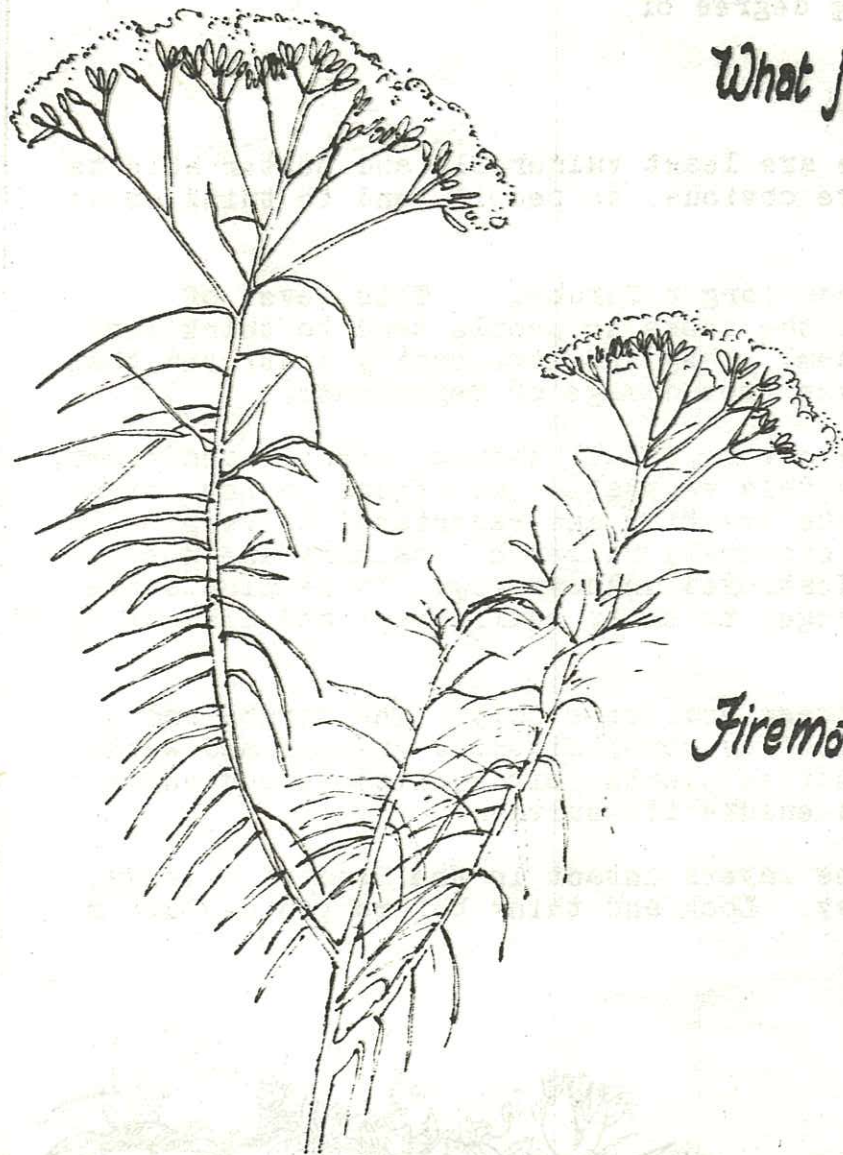


Bend of Islands Conservation Association Newsletter

No 3 January 1980

What Native's Flowering?



Botanical Name: Cassinia aculeata
Common Name: Common Cassinia, Dogwood
Family: compositae

A tall, rounded, aromatic shrub or small tree 1-4m high. Crowned by numerous flat heads of creamy small flowers or seeds. Flowerheads sometimes pink or brownish. The flower clusters 3 cm. or more across. Flowers in the summer and spring. Leaves are short curry-scented usually less than 3 cm. long and minutely rough above. Widespread in mountains, forests and woodlands of Victoria.

Fireman's Ball

Another dance to bolster depleted funds for our local brigade. They need the money badly!

SATURDAY 1st MARCH at CHRISTMAS HILLS HALL.
JIGS AND REELS AND LOVELY SUPPER PREPARED
BY LADIES AUXILLIARY.

\$8.00 HEAD. DRINKS AVAILABLE.

TICKETS: Contact Cric Henry 7120 547
Felicity Faris 7120 422

² How to Lose a Forest in 3 Steps

At the last General Meeting, our Guest Speaker pointed out that the bush (very generally) has three layers, or levels. Each layer is necessary to retain a balanced eco system and each layer has a differing degree of vulnerability to destruction.

Very roughly the layers look like this ...

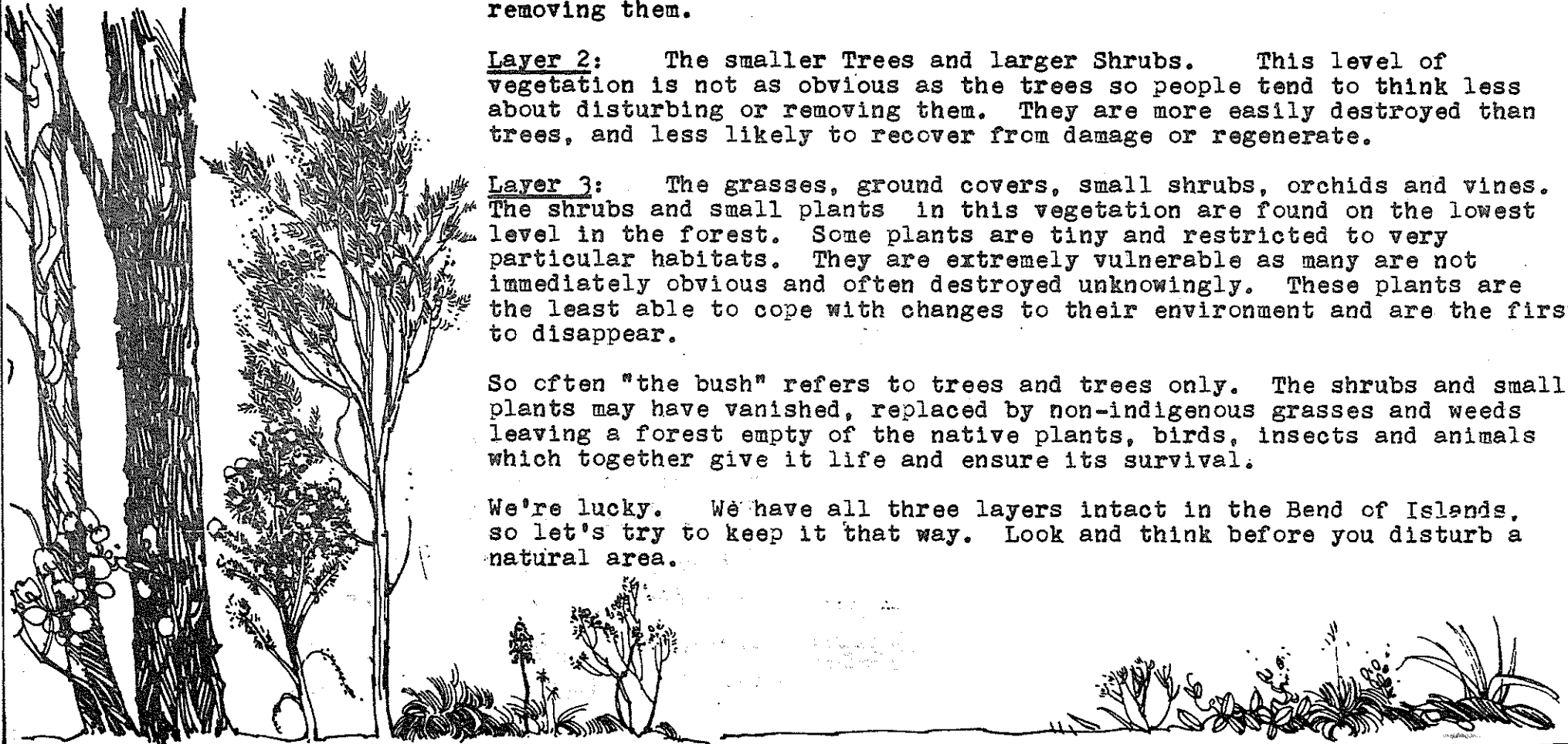
Layer 1: The Trees. These are least vulnerable and better able to withstand interference. They're obvious, so people tend to think about removing them.

Layer 2: The smaller Trees and larger Shrubs. This level of vegetation is not as obvious as the trees so people tend to think less about disturbing or removing them. They are more easily destroyed than trees, and less likely to recover from damage or regenerate.

Layer 3: The grasses, ground covers, small shrubs, orchids and vines. The shrubs and small plants in this vegetation are found on the lowest level in the forest. Some plants are tiny and restricted to very particular habitats. They are extremely vulnerable as many are not immediately obvious and often destroyed unknowingly. These plants are the least able to cope with changes to their environment and are the first to disappear.

So often "the bush" refers to trees and trees only. The shrubs and small plants may have vanished, replaced by non-indigenous grasses and weeds leaving a forest empty of the native plants, birds, insects and animals which together give it life and ensure its survival.

We're lucky. We have all three layers intact in the Bend of Islands, so let's try to keep it that way. Look and think before you disturb a natural area.



Notice of Annual General Meeting of Bend of Islands Conservation Assoc.

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The Annual General Meeting of the Association will be held on Sunday 23rd March, at 2 p.m., at the home of Raya Ealey, Skyline Road. Please try to come and bring a plate, mug and seat.

Agenda

Apologies

Minutes of last A.G.M and business arising

Secretary/Treasurer's Report

Election of Office Bearers & Committee

Subscriptions

General Business:

- (a) Report on Committee activities
- (b) Guest Speaker on "Economics of Conservation"
- (c) Film - we are trying to obtain Schumacher's film "On the Edge of the Forest" (author of "small is Beautiful").

NOMINATIONS:

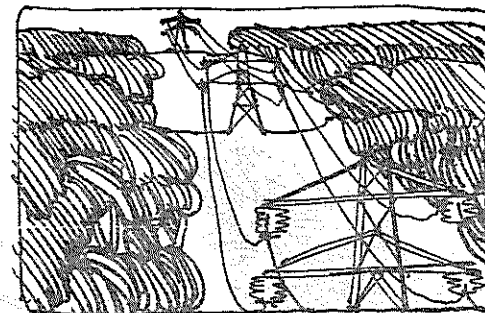
The Offices of President, Vice President and Committee are to be filled. It would be preferred if anyone wishing to stand, could have nominations to the Secretary (Felicity Faris, 7120 422) by 16th March.

Our Committee at Work.

The workload of the Committee has been large over the past year, with many meetings and particularly a great deal of time spent on the Bissett-Johnson Sub-division and the MMBW Land Sales issues. The following are brief resumés of the issues.



SEC/TELECOM: Both these bodies have plans to bring services into the area. On site meetings and walks over proposed routes have been arranged through the year to plan routes which can minimize environmental damage. It has been a source of concern that these bodies carry out works as agreed at these meetings and make a conscious effort to ensure that their contractors understand and work in a manner which will lessen the degree of damage. All clearing works proposed along the Henley Road extension and along Catani Boulevard and Ironbark Rd., and Gongflers Drive will be observed by committee members as they progress. The major concern with Telecom is the use of "moleploughs" for clearing in this area.



COMMUNITY TRANSPORT: Preliminary investigations into the needs of residents for bus services for school, kindergarten, commuters and shoppers, will be commenced in this year. Anyone interested in the provision of such a service should contact the Committee and explain their needs.

BISSETT-JOHNSON SUB-DIVISION: (Opposite Bend of Islands). Constant liaison with appropriate Govt. departments and local authorities to keep abreast of the situation and where necessary written contact with Ministers and Press to attempt to ensure that this sub-division will not destroy this unique stretch of Yarra River.

MT. LOFTY (Wonga Park). This area is owned by MMBW and is all river-side land. A campaign is now being commenced to ensure that this area is treated in an environmentally sound manner. The area is already sub-divided into allotments and there is some suggestion that it become a National Park. It is vital for the Yarra that sub-division or development not be permitted from the escarpment to the water's edge, to allow regeneration of the riparian association.

MMBW LAND SALES: Submissions and objections have been prepared and lodged in relation to the Board's sales of small and unsuitable allotments within the zone. Liaison has been maintained with agents for the land to ensure that advertizing is done with ELZ zoning included. Auctions of the first 9 allotments will take place on February 23rd at the Eltham Community Centre. Anyone interested in purchasing land (all river frontages) ought to contact the committee for further information. Sizes vary and prices are unknown. The going rate over the last 2 years for 5 acres is between \$19,000 and \$45,000.

RATES: New rates have recently been levied on property in the area. We understand that rises (in some cases of over 50%) are likely. If when you receive your new rate, you are unhappy about it, please contact Rod Shield on 7120 396 for information on how you can go about appealing against it. There is a limited time in which to do so, so be quick.

GARBAGE: A proposal for garbage trucks to visit the area was voted against overwhelmingly at our last General Meeting (90 present). Since that time the Shire has agreed that if residents can satisfy them that they dispose of garbage without causing hazard to health, neighbours and legally, then exemption will be granted. Exemption forms must be completed by each household and forwarded to the Shire Office by 18th February. Forms are obtainable from Secretary (7120 422).

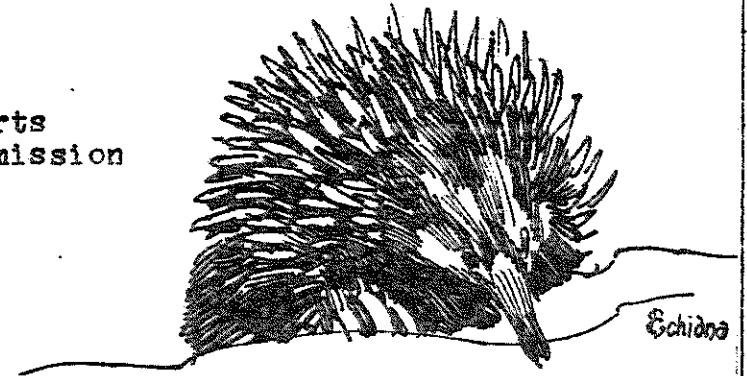
WOOD STEALING: It has come to committee's attention that throughout winter, many trailer loads of wood are being taken out of the area. In some cases apparently from private blocks as well as roadsides. It is not legal for persons to remove any vegetation whatsoever in the zone without a permit. We suggest that you inform people you see doing it of this and as a precaution take a note of their registration number.

FENCING: A recommendation has gone to council asking that fencing of entire boundaries be made a "use subject to consent". The reason for this? As more and more homes are built there will be less and less territory available to wild life. If properties are fenced in such a way as to prevent them moving easily to feed, water and breed then our wombats, wallabies and kangaroos will not survive. This would not include the fencing of small areas such as gardens etc., and would apply to certain types of fencing only, i.e. types which do not allow the passage of native animals.

Thanks

We'd like to thank the following people for their interest and efforts in providing material over the holiday break for us to use in a Submission relating to MMBW land sales.

- Mr. Jim Kilpatrick of the Soil Conservation Authority.
- Mr. Jim Mattiske - Birds
- Tim Ealey - Fauna
- Andrew McMahon - Botanical report
- Dr. Robert Van de Graaf - Effluent Disposal.



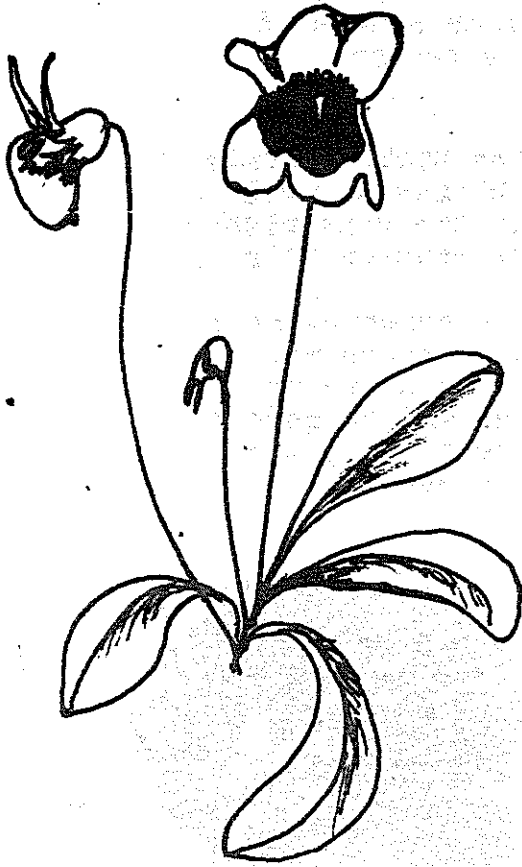
Mud House for Rent

Bend of Islands. 3 Bedrooms, Large Living Areas. 7101424

Home for Sale

Mud brick, slate roof, lead light windows etc., on the "Round the Bend Co-operative". Owner must sell due to ill health. Price excellent for buyer genuinely concerned with conservation and co-operative ideals. Contact Co-op members on 7120 435.

Wildflower Walk



Gould League Publications.

There are a number of Gould League books and charts ideal for kids .. if you'd like to know about them Contact J. Mattiske on 877 2880.

At our last General Meeting (16th September) we held a walk through the bush to identify the plants in flower at the time.

Our bush is classified by the Victorian National Parks Association, as open forest, that is, trees 10-30 metres high, creating a 30-70% protective foliage cover. A tree is defined as a woody plant greater than 5 metres tall usually with a single stem. The dominant canopy trees in our open forest are Red Box (*Eucalyptus polyanthemos*), and Red Stringybark (*E. macrorchynca*) with Red Ironbark (*E. sideroxylon*) in association.

The understorey plants in flower at the time of the walk can be divided into 4 main categories:-

1. Tall Shrubs i.e. a woody plant less than 8 metres tall, frequently with many stems at or near the base.

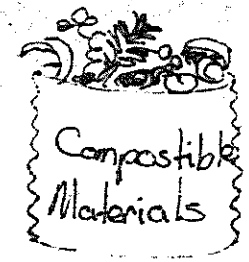
<u>Proper Name</u>	<u>Common Name</u>	<u>Sometimes called</u>
Acacia armata	Hedge Wattle	
Acacia acinacea	Gold Dust Wattle	
Acacia genistifolia	Spreading Wattle	
Daviesia wyattiana	Long leaf bitter pea	Egg and Bacon

2. Low Shrubs i.e. a woody plant as above but less than 2 metres tall (includes ground cover and prostrate cover)

<u>Proper Name</u>	<u>Common Name</u>	<u>Sometimes called</u>
Pultenaea gunni	Golden bush pea	Egg and Bacon
Dillwynia retorta	Twisted parrot pea	" "
Styphelia ericoides	Pink beard heath	
Correa reflexa (Green form)	Common correa	
Pimelia linifolia	Slender Rice flower	

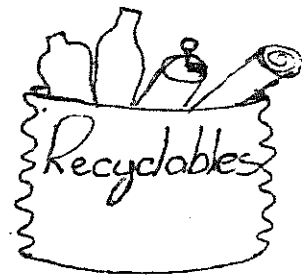
3. Herbs i.e. a plant with no woody parts and less than 2 metres high and includes ground covers and prostrate covers.

<u>Proper Name</u>	<u>Common Name</u>	<u>Sometimes called</u>
Poa australis	Grass tussock	summer grass
Diuris maculata	Leopard orchid	Tiger orchid
Caladenia carnea (White form)	Fairy orchid	
Pterostylis obtusa	Pink faries	
Perostylis nutans	Blunt tongued Greenhood	
Glossodia major	Nodding Greenhood	
Tetratheca ciliata	Wax lip orchid	Black eyed Susan
Acaena anserinifolia	Pink Bells	
Drosera auriculata	Bidgee widgee	Tall Sundew/flycatcher
Anguillaria dioica	Errienellum	Lily
Viola hederacea	Early Nancy	Native violets
	Ivy leaf violet	



4. Creepers/Climbers i.e. plants which creep along the ground or climb on other plants for support.

<u>Proper Name</u>	<u>Common Name</u>	<u>Sometimes Called</u>
Kennedia prostrata	Running Postman	Sarsaparilla
Hardenbergia violacea	Purple Coral Pea	Milkworts
Comesperma volubile	Love Creeper	



3 Bin System for Rubbish Disposal

This is a system whereby all rubbish generated in your household is put into three separate bins to avoid having to sort at a later stage.

- BIN 1: Organic and compostible materials for use in gardens.
 - BIN 2: Re-cyclable materials such as glass, paper, some metals if useable around your home and anything which you can either use yourself or take to a re-cycling centre.
 - BIN 3: Materials which have to be taken to the tip.
- It may be that you require more than 3 bins if you separate rubbish into further categories.

8



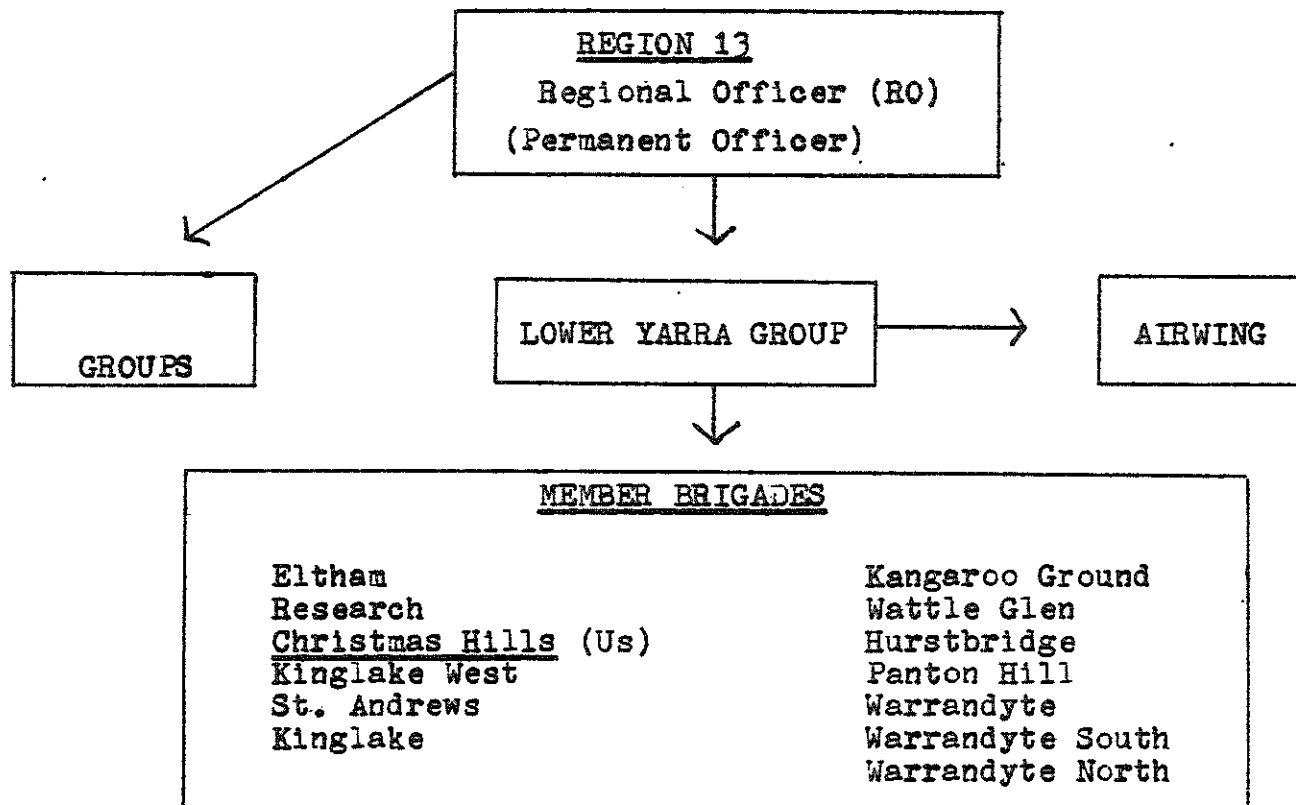
Fires in the Bend of Islands Vicinity

<u>YEAR</u>	<u>MONTH</u>	<u>TYPE</u>	<u>DIRECTION AND EXTENT</u>	<u>CAUSE</u>	<u>SUPPRESSED BY</u>
1973	Dec.	Bush	Originated at junction Catani & Henley Rd. Travelled North east up slope towards Schwindt House. Area burned 1.5 to 2 hectares.	Unclear	K.G. Brigade & locals.
1974	Jan.	Bush	Originated Catani Blvd on south side & travelled east into gully adjoining Fretwell House & then north up the gully back to Catani. 3 to 4 hectares burned.	Dead tree fallen on SEC wires	Xmas Hills & K.G. Brigades.
1975	Dec.	Hay Shed	Clive Hills Property on Yarra Flats. Area burned .5 hectares.	suspected arson.	C. Hills & Coldstream Brigades.
1976	Feb.	Bush & Grass	Originated east side of Oxley Rd., in Kunzea & travelled east across Ogden property to cliffs facing river, then north across paddocks into light scrub, stopped there by firefighters.	SEC lines touching during violent southerly change, molten metal ignited litter beneath wires.	Xmas Hills & K.G. Brigades.
1978	May	House Fire	L. Riddoch House, Catani Blvd on river. Total Loss.	unknown	No attendance.
1979	Apr.	Bush & Grass	North side of aqueduct north of Henley Rd. ½ mile west of Caldwell's Road. Fanned by strong southerly wind. Area burned 7-10 Hectares.	MMBW Burning Off	K.G. Brigade.
1979	Feb.	Bush	South of Skyline Rd., opposite Bayly House. Spot fire quickly suppressed.	Suspected Arson	Xmas Hills Brigade.

In addition to the above which were very local, in the same period our Brigade attended a similar number of fires within their own area of responsibility, many more serious than the above-mentioned.

Who Fights Fire in our Region

The following diagram shows the structure of the fire-fighting forces in our region.



We are part of Region 13. Our Brigade Captain can request other brigades to join him in fighting a fire in his region. (That is, his allocated portion of Region 13). He may also request that the larger LOWER YARRA GROUP Headquarters (HQ) co-ordinate and take command of a fire situation since they may have a more direct control of communications through N.I., the Group's HQ base radio.

The Lower Yarra Group also operates an Airwing. Its aircraft operates out of Lilydale and is specially designed and fitted for fire spotting but is used currently in fire situations only.

Apart from Statewide Total Fire Ban declarations, there is a local fire rating system which allows local conditions to be independently and more flexibly assessed. Staffing of the Lower Yarra Group.

headquarters is based on this rating. (Volunteer staff). There are Captains' meetings preceding the fire season to review group procedures and policy especially on tactics for the coming season and again after the season to review any deficiencies disclosed. This is done to maximize co-ordination and efficiency in situations where brigades work together.

The Structure of the various levels explained is as follows:-

Regional Headquarters - Regional Officer and assistants are paid, permanent CFA employees.

Group Headquarters - Voluntary, registered firepersons.

STAFF:

- Group Officer
- 4 Deputy Group Officers
- Communications Officer
- Secretary
- Treasurer
- 4 Staff members
- Fire Spotter

AIRWING:

Pilot and Observer are responsible to the Group Officer.

Christmas Hills Brigade - Voluntary, registered firepersons.

Captain

- Communications Officer
- Asst. " "
- Apparatus Officer
- Secretary

Jeffrey Neale

- Peter Gurney
- Hilary Jackman
- Roger Nink
- Peter Faris

Officers:

- 1st Lieutenant
- 2nd
- 3rd
- 4th

- David Herd
- Fred Kober
- John McCallum
- David Vincent

Resident Responsibilities

1. Stay off the phone to fire officers and their homes! The lines may be needed for urgent calls. Stay off the roads too, the Brigades may need them open and clear in a fire situation.
2. Support the Fire Brigade, if possible by joining it, or else by contributing to fund-raising activities and giving donations.
3. Participate in Fire Brigade work parties if requested.



4. By joining the Brigade you are then required to attend training sessions which offer knowledge and experience you may need when there is a fire. The more you know about fire and fire fighting techniques the more likely it is that fires can be dealt with efficiently and with less danger to life.

5. Maybe you could join the Womens Auxilliary, the fund-raising, support arm of the Brigade. The Brigade needs constant funds for new and replacement equipment necessary, and to maintain adequate fire fighting facilities. The Auxilliary welcomes any suggestions and particularly any volunteers for fund-raising.

6. To carry out fire prevention work around your home, all year round. To have adequate supplies of water for use when necessary. To generally ensure that all the suggestions for fire prevention and safety are carried out on your property. (Refer Page 11-12).

7. To ensure that your property and your actions will not create a fire hazard for your neighbours and the community.

8. Ensure that you have fire fighting equipment such as knapsacks, fire pumps, hoses and a fire extinguisher for house fire.

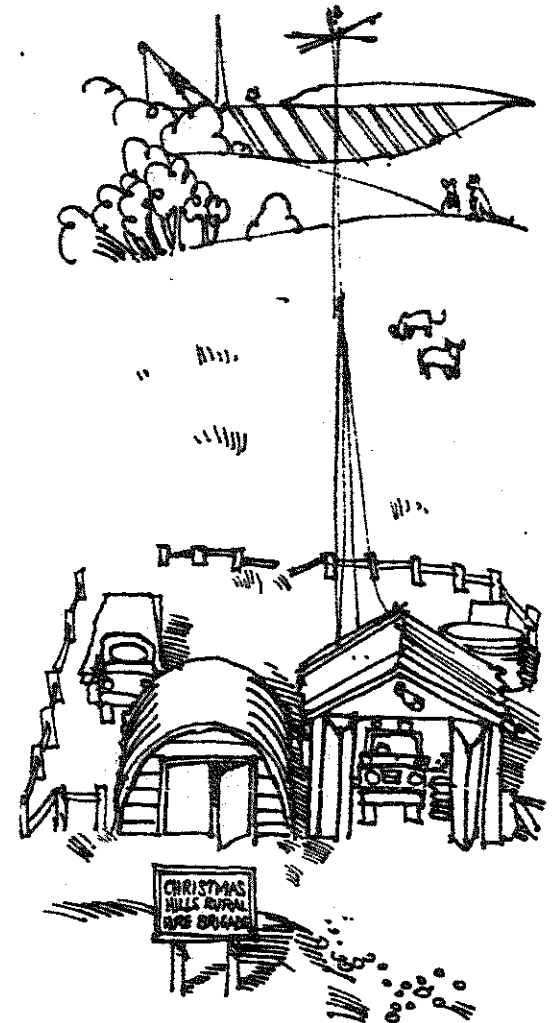
9. Perhaps a sensible plan would be to clearly indicate where your house-fire equipment is located and how it works and to familiarize neighbours with the same, so that delay is avoided should the Brigade attend in a case of fire.

Fire Prevention Around the House

A. WHAT TO DO DURING THE YEAR:

1. Ensure that the building, from footings to ridge cap, can be sealed against flying sparks or burning pieces of wood. Make fine wire mesh screens to fit over ventilators, chimneys, downpipes, windows, and enclose underfloor spaces and eaves.

2. Keep underfloor spaces free from combustible materials such as straw, wood piles, cardboard and papers. Keep gutters and other areas of the roof free from leaves and twigs or other combustible material.



3. Reduce the amount of radiation the building will be exposed to by making corrugated iron screens to fit over all openings, windows and glass doors.

4. Reduce the fuel litter from around the house (the CFA suggests 20 metres, measured horizontally) by raking, composting and cool burning fallen leaves, twigs and branches.

5. Keep wood heaps, storage outbuildings and fuel storage well away from the house (20 metres). Liquid Petroleum Gas is usually fitted close to the house. Make sure that the safety valve faces away from the building. Keep the control valve closed.

6. Ensure that water supplies are adequate and are obtainable with, or without electricity supply. It is a good idea to have a tank especially for fire fighting purposes, 44 gallon drums of water, buckets, knapsacks and a petrol (fuel) pump (fire fighting pump). Make sure the pump, knapsacks are in good working condition and that the pump is well fuelled.

7. Keep basic fire fighting tools handy i.e. rakes, shovels, ladders, axes and beaters.

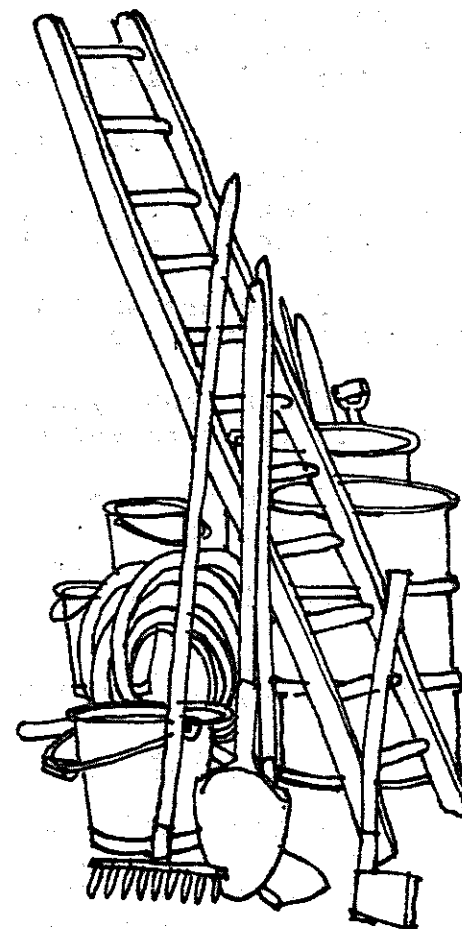
8. Check cupboards in the house for flammable materials such as kerosine, petrol, methylated spirits, gas bottles and allow for storage in a safer place away from the house.

9. Keep a list of the Fire Brigade Phone Numbers close to the telephone. (Bend of Islands area Fire Reporting Service number is 7120 454).

10. Check slow combustion fuel stoves are cleaned at the opening and also elbow, and well maintained. Sparks can often get out at this point which is more dangerous than sparks escaping from the top of flue.

B. WHAT TO DO WHEN THE FIRE APPROACHES:

1. Locate fire and report it to the Brigade (FRS). If it is a small spot fire approach with sacks and water and prevent it from spreading and call Brigade.

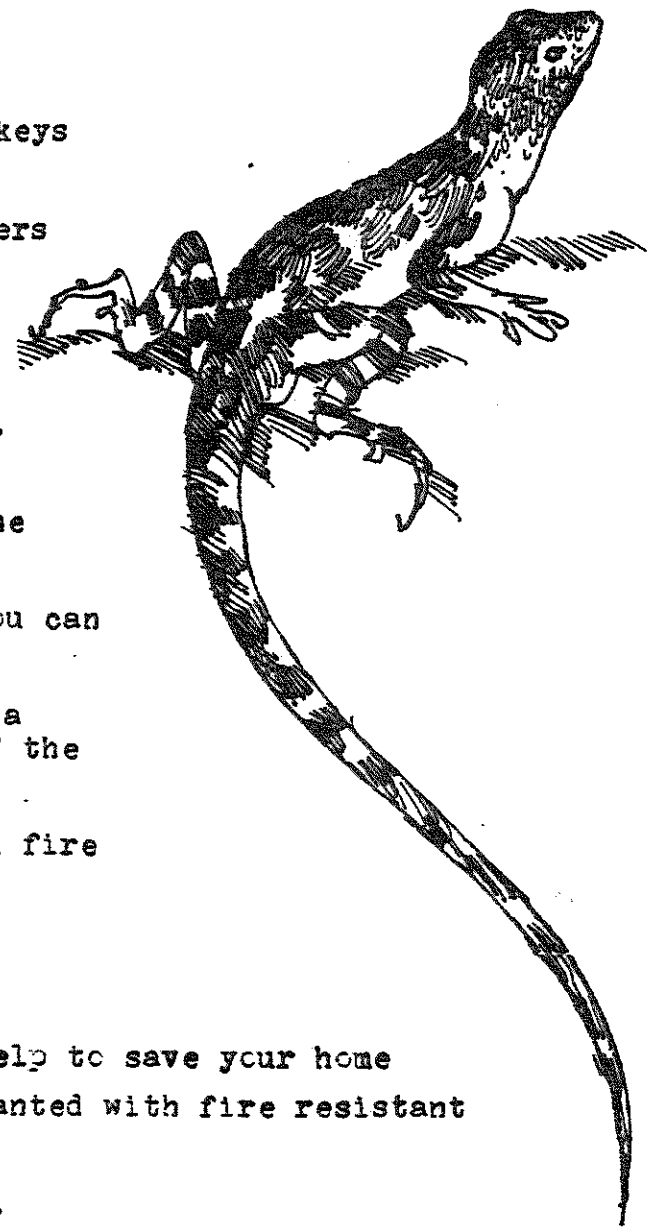


2. Close all windows, doors and ventilators.
3. Turn off the Gas and Electricity.
4. Bring children inside and ensure that animals are safe.
5. Leave car on bare ground. Close car windows and leave the keys in the ignition. Put blankets and water inside car.
6. Fill kitchen sinks, troughs, bath and all available containers with water and have mops and buckets handy.
7. In the case of furnishings catching alight, before watering anything make sure power is off. (Inside house)
8. Dress in long trousers, long sleeved shirt and strong shoes. Clothes should be of an inflammable material, preferably wool.
9. Stay inside near a door which leads to the outside and on the side away from the approaching fire front.
10. Do not leave the house until the fire has passed or until you can no longer stand the smoke and heat.
11. If you are forced to leave the house, protect yourself with a blanket and proceed cautiously to a safer place, perhaps the car. If the car, then cover yourself with the blanket after lying on floor.
12. When the fire has passed, check that the house doesn't catch fire by falling branches or sparks or by fire spots outside the house.

Some Theories about Bushfire Prevention and Fire Survival

Neil Douglas' Theories: Neil believes that the following should help to save your home

1. Mounding .. mounds of earth which deflect radiant heat, planted with fire resistant species.
2. Gravel lawns around the house .. they're easily maintained.



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3. Mossing .. encouraging the growth of moss by cool burning and ground clearing of leaves, then watering.

4. At least 4 knapsack sprays and many buckets for water.

5. Pond or dam strategy .. placed in appropriate location with hoses and pumps to reach right around your house, sheds and animal pens. $\frac{3}{4}$ " to 1" hose is better than standard $\frac{1}{2}$ " and often can be used by siphon for soaking or spraying downhill.

6. Sheets of corrugated iron to fit and hang on hooks over windows and doors.

7. Have a pre-determined plan of tasks necessary and the person in your house responsible for faster action in time of need.

8. Have a cellar, mud brick or safer room to use for yourselves and valuables.

9. Place barriers in front of gaps under houses, either wire or special plantings of heat resistant species to prevent gum leaves from passing through.

10. Special attention to the design of your garden around the house will assist in preventing flames from igniting it.

11. Watch pine bark shavings and sawdust used for mulch around the house. This burns away for hours.

12. Reduce fuel litter on ground around your house.

13. When you're fuel-load reducing watch out for tiny plants and seedlings and avoid destroying them.

14. Always leave some sections untouched as Control patches in the middle of your fire clearing work, preferably fenced for rabbits, so you are able to judge later what affect your work has had on the bush, compared to the area left alone.

15. Walled gardens are good deflectors of radiant heat.

16. Finally, if you'd like to see Neil's theories in practice he'll welcome you and there's always a cup of tea.

The Round the Bend Co-op's Theories:

Each year it is aimed to fuel reduce one tenth of the land by winter. This is done by raking fine forest litter (leaves etc) into long heaped rows along the contours of the slopes. Larger sticks and dead saplings are, where available, laid on the downhill side of these heaps to provide stability. The heaps, about 1 foot high, are then trampled and compacted as much as possible to aid mulching down over winter and spring.

Cool burns may be carried out in spring where the fuel still needs reducing after the previous raking programme. In fact, cool burns have not been carried out for the last 2 years. Care in raking is taken to avoid excessive denuding of the forest floor and damage to tender orchids and plants growing in the protective litter. Raking piles away from around trees and bushes to avoid flammable material collecting at the base of trees and bushes.

Building with Fire Prevention in Mind

Reference: Notes in the Science of Building Houses Exposed to Bushfires, compiled by the Experimental Building Station (Department of Housing and Construction).

Surveys of bushfire damage indicate that the following precautions will reduce the risk of damage to a building exposed to a severe bushfire.

1. Attention to the choice of site and the location of the building on the site considering the slope of the ground and the direction of the prevailing hot winds.
2. A low-slope roof is better sealed and offers smaller areas to pre-heating by radiation than a pitched roof. Also the roof cladding should be well sealed e.g., metal sheet or a well sarked roofing if tiles are used. The sarking is the insulating blanket under the tiles and it should be of a type that is well flame retardant. Avoid wood shingle roofs, as the falling branches and sparks can cause fire.
3. Make corrugated iron shields for all openings in the building and make plugs for downpipes.
4. Make sure that the timber in the building is not cracking or splitting where sparks can lodge.



- 16
5. Top the roof with a sprinkler system i.e. steel water pipe fitted with sprinkler heads and rely on gravity feed.
 6. Provide one tank (min. 1000 galls) for fire fighting.
 7. Avoid underfloor spaces. It is better to build with a slab on the ground rather than upon stilts.
 8. Fit the chimney with a spark arrestor made out of fine wire.
 9. Fit the house with a fire extinguisher recommended by the local Fire Brigade. Contact Brigade Apparatus Officer Roger Nink on 7197426

Landscaping with Fire Prevention in Mind

1. Avoid highly inflammable plants close to the house. The Forest Commission of Victoria regards species as heat resistant rather than as fire resistant. All wood eventually burns, it's just that some species burn more quickly than others. This rate of burning is dependent upon the oil content of the plant. With heat, the oil produces a gas which explodes and causes the plant to ignite.

The foliage of eucalypts burns readily in the green condition, as the leaves, high in oils, are gas producing. However, the leaves of deciduous trees are more fleshy and moist with new growth in summer, and are not nearly as gas producing as the eucalypts.

Site the vegetables, herbs and fruit trees next to the house on the downhill side.

The bark of some eucalypts is more fire resistant than others. In particular, Red Box and Ironbark have more heat resistant qualities than Red Stringybark whose bark is very flammable. If you are planting eucalypts around your house, it would be safer to use Red Box and Ironbark and stay clear of Red Stringybark.



A particular native species which is very flammable is *Leptospermum phyllicoides* (Burgan, Kunzea, Ti Tree). It's leaves must have a very high oil content. Observation of the 1964 fires at Mt. Dandenong showed that the following plants had some remaining foliage even though the plants were damaged ... *Grevillea rosmarinifolia* (native grevillea) and *Banksia* species (*Banksia spinulosa* is native to our area).

2. Landscape with walls and mounds, and water.

Enclose the vegie garden as described above with a mud brick wall 2-3 metres high to deflect the fire up, over and away from the house.

Landscape with mounds, planted with heat resistant plants, also to deflect the fire away from the house.

A pond or dam situated on the downhill side can create a break in a fire.

4. Plant native species in their natural habitat.

The great advantage with the native species, is their ability to regenerate quickly after fire. The eucalypts have adapted themselves to fire by evolving lignotubers, woody lumps at the base, stored with growth hormone to stimulate the buds into growth when the crown of leaves is destroyed. There is the risk that the fire damage can be so great as to destroy a large proportion of ground vegetation and trees, so allowing one particular species to dominate. This is what happened with much of the Burgan or Kunzea forest that exists through our own bush. The problem is that this particular species is creating a greater fire risk for the future. The same is true of the introduced grasses which are always dead and dry in summer and often largely responsible for the rapid spread of fire.

We can learn a lot by observing how the plants exist together in nature and planting similiar combinations in simill ar habitats around our own houses!



Bushfire Survival

A number of popular misconceptions - such as death from lack of oxygen if trapped in a fire or that a car petrol tank will explode if exposed to a naked flame - cause many persons to panic and flee a safe refuge.

In grass or forest fires, the main cause of death is heat stroke in an extreme form as a result of excessive heat radiation. Even severe burns to the body are not an immediate cause of death unless accompanied by heat stroke.

Most of the heat felt from a bush fire is radiant heat and though it can reach high intensity it lasts only a relatively short time.

Radiant heat, like light, travels in straight lines, does not penetrate solid substances, and is easily reflected. These physical principles are basic to survival procedures.

Even in a severe fire the temperature near the ground remains relatively cool as hot combustion gases are rapidly carried away by convection. Air temperatures around one metre off the ground and within one metre of flames up to 11 metres high are less than 49°C . While air at this temperature may be unpleasant it can be breathed for long periods. Bush fires in the open do not deplete the OXYGEN concentration in the air outside the actual zone where combustion is taking place. Flaming combustion can only continue when the OXYGEN content of the air exceeds 12 per cent. Life can be supported at and below this level.

Bushfires only release minute quantities of harmful CARBON MONOXIDE GAS, so if a person can survive the flaming period of a forest fire (usually 3-4 minutes) there is no risk of succumbing later.

At Lara Vic in 1969, 17 people were killed when a grass fire cut a four lane highway. They abandoned their cars and tried to outrun the fire. At least six other people at the same place remained in their cars and survived, even though one car burnt out after the fire had passed.



Research has shown that the standard petrol tank is quite difficult to explode. When a tank contains petrol the space above the liquid always contains a mixture that is too rich in petrol vapour for an explosion to occur. To study the performance of a car as a shield against radiation, cars were subjected to intensive radiant heat from windrow of burning pine slash 15m long, 4.5m wide and 1.5m high. The cars were placed between two windrows 7.5m apart which were ignited simultaneously.

Most cars burnt out in a similar manner. First the tyres caught alight by severe radiation heating. Some eight to ten minutes after peak radiation the engine compartment caught alight and burnt strongly. The fire slowly spread into the interior and the petrol tank was last to burn, some thirty minutes after the peak radiation from the fire.

In Hobart during the fires of February 1967 1,500 vehicles were burnt. A large proportion of these were later inspected by fire authorities - none of the vehicles had ruptured petrol tanks.

If fire threatens your house - stay there. You will survive peak radiation from the fire even if the house burns down later, and you stand a good chance of saving the house as well.

At Langwood, Victoria, in 1965, seven people left a threatened homestead surrounded by green lawns and crashed their car into a tree on the side of a narrow country road. They were burnt to death. Although the impact of the crash was slight the car was left on a heavy fuel bed and possibly with broken windows. The homestead did not burn down until well after the fire had passed and would not have burnt at all had even one person stayed to fight the fire.

At any fire wear clothing (preferably wool) which covers your body, arms and legs, providing a radiation shield which might possibly save your life.

Avoid panic by preparing to fight the fire around the house. Direct other people to useful jobs such as filling utensils with water, blocking cracks with wet towels, ensuring doors and windows are closed. People kept occupied usually don't panic.



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Do not drive a motor vehicle blindly through heavy smoke. Switch on headlights and park adjacent to bare areas beside the road or where roadside grass is shortest.

Wind up windows and shelter from radiation beneath the dashboard with a rug or floor mat covering your body.

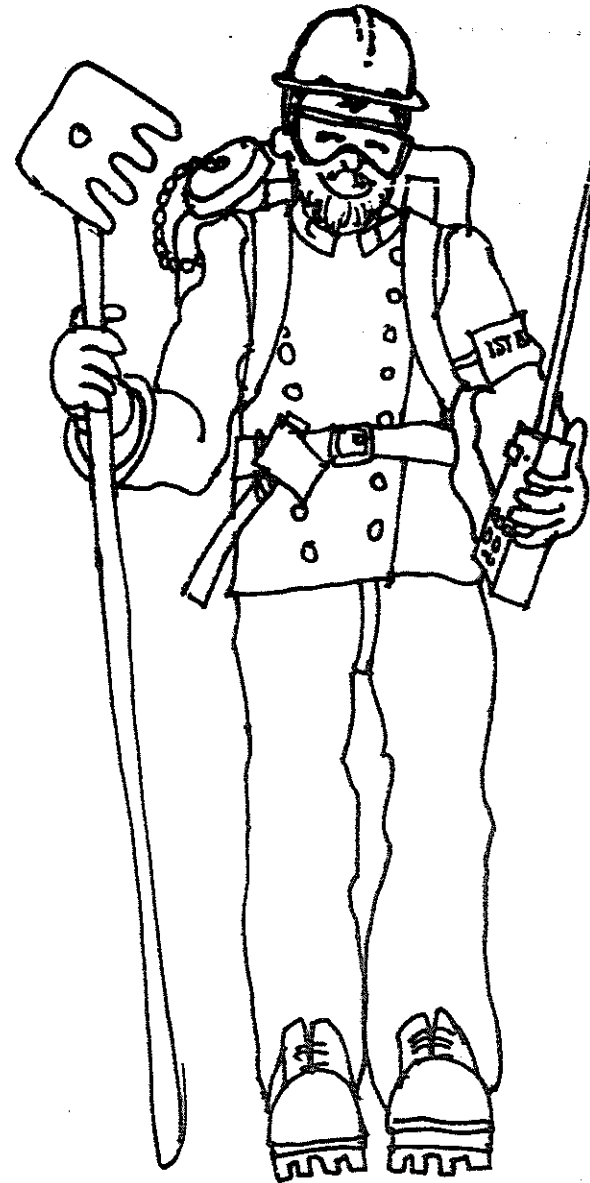
Remain calm and have confidence that the petrol tank will not explode and even in the worst situation it will be some minutes before the car catches alight.

In a grass fire the flames will last for 30 seconds or less and the chances of survival are good. In a high intensity forest fire the flames will last for 3 to 4 minutes and your chances of survival are lower but they will be better in a vehicle than in the open.

At Wandilo SA in 1958 a fire party was sent across the head of a "safe" fire in a Pinus Radiata Plantation. At 3pm, due to an unusual and extremely localized combination of fuel, weather and terrain factors, the fire blew up into a "fire storm". Eleven men and three firefighting vehicles were trapped on a trail in the plantation - only three survived. Two of these took refuge in the cab of a vehicle, the other dived into a deep wheel rut and covered himself with a coat. Within 20 minutes another 250 acres of Pinus Radiata were destroyed.

If you find yourself on foot in a fire situation:

- a. Try to move onto bare ground.
- b. Do not run uphill or away from the fire unless you know a safe refuge is handy.
- c. Move across the slope out of the path of the head of the fire and work your way downslope toward the back of the fire.
- d. Do not attempt to run through flames unless you can see clearly behind them. This generally means when flames are less than 3m deep on the back or flank of the fire. Lulls in the fire often result in the flames being low enough in these parts to step or run through to the burnt ground beyond.



When conditions become severe use every possible means to protect yourself from radiation. On bare ground cover yourself with dirt or sand if possible, or use wheel ruts, depressions, large rocks or logs to give protection. If you stay put you have a fair chance of survival.

Take refuge in ponds, running streams or culverts, but avoid raised water tanks. Water at ground level does not heat up quickly but in elevated tanks it becomes warm very rapidly. A body immersed in lukewarm water cannot sweat and at a temp of 46°C a state of collapse will be reached in about three minutes.

Remain calm and do not run blindly from the fire. If you become exhausted you are much more prone to heat stroke and you may easily overlook a safe refuge.

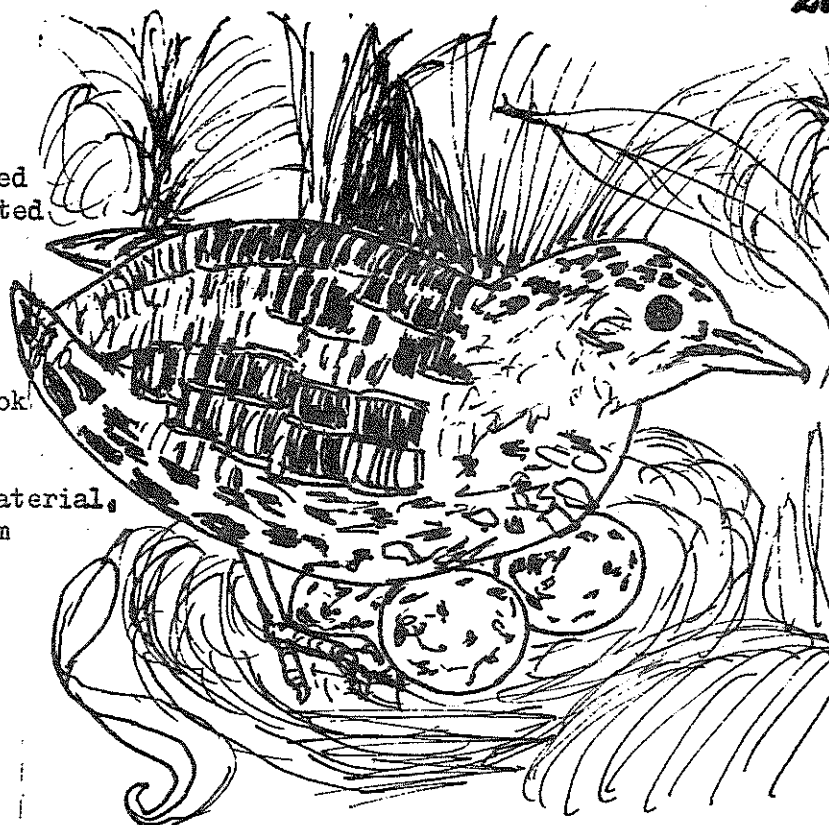
In summary, select an area with the least amount of combustible material. Use every means to protect yourself from radiation and flames. Remain calm and DONT panic.

Compiled by D. Herd. (1st. Lieutenant)

SOURCES: N.P. Cheney Division of Forest Research CSIRO

T. Foster: Bushfires

Luke & McArthur: Bushfires in Australia.



*Bustard Quail
or Painted Button Quail*

Believe it or not, this bird is not a true quail! Turnicidae is related to Rails, cranes and Planes Wanderer. Like the Emu, the Painted Quail has three toes also simi arly, the male Quail "incubates" the eggs and rears the young. Nesting: Breeds September - March but nests have been found in other months, particularly in northern part of range. Nest always on the ground, at base of shrubs or tufts of grass, well lined with grass and leaves, and sometimes partially domed. Work done primarily by male, at times assisted by the female. They are a small billed quail with a conspicuous bright chestnut patch on their shoulder, upper side is marbled black and pale brown, with narrow white stripes on the throat. Abdomen is off white, breast spotted grey. The male is similiar to the female but smaller. Turnicidae give a call rather like a bronzewing pidgeon, oom ... oom ... oom!

22 Snakes

Melbourne metropolitan and surrounding areas have revealed the occurrence of 7 species of snakes. The last three listed snakes are small and are not considered dangerous, even though venomous.

The first 4 species are considered dangerous! The Copperhead and Tiger Snakes have accounted for most snakebite deaths around Melbourne. They are the two most common species and have very potent venoms. The Brown snake and black snakes are less common, although brown snakes may occur in our dry, hilly habitats pursuing mice and lizards in preference to frogs.

Tiger, Copperhead and Black Snakes feed mainly on frogs and are to be found more frequently in creek and river valleys, near swamps, dams and ponds.

Mating season for all species is October to November with young being born in February to April.

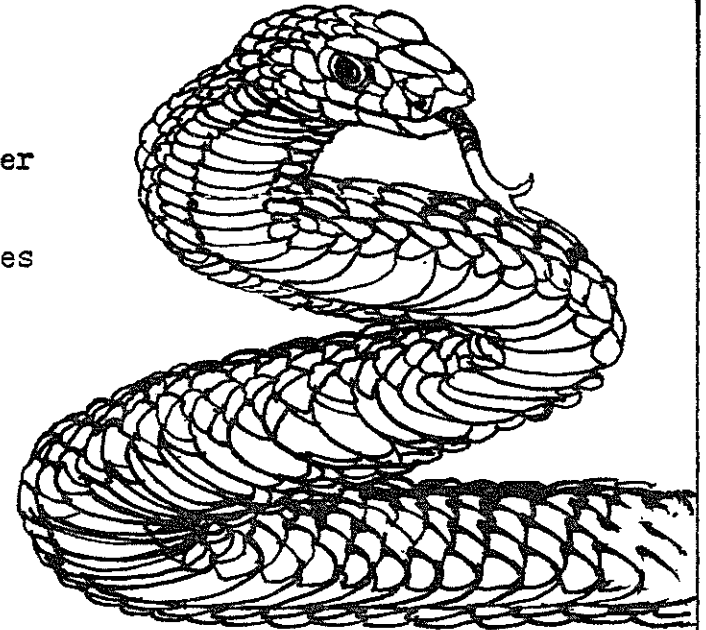
THESE DETAILS WILL ASSIST YOU IN IDENTIFICATION.

TIGER SNAKE (Notechis Scutatus)

Mainly Diurnal (day) but also nocturnal (night) on warm evenings, especially between 9-11 p.m. Abundant in many localities especially low-lying swamps. Eats frogs. Colour: Dorsal (Back) is green/brown and darker cross bands. Ventral (Belly) is lighter green/brown or yellow. Max. Length is 5' 6" and has 19 (rarely 17) mid body scalation. Movements are agile, head same as body colour. Variation: when no darker cross bands. When provoked flattens head (Cobra) and hisses violently. Semi-glossy to matt surface.

COPPERHEAD (Denisonia Superba)

Mainly diurnal but also nocturnal. Common throughout except drier regions. Eats frogs also lizards and small mammals. Colour: Dorsal is mid to dark brown, Ventral is light brown or orange/brown or green. Max. Length is 5'. Has 15 mid body scalations. Movement is not so fast. Lateral scales are sometimes orange or red. Head same colour as body. Usually dark band around the neck then lighter band, but not so in large ones. Scales are matt surface.



BLACK SNAKE (Pseudechis Porphyriacus)

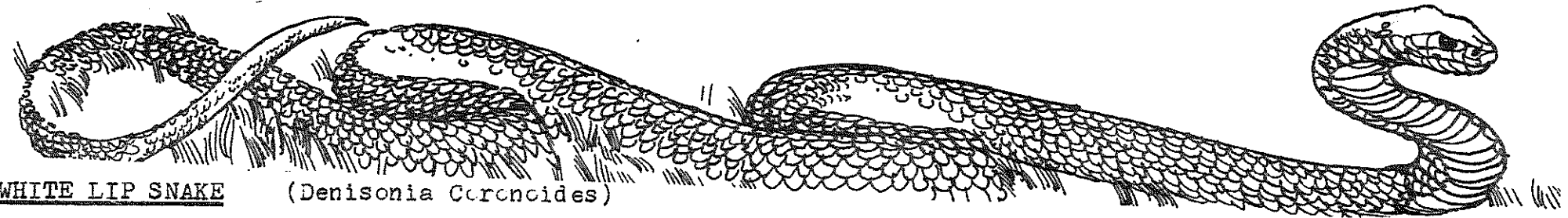
Diurnal but occasionally nocturnal. Lives especially in rivers and creek valleys and adjacent areas. Not very common around Melbourne. Eats frogs. Colour: Dorsal is black and ventral is red or pink sometimes grey/white. Max Length is 7' and has 17 mid body scalations. Weak venom. Semi glossy to glossy surface.

BROWN SNAKE (Demansia textilis)

Diurnal, occasionally nocturnal. Lives throughout metropolitan area but not abundant. More common in hilly, dry areas. Eats mice and lizards. Max length is 7'6" and colour: Dorsal is brown with black head. Ventral is brown with black to off white patch on neck in juveniles. Has 17 mid body scalations. Semi glossy and slender and fast moving. Will sometimes attack any moving object in range. Small fangs and venom glands.

SMALL-EYED SNAKE (Denisonia nigrescens)

Nocturnal. Lives in rocky areas especially granite but not abundant. Northern and Eastern metropolitan area. Eats small lizards and insects. Colour: Dorsal is dark grey and ventral is light grey or pink edges. Max. Length is 2 feet, has 15 mid body scalations. Scales are unglassy, head dark grey or black and emits ant-like odour.

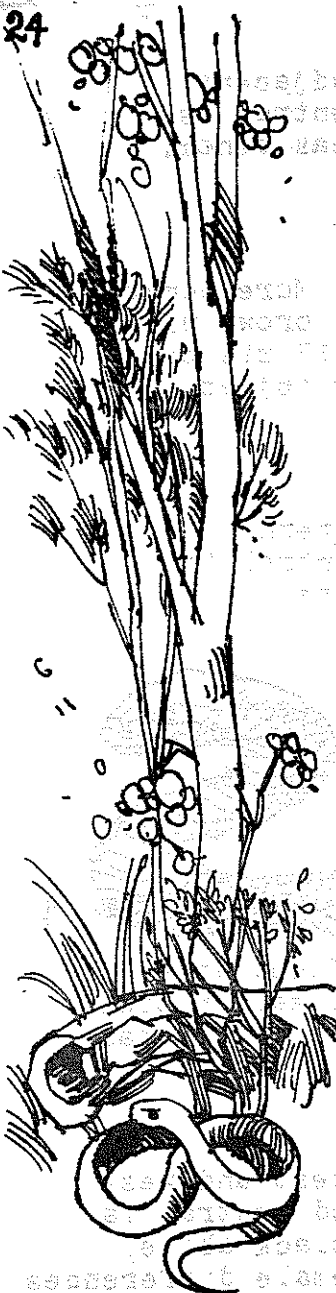


WHITE LIP SNAKE (Denisonia Cordoides)

Nocturnal. Lives in rocky and timbered areas throughout Melbourne's surrounds. Often found under rotting logs. Eats small lizards and insects. Colour: Dorsal is black and ventral is salmon pink to orange. Maximum Length is 2' and has 15 mid body scalations. Scales are matt surface and it has white stripe on upper lip.

LITTLE WHIP SNAKE (Denisonia Flagellum)

Diurnal (day) occasionally nocturnal. Lives and is abundant in rocky localities north-west and west of Melbourne. Eats small lizards and insects. Colour: Dorsal is light to mid brown and ventral is light brown to orange/brown. Max Length is 16½" and has 17 mid body scalations. Head black above, brown band across snout. Scales very glossy. Emits ant-like odour. Pronounced male/female differences in tail.



AVOIDING SNAKEBITE:

1. Protective boots and clothing should be worn in the bush even if its hot.
2. Look carefully before stepping over logs and rocks and in thick grass.
3. Carry a torch at night.
4. Don't reach into holes and burrows.
5. Don't aggravate a discovered snake nor cut off its escape.
6. Don't provide good habitats near your house by leaving old wood piles and pieces of plastic or tin around on ground.

There is an excellent booklet covering 1st aid for venomous bites:

"Watch Out" published by H.B.A.

FIRST AID FOR SNAKEBITE:

1. Don't Panic.
2. Try to identify species of snake (See earlier guide).
3. Wash the wound to remove surface venom (do not suck or cut wound).
4. Lie victim down and apply a constrictive bandage. (use a broad firm bandage). Apply to the affected limb, covering the bitten area tightly. As much of the limb as possible should be bound. To keep the limb as still as possible, bind a splint to it. (e.g. strip of wood).
5. Bring transport to the patient if possible.
6. Keep the patient calm and resting.
7. If breathing fails, apply artificial respiration.
8. **THE AUSTIN HOSPITAL IS THE CLOSEST CENTRE FOR SNAKEBITE TREATMENT.**



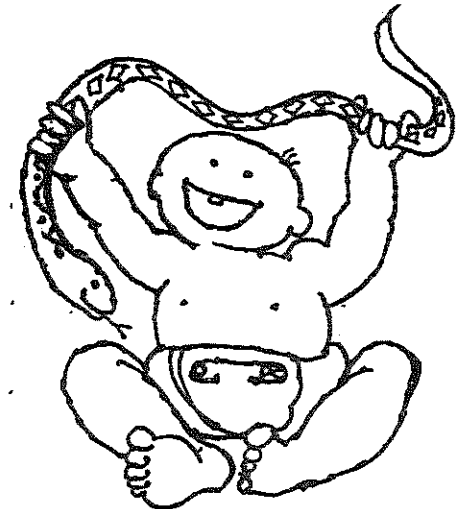
Tiger snake venom attacks the nervous system, breaks down tissues and coagulates the blood. The Tiger fastens onto the victim and chews forcing the venom out. Symptoms are: drunken sensation, affected vision, breathing difficulty and vomiting.

Most bites occur in wet seasons, flooding in particular will drive snakes close to habitation. Snakes also are likely to reside in farm buildings where feed is stored which attracts rats and mice.

KIDS AND SNAKES ... SOME KID COMMENTS!

Despite rigorous training by concerned mothers the following comments were offered

- | | |
|----------------|------------------------------|
| Andrew Bayly | "kill it" |
| Jo Henry | "I want an orange one" |
| Katy Herd | "Boom" |
| Rupert Pelling | "Put it on Yo" (baby sister) |
| Guy Gurney | "Go and get Mummy" |



Over the last few months the following people have visited our area to familiarize themselves with the Environmental Living Zone.

- Mr. Vasey Houghton, Minister for Conservation.
- Mr. Jim Plowman, Member for Evelyn.
- Mr. Evan Walker, Shadow Minister for Conservation.
- Mr. Rupert Hamer, Premier.
- Healesville Councillors, Mr. Gary Cooper and Mrs. Hazel Hill.

Visitors to our Area

- Planned for early this year are:-
- Mr. Lou Lieberman, Minister for Planning
 - Mr. John Cain, Shadow Minister for Planning
 - Mr. John Bailey, Town and Country Planning Board
 - Eltham Shire Councillors (their own request).

The visitors were shown examples of houses built to blend with the environment, river scenery, native flora and fauna. Discussions were held about land management related to fire prevention, effluent disposal and generally about the sorts of problems the zone faces. Particular blocks which we hope to save from development were pointed out.

Food Co-op

Next Meeting: 13th February, 1980. Bayly House.

Food Pick-up: 8th March, 1980. 10-12pm

To be an effective and happy Food Co-operative it is important that we all CO-OPERATE by coming to meetings, by sharing the workload, and by understanding our philosophy.

In future all decisions will be made at meetings and will apply to the group as a whole.

We will set up an ongoing roster for the ordering of food and form organizers into groups of three.

We must remember the concept of the food co-op

- (a) It is ecologically based to minimize the over-use of natural resources.
- (b) It is healthy! We buy unprocessed, fresh, organic food where possible.
- (c) It is a co-operative! That is, we all co-operate and work together in force and in spirit.

Musical Evening

ANOTHER COMMUNITY MUSICAL EVENING AT RAYA'S:

PHILLIP MIECHEL
TRIO

Clarinet Cello Piano.

\$5.00 per ticket.

Saturday: 26th April, at 7.45 p.m. at Tim and Raya Ealey's Home.

Contact Raya on 7120 347.



Community Working Bee

The Shire Engineer has expressed concern at the visibility and danger to large vehicles posed by overhanging flora in some sections on our roads. This problem would/could be resolved by the grader "skimming" the sides of the roads, taking everything else and also by carefully eliminating the offending branches and stumps. He is agreeable to the suggestion that this work be carried out by hand by residents to avoid "skimming". The work must be done either way .. environmentally it is preferable we do it ourselves. PLEASE COME ALONG AND HELP! The locations of the worrying stretches has been pointed out.

2 p.m. on SUNDAY 24th FEBRUARY meet at Neil Douglas' home in Henley Road.

(Bring saws, trailers, chainsaws and can anyone offer a 4-wheel drive vehicle with winch and chain etc., for the tree stumps?)

For information phone Rod Shield on 7120 396.



Local Clay Pottery

Elsa Jackman, a local potter, has successfully used some clay from our area. By cleaning small sticks and stones from the earthenware clay (a reddish/orange in colour) Elsa was able to work the clay and throw some cups, dry them, then bisque-fire them, glaze, and fire again for the finished product.



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Some Environmental Things to Think About Before You Build

1. FIRE: The way you site your home and the method of construction and materials you use, could help to save it! Check the C.S.I.R.O - they have information.

2. POLLUTION: The type of effluent disposal system you install could protect a gully, a creek or river from pollution. Check out the following methods in relation to your own land and its slope and soil type....

Transpiration Beds
Respiration Beds
Oxidation Ponds.

John Roberts has information: 7120486

3. NATIVE FLORA: The site you choose could save a precious habitat for wildflowers or a beautiful plant or tree from destruction. Check your land in each season; see what's growing before you bulldoze.

4. BIRDS & ANIMALS: The site you choose could help to protect the habitat for a bush creature or a bird, particularly if its near water. Perhaps its a nesting, feeding watering or breeding place, or a movement path. Think about fencing .. will it prevent an animal from moving freely. Check your land .. see what lives there already.

Residents !

Bend of Islands Conservation Association Subscription :

Our Fire Brigade is in
urgent need of funds.
We need your support.
Please send your donation to
Neil Harvey
C/O Kangaroo Ground P.O.

I enclose \$..... (\$5 per person) for 1979 membership of B.I.C.A. for the
following persons: (please include addresses and phone numbers).
Names.....
.....
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