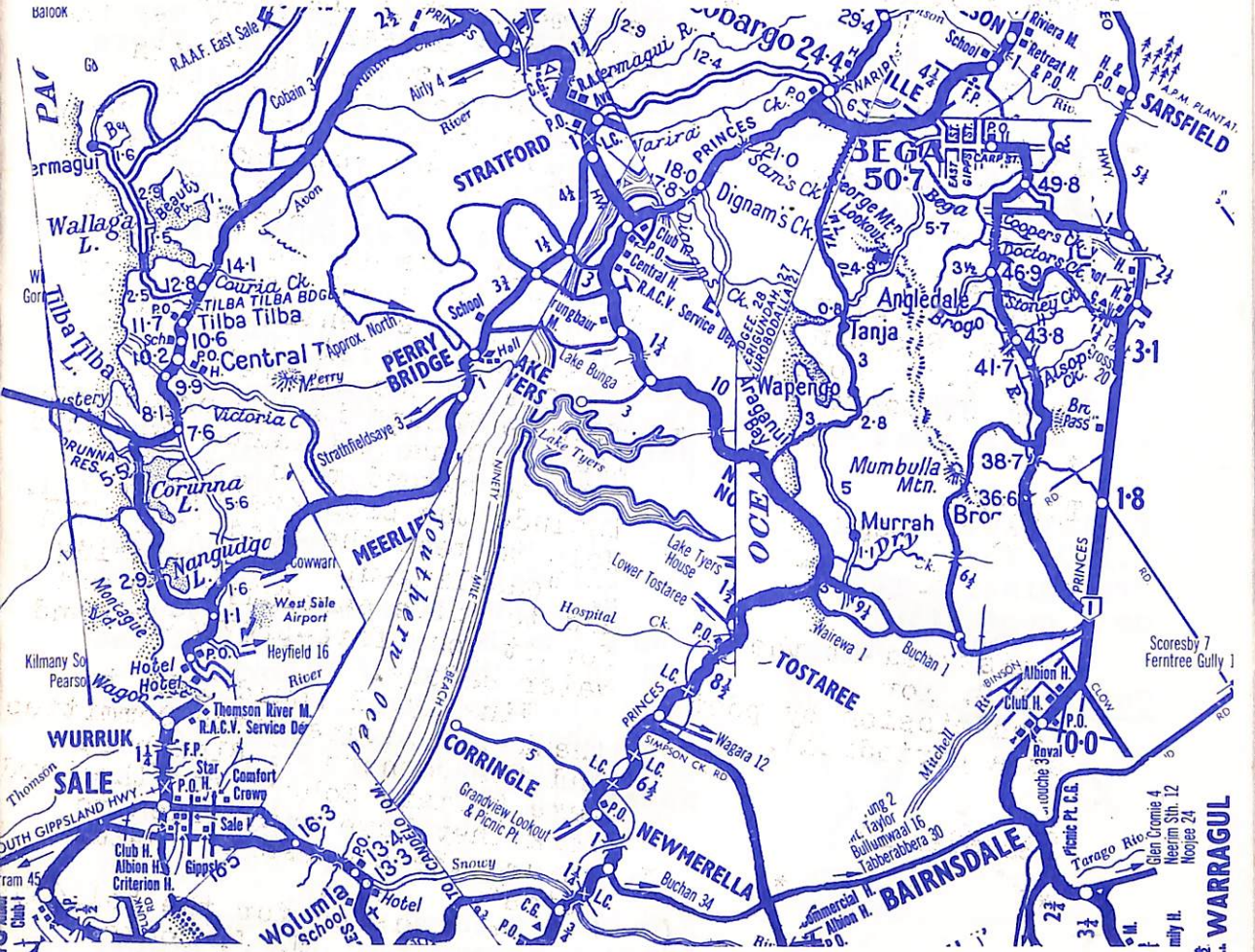
nature notes



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6 cents

Contents

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Category B.

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Editorial

Dear Girls and Boys,

This is the final issue of "Nature Notes" for 1971. The last issue for the year means that the Christmas holidays are nearly here, so the articles presented deal with areas in Victoria that you may visit during the vacation. There are articles about lakes and rivers, the sea-shore, the mountains and the plains. With a little careful observation you should be able to see most of the things mentioned for the area you are visiting.

One of the special plans of "Nature Notes" is the preservation of flora and fauna. We would like to extend this plea to include the preservation of you. Help to keep the road toll down by "buckling-up" and reminding dad to drive carefully. Do not forget your fire-prevention and water safety.

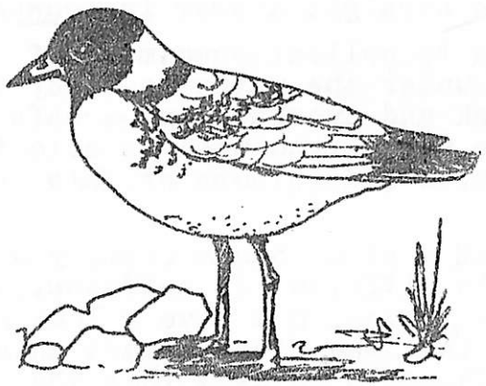
Finally, I would like to thank the Nature Notes Committee and the mothers of Blackburn Lake Primary School for the hard work they have undertaken to ensure the success of "Nature Notes" in 1971.

Best wishes for the holidays,

M. J. Coote,
Editor.

P.S. Don't forget to re-order "Nature Notes" for 1972. It will be the best magazine produced.

Seashore



Hooded Dotterel.

IT IS CERTAIN that some of your holidays will be spent beside the sea this year. When you go, you will be in one of the best places for asking interesting questions and searching to find the answers.

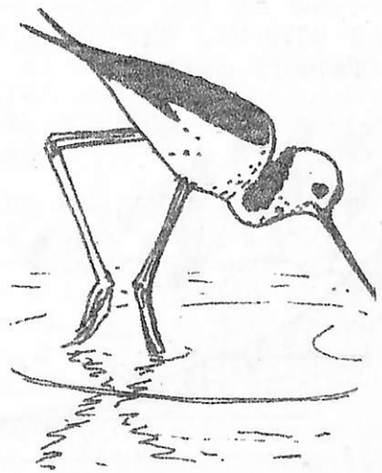
What varieties of birds can you see at the particular seashore that you visit? How many varieties can you see? Do not forget to search among the scrub to get a complete list. Can you see any varieties on the beach that you normally find further inland?

Try to count or estimate their numbers. How do the totals compare? Are there three times as many gulls as terns? Are there four times as many?

The pictures on this page show two varieties that you may find on Victorian beaches. Try to learn their shapes and colours from a good bird book; then you will be ready to recognise them quickly.

Among the varieties that you may well find this year are: Stilts, Gulls, Terns, Avocet, Sand-pipers, Snipe, Pratincole, Crakes, Dotterels.

Watch their feeding habits. Do they feed in groups, in pairs, or alone? Is there a pattern in their flight?



White-headed Stilt.

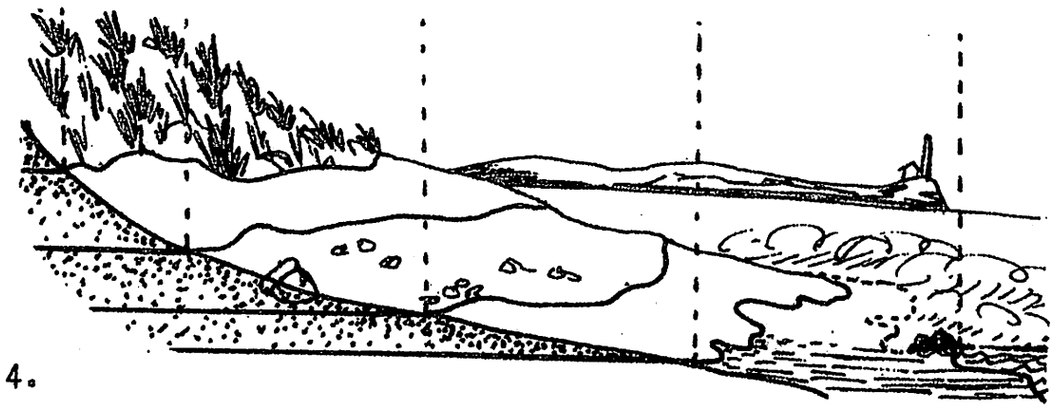
At the bottom of the page we have a picture of the seashore marked off into sections for you. This pattern will help you to think about the seashore and the life to be found there.

What is one of the most highly coloured plants in the world and has no flowers, leaves, stems or roots? No, this is not a riddle; the straight answer is seaweed.

It is not much use trying to collect specimens of this plant! It is best to go under the water to study it. For this, you need a good mask and snorkel, and a safe place to swim. Once under the water, you will be able to see clearly the fantastic shapes and colours of this marvelous plant.

You see, when you say that a plant has a stem, you mean that part of the plant is different in hardness, colour and structure from the leaves. Now have a look at a seaweed; you will soon see that the "leafy" part should really be called a frond. Although a seaweed that you find may appear to have a root, this part of the plant is called a holdfast. This is because it is not used for the absorption of food, but for anchorage.

The basic colours of seaweeds are interesting. Those that grow near the surface of the water are greens, those found lower down are generally browns, and those that are found lower still are generally red . Those near the surface of the water have the same general colour as land plants. Why should those found lower down have a different colour?



When you have finished your study of the seaweed, stop at the water's edge on your way out of the water. If it is a sandy beach, the there are certainly no plants growing at your feet.

Look up as far as you can across the beach. What is the largest plant you can see? How close to the water does it grow? What other plants grow around it?

Which plant of any size grows closest to the water's edge? Is there a pattern in the way that the plants grow? How does this pattern fit into our picture on page 4?

Hairy Spinifex.

If there is a rocky cliff face nearby, see if there are any plants growing upon it. If there are, try to work out how they are able to remain there. Will they spread very far along the cliff face? How will they be able to do this?

Coast Tea-tree.

Probably the tree that you find the most interesting will be the Coast Banksia. The trunk is often gnarled and twisted into fantastic shapes. The grey bark looks like elephant skin.

The Hairy Spinifex is a very good binder for the loose sand; this grass is interesting because the male and female parts are on separate plants. See if you can sort them out.

Other plants to look out for on our coast: Groundsel, Wattle, Correa, Saltbush.

Perhaps this will be the year that you decide to begin your collection of sea shells. The best part of shell collecting is the sorting out that comes afterwards. You can very quickly sort them out into the three basic designs: one-piece shells (univalves)
two-piece shells (bivalves)
eight-piece shells (chitons).
You will need to be careful about the bivalves, for you often may only find one half of the shell.

But the real fun starts when you begin sorting out the shells within these large groups. As you work at it, you will see the incredible variety; and you may find it surprisingly hard to find two shells of the same basic shape-design and colour pattern in the one group.

When you have them sorted, you will need a good book for naming them. Of course, you should try to improve your collection by finding undamaged shells. When you do find your perfect specimen, you will be pleased by exploring its ridges, markings and patterns of colour.

Periwinkle.

Limpet.

Whelk.

I have not had time to talk to you about all that is interesting on the Victorian seashore. There is so much there to be explored and thought about. There are the patterns of headlands, rocks and sandy beaches; the patterns of sandpiles and dunes; the patterns of day-by-day seabreezes; the patterns of waves and currents.

All of these things may be explored by you at any time. All you need to do is ask the right kind of question, the kind of question that can be answered by going and looking.

I hope you enjoy doing it.

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Lakes·Streams

Are you going camping at your favorite lake or river this summer? If so, try to have a close look at some of the creatures that make a home there.

The Surrounding Dry Land.

Collect a soil sample. Note the types of trees and bushes. Listen for any birds. Can you see them? Which insects annoy you? Which ones leave you alone?

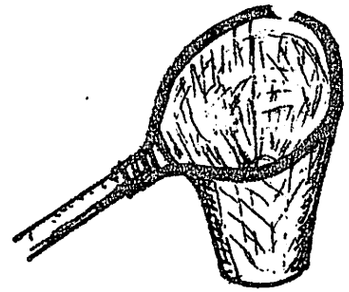
The Edge of the Water.

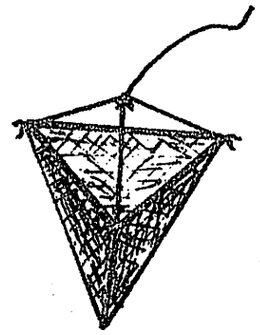
First, tell your parents where you are going and gain their permission!

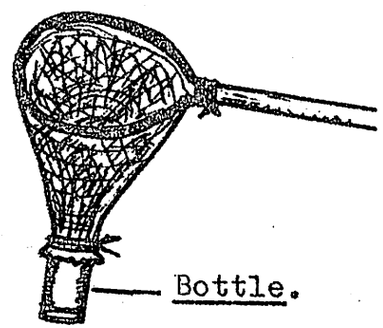
Is the edge of the bank steep? Has the level of the water risen or fallen lately? Does the bank provide shelter for any creatures?

Entering the Water.

At first just listen and watch for any sounds of life. Then use one of your nets for collecting material.







Bottle.

Sweep Net.

This is used for collecting specimens of animals you can see.

Drag Net.

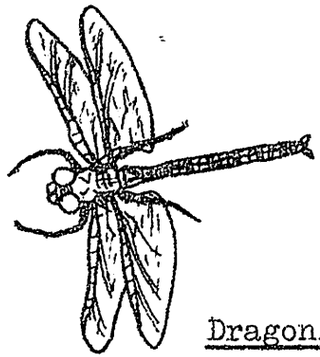
This is used for collecting specimens of animals you can only find on the bottom of the pond.

Plankton Net.

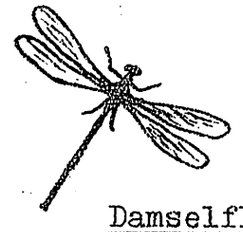
This is used for collecting tiny pond life.

The Air Above the Water.

Look out for some of the following insects! Use your net to collect specimens.



Dragonfly.



Damselfly.

Mayfly.

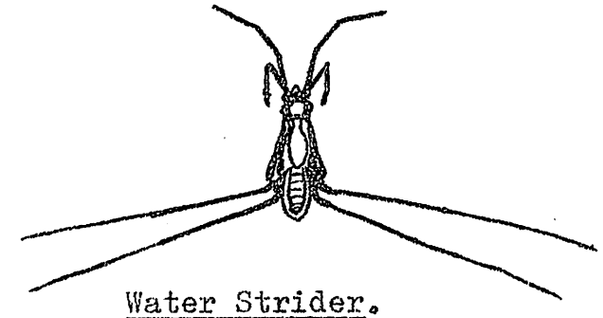
Caddisfly.

Mosquito.

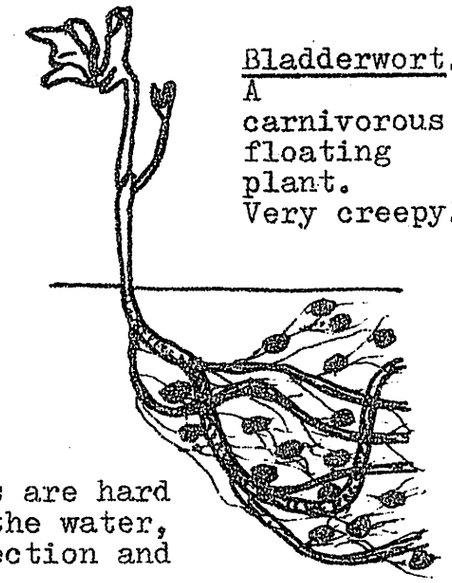
Dragonflies are among the finest looking insects to be found around fresh waters. They are harmless, and do not sting. You may be lucky enough to find a fully grown larva climbing up a plant out of the water. After a while, the skin along its back will split and a fully-grown dragonfly will slowly crawl out. You will sometimes find the empty skin case of the larva attached to the stalk of a plant. It is not much use trying to keep larvae in your aquarium unless you have a lot of other larvae for it to feed on. For these little animals are quite fierce with one another; their diet consists of other larvae.

The caddisfly larva is very interesting as it protects itself with a case of small stones or twigs. When it moves it is like a stick coming to life.

Caddisfly larva.



Water Strider.



Bladderwort. A carnivorous floating plant. Very creepy!

On the Surface.

Two insects to look for are the Water Measurers and the Water Skaters. The skaters are hard to catch as they skim across the water, leap into the air, change direction and skim off again! Good luck!

Among the floating water plants is the Bladderwort. This plant traps tiny animals for food. Have a look at the bladders and see if you can discover how the trap works.

Many water birds are interesting to watch. Below you will find a list of some which you may see patiently standing or resting by the water. Beside this list there is a list of sources of food which any of these birds may use. Try to find out which bird makes use of which food.

1. Whitefaced Heron	frogs fish
2. Eastern Swamphen	aquatic insects
3. Black Swan	yabbies
4. Little Grebe	freshwater molluscs
5. Large Black Cormorant	grass water plants

This will be a good exercise for you, to prepare for having a go at compiling a food chain like the one you will find over the page.

All living things must eat. Here is a food chain. Study it and see if you can make up two of your own.

Cormorant.

Man.

Heron.

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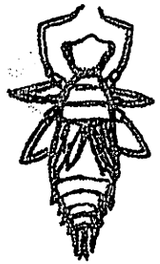

Dragonfly Nymph.

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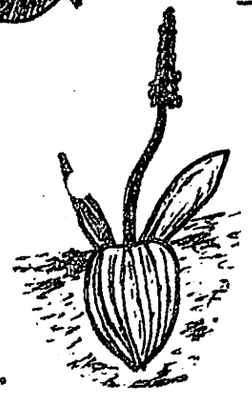
Tadpole.



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Water Plant.
This makes its own food.

Mountains

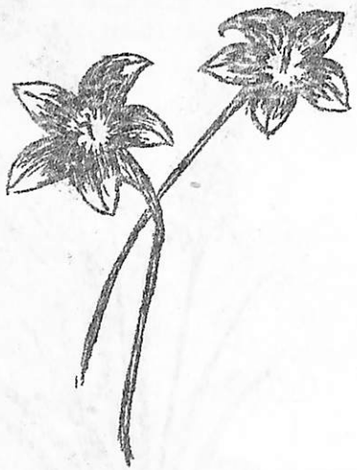
The mountains are interesting to visit during the summer - there is so much to see and do. As you climb into the mountains you should be able to identify a number of trees. Can you identify the tall Mountain Ash? Is the Mountain Ash taller than the Alpine Ash? Where do the tallest trees grow? Do you find the tallest trees on top of the mountains? In the very high mountains you will find the twisted and bent Alpine Snow Gum. Why is it so twisted? Are all Snow Gums bent and twisted?

Grass Trigger Plant.

Through the late spring and summer many of the alpine plants come into flower. Why are these plants so late in flowering? Watch insects landing on the pink flowers of the Grass Trigger Plant. Can you see why it has the name "trigger plant"? The crimson berry-like fruit on the white-flowered Carpet Heath makes a bright show in some areas. If you look carefully you may find the Mauve Leek-orchid. This is one of the few orchids to inhabit the tall mountains.

Silver/Snow Daisy.

Other flowers you should be able to see are Glacial Eyebrights; Royal Bluebells; Silver or Snow Daisies; Dwarf and Strawberry Buttercup; Alpine Boronia & Candle Heath.



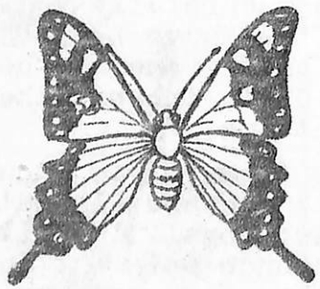
Royal Bluebell.

Of the Australian mammals you may be able to find the Dusky Marsupial Mouse; the Spiny Anteater; the Wombat and perhaps the Grey Kangaroo. If you are really lucky you may see the rare Eastern Native Cat.

Damselflies - which are similar to dragonflies - can be found in many places.

The shrill trilling you may hear on hot days probably comes from the noisy Mountain Cicada. This small brown insect has clear wings with brown blotches.
Difficult to find is the very large wingless cockroach.

Eyebright.



Careful observation near bogs should result in you seeing this large green insect.
Bush Flies and March Flies can make themselves pests in this area. Crane Flies, with their long legs and "snout" can be found near water.
You should be able to find the white spotted Mountain Grasshopper. A spectacular insect is the beautiful Alpine Swallowtail Butterfly.

 Swallowtail Butterfly.

Mountain Grasshopper.

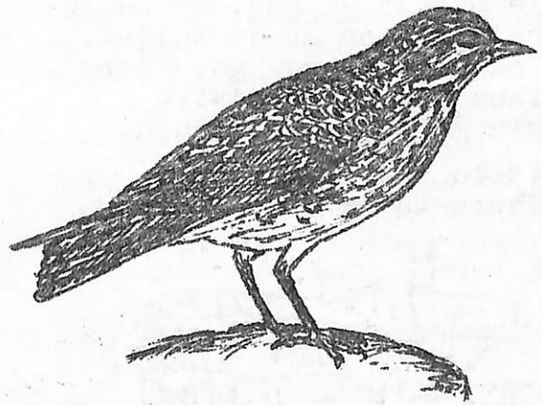
A number of frogs inhabit this area - Alpine Tree Frogs; Green and Gold Bull Frogs; Spotted Grass Frogs and the brilliant black and yellow striped Corroboree Frogs.

Blue Tongued, Jacky and Dragon lizards can be found, as can Water and Grass Skinks. Copperhead, Diamond and Tiger Snakes are fairly common.

The birds are well represented in the mountains. See if you can spot Wedge-tailed Eagles, Peregrine Falcons, Sparrow Hawks, Nankeen Kestrels, Yellow-tailed Thornbills, Australian Ravens, Red-tipped Pardalote, Skylarks, Pipits, Flame Robins and on the water you should find Black Duck.

If you see a specimen you cannot identify, write down its characteristics - colours, size, where found, call, etc. - and take the description home with you. Your local library will contain books that will help you identify your "mystery creature".

Peregrine Falcon.



Southern Pipit.

Plains

If you are near Swan Hill during your holidays, there is a very interesting area to visit. This is Wilga Park, which is 44 miles north of Swan Hill.

In this park you will see many rare and beautiful trees and shrubs from the Mallee and Inland Australia. Also in this area are Victoria's only Wilgas. It would be a good idea to find out what you can about Mulgas, Myalls, Emu Bush and Rattle Pods before you go. There is 250 acres of natural bushland for you to drive through and 8 acres of rare plants to walk through.

While at Swan Hill a visit to the Folk Museum would take up several days. There is so much to see there, right from the time that you first walk onto the paddle steamer.

If you stay for the night session you are transported round the museum while the

Paddle steamer.

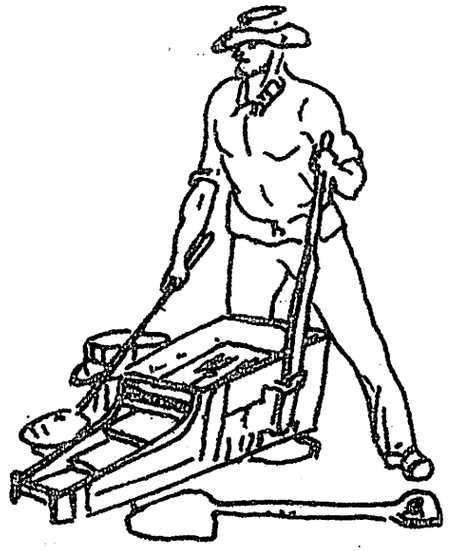
 traditional sounds are made audible at your approach: the blacksmith, the hostelry, etc.

There are various other folk museums to visit. The Goldfields Town at Sovereign Hill Ballarat helps make your history live. It is to be hoped that they follow Swan Hill's fine example and include Australian plants (trees and shrubs) to set off their historic buildings and scenes.

Before you go to Ballarat, take some time to check out what things were like 100 years ago.

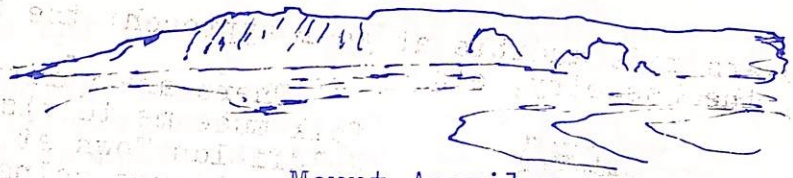
What do the drawings on this page show? Which one of them shows your dad at work?

The cradles that the gold-diggers used were designed to wash the soil and separate the tiny particles of gold from the sand, gravel and clay. You may care to make a model of one of these machines and work it.



It is becoming popular to try your own hand at panning for gold these days. You might like to go to one of the creeks in this area with dad. You will probably not make your fortune, for many people have been doing it in this area before you, but if you are lucky, you may pick up just a few tiny specks.

Out west of Horsham there is a unique feature. There you will find large



Mount Arapiles.

outcrop of rock known as Mount Arapiles. It was discovered by Major Mitchell when he came through "Australia Felix" in 1836. Today it is a popular rock-climbing area and is also visited by naturalists who enjoy searching for the wildflowers and native animals.

For Further Reading: use these books in your school library.

"Three Expeditions into Central Australia" Mitchell.
"Pastoral Plants of the Riverina Plains" Leigh and Mulham.
"The Face of Australia" Charles Laseron.

South of Horsham is Rocklands Reservoir. This is a rather unusual reservoir because the surroundings and picnic area have been beautified with Australian plants and as a result you can enjoy seeing many Australian birds feeding and nesting here. It is well worth a visit.

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DO NOT FORGET!

NATURE NOTES ORDERS FOR 1972 TO

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