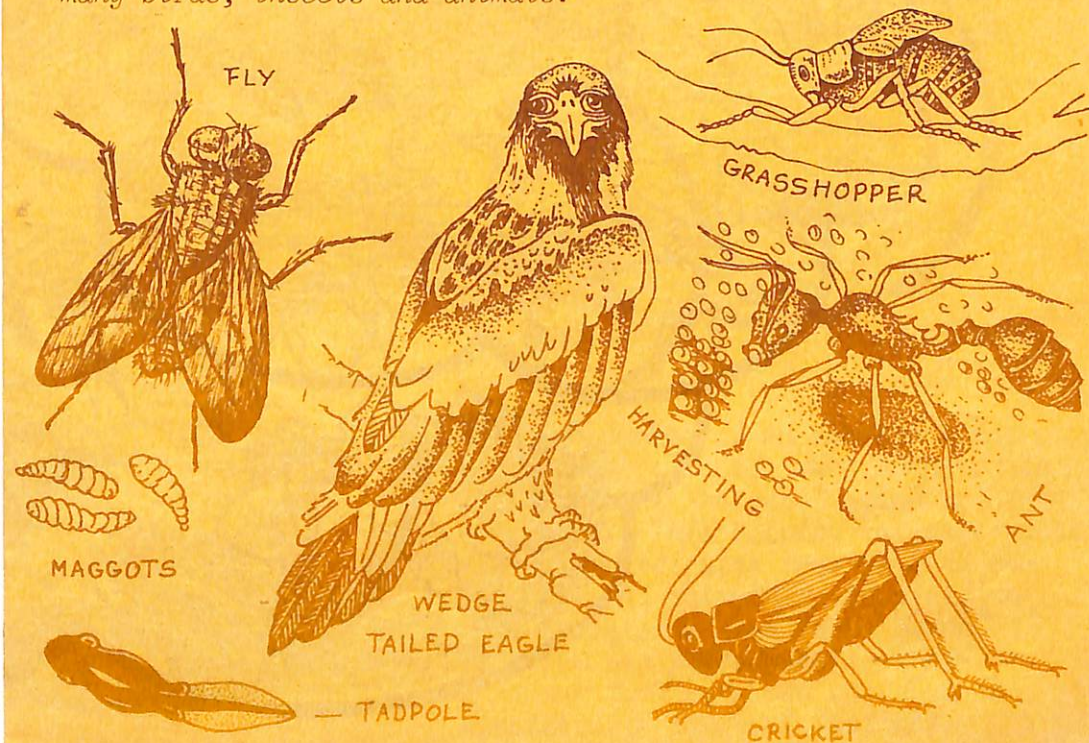


BODIES !

Insects are prime removers of carrion. There are two main types of insect 'removers'- those that eat the carrion, and those that lay eggs in it, so their young begin life with the nutrition found in the carrion. Crickets and grass hoppers have been known to eat a dead frog in a night, whilst ants, the most numerous of the carrion eaters can eat a bird in a night and a snake in a week. Flies lay their eggs in carrion, and their young (maggots) live on the carrion.

Birds are another important carrion remover. The wedge tailed eagle, along with its relatives the black kite and the whistling kite are known carrion removers. The crow, magpie and currawong are also occasional carrion eaters.

Goannas can eat smaller dead animals, as can the shingle back lizard. Tadpoles remove carrion that is left in water. All the carcasses of animals that have died are used by nature - recycled back into the web of life. This system keeps both the environment free from carcasses, and feeds many birds, insects and animals.



LENDING A HELPING HAND

There are many different species of birds in Australia that help each other out in different ways, either with looking after the baby birds, or protecting the flock from predators. Here are just a few of these feathered friends.

The woodswallows feed both the young and the sick adults in the group, all pitching in to help each other to survive.

White winged choughs and apostlebirds communally feed the young of the flock and look out for predators. These birds really believe in safety in numbers.

The cuckoo shrike has been seen with 3 adults tending a single nest with young in it. On another occasion, 2 nests a metre apart were looked after by 5 adults.

BOY, THESE CHICKS ARE A HANDFUL!

CHEEP!
CHEEP!

I DON'T LIKE THE LOOK OF THIS MRS. WALLOW!

The male yellow tailed thornbill builds a second nest before his first brood of children are ready to leave the care of their parents. When the second brood arrive, the first brood are expected to help mum and dad look after the babies, to get them food, and care for them generally.

IS IT SAFE TO PLAY OUT YET DAD?

IT'S YOUR TURN TO FEED THEM SIS!

NO IT'S NOT... IT'S YOUR TURN!

A high number of Australian birds are 'helper' species, when compared to the number of 'helpers' found in other continents. This helping out makes sure that the particular type of bird can survive. The pair that are breeding have helpers to feed their young or look out for predators, so they can continue to breed, and build up the species... a survival instinct.

ARTIST:
CAROL MEASURES

BAFFLING

How many different types of butterflies have you seen in your garden? Sometimes the same type of butterfly, or species, can look totally different, depending if it is a male or a female. In some cases the difference between male and female is so marked that it is unbelievable that they should even belong to the same species, as with the Common Brown butterfly.



MALE COMMON BROWN

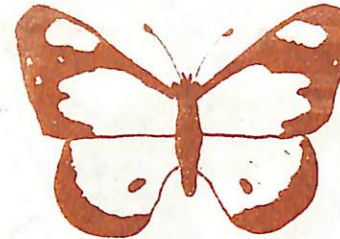


FEMALE COMMON BROWN

This butterfly is found in Victoria and you may see one in the garden, or in the Dandenongs. In spring the males are common, with females appearing later in the summer. Why are they so different? It is thought that males rely mainly on sight to find the females, so the difference in color and pattern of the wings help the male to distinguish females from other males.

BUTTERFLIES

Sometimes two different species can look very similar.



MALE LESSER WANDERER



FEMALE DANAID EGGFLY

Look closely at the above drawings and you will see that the Danaid Eggfly looks like the Lesser Wanderer. Both of these butterflies live in the same area. The Lesser Wanderer has a nasty taste to birds, and once a bird has tried one, it leaves them alone. The Danaid Eggfly, which tastes good to birds, uses the same pattern as the Lesser Wanderer. It is because of this similar appearance that the Eggfly is protected from birds, as birds generally do not eat butterflies having this pattern.

This is an example of MIMICRY where one butterfly 'mimics' another's appearance to gain protection from the animals that eat them.

Slarty Bardfast.

SUPA HERO, WONDEROO

WONDEROO

HELPS OUT
AN OLD FRIEND

TEXT: H.J. LAWRY

ARTIST: A. DUNSTAN



Good
Heavens
Basil!
what ever
is happening
here?

SOB! oh Wonderoo
I'm so sad - I used to
be a pet in that house
but now my human
friend thinks I am
eating his vegetables
and plants!

Poor Basil.
We must show
his friend
that bandicoots
are insect
eating animals
and good friends
for man.

So kind old Wonderoo
thought out a plan...
He told Basil to dig
up all the insects he
could find in one night
and put them on his
friend's doorstep...

Acknowledgement: the author is indebted to
Margot Manhood in Wild Life May 1947 - for the
plot for this story

zoom! I'm getting
out of here!

Basil dug and dug all night long and by
morning he had caught -



6 wire worms
8 looper caterpillars
20 millipedes
14 potato weevils
and 2 red spiders
- all of them
pests in the
garden!

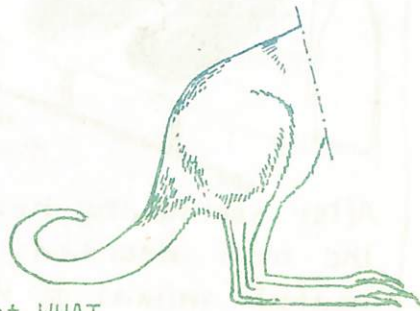
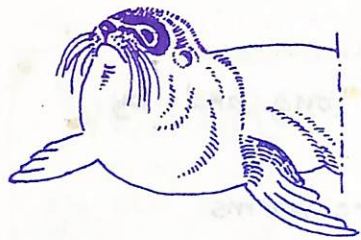
YUK!



After seeing the heap of creepy pests
the man decided Basil was a very
useful animal if he could catch all those
nuisances in just one night - so they lived
happily ever after ...

ANOTHER TRIUMPH FOR WONDEROO!!!

tops and tails



Here's triple trouble! Find out just WHAT each of these animals are, draw in their missing half, and Color them in their correct colorings. Thanks to Mrs. Prohasky for the drawings!

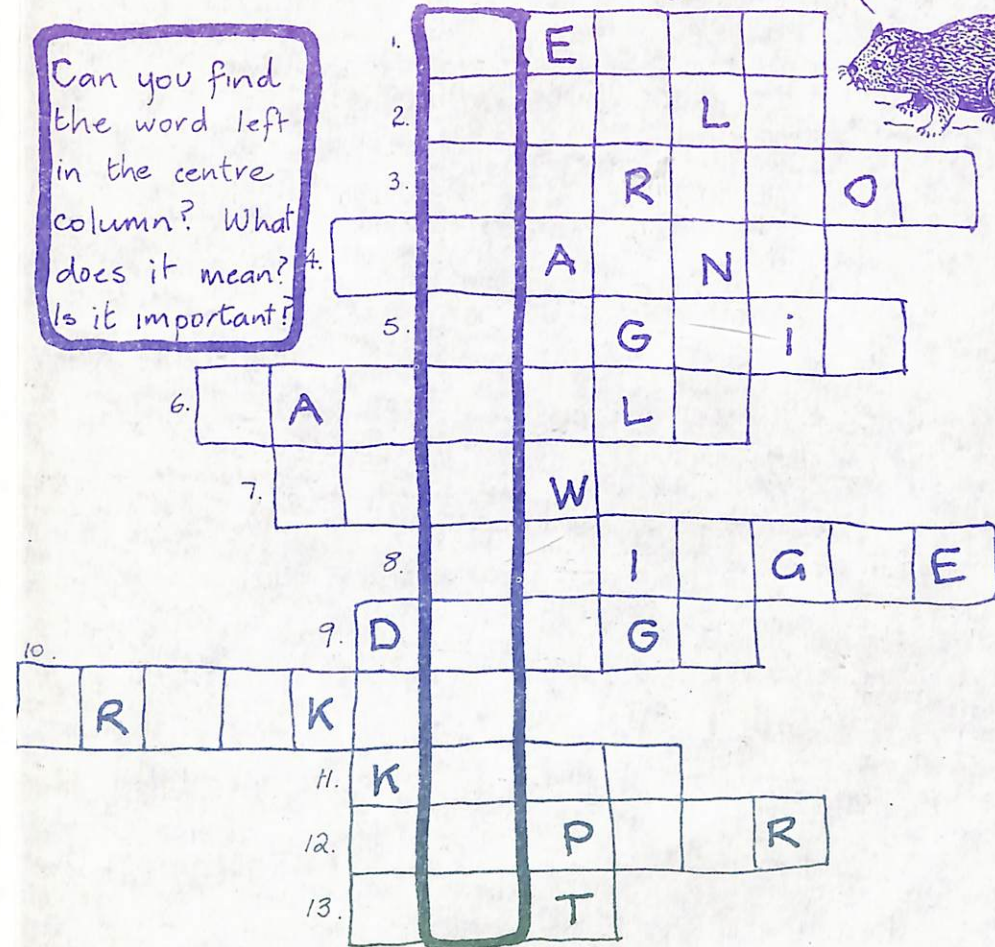
FIND-A-WORD



HERE WORD,
HERE WORD!



Can you find the word left in the centre column? What does it mean? Is it important?



CLUES: (ALL THE ANSWERS ARE FOUND IN "VANISHING BODIES")

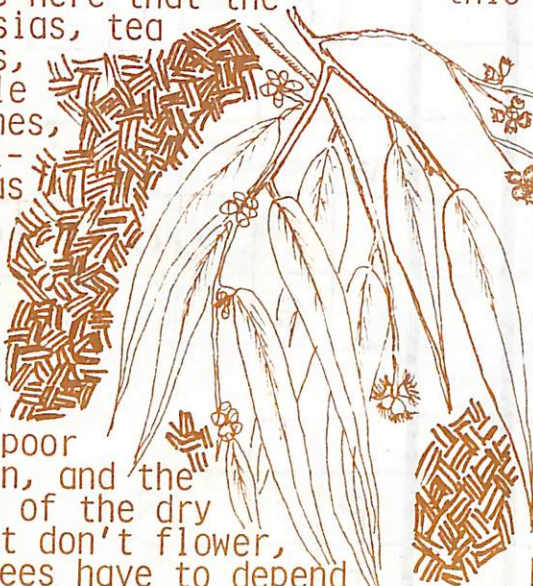
1. TASMANIAN _____
2. WEDGE TAILED _____
3. A NAME FOR DEAD ANIMAL'S BODIES.
4. EATS SMALLER DEAD ANIMALS, CHIMPS TREES.
5. OCCASIONAL CARRION EATERS, BLACK & WHITE
6. EATS CARRION FOUND IN WATER.
7. BLACK BIRD, LARGER THAN NO. 5.
8. _____ BACK LIZARD
9. FOUR LEGGED SCAVENGER
10. A GAME, AS WELL AS AN INSECT.
11. WHISTLING _____
12. GRASS _____
13. TINY CARRION EATER.

BEES AND TREES

Bees like trees very much. The red gum, yellow box, iron bark karri and stringy bark are all favourites with the bees when they're in the dry forests of Australia. The heathlands are important too, because it is here that the banksias, tea trees, bottle brushes, grevillias and wild flowers live. When there is a poor season, and the trees of the dry forest don't flower, the bees have to depend on the heathland shrubs and flowers for their all important nectar and pollen. Bees cannot live for a very long time without pollen.

The bees we get honey from are not native bees. They are called Italian bees and come from Europe. We use them because they give us far more honey than the native bees. Australia has different types of trees to the rest of the world, and this is curiously so with bees and honey.

The moisture content of the dry forest trees which the bees like is less than what they would have been used to in Europe. This has the effect of making the honey the bees produce last a very long time without fermenting or losing its aroma, like honey produced in Europe does. Australian trees can also produce nectar as fast as the bees can drink it. Clever trees!



RED GUM



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