



The Clematis



The Quarterly Newsletter of the
Bairnsdale & District Field Naturalists Club Inc. A0006074C

P.O. Box 563, Bairnsdale Victoria 3875 www.bairnsdalefieldnaturalists.com.au

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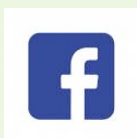
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Issue date

September 2020



MOORMUNG STATE FOREST

SCALE:- 1 cm. = 200m.

600 400 200 0 500 1000 1500 METRES

forest boundary
other fences
major tracks
minor tracks
foot tracks
gate and/or grid
dam
swamp grass/clearing

** Sites BOTANICAL significance NUMBERED

BAIRNSDALE FIELD NATURALISTS' CLUB

George C. Stewart

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Photographers

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CLUB INFORMATION

CORRESPONDENCE TO: The Secretary, P.O. Box 563, Bairnsdale 3875

www.bairnsdalefieldnaturalists.com.au

MEETINGS

General meetings take place at:

The Hub

27 Dalmahoy Street, Bairnsdale

as per program at 7.30pm *sharp*

Committee meetings take place at:

members homes as per

program at 10.00am.

THE CLEMATIS

The Clematis is issued quarterly.

Responsibility for the accuracy of information

and opinions expressed in this newsletter

rests with the author of the article.

All articles for Summer 2020/21 Clematis must be

sent to the Newsletter Editor by 1st December 2020.

SUBSCRIPTION FEES 2020

Single membership \$30

Family membership \$45

Mid-year fee (new members only) \$15

Subscriptions can be paid to the Treasurer at meetings or excursions or by EFT or cheque by downloading a Membership Application form from our web site.

STATEMENT OF PURPOSE

1. To further the awareness and study of all branches of natural history within the East Gippsland community through field excursions, regular surveys, specialist guest speakers and publications.
2. To observe and strengthen the laws for the preservation and protection of indigenous flora, fauna, habitat and important geological features.
3. To promote the formation and preservation of National and State Parks and Reserves.
4. To collaborate with other groups and agencies with similar environmental interest.

CONTACTS for Field Trips

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FIELD TRIPS

It is your responsibility to contact the coordinator of each field trip to notify them of intention to participate.

The coordinator will notify you if the trip has to be cancelled due to adverse weather conditions or other unforeseen circumstances.

Please take note of safety procedures in your Bairnsdale & District Field Naturalists Club Inc. 'RISK MANAGEMENT POLICY' booklet.

This can be downloaded from our web site.

RULES TO OBSERVE DURING FIELD TRIPS

1. Excursions are cancelled on days of TOTAL FIRE BAN.
2. Participants to keep a visual on the car in front and behind.
3. When making a turn, give signal, and stay at intersection until following car has also turned.
4. If separated from other cars, stop, and stay with your car.
Other members will return to find you.
5. The Car Pooling Cost Calculator is used to assist drivers and car pool passengers to share fuel costs and can be found on our web site.

DEGREE OF DIFFICULTY FOR BUSH WALKS

Walks vary in distance from 8 to 14 km.

Easy: Flat, good firm track.

Moderately easy: Mostly flat, track in good to fair condition.

Moderate: May be undulating, track in good to fair condition.

Moderately Difficult: May be some steep sections, track may be rough in places.

Difficult: May have long steep sections, track may be non-existent at times.

Contact the leader of the walk for a rating if it's not included in the program.

PROGRAMME SEPTEMBER TO DECEMBER 2020

Due to possible Covid-19 restrictions these activities are subject to change. Advice will be emailed to confirm if the activity in this program will take place.

Date	Activity	Time	Meeting Place	Destination	Subject/ Rated	Leader/Speaker
SEPTEMBER						
Sun 20 th	Excursion	9.00am 9.45am 10.15am	Bridge Club Nowa Nowa Orbost Forest Park Toilets	Pinnak Hills Yalmy Road or Mt. Raymond		James Turner
Sun 27 th	Bushwalk	9.00am 9.30am	Bridge Club Forest Tech	Mississippi Creek	Easy	Noel William- son
OCTOBER						
Sun 18 th	Excursion	9.00am 9.45am 10.15am	Bridge Club Nowa Nowa Orbost	Cape Conran Coastal Park		James Turner
Sun 25 th	Bushwalk TBA					
NOVEMBER						
Sun 1 st	Juniors					
Tue 10 th	Committee meeting	10.00am	Pauline Stewart's home			
Fri 20 th	General meeting Christmas breakup	7.30pm	Noweyung Centre			
Sun 22 nd	Excursion	9.00am 9.30am	Bridge Club Red Knob	Timbarra & Green Hills		James Turner
Sun 29 th	Bushwalk TBA					
DECEMBER						
Sun 6 th	Junior		Christmas breakup			
Tue 8 th	Committee meeting	10.00am	Pat McPherson's home			
SUMMER	Alpine Camp TBA					

PRESIDENT'S REPORT

I am writing this as the road map for recovery for Regional Victoria

has just been announced. It hasn't unlocked the regions from our current shut-down as we had hoped it might. Nor can it, because lifting of restrictions is based on provisional dates that are subject to "the 14-day rolling average of daily new cases falling below certain thresholds". So, it's a matter of arithmetic (where have we heard that before)!

Therefore, all I will say at this point is that decisions regarding the resumption of our planned excursions/ bush walks will be communicated to you once we reach Stage 3 of the Roadmap when 10 people can attend out door activities and Stage 4 when 50 people can. The provisional date set for the latter is 23rd November.

Committee activity has continued during the current six weeks of inactivity and will continue for as long as it takes.

Marg. Regan continues to keep the books and write excursion reports, Jen Wilkinson is still beavering away on our new wildflower book; Pauline Stewart has produced a creatively different Clematis newsletter ...and dealt with an unexpected demand for our orchid book. It might have something to do with the increased number of orchid related queries from the public that James Turner, our Club's 'go to person', has handled in between collaborating with Jen on the new book.

As for me, my job in this time of Corona has been to keep abreast of the requirements of the Government's Covid-19 rules and regulations regarding our activities; keep abreast of the requirement/advice from Consumer Affairs Victoria regarding our incorporation responsibilities; to keep abreast of member's advice from the Field Naturalist Club of Victoria and to keep engaged with our own membership.

In July we were advised that Noweyung premises will no longer be available to rent to external organisations for out of hours activities.

We investigated alternative venues and decided that rooms at The Hub are suitable to meet our needs and the cost is comparative to that of Noweyung. We have sent The Hub an Expression of Interest in renting a room for our meetings when Covid-19 restrictions allow. According to the Regional road map that is not likely to be before 23rd November.

The second issue we had to deal with was the Library - the future and use of which had long been in the Club's 'too hard' basket. Located in one of the back rooms at Noweyung it had to be removed by 16th August. We scheduled two working bees, the first on August 3rd when we updated the reference list by adding the author's names; audited the books and removed them to safe storage at Margaret Regan's place. For your information, the audit revealed 320 books were catalogued of which only 185 were found and an additional 21 books were found that were not catalogued.

Total- 206 books, most of which are extremely dated.

The second working bee scheduled for August 10th didn't take place because of the second shut down. Its purpose was predicated on the Committee's firm opinion that the focus of the Library should change from lending to that of reference only. As a consequence, a decision has to be made about the books to keep (if any), where to store them and to look at options for the disposal of the others.

With this in mind we would welcome any thoughts/suggestions that you the members may have regarding the use and/or disposal of the non reference books.

.....and now it is Spring, and the burnt bush is blooming. Hopefully we will soon be free to get out and enjoy it.

Pat McPherson

PLIGHT OF THE PANGOLIN

By C. Tuck

Is it fair to blame an endangered animal for a human pandemic? The Pangolin is a timid, scaled mammal of Asia and Africa. There are eight pangolin (*Manis*, *Phataginus* and *Smutsia*) species. The types are split equally with four in each of the two continents. They are mainly nocturnal, eat huge numbers of insects and roll into a ball when threatened. See Figure 1

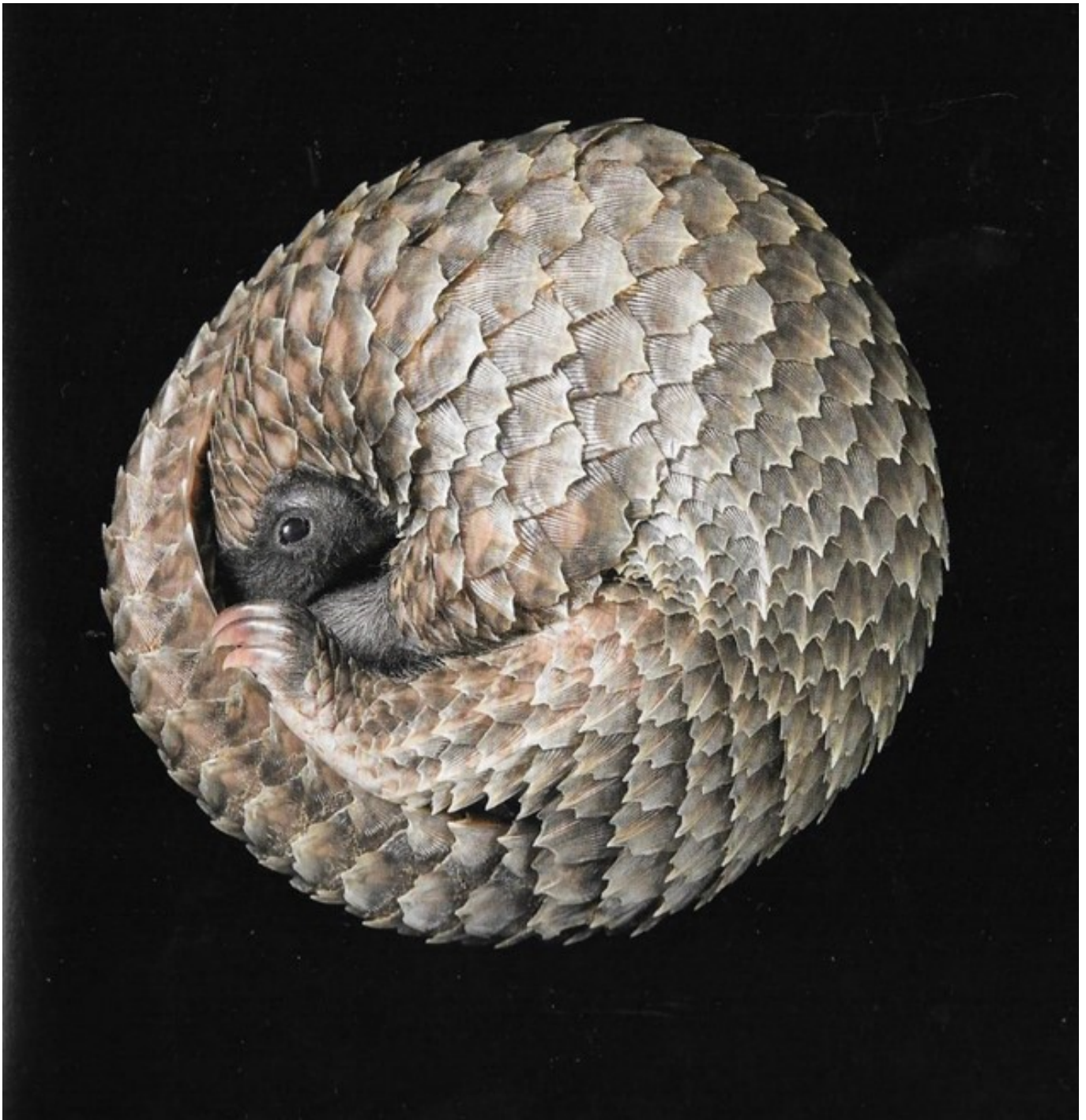


FIGURE 1 . Flack. T (2017).

Although wild population numbers are only estimates, it is considered that all eight species are in decline and their populations threatened, soon to the point of extinction. Why you wonder? Well it is not just habitat destruction, or because the normal predators like lions are eating these little insectivores. No. They are being hunted by humans. They are valued for the meat, and the scales are dried and ground to powder to become traditional Asian medicine. The blood, bones, claws and other body parts have also been thought to have medicinal properties. They are trafficked in hundreds in an illegal and legal trading system and deemed to be one of the most trafficked mammals in the world. Young pangolin, see figure 2.

Asian companies and workers have been working in Africa, in pangolin habitat to build rail infrastructure. This has allowed Asian markets to access the African pangolins putting increased pressure on the animals. While two of the Asian species are critically endangered, since 2000 more and more of the trade has come from African species. Wildlife trafficking has become a large and profitable business. The price for the pangolin has increase dramatically in the past ten years.

In 2016 over 4000kg of pangolin scales were found in a shipment in Hong Kong labelled as plastic. However earlier this year it was suggested that perhaps the Pangolin was an intermediate host for the SARS virus strain. Asian markets with illegal animal trade have been in main stream media. Legislation has been changed, but will it be enough to alter the demand for the only scaled mammal in the world?



**GURRAN-GURRAN-YARN (DEAD HORSE CREEK ROAD)
AND KENNY STATE FOREST – 19 July 2020**

Due to the Covid19 virus restrictions only 10 lucky Field Nats were able to go on the first excursion since March, ably led by James. It was with some trepidation that we headed north along Dead Horse Creek Road. Nearly all the areas we passed through during the day had been burnt during the horrific Black Summer bushfires. We were surprised and pleased to see that most of the eucalypts were regenerating, both by their epicormic shoots, and the large number of their seedlings. The epicormic shoots (arising from buds all up the trunks) bear juvenile leaves, so the trunks were completely sheathed in green of various hues. It was interesting that there is much more difference in colour and shape in the juvenile leaves than in the later adult leaves. Most of the places we searched were the areas beside the track that had been slashed, but with much regrowth. We were thrilled to see that most of the ground was covered with new seedlings or plants regenerating from underground roots, rhizomes or lignotubers. Quite a few plants were in flower, but the area will be stunning in spring when most of the plants will be in bloom.

At our first stop along Dead Horse Creek Road were lovely deep pink Common Heath (*Epacris impressa*) plants with spiky leaves and long tubular flowers. We saw this heath at most of the sites visited during the day, with varying shades of pink. Honey bees, hoverflies and other tiny flies were busy visiting the flowers. Although not flowering, there were everywhere many plants of the “native, but weedy” shrub Burgan (*Kunzea ericoides*). There were a few plants of the small yellow-green shrub Holly Lomatia (*Lomatia ilicifolia*) with large tough holly-like leaves. Two more shrubby heaths (family Ericaceae) were the very prickly almost prostrate Cranberry Heath (*Astroloma humifusum*) with few red tubular flowers; and Prickly or Long-flower Beard-heath (*Styphelia sieberi*) which has yellow-green foliage and whose white tubular flowers are lightly bearded within.



Holly Lomatia (*Lomatia ilicifolia*) JW



Long-flower Beard-heath (*Styphelia sieberi*) JW

Two peas (Fabaceae) were a flat-pea shrub *Platylobium parviflorum* with opposite narrowly ovate leaves and almost all yellow flowers; and the tough showy creeper Purple Coral-pea (*Hardenbergia violacea*) with similar leaves. An everlasting daisy we saw all day was yellow Button Everlasting (*Coronidium scorpioides*) with grey-green hairy leaves. Two other small plants were the pretty scrambling purple Hairy Fan-flower (*Scaevola ramosissima*) whose leaves and the outside of the flowers are hairy; and Hoary Guinea-flower (*Hibbertia crinita*) whose branches and leaves are covered with silky hairs. Orchids were tiny neat Trim Greenhood (*Pterostylis concinna*), a helmet-orchid (*Corybas* sp.), fertilised Tiny Greenhood (*P. parviflora*), fertilised Large Mosquito-orchid (*Acianthus excertus*), and sun-orchid (*Thelymitra* sp.) and beard-orchid (*Calochilus* sp.) leaves. “Parvi” is Latin for “small”.

Just past Old Mill Road we again found Trim Greenhood, but also the well-known (“Noddies”) Nodding Greenhood (*Pterostylis nutans*). The Hoary Guinea-flower here was being serviced by hoverflies. Adult hoverflies are 4-7mm long and have a dark-coloured flattened body with black and yellow stripes. They can hover or fly swiftly, and like all flies, have only one set of wings. The adults feed on pollen and nectar and do not feed on insects. Their larvae are generally green with a white stripe down their back. They are predatory and attack aphids, spearing them with their prominent mouth hook. Two other plants we saw all day were the small red pea creeper Running Postman (*Kennedia prostrata*) which is one of the plants which



Running Postman (*Kennedia prostrata*) JW

germinate in response to fire; and tiny white Common Rice-flower (*Pimelea humilis*) whose tubular flowers have long stamens protruding. There was also a pretty bluebell (*Wahlenbergia* sp.). Sambar deer tracks were seen throughout the day.

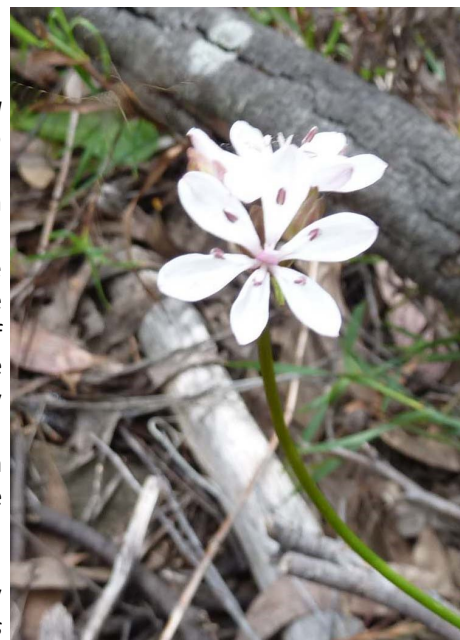
Dead Horse Creek Road was now running along a ridge which had been burnt on either side. Again we found Running Postman, Button Everlasting, Common Rice-flower, Hairy Fan-flower and mosquito-orchid leaves. New daisies were the tiny Blue Bottle-daisy (*Lagenophora stipitata*) with a basal rosette of hairy crenate (round teeth) leaves; and a *Brachyscome* sp. whose basal rosette was of linear leaves. Two herbs were the highly perfumed white or blue herb Sweet Hound’s-tongue (*Hackelia suaveolens*); and the gorgeous Blue Pincushion (*Brunonia australis*) with many flowers clustered in a head at the top of the stalk. There was also all day Nodding Blue Lily (*Stypantra glauca*) whose pendulous flowers have their petals recurved to expose their bright yellow stamens; and the tiny mauve pea climber Twining Glycine (*Glycine clandestina*) twisting up around other plants. There were, of course, a number of grasses. These included reddish Kangaroo Grass (*Themeda triandra*) with a drooping inflorescence; the very fine Weeping Grass (*Microlaena stipoides*) whose spikelets irritatingly attach themselves to our socks and laces; a spear-grass (*Austrostipa* sp.) whose inflorescence was extremely tall (over 2m) with hairy nodes; and a plume-grass (*Dichelachne* sp.) which has a dense panicle with many spikelets.

Further along the same ridge, a new lily was the small white Milkmaids (*Burchardia umbellata*) whose white starry flowers have a red ovary. Holly Lomatia was also seen flowering, which seems to be rare. It produces a tall inflorescence (to 30cm) with many white or cream grevillea-like flowers. It regenerates after fire from a lignotuber, which is a rounded woody growth at or below ground level containing a



Sundew (*Drosera auriculata*) JW

mass of buds and food reserves. Some eucalypts and banksias also have lignotubers. We noticed a Narrow-leaf Geebung (*Persoonia linearis*) where the original plant appeared to be completely burnt, but new shoots were growing from the base of the old plants. It is adapted to a fire-prone environment and like the eucalypts resprouts epicormic shoots from buds protected beneath the thick bark. There was also an apparently completely burnt tree of Cherry Ballart (*Exocarpus cupressiformis*) with two tiny sprouts up the tree, but more out from the tree, presumably coming up from spreading roots.



Milkmaids (*Burchardia umbellata*) PS

Now on Watershed Road were more Milkmaids, but also Grey Guinea-flower (*Hibbertia obtusifolia*), and the carnivorous sundew (*Drosera auriculata*). This sundew has a basal rosette of leaves and its stem leaves are ear-shaped. All the leaves are modified as insect traps with sticky glandular hairs over their surfaces. When an insect alights on a leaf they become stuck on the sticky substance and surrounding hairs are stimulated to entrap the insect. The hairs then release a protein-digesting enzyme and the insect’s fate is sealed!!! Horror!!! Sundews often grow in nitrogen-deficient environments and this enables them to supplement their diet.

Further on Watershed Road were ??maybe three spider-orchids, Monaro Spider-orchid (*Caladenia oreophila*), Peisley's Spider-orchid (*C. peisleyi*) and Heath Spider-orchid (*C. fitzgeraldii*). Mid July is a month earlier than normal for the flowering of these orchids. An everlasting daisy we found at several sites was white and yellow Satin Everlasting (*Helichrysum leucopsideum*) with woolly stems and leaves and the flower heads with white outer bracts and inner yellow disc florets. Another daisy was yellow Indian Weed (*Sigesbeckia orientalis*) which is an annual herb of shaded places whose lanceolate to spear-shaped leaves are covered with glandular hairs. It was probably introduced from Asia or Africa. It is used in herbal medicine. There was Small Grass-tree (*Xanthorrhoea minor*) with flowering stalks with the flowers still in bud. Its trunk is almost entirely underground and branching. Clambering about was the climber Wonga-vine (*Pandorea pandorana*) with pinnate leaves, but as yet none of the lovely tubular pink flowers. Two more plants that were resprouting from their bases were the very pretty small tree Blue Oliveberry or Blueberry Ash (*Elaeocarpus reticulatus*) with toothed leaves, fringed pink flowers and dark blue fruits; and the rare shrub Nowa Nowa Grevillea (*Grevillea celata*). It is believed to have a range of only 100km and is found in the Colquhuon and Kenny State Forests. Its flowers may be red and white, pink and white or apricot and white. It can reproduce by root suckering, particularly after fire! There was, of course, the tough Austral bracken (*Pteridium esculentum*), which because it is so ubiquitous, tends to be ignored. The new growth was a lovely bright green. Two other ferns were the delicate lacy Common maidenhair (*Adiantum aethiopicum*), surprisingly surviving the heat; and the more robust Narrow rock-fern (*Cheilanthes sieberi*) with widely spaced short pinnae.

James then took us to the corner of Kenny Road and Holloways Road to show us the damage he had discovered when DELWP had sprayed kilometres of the roadside with herbicide; regardless of the fact that threatened plants had been reported to the department as growing along roadsides.

Our last stop was at Radar Hill where in the 70s or 80s, the Victorian Forests Commission had a radar station somehow involved with burning?? We came here to find Red-lip Greenhood (*Pterostylis scapula*). This rare greenhood can have up to 12 flowers on its stem. Each flower has a reddish labellum with incurved margins and the sepal tips are reddish as well. Here we found Noddies again. Two daisies were the herbs, white Tall Daisy (*Brachyscome diversifolia*) with dissected basal leaves; and the much larger yellow Fireweed Groundsel (*Senecio linearifolius*) with very variable leaves and flower heads with 4-8 ray florets and 8-14 central disc florets. We saw also the herbs Creamy Candles (*Stackhousia monogyna*) which has cream flowers in a cylindrical raceme; and purple Showy Violet (*Viola betonicifolia*) with a basal rosette of leaves.

What a lovely day, thank you James. You picked the warmest day for ages, as well as all those wonderful plants. Thank you also to Len, Jacque and James for the bird list.



Satin Everlasting (*Helichrysum leucopsideum*) JW



Nowa Nowa Grevillea (*Grevillea celata*) JW



Red-lip Greenhood (*Pterostylis scapula*) DW

Plants:

Acianthus exsertus Large Mosquito-orchid
Adiantum aethiopicum Common maidenhair
Astroloma humifusum Cranberry Heath
Austrostipa sp. a spear-grass
Brachyscome sp.
B. diversifolia Tall Daisy
Brunonia australis Blue Pincushion
Burchardia umbellata Milkmaids
?Caladenia fitzgeraldii Heath Spider-orchid
?C. oreophila Monaro Spider-orchid
?C. peisleyi Peisley's Spider-orchid
Calochilus sp. a helmet-orchid
Cheilanthes sieberi Narrow rock-fern
Coronidium scorpioides Button Everlasting
Corybas sp. a helmet-orchid
Dichelachne sp. a plume-grass
Drosera auriculata a sun dew
Elaeocarpus reticulatus Blue Oliveberry or Blueberry Ash
Epacris impressa Common Heath
Exocarpus cupressiformis Cherry Ballart
Glycine clandestina Twining Glycine
Grevillea celata Nowa Nowa Grevillea
Hackelia suaveolens Sweet Hound's-tongue
Hardenbergia violacea Purple Coral-pea
Helichrysum leucopsideum Satin Everlasting
Hibbertia crinita Hoary Guinea-flower
H. obtusifolia Grey Guinea-flower
Kennedia prostrata Running Postman
Kunzea ericoides Burgan

Lagenophora stipitata Blue Bottle-daisy
Lomatia ilicifolia Holly Lomatia
Microlaena stipoides Weeping Grass
Pandorea pandorana Wonga-vine
Persoonia linearis Narrow-leaf Geebung
Pimelea humilis Common Rice-flower
Platylobium parviflorum a flat-pea
Pteridium esculentum Austral bracken
Pterostylis concinna Trim Greenhood
P. nutans Nodding Greenhood
P. parviflora Tiny Greenhood
P. scapula Red-lip Greenhood
Scaevola ramosissima Hairy Fan-flower
Senecio linearifolius Fireweed Groundsel
Sigesbeckia orientalis Indian Weed
Stackhousia monogyna Creamy Candles

Stypantra glauca Nodding Blue Lily
Styphelia sieberi Prickly or Long-flower Beard-heath
Thelymitra sp. a sun-orchid
Themeda triandra Kangaroo Grass
Viola betonicifolia Showy Violet
Wahlenbergia sp. a bluebell
Xanthorrhoea minor Small Grass-tree

Birds:

Total of 21, with only new additions added at each site.

Bruthen:

Australian King Parrot
 Galah

Rock Dove or Feral Pigeon

Dead Horse Creek Road 1:

Superb Lyrebird
 White-eared Honeyeater
 Spotted Pardalote
 Red Wattlebird

Grey Shrike-thrush
 Pied Currawong

Laughing Kookaburra

Brown Thornbill

White-throated Treecreeper

Golden Whistler

White-winged Chough

Dead Horse Creek Road 2:

Eastern Spinebill

Dead Horse Creek Road 3:

Superb Fairy-wren

Watershed Road 5 (lunch):

Jacky Winter

Watershed Road 6:

Scarlet Robin

Aquarius Road 8 (afternoon tea):

Rainbow Lorikeet

Yellow-faced Honeyeater

White-naped Honeyeater

Insects:

Hoverflies

NATURE NOTES

Birds - by Margaret Regan

For several years now, come late winter, a male Superb Fairy-wren (resplendent in his blue outfit) has spent time attacking his image in the windows of my house. He is so engrossed in protecting his territory from this look-a-like intruder, that I can get quite close to him before he flies off. This year, however, he has been almost completely replaced by an Eastern Yellow Robin (presumably also a male). One is alerted to their presence by tapping on the window.

I have also had the pleasure of having White-browed Scrub-wrens nesting in a large pot of the orchid *Dendrobium x delicatum*. I had found a nest in an adjoining pot from the previous year, but had not noticed the birds that were using it. I hope I didn't water them when they were using it!

On Tuesday August 11, I was lucky enough to see a flock of about 30 Royal Spoonbills come into roost in the trees surrounding the small lake at McMillans in Metung. This lake is a great spot to see a number of waterbirds. The Royal Spoonbills are large white waterbirds which have a black spoon-shaped bill and black facial skin, legs and feet. They are vulnerable in Victoria.



Royal Spoonbill JS

Ephemeral Magic - by Jen Wilkinson

Recent rains have stimulated new life in the bush including wondrous fungi such as this Basket Fungus (*Ileodictyon cibarium*). Being related to puff-balls, Basket Fungi belong to the Phalloid or Stinkhorn group known for their strong odour, although I couldn't detect any odour on this specimen at this stage. Basket Fungi are not uncommon in rainy seasons throughout East Gippsland.

They first appear as an egg-like sac partially buried in the ground and rapidly expand to cricket ball size rupturing the sac. The gleba containing the spore-bearing tissue is on the inner surface of the 'basket' but you have to be in the right spot at the right time to see it because the basket collapses as quickly as it appears. What remains is a smelly brown slime containing the spores and of course, the smell attracts flies and other insects from far and wide.

The magic continues though, because as well as being wind-blown, the spores are dispersed after passing through insects. How amazing is that?



Basket Fungus JW

Gang Gangs and Grubs - by Noel Williamson

While walking through the Bosworth Road Recreation Reserve at Bairnsdale recently I noticed a lone Gang Gang cockatoo in one of the Eucalypt trees on the side of the trail feeding on something. On closer investigation it was feeding on Spitfire grubs which had colonised on a branch, I thought this was a bit unusual. On another walk in the same area I came across a small group of Gang Gang cockatoos in the trees but this time not feeding on spitfire grubs.



Gang Gang Cockatoo KR

BUSHWALK IN MOORMURNG FOREST - Sunday 26th July 2020**By Pauline Stewart**

A small group of bushwalkers observing social distancing enjoyed a day out walking through this very special forest. It was a wet, drizzly morning which turned the mosses a vibrant green and Red Gum tree trunks beautiful colours with the rain clearing up at lunch time. Members observed and appreciated the greenness of the bush after four years of drought and took in the early history of the area. Some interesting observations were the Red Gum Scar Tree, Horse Dropping fungi, patches of Trim and Nodding Greenhoods, a Maroonhood and a couple of Slaty Helmet Orchids.

Early history:

In the book *Path Among the Years—History of Shire of Bairnsdale* by John Adams, John Adams writes:

The Aboriginals were the first inhabitants of the area. The main tribe in the area was the Kurnai tribe of which the Brabaralung clan predominated. The clan was bordered on the west by the Brayakaulung clan, and on the east by the Krauatungalung. The Brabaralung tribe were divide into several groups - the Bruthen, the Waiung, the Wuk Wuk, the Dairgo and the Munji. The Munji occupied the northern shores of Lake Victoria in the Bengworden-Good Nure area, while the other tribes concentrated north of the Mitchell in the areas named for them Bruthen (from Brewd-than, bracken fern); Wy Yung (from Waiung, wild duck); Wuk Wuk (ground, or earth), and Dargo (from Dairgo, patience).

So presumably, by that description of the structure of the Kurnai peoples the Munji would have been the group living and hunting in the Moormung area.

Much of what we know about the Aborigines of the Bairnsdale district comes from the studies of Alfred William Howitt whose book, The Native Tribes of South-East Australia, is regarded as a pioneering work and a classic in the field of Australian Aboriginal anthropology.

Howitt describes in detail the food, clothes and weapons of the Aboriginal people. The weapons were traditional—spears, axes of stone, boomerangs and nullahs. There were also elaborate shields cut from the bark of trees. A number of old trees and tree stumps in the district can still be seen bearing the scars of the aboriginal craftsmen. One such tree is in Howitt Park and another is in the Moormung Forest, a great old red gum. Canoes were also cut from the bark of trees, and skilfully shaped and made watertight for use on the lakes. The Aborigines were fishermen as well as hunters and used fish pens and nets, while snares were often used to trap small animals for food.

When visitors first see the Moormung scar tree they are intrigued as there doesn't seem to be any water bodies anywhere near, but initially the area would have been quite swampy. Canoes provided aborigines with access to rich hunting grounds in swamps, river estuaries and lakes in the region. In the late 19th and into the 20th century settlers and later landowners spent a lot of time and effort draining the swamps.

In January 1840, Angus McMillan and his party of exploration came down the Tambo Valley and reached Brewd-than (Bruthen) and so went on to discover Gippsland. *The news of the rich pastures in the new found province of Gippsland soon began to spread throughout New South Wales*¹. It wasn't long before selectors came in to claim the land and Moormung became part of the Lindenow Station.

There is such an interesting story written in this book by John Adams about the Lindenow Station selected by John Loughnan and Frederick Taylor that it is worth following up.

In those very early days fences had not yet been built so the sheep had to be cared for by shepherds. A story was told to me by my father-in-law, George Maitland Stewart who along with his two brothers acquired the Cold Xmas property adjoining the Moormung Reserve in the early 1900s about how the property got its name. "Two shepherds who were caring for the flock one Xmas ran out of supplies so one headed off to the bright lights of Bairnsdale supposedly to bring back enough tucker to see them through the festive season. However, while there he succumbed to too much booze and left his mate alone in the bush with only the sheep for company and facing a very miserable and 'cold Christmas'".

Moormung was declared a timber reserve in 1885 and from hearsay, timber was used to make charcoal for the paddle steamers in the Gippsland Lakes as well as for a supply of sleepers for the railway line which was opened to Bairnsdale in 1888. For this reason most of the Red Gums are of the same age group with very few old growth trees left.

In 1976 the Bairnsdale Environmental Group was formed to promote the protection and preservation of areas of special natural and scenic interest in the East Gippsland area reinforcing the work of the Field Naturalists Club. One of the group's first projects was to formulate a policy on the possible preservation of the unique Moormung Forest area. A former timber reserve noted for its red gums.²

In past years the area had to put up with the dumping of rubbish and car bodies, illegal timber getting, hoons and irresponsible 4 wheel drivers as well as drought and fire but through all that it has emerged as a special place where there is still a wealth of wild flowers and birds to observe.

The reserve is now know as the Moormung Flora and Fauna Reserve.

References:

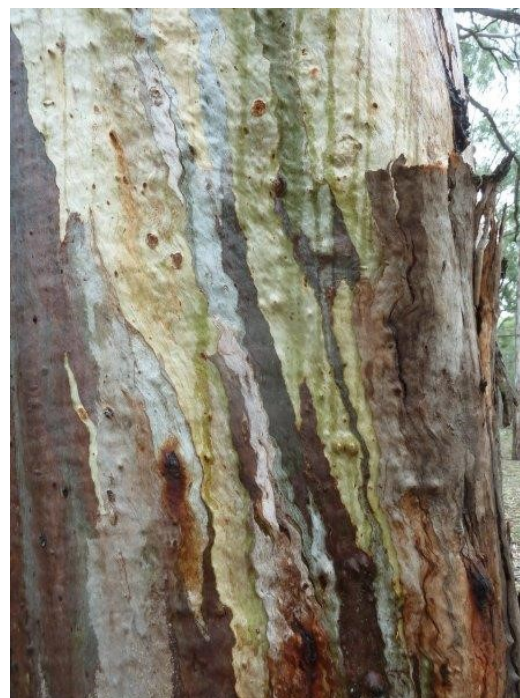
- ¹ John Adams , Path Among the Years-History of Shire of Bairnsdale
- ² Ibid.



4WD tracks PS



Horse Dropping Fungi PS



Wet bark on Red Gum PS



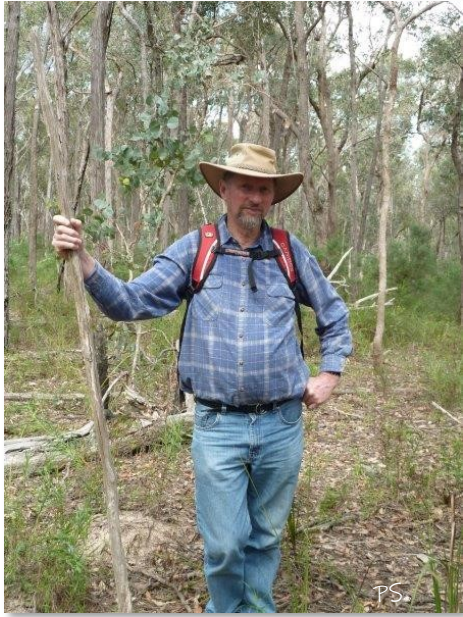
Horse Dropping Fungi breaking down to release spores PS



Slaty Helmet Orchid DW

MEMBER PROFILE

The late GEORGE CARSON STEWART 1943 – 2016



George Carson Stewart was born in 1943 to a farming family who bred and grazed Merino sheep. The farm was located on the north and south side of the Princes Highway at Hillside, west of Bairnsdale and angled down to a large paddock named *Cold Xmas* situated between the two southern arms of the Moormung Timber Reserve. All movement of sheep from this paddock to the shearing shed up near the highway was through the reserve so George had an intimate knowledge of it and spent a lot of time wandering around locating and recording plant species.

In the early 1970s, George became very concerned about the poor state of the Moormung forest and in 1976 he helped set up the Bairnsdale Environmental Group to tackle the problem.

From the 1980s George was an active member of the Gippsland Sheep Breeder's Association and had terms as President and Vice President and awarded a Life Membership.

During this time, he bred stud merino sheep and upgraded his commercial flock. He won many awards in sheep shows and often topped the sales for his fine and superfine wool. Cold Xmas wethers consistently won at the Gippsland Sheep Breeder's Association's sheep production trials. His rams were displayed on site at Cold Xmas at the Gippsland Merino Studs field days creating interest from ram buyers. George twice won the Australian Sheep & Wool Show for Champion Commercial Fleece.

George was involved in the Gippsland Grazing Industries Training Centre Committee for seven years from 1991 and became a Vice President. Also, in 1991 he joined the

Cobblers Creek Catchment Landcare Group and had a term as Secretary/Treasurer.

Another of George's major interests was as a member of the Bairnsdale and District Field Naturalists Club. Joining in 1973 he later held the offices of Vice President, President and Publicity Officer and was awarded a Life Membership. He remembered with great fondness the camaraderie of the members as they went off on field excursions and camps. His knowledge of native plants particularly the eucalypts grew as he learnt from senior members and did his own research.

Computers and other electronic devices were embraced by George ever since computers came on the scene back in the 1980s. He had a natural association with them and enjoyed learning how to use them and fix anything that went wrong. George retired from farming in 2007 and sold off the farm, his stud sheep and commercial flock.

With no regrets, he embraced the life of retirement by caravanning around Australia with his wife Pauline.

Native plants were incredibly special to him and he spent a lot of time in his large native garden. He had collected Australian plant seeds for years and when in Western Australia he unpreparedly climbed to the top of the 1128mt Mt Nameless at the back of the mining town of Tom Price to find a Eucalypt species that had so far eluded him. After several hours with Pauline waiting in the hot sun at the base of the bleak mountain he returned thirsty, hot, and very red in the face but triumphantly held a couple of seed capsules in his hand to take home. These were propagated and given to his children Jacquelyn, Jeremy, and Stephanie to plant in their home gardens.

In 2013 after building a house at Eastwood, George helped Pauline to set up the new Eastwood Landcare Group and became very involved in planting and maintaining the reserve below his new home. New and valued friendships were formed with the Eastwood residents who come along to fortnightly working bees.

After becoming ill at Easter 2016 and spending a lot of time in and out of hospitals all he wanted to do was to come home and sit in the sunshine in his garden.

With the aid of Pauline, the district nurses and his family and friends he did manage to come home where he passed away peacefully on the 16th October 2016.

MOORMURNG FOREST AND ITS EUCALYPTS - The Clematis, Volume 20, December 1981

by George C. Stewart

The area of State Forest, commonly called Moormurng Forest, lies 12 kms to the south-west of the town of Bairnsdale. It was originally set aside as a Timber Reserve of 870 hectares in 1885, but was enlarged to 950 hectares and declared to be a reserved Forest in 1958, subsequently attaining the status of a Forest Park in the late 1970's.

As a result of the extensive clearing of the Plains country for agriculture around the turn of the century, Moormurng Forest became an isolated block of forest containing a fairly representative sample of the Red Gum plains flora.

The main tree species of Eucalypt present in large numbers over the wetter southern and eastern sectors of the forest is the Forest Red Gum (*Eucalyptus tereticornis*). Unfortunately, most of the pre-settlement Red Gum forest was felled either for railway sleepers or for fencing materials prior to the turn of the century, with the result that 99% of the Forest Red gum now growing there appears to be less than 100 years of age.

However, one prominent example of a largish Forest Red Gum (at least 30 metres in height, with a trunk 5 metres in circumference) has the added feature of a scar 4 metres long on one side where an aboriginal canoe had been hacked out in times long gone. The tree itself is still in reasonably good health, however, and should see out a few more decades yet.



This thriving Red Gum population will become increasingly important as an ecological refuge for most of the beneficial birds, insects, reptiles and so on that have seemingly deserted the surrounding cleared agricultural lands where the scattered and sick remnant trees are in serious decline with perhaps the ultimate threat of extinction not altogether impossible. (Ed. Transcribed. Plant names may have changed.)



Other significant Eucalypts found growing in association with the Forest Red Gum are the Gippsland Grey Box (*Eucalyptus bosistoana*), Yellow Box (*Eucalyptus melliodora*), But But (*Eucalyptus bridgesiana*) and Swamp Gum (*Eucalyptus ovata*).

Where the sandy soils meet the wetter clay soils we find Yerchuk (*Eucalyptus considiana*), a slightly bluish leaved Eucalypt, not yet identified, but resembling the Scent Bark (*Eucalyptus aromaphloia*) and possibly Silver-leaf Stringybark (*Eucalyptus cephalocarpa*) which is found growing quite commonly nearby.

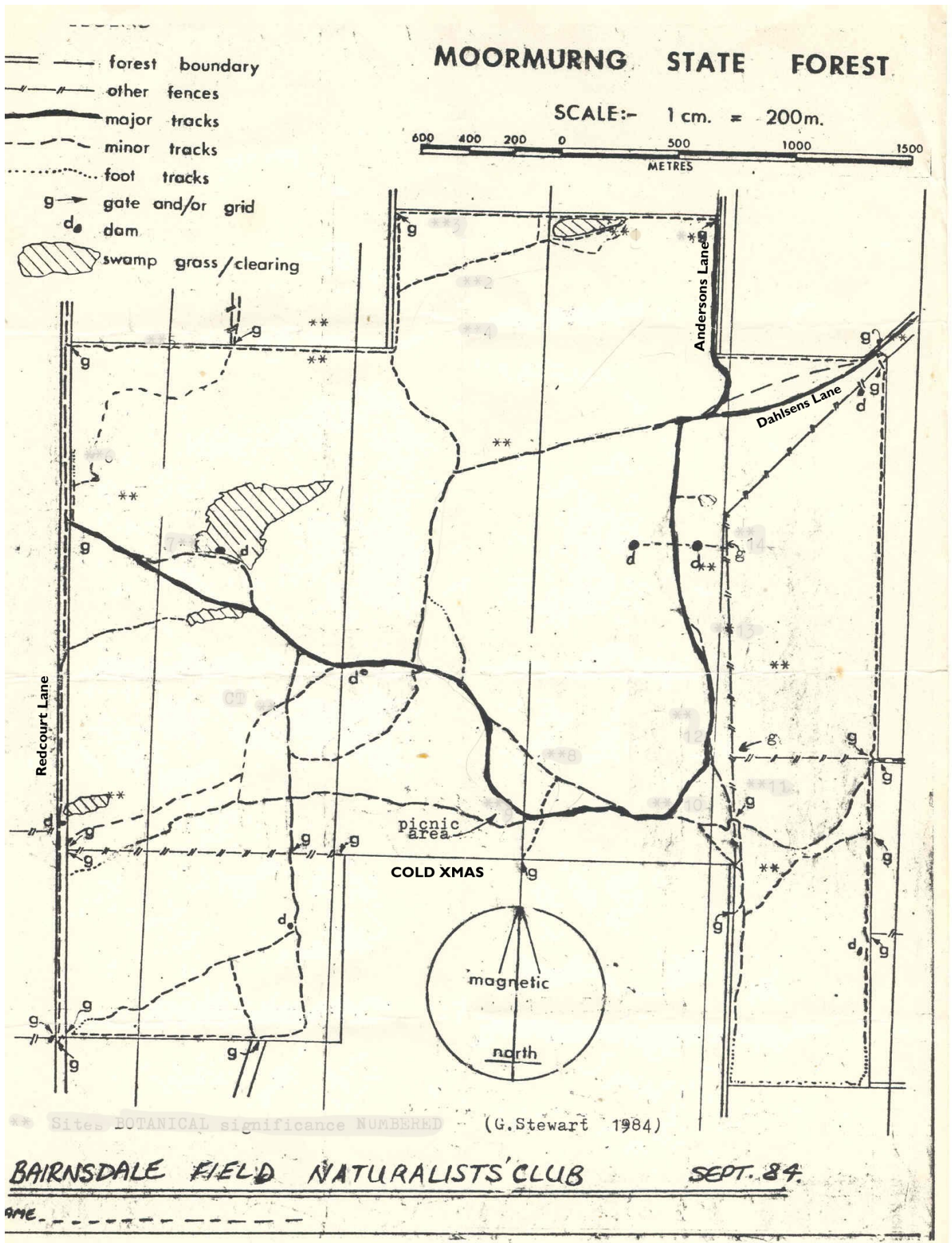
The higher and well drained sandy ridges within the forest support numerous fire blackened stands of White Stringybark (*Eucalyptus polyanthemus*) and on the highest and poorest sites, we find the Narrow-leaved Peppermint (*Eucalyptus radiata*) usually not growing and higher than 8 metres.

The rough barked form on Manna Gum (*Eucalyptus viminalis*) is found only 1 km away from the forest, and should be found within its boundaries, but I have not as yet discovered it there.

About 12 species of eucalypts are possibly found in Moormurng Forest and in my opinion this makes the area quite unique.



Map of the Moormung Forest drawn up by George C. Stewart in 1984



IN SEARCH OF EUCALYPTS The Clematis, Volume 22, December 1983

By George C. Stewart

My interest in Eucalyptus began some years ago with attempts to grow some of the showier flowering S.W. mallees purchased from nurseries, in my garden.

Many of the more desirable ones slowly died or sometimes the adverse climatic conditions here quickly took their toll of the survivors.

I then resolved to try and grow my own seedlings from seed collected from the best forms that I could find, with the result that I had to acquire a basic knowledge to enable me to identify the particular tree that I was taking seed from.

Seed collecting was undertaken during holidays, local trips and even special trips to an area to locate a certain species that was required.

One of the first trees that I specially wanted to grow was the lovely weeping grey-blue foliated stringybark that is fairly abundant on the side of the road at Canni Creek. This tree is aptly called the Silver-leaf Stringybark (*Euc. cinereal* ssp *cephalocarpa*).

While on holiday in Western Victoria we visited Wyperfeld National Park where I was overjoyed to find a beautiful medium sized glaucous leaved tree with foliage almost reaching the ground, carrying also white powdered buds and fruit.

This delightful shady tree turned out to be a form of Yellow Gum (*Euc. leucoxylon* var *priunosa*) somewhat different from the well known more widely planted forms.

Even closer to home there is a magnificent specimen of Forest Red Gum (*E. tereticornis*) with huge weeping branches up to 40cms thick hanging down from a straight bole about 5 metres in height.

This unusual tree still flourishes on private land about 14 kms west of Bairnsdale on the Princes Highway. The property used to belong to our family which is why I came to be so familiar with it.

Moving further afield, I had often read about the Tumbledown Gum (*E. dealbata*) and assumed by these accounts that it always grew as a straggly poor sort of tree. That is until I came across it growing on a dry stony hillside near Wellington NSW a few years ago. To my surprise this particular tree was a gem, with a beautiful waxy white coating over leaves, buds, fruit and small branches, in fact quite a striking ornamental small tree not to be found for sale in most nurseries, more's the pity.

Ironbarks have always held a fascination for me, therefore I seldom fail to pull up on encountering a group of these trees in the hope of finding something different. They usually provide a feast for the honeyeaters as the group are profuse flowerers, many doing so in mid-winter.

While touring near the town of Rushworth in north central Victoria, we came across a beautiful stand of Red Ironbarks (*Euc. sideroxylon* var *rosea*) while looking Grevilleas beside the old abandoned gold mining township of Whroo. These trees were pink flowering forms with very narrow leaves, while their crowns were alive with many varied honeyeaters and other birds drinking in the profuse nectar provided.

Another fine ornamental Ironbark is Caley's Ironbark (*Euc. caleyi*) again with handsome silvery foliated and buds standing out against a jet-black furrowed trunk. I found this tree by accident while on a ram buying trip to the Mudgee area of NSW when my car was forced to stop due to a boiling radiator.

Trees with pure white trunks are at the other extreme of the spectrum with the never to be forgotten sight of the beautiful White Brittle Gums growing naturally in the Canberra Botanical Gardens where the majesty of the multi-trunked forms particularly is superb.

One does not have to go that distance however to see these trees, as a good stand of them grows nearby at Cobbanah Creek where the new expensive road to that on again-off again Mitchell River Dam passes.

A nice Autumn trip that our club has enjoyed in the past is to see the Omeo Gum (*Euc. neglecta*) one of Victoria's endemic trees. This trip follows the upper reaches of the Livingstone Creek where in moist peaty ground we find a thicket of these small glaucous trees growing most happily beneath Black Sallee (*Euc. stellulata*). An occasional one has found room to spread and has grown into an ornamental small umbrageous tree.

Another Victorian endemic species that I have tracked down was the Grampians gum (*Euc. alpine*), a small bushy mallee-like shrub which grows on the higher Grampians peaks, like Mt. William where I found it after a solid walk to the summit. This tree has thick green glossy leaves, warty fruits and a somewhat fibrous multi-trunk and white flowers that attract the birds when out.

These are some of the Eucalypts I have sought to provide good specimens for the garden, with the result that I find that the surface has hardly been scratched yet with many good forms still coming to light.

Even our family holiday schedule is apt to be interrupted by my abrupt roadside stops to collect seed of an interesting patch of trees with the inevitable chorus from the back-seat ringing in my ears..... "Aw, not again Dad".

(Ed: Transcribed. Plant names may have changed.)