

A Natural History of
The St Arnaud District.

June 1990

Compiled by members of the St Arnaud Field Naturalists Club.

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The Main Vegetative Zones of the District

1. The Granite soils of Emu, Dalynong, and the area south-east of St Arnaud have Red Box, Buloke, and some scrubby cover. There are also some Blakely's Red Gums.
 2. In the Hard Hills area, east of the town, there are remnant Mallee-type trees plus smaller scrubby areas north and north-east of the town on the Charlton and Wycheproof roads.
 3. The predominant trees would be Yellow Gum, Ironbark and Grey Box along Centre Road, and west and south of the town.
 4. On the Wimmera Plains north and west of the town, including Cope Cope and the Lakes system, Batyo Catyo etc., trees are sparse, but include Black Box, Swamp Box, and Buloke. (In the area of the lakes, Field Nats have helped in the extensive replanting of the area near Holland's Lake.)
 5. South of Teddington Reservoirs there are quite large areas of Tasmanian Blue Gums, Manna Gum, and Yellow Box. The Blue Gums are believed to be the most northerly stand of Blue Gum on the mainland.
- Along the small creeks and rivers around St Arnaud are many River Red Gums.



Fringe Myrtle

The tribe of Aborigines who occupied the St Arnaud district prior to the advent of white man, were known as the Jajowurong tribe.

Their tribal boundary ranged from approximately Daylesford in the south, the Campaspe River in the east, the Richardson River to the west, and the Boort district to the north.

Although hard to calculate, their numbers are believed to have been 900 to 1000 before white man's arrival. White man's diseases, particularly in the gold rush era, played a large part in the demise of the tribe. The last full blood of the tribe is believed to have died at Dimboola in 1934.

There is still evidence of their habitation, such as tools and working stones on sand ridges along the Avon and Avoca rivers, canoe trees in the Coonoer Bridge area, and the remains of middens in various places throughout the St Arnaud district.

To the north of St Arnaud in the Blinkbonnie Mine area, is a rocky outcrop containing an extensive area of water wells. These are narrow holes bored vertically into the rock, and would contain only a small amount of water, but because of the very arid nature of the area these wells would obviously be used as a source of water during some of the family movements.

Most of the remains are on private property, and permission should be sought to enter.

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The Avon Plains Lakes are situated 35 kilometres west of St Arnaud on the Banyena Road. The landscape is typical Wimmera Plains and is used for broad-acre cereal growing. The area was extensively cleared in the early years of settlement around the 1830's. The lakes provide a unique retreat for people and wildlife alike.



White-faced Heron

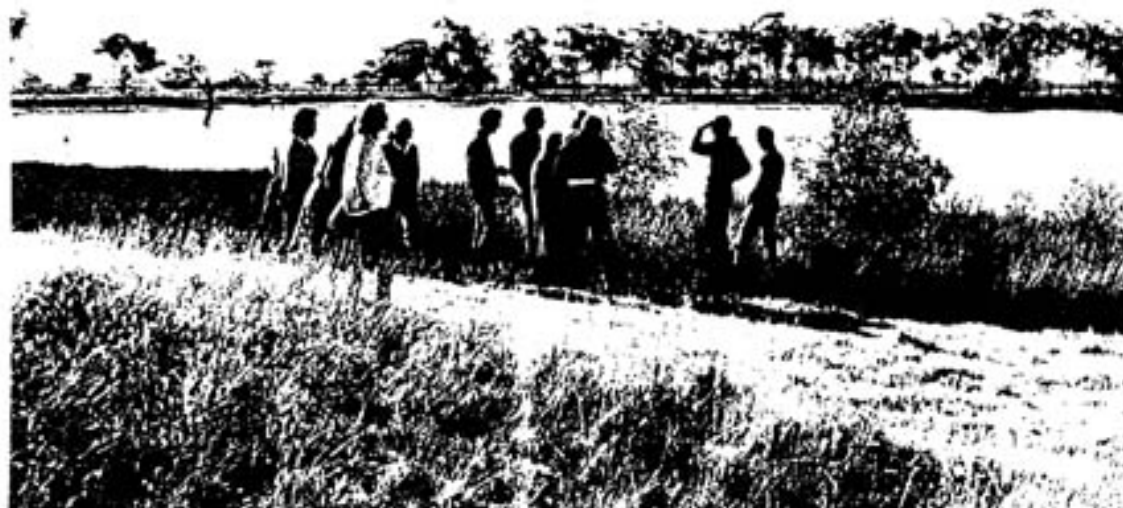
Lake Batyo Catyo is the largest. It is filled annually by the Rural Water Commission and is used as a temporary storage. In dry periods when natural lakes dry up, Batyo Catyo remains suitable for all water recreation.

A camping ground with modern facilities and kiosk is also located there. A resident care-taker keeps the grounds tidy.

Some 5 kilometres south-west of Batyo Catyo, three smaller lakes provide wildlife habitat and water recreation.

Walkers Lake is a pretty lake surrounded by flourishing red-gums. Camping here is free and unrestricted but there are no facilities.

Two smaller lakes are located one kilometre south. Hollands Lake is a sanctuary and Hancocks Swamp is a popular haven for wading birds.



At
Hollands
Lake

A local landcare group is currently planting wildlife corridors to link all the bodies of water in the area. To date some ten thousand trees and shrubs have been planted.



Brolgas near Traynor's Lagoon

The Teddington Reservoirs are situated south of St Arnaud near the hamlet of Stuart Mill. The Reservoirs are used for domestic water supply so swimming is prohibited. They are stocked with trout and provide angler entertainment.

Situated in the Kara Kara State Park the setting is very picturesque. Wildlife is abundant. Kangaroos, emus and koalas are plentiful. In spring the wildflowers bloom prolifically.

Bushwalking is popular and the hills are not too steep. Camping is allowed, and basic facilities are provided.



Little Grebe

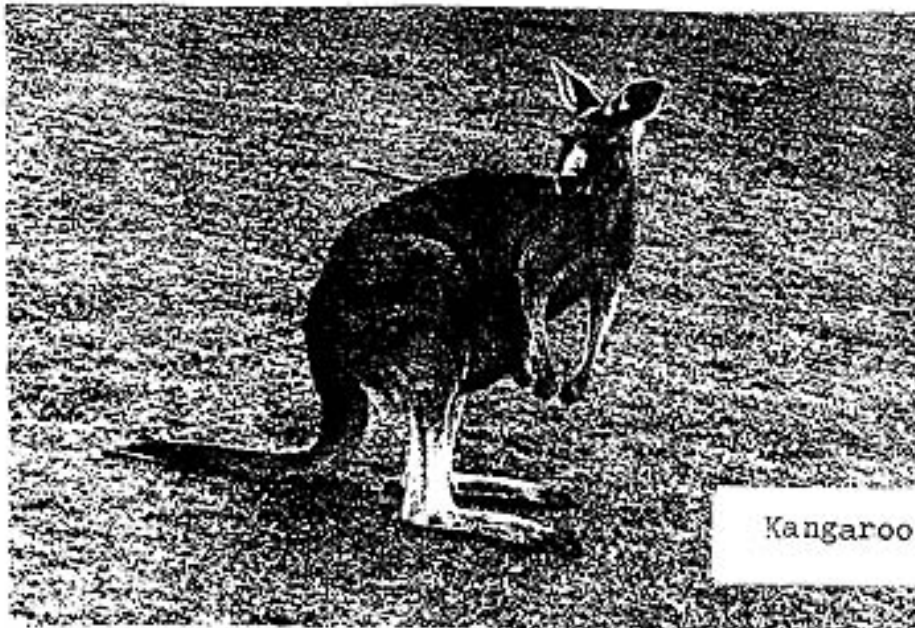
Of the mammals of the St Arnaud/North Pyrenees area, two are probably extinct since the coming of European settlement, as anecdotal evidence from R. Douglas tells of the existence of the tiger cat and the quoll at Stuart Mill in the early 1900s. Two have very reduced distribution: the tuan (brush-tailed phascogale) and the yellow-footed antechinus. Both of these require hollow trees for nest sites.

The brown-footed antechinus is restricted to the Southern Pyrenees ranges. The fat-tailed dunnart is fairly widespread and can survive in farmland if suitable shelter and nest sites are available.

The echidna is common and widespread in bush areas, but the platypus is uncommon and restricted to Loddon and Goulburn Rivers. One was sighted by St Arnaud Club members in a backwater at Llanecoorie Reservoir in March 1990. These two are, of course, monotremes (egg-laying mammals.)

The koala is uncommon and restricted to the Pyrenees Range, including Teddington. Populations result from liberations which have occurred since 1941, original populations having been destroyed. Suitable food trees for koalas include *Eucalyptus viminalis*, *E. orata*, *E. obliqua*, *E. gonicalyx*, *E. rubida*, *E. melliodora*, *E. camaldulensis*, and *E. macrohyncha*.

The bush-tailed possum and ring-tailed possum are both common and widespread, but the sugar glider and feather-tailed glider are uncommon.



Kangaroo and Joey

The Western Grey kangaroo is uncommon and restricted to the north, but the Eastern Grey kangaroo is extremely common and widespread, especially where bush and grassland meet. The large increase in

Mammals and Reptiles /2

the population of kangaroos is due to increasing areas of grassland and permanent watering sites.

The black wallaby is quite common in the Pyraneees Ranges although more common in those forested areas where a dense shrub understorey exists.

Numerous bats, such as the Little Bat, Gould's wattled bat, Lesser long-eared bat, the Greater long-eared bat and the Little flat bat are probably quite common, though seldom seen. A colony of Fruit bats has been observed near a dwelling in the area.

The Eastern Water Rat can be seen at Teddington Reservoir and Lake Batyo Catyo.

Introduced mammals, the rabbit, fox, black rat, house mouse and cat are common and widespread. The hare is quite common in farmland areas.

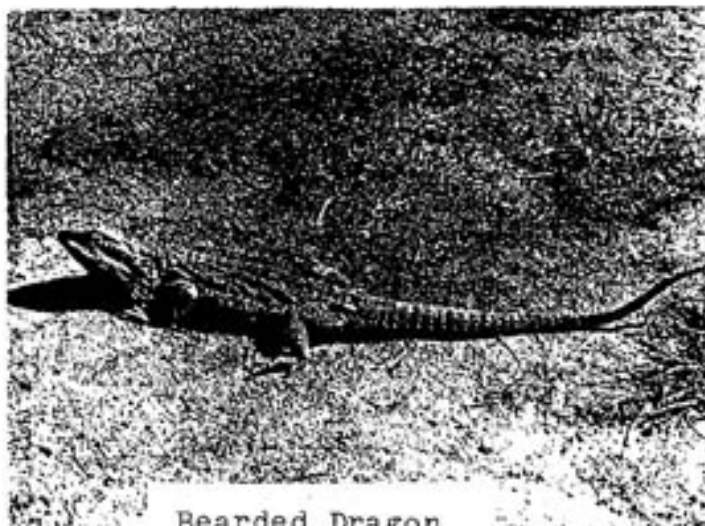
Some evidence also exists for the presence of a puma population, but this has not been fully verified.

Reptiles:

The long-necked tortoise is uncommon but has been reported from a Rostron dam.

The bearded dragon and Jacky lizard are both common in box/ironbark forest.

The wood gecko, thick-tailed gecko and marbled gecko occur in disjunct populations, but are widespread.

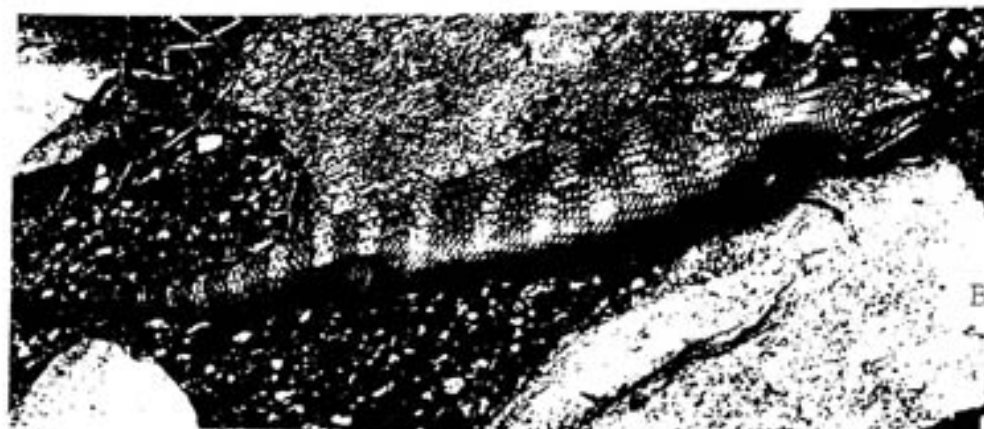


Bearded Dragon

Two species of legless lizard exist. *Delma inornata* lives in a variety of habitats but is not often found. *Delma impar* is very uncommon and lives in forest litter.

Eleven small species from the Skink genus are quite widespread and common in forested areas.

The Eastern blue-tongued lizard is widespread and quite common in farmland and bush areas.



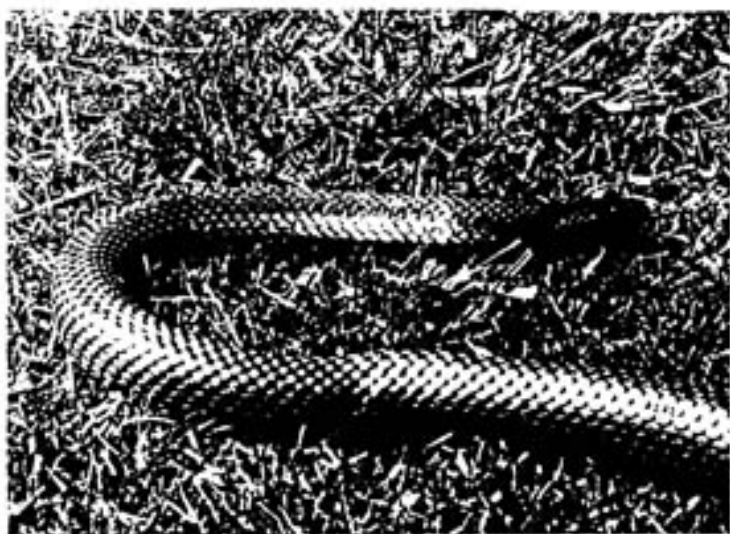
Blue-tongued Lizard

Mammals and Reptiles/3

The shingleback (stumpy-tailed lizard) is also very common in farmland and iron-bark forest.

The Sand monitor is rare, and confined to the north, but the Lace monitor is seen more frequently in the box/ironbark forest.

The red-bellied black snake is also an inhabitant of the box/ironbark forest. The Eastern brown snake is widespread and common in most habitats. Several lesser-known and smaller snake species may occur.



Brown Snake

Uroechis flagellum (Little whip snake) has been reported from Stuart Mill and Redbank. It is small, nocturnal and viviparous. *Uroechis brevicaudus* is uncommon but has been reported in farmland to the north, and box forest.

Vermicella annulata (Bandy-bandy) was formerly widespread in the north, but its habitat, box woodland, has since been cleared for farming and this species may now be extinct.

Several species of blind snake (*Typhlina*) with burrowing habit are also probably extinct.

- References:
1. Mammals and Reptiles of North Central Victoria by P.W. Menkhorst and A.M.Gilmore.
 2. What mammal is that? by N.W.Cayley
 3. Reptiles and amphibians of Australia by H.G.Cogger.

Birds and their habitats around St Arnaud: The following habitats are represented here - open forest, woodland, mallee, pasture/grassland, and aquatic.



However, the public land in the St Arnaud Range is nearly all open forest.

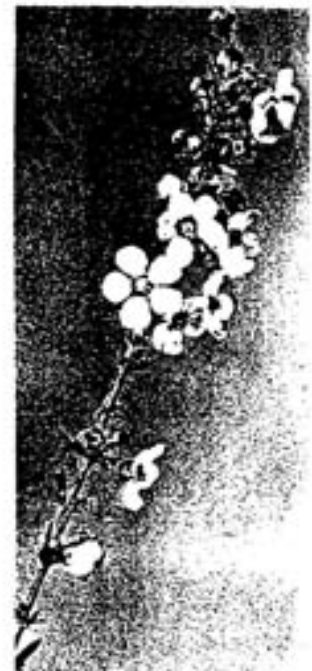
The Range has been substantially altered by human influence; few areas of mature forest remain, most now being coppice regrowth. This has changed the bird habitat in two main ways: the younger trees contain fewer nest hollows, and tree density is greater than originally. Much of the box/ironbark forest was most likely originally woodland.

The northern part of the range is forested mainly with red ironbark, yellow gum and grey box, although red box, red stringybark and long-leaf box also occur. These latter species increase in dominance further south, until the ironbark, yellow gum and grey box are few. Yellow box woodland occupies ridge tops.

In the wetter parts of the south end of the Range, blue gum and manna gum grow on sheltered sites.

More than 100 bird species have been recorded in the open forests of the Range. Red ironbark provides food for nectar-feeding species, such as lorikeets and honeyeaters, during winter.

Thornbills and other bird species inhabiting low vegetation are also present, sometimes in large numbers.



CAMP BIRD LIST ST. ARNAUD SHOW WEEKEND 23rd - 29th SEPT 1987.

GREAT -CRESTED GREBE	EASTERN YELLOW ROBIN
AUSTRALASIAN GREBE	JACKY WINTER
AUSTRALIAN PELICAN	CRESTED SHRIKE -TIT
LITTLE PIED CORMORANT	RUFIOUS WHISTLER
LITTLE BLACK CORMORANT	GREY-SHRIKE-THRUSH
PACIFIC HERON	CRESTED BELLBIRD
WHITE-faced heron	RESTLESS FLYCATCHER
SACRED IBIS	GREY FANTAIL
STRAW-NECKED IBIS	WILLIE-WAGTAIL (N)
YELLOW-BILLED SPOONBILL	WHITE-BROWED BABBLER
BLACK SWAN (N)	CLAMOROUS REED WARBLER
AUSTRALIAN SHELDUCK	RUFIOUS SONGLARK
PACIFIC BLACK DUCK	BROWN SONGLARK
AUSTRALASIAN GREY TEAL	SUPERB FAIRY-WREN
" Shoveller	WESTERN GERYGONE
PINK-EARED DUCK	YELLOW RUMPED THORNBILL
MANED DUCK (2Y)	YELLOW THORNBILL
MUSK DUCK	SOUTHERN WHITEFACE
WHISTLING KITE	VARIED SITELLA
BROWN GOSHAWK (IM)	BROWN TREECREEPER
LITTLE EAGLE	RED WATTLEBIRD
MARSH HARRIER	SPINY-CHEEKED H.E.
BROWN FALCON	REGENT H.E.
AUSTRALIAN KESTREL	NOISY MINER
PAINTED BUTTON-QUAIL	YELLOW-TUFTED H.E.
BLACK-TAILED NATIVE-HEN	YELLOW-PLUMED H.E.
PURPLE SWAMPHEN	FUSCOUS H.E.
EURASIAN COOT	WHITE-PLUMED H.E.
MASKED LAPWING	BLACK-CHINNED H.E.
BLACK FRONTED PLOVER	BROWN-HEADED H.E.
BLACK-WINGED STILT	WHITE-NAPED H.E.
SILVER GULL	NEW HOLLAND H.E.
WHISKERED TERN	EASTERN SPINEBILL
FERAL PIGEON	WHITE-FRONTED CHAT
PEACEFUL DOVE	MISTLE-toe bird
COMMON BRONZEWING (H)	STRIATED PARDALOTE
BRUSH BRONZEWING	SILVEREYE
CRESTED PIGEON	EUROPEAN GOLDFINCH
GALAH LONG-BILLED CORELLA	HOUSE SPARROW
SULPHUR-CRESTED COCKATOO	DIAMOND FIRETAIL (n)
MUSK LORIKEET	COMMON STARLING
CRIMSON ROSELLA	OLIVE-BACKED ORIOLE
EASTERN ROSELLA	WHITE-WINGED CHOUGH (N)
RED-RUMPED PARROT	AUSTRALIAN MAGPIE LARK
PALLID CUCKOO	WHITE BREASTED WOODSWALLOW
HORSFIELD'S BRONZE-CUCKOO	DUSKY WOODSWALLOW
SHINING BRONZE CUCKOO (H)	AUSTRALIAN MAGPIE (FY)
SOUTHERN BOOBOOK (H)	GREY CURRAWONG
TAWNY FROGMOUTH (H)	AUSTRALIAN RAVEN
AUSTRALIAN OWLET-NIGHTJAR	
LAUGHING KOOKABURRA	
WELCOME SWALLOW	
TREE MARTIN	
FAIRY MARTIN	
RICHARD'S PIPIT	
BLACK-FACED CUCKOO SHRIKE	
WHITE-BELLIED CUCKOO-SHRIKE	
WHITE-WINGED TRILLER	
BLACKBIRD	

The St Arnaud district is rich in native flora, from magnificent Candlebark Eucalypts to the tiny mosquito orchids. The area with the most spectacular wildflower display in spring is the Hard Hills Flora Reserve, with nearby Gosler and St Arnaud Flora Reserves.

In the Hard Hills Flora Reserve, the most common Eucalypts are Green Mallee, Blue Mallee and Red Box, with *Melaleuca decussata* and *Melaleuca uncinata* helping to fill the canopy, along with Cherry Ballart, Slaty Sheoak, Golden, Spreading and Gold-dust Wattles, Hedge-leaf Hop Bush, Sweet Apple-berry and Silky Hakea etc..

The under-storey is quite thick, and at times spectacular. There you can find Plough-share Wattle, Common Fringe Myrtle, Cranberry Heath, Flame, Common Beard, Ruddy Beard, Peach and Daphne Heaths; both red and green forms of *Correa reflexa*, and the dainty Narrow-leafed Wax Flower. Sticky and Primrose Goodenias always make a bright yellow show, as do Guinea Flowers and *Helichrysum* everlastings.



Silky Hakea



Golden Everlastings

Two species of the Mint family catch the eye: the lovely purple *Prostanthera denticulata*, and a real treasure, *P. aspalathoides*, the Scarlet Mint bush.

The lily family is well represented, the most common being the sweetly scented Chocolate Lily, which under favourable conditions makes a sea of mauve. Other lilies are Milkmaids, Small Vanilla Lilies, Early Nancies, Blue Stars and Black-anther Flax Lily.

A favourite of the children, Buttercups, can still be seen, but are becoming less common unfortunately. The Scented Sundew is always one of the first flowers to appear.



Scented Sundew

The wildflower season begins in April, when Parson's Bands and Autumn Greenhoods start to flower; and by June, the Flame Heath, Common Heath, Dark Midge Orchids, Large Striped Greenhoods, Desert Baekea and Silver Banksias could be blooming also.

Orchids are one of "Nature's Treasures", and can be found in abundance in most of the bushland surrounding St Arnaud. Five members of the Thelymitra (Sun Orchid) family may be found, and of the eight Greenhoods, seven may be seen blooming in the Hard Hills, these being Dwarf Greenhood, Swan Greenhood, Ruddy Hood, Scaly Greenhood, Tall Greenhood, Large Striped Greenhood, and Nodding Greenhoods grow in the Dalynong Wild Flower Reserve.

Autumn Greenhood



Prasophyllum rufum, the Dark Midge orchid, is usually blooming in April in the Hard Hills, and *Prasophyllum odoratum*, the Scented Leek Orchid, may be found deep in the forest between Stuart Mill and Redbank, late in November.

Of the Diuris family, the Leopard orchid is widespread, but the Golden Moths and Tiger Orchids would possibly only appear in the Stuart Mill area.

The St Arnaud bushland is rich in the beautiful *Caladenia* Orchids, amongst them the rare and magnificent *Caladenia filamentosa*, "Daddy Long Legs"; others being Veined Spider Orchid, Hooded *Caladenia*, Pink Fingers, Musk *Caladenia*, Blue Fairies, Blue *Caladenia*, and the



Green Fringe Orchid



Leopard Orchid

Wildflowers of the District/4
lovely Greencomb Spider Orchid which grows beautifully in the Dalynong Forest, with stems up to two ft tall and multiple flowers on the stems.

A drive along Centre Road is always rewarding, though the flowers are not abundant; there is always something to see, such as Finger Flowers, Trigger Plants, Purple Coral Pea, and deep in the forest *Epacris impressa*, the Common Heath blooming about July in colours from white to darkred. Maidenhair ferns grow between rocks in the gullies, as do Necklace Ferns and of course th



Common Heath



Rosy Baekea

Along Centre Road between St Arnaud and Stuart Mill, a fenced area known as the Wax Garden is a reserve for wildflowers, especially the showy *Baekea ramosissima*, Rosy Baekea, which forms a lovely pink carpet during October, with many other flowers adding colour to the scene.

CHECK LIST FOR WAX GARDENS

_____	Acacia acinacea	Gold dust Wattle
_____	" armata	Hedge Wattle
_____	" genistifolia	Spreading Wattle
_____	" pycnantha	Golden Wattle
_____	Amgema miquellii	Box Mistletoe
_____	Astroloma humifusum	Cranberry Heath
_____	Baekea ramosissima	Rosy Baekea
_____	Brachyloma daphnoides	Daphne Heath
_____	Brachycome perpusilla	Rayless Daisy
_____	Brunonia australis	Blue Pincushion
_____	Bursaria lasiopetala	Bursaria
_____	Caladenia angustata	Musky Caladenia
_____	" carnea	Pink Fingers
_____	" cucullata	Hooded Caladenia
_____	Calochilus robertsonii	Purplish Beard Orchid
_____	Calytrix tetragona	Common Fringe Myrtle
_____	Chamaescilla corymbosa	Blue Stars
_____	Dillwynia sericea	Silky Parrot-pea
_____	Dillwynia hispida	Red Parrot-pea
_____	Diuris maculata	Leopard Orchid
_____	Dampiera sp.	
_____	Dianella revoluta	Black-anther Flax Lily
_____	Dichopogan strictus	Chocolate Lily
_____	Drosera glanduligera	Scarlet Sundew
_____	" peltata	Pale Sundew
_____	" planchonii	Climbing Sundew
_____	" whittaker	Scented Sundew
_____	Eriostemon verrucosus	Fairy Wax Flower
_____	Eucalyptus gonioncalyx	Long-leaved box or Bundy
_____	" leucoxyton	Yellow Gum
_____	" macrorhyncha	Red Stringy-bark
_____	" microcarpa	Grey Box
_____	" polyanthemas	Red Box
_____	" sideroxyton	Red Iron-bark
_____	" viridis	Green Mallee
_____	Glossodia major	Waxlip Orchid
_____	Gonocarpus tetragyna	Common raspwort
_____	Goodenia blackiana	Primrose Goodenia

(over)

CHECK LIST FOR WAX GARDENS (cont.)

_____	Grevillea alpina	Cat's Claws
_____	" dryophylla	Goldfields Grevillea
_____	Hibbertia stricta	Erect Guinea Flower
_____	" exutiacies	Prickly Guinea Flower
_____	Helichrysum obcordatus	Grey Everlasting
_____	" viscosum	.
_____	Helipterum demissum	Moss Sunray
_____	Leptospermum myrsinoides	Heath Tea Tree
_____	Levenhookia dubia	Wiry Stylewort
_____	Lomandra multiflora	Many-flowered mat-rush
_____	" filiformis	Wattle mat-rush
_____	Microseris acapigera	Yam Daisy
_____	Olearia teretifolia	Cypress Daisy Bush
_____	Pimelea cinifolia	Slender Rice Flower
_____	Pterostylis (leaves)	Greenhood Orchid Leaves
_____	Rhytidosporum procumbens	White marianth
_____	Rutidosus multiflora	Small Wrinklewort
_____	Tetrateca ciliata	Pink Bells
_____	Thelmyrtra antennifera	Rabbits Ears
_____	Thysanotus patersonii	Twining Fringe Lily
_____	.	Tussock Grass
_____	Wahlenbergia sp.	Blue Bells

Railton's Tunnel, pictured here, is not typical of the gold workings of the district, though it may show something of the tenacity and initiative of the miners.

Railton was one of the miners thrown out of work as the gold diminished, and, provided he kept digging, he was permitted to draw Government rations. So dig he did, as the tunnel is evidence; though there was no prospect of gold there, I suppose it kept him occupied, warm and dry, while he consumed his rations.



St Arnaud is situated at the apex of what is referred to as "The Golden Triangle". So the visitor might expect to find remnants of the gold rush days - or even the rare nugget!

The town was actually founded by a group of eight miners who had come from Bendigo in 1854 looking for fresh fields to conquer, and they were not disappointed. There is a monument to their memory along the Bendigo Road, a cairn of stones where their camp was pitched, and from where they set out every day to go four miles through the bush to the New Bendigo Diggings, on the other side of what is now the town. They chose to stay in that spot because water was as difficult to find as gold, and they had a secret spring, which they covered and kept hidden, which served them when the creek was dry.

The New Bendigo diggings were around where the Woolpack Hotel is now situated, and it is said that in the creek at the back of the hotel the occasional nugget may still be found.

Several impressive nuggets, of 500, 72, and 64 ounces were found near St Arnaud, around Bell Rock, between 3 and 20ft deep, and it is rumoured that one lucky fellow found a nugget of twenty pound weight, and quietly absconded with his family and the nugget, of which there is no official record. But the alluvial gold was mainly of "pea-sized"

nuggets, such as are occasionally found even today around the district and the real wealth lay in quartz mining, which was "not a casual occupation but an industry", (Track of the Years, p15.)

By 1900 The Lord Nelson mine was the largest in the district. The remains of the foundations for its quartz crushing machinery can be seen as a feature of Pioneer Park, itself created from the fractured soil of the mines and the sand left by the later "cyanide process" by which the tailings were reworked. Amongst the "cyanide sands" to the north of the town, there are mining leases of recent origin. It seems hope still stirs amongst the mining fraternity of St Arnaud.

At Burke's Flat and Canadian Hill recent work has been carried out, though it has been said that the gravel produced has been far more profitable to the community than the gold ever was. Work is currently in hand on a hill at Koreh, and Gold Searchers are looking into (excuse the pun) the deep open shaft at Wehla, known as the Prince of Wales Mine. On the road going from Logan to Melville's Caves, this old cutting is well worth a look, despite the old tyres and other rubbish that has been dumped there. It is hard to believe that there was a town at Wehla in the height of the gold rush, with 3000 people, churches and a pub.

The Prince of Wales was sunk to a depth of 400 ft, and at one point, a ton of crushed quartz yielded 17dwt. 20gr. of gold, enough to encourage further sinking at that time.

Life on the goldfields is described in a letter from the Redbank district: "This goldfield is in the heart of the Pyranees and is very extensive. The gold is more equally distributed than I have known on any digging, and in consequence a greater number of men have got gold than is usual on a new field, the claims paying from half an ounce to three ounces to a cartload of washed stuff. From 50 to 60 loads is taken from a claim. It is a good hole that pays 3 ounces a load; we wash many a load for 4 or 5 dwts - always hoping to get on a patch that will take us to the great exhibition....."

At Stuart Mill itself, in 1869, "the small mining township 16 miles south of At Arnaud mushroomed into growth as companies were formed to work its reefs." (Track of the Years, p117.) The reefs, however, yielded only 2½ ounces to the ton, and the machinery available was not efficient for the tasks of crushing the quartz and keeping the water out, which is the problem of most mines in this district.

There is the legend that a young man from Stuart Mill, out riding in the Rostron Road vicinity, discovered a reef so rich that he hastily covered it over to prevent its discovery by anyone else, and rode off at a gallop to legalise his claim. He was thrown from his horse, so the story goes, and knocked unconscious; and afterwards was never able to recover the precious memory of where the gold was to be found. Needless to say, everyone who passes that way takes a good look at any interesting outcrop, but the rich reef has not so far been re-discovered.

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