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TASMANIAN WILDERNESS SOCIETY ACTIVITIES

In early August the Tasmanian Wilderness Society announced that it was preparing to challenge the intention of the State Government to proceed with the Gordon below Franklin Hydro-Electric power scheme by Non-Violent Action.

The Society emphasised that participants should be committed to a philosophy of non-violence, and to ensure that they have confidence in their ability to remain non-violent and make sensible decisions under pressure a series of Non-Violent Action work-shops are being organised in several cities and towns. These workshops cover Non-Violent Action theory, consensus decision making and meeting procedure, and give practice in handling provocative or potentially explosive situations in a peaceful manner.

Whether or not we, as individuals, support the broad aims of the Tasmanian Wilderness Society we should commend it for its emphasis on Non-Violent Action.

VASCULAR PLANTS OF THE DENISON RANGE AND VALE OF RASSELAS

M.J. Brown, F. Duncan, W.D. Jackson, S.J. Jarman, J.B. Kirkpatrick and R.G. Tyson

National Parks and Wildlife Service, Hobart (MJB, FD, RGT) and University of Tasmania, Hobart (WDJ, SJJ, JBK)

INTRODUCTION

This paper reports the presence of 220 species of vascular plants in the vicinity of the Denison Range and Vale of Rasselas, within the Southwest Conservation Area. The checklist was compiled from information gathered during a two-day helicopter survey of the vegetation in the area during October 1981, in association with the Tasmanian Fire Services, the Forestry Commission and Australian Newsprint Mills. The survey team included all of the authors, excepting JBK who provided a supplementary species list from an earlier survey of alpine vegetation in the area.

RESULTS AND DISCUSSION

A total of 220 vascular plants from 142 genera and 62 families were recorded, of which 99 are endemic to Tasmania (Table 1).

Table 1: Summary of species recorded.

Plant Group	No. families	No. genera	No. species	No. endemic	% endemic
Pteridophyta	9	14	20	1	5
Gymnospermae Angiospermae:	3	5	6	5	83
Dicotyledoneae	39	87	149	79	53
Monocotyledoneae	11	36	45	14	31
				·	
TOTAL	62	142	220	99	45

The habitats examined during the survey included alpine, buttongrass moorland, scrub, woodland and forest. In addition, three specialized habitats were noted and their flora recorded.- Iowland aquatic areas, rock outcrop and erratics on the lower to upper midslopes of the Denison Range and a sink-hole. A breakdown of the species richness, degree of habitat specificity and richness of Tasmanian endemic flora for each habitat is given in Table 2.

Table 2: Species richness, habitat specificity and richness of Tasmanian endemic flora in the sampled habitats.

Habitat	No. species	No. specific	% specific	No. Endemics	% endemics
buttongrass	53	10	19	14	26
scrub	59	2	3	21	36
woodland	57	7	12	17	30
forest	75	16	21	25	33
alpine	130	72	55	73	56
rock outcrop	29	2	7	14	48
aquatic	13	9	69	2	1,5
sink hole	19	0	0	0	0

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This table shows that the alpine flora is the most diverse and includes the largest number of endemic species. The transitional nature of the scrub and woodland and habitats is also emphasized; relatively more of the species in these habitats are shared, either with each other or with the buttongrass moorland and forest communities.

The appendix presents a checklist of all the species observed during the surveys. With the possible exception of *Restio monocephalus* var. glabrum, of which few records are available, all of the species encountered have known occurrences in one or more of the larger State Reserves. However several unusual occurrences were noted during the survey. The filmy fern Apteropteris applanata commonly occurs on King Billy pine. but in this instance it was found growing in the shaded crevices of a rocky outcrop in buttongrass moorland. According to Curtis and Morris (1975), Boronia rhomboidea occurs on the Central Plateau mountains, in the heaths of the Northwest and at Longley. Its occurrence in the lowland scrub and woodland communities of the Vale of Rasselas indicates that there is not such a great disjunction between the Longley and Central Plateau populations, Epacris navicularis is an endemic species of Southwestern mountains and has only recently been described (Jarman and Crowden 1978). Two other epacrids found during the survey are interesting variants, which may prove to be specifically distinct on further study. The Cyathodes aff, petiolaris variant is referred to by Curtis (1963) and is recognised also by Jarman and Crowden (1977). The variety Monotoca aff. linifolia has flowers which have five perianth parts, the typical flowers of Monotoca linifolia have only four (Jarman and Crowden 1977).

The particular aims of the survey were to establish the fire-history of the vegetation in the area, and its implications for possible future prescribed burning. A report on this facet of the investigation is currently in preparation. However it is worth making some immediate observations about the susceptibility and sensitivity of the plant species to fire.

Many of the alpine species in particular are extremely sensitive to fire and do not recover readily. Such species are placed at risk by fires occurring at too-frequent intervals, and Macphail (1981) has noted in his pollen record for the Denison Range that "none of local small trees, *Athrotaxis, Diselma* or *Nothofagus gunnii*, survived long after the central 'cluster' of 'closely' spaced fires". The restriction of *Athrotaxis* and *Nothofagus gunnii* to areas topographically protected from fire seems to bear out this observation in the present day.

REFERENCES

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APPENDIX

Checklist of vascular plants from the Denison Range and Vale of Rasselas. Occurrence by habitat is indicated by Alpine (A), Aquatic (Aq), buttongrass moorland (B), forest (F), Rock (R), Scrub (S), sink hole (Sh) and woodland (W). Endemic species are asterisked.

Pteridophyta Asnidiaceae Polystichum proliferum (R. Br.) Presl. AFSh Aspleniaceae Asplenium flabellifolium cav Sh W Blechnaceae Blechnum nudum (Labill.) Mett. ex Luerss. F. B nenna-marina (Poir) Kuhn AF B. wattsii Tindale AFRShW Dennstaedtiaceae Histiopteris incisa (Thunb.) J. Sm. AF Hypolepis rugosula (Labill.) J. Sm. F Pteridium esculentum (Forst, f.) Cockayne F S W Gleicheniaceae Gleichenia dicarpa R. Br. BFSW Sticherus tener (R. Br.) China W Grammitidaceae Grammitis hillardieri Wildl. A Hymenophyllaceae *Apteropteris applanata A.M. Gray & R.G. Williams R Hymenophyllum flabellatum Labill, ASL H. marginatum Hook, et Grev. AR Lycopodiaceae Huperzia selago (L) Bernh. ex Schrank & Marto A Lycopodium fastigiatum R. Br. A L. myrtifolium Forst. f. R L. scariosum Forst. f. AB 1. laterale R. Br. AR Schizaeaceae Schizaea fistulosa Labill, 8 Gymnospermae Cupressaceae *Diselma archeri Hook f A Podocarpaceae *Microcachrys tetragona (Hook.) Hook. f. A *Phyllocladus aspleniifolius A & L. C. Rich (A) FSW Podocarpus lawrencii Hook, f. A Texodiaceae *Athrotaxis cupressoides D. Don A *A. selaginoides D. Don A Angiospermae: Dicotyledonese Aniaceae Actinotus bellidioides (Hook, f.) Benth B *A. moorei Roow, A B R A. suffocata (Hook, f.) Rodw, A. *Dichosciadium ranunculaceum (F. Muell) Domin A *Diplaspis cordifolia Hook, f. A Hydrocotyle muscosa R. Br. Aq Hydrocotyle sp. FW Asteraceae *Abrotanella scapigera (F. Muell.) Benth. A. *Aciphylla procumbens (F. Muell.) Benth. A Celmisia longifolia Cass. A *C. saxifraga Comber A Erigeron pappochroma Labill. A *E. stellatus (Hook, f.) W.M. Curtis A *Ewartia meredithae (F. Muell.) Beauv. A Gnaphalium sp. W *Helichrysum backhousii (Hook. f.) F. Muell. ex Benth. A Escalioniaceae *H. ledifolium (DC.) Benth. A

*H. milliganii Hook. f. A *H. pumilum Hook. f. ABR

*Olearia ledifolia (DC.) Benth, A *O. persoonioides (DC.) Benth, AF *O pinifolia (Hook f) Benth A *O. tasmanica W.M. Curtis A *Pterygopappus lawrencii Hook. f. A Senecio leptocarpus DC. A S. pectinatus DC. A Casuarinaceae Casuaring monilifera L. Johnson SW Cruciferae *Cheesemania radicata (Hook, f.) O.E. Schulz A. Cunoniaceae *Anodopetalum biglandulosum A. Cunn. ex Hook, f. AFS Bauera rubioides Andr. A B F S Sh W Dilleniaceae Hibbertia procumbens (Labill.) D.C. A B B S Sh Donatiscese Donatia novae-zelandiae J.R. & G. Forst, A Droseraceae Drosera arcturi Hook, AB D. pvgmaea DC. B Epacridaceae *Archeria comberi Melville A *A. hirtella (Hook, s.) Hook. f. A *A. serpyllifolia Hook, f. A *Cvathodes dealbata R. Br. A C. juniperina (Forst.) Druce A F R W *C. parvifolia R. Br. A *C. sp. aff. C. petiolaris (D.C.) Druce* AR *Dracophyllum milliganii Hook. f. AR *D. minimum F. Muell A *Epacris corymbiflora Hook. f. B *E. gunnii Hook, f. W F E. impressa Labill, A B F R S Sh W E. lanuginosa Labill, B S W *E, navicularis S.J. Jarman A E. obtusifolia Sm. B E. serpvilifolia R. Br. A F Leucopogon collinus (Labill.) R. Br. A B F R S Sh L. ericoides (Sm.) R. Br. S W *L. milliganii (F. Muell.) Rodw. A *Monotoca glauca (Labili.) Druce F S W *M sp. aff, M. linifolia (Rodw.) W.M. Curtis A F W *M. submutica Benth. F R S W Pentachondra pumila (Forst.) R. Br. A R *Prionotes cerinthoides (Labill.) R. Br. A F *Richea curtisiae A.M. Gray A *R. milliganii (Hook, f.) F. Muell, A F *R. pandanifolia Hook, f. A F *R, procera (F. Muell), F. Muell, F S W *R. scoparia Hook, f. A *R. sprengelioides (R. Br.) F. Muell, A Sprengelia incarnata Sm (alpine and lowland forms) ABRSShW *Trochocarpa cunninghamii (DC.) W.M. Curtis A *T. gunnii (Hook, f.) Benth. F Ericaceae *Gaultheria depressa Hook. f. A G. hispida R. Br. A *Anopterus glandulosus Labill, FW *Tetracarpaeg tasmanica Hook. 1. A

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Eucryphiaceae *Fucryphia lucida (Labill.) Baill, F *E. milliganii Hook, f. A F Euphorbiaceae *Amperea xiphoclada (Sieb. ex Spreg.) Druce F S W Fabaceae Actus ericoides (Vent.) G. Don B F S W Dillwynia glaberrima Sm. F R S W Oxylobium ellipticum (Labill.) R. Br. A F R S W Pultenaea dentata Labill. B P. juniperina Labill, F S W Fagaceae Nothofagus cunninghamii (Hook.) Oerst. A F *N. gunnii (Hook, f.) Oerst A Gentianacea Gentianella diemensis (Griseb.) J.H. Willis A Villarsia sp. Aq Haloragaceae Gonocarpus micranthus Thunb. Aq F Myriophyllum pedunculatum Hook, f. Aq 1 obeliaceae Isotoma fluviatilis (R. Br.) F. Muell. ex Benth. Aq Loganiaceae *Mitrasacme archeri Hook. F. A M. montana Hook, f. A B Mimosaceae Acacia dealbata Link F A mucronata Willd, ex H, Wendl, F S W Monimiaceae Atherosperma moschatum Labill, F Myrtaceae Baeckea gunniana Schauer ex Walp. AFRS *B. leptocaulis Hook. f. B S *Callistemon viridiflorus (Sims.) Sweet F S W *Eucalyptus amygdalina Labill. F S W *E. coccifera Hook, f. A E. dalrympleana Maiden F E. delegatensis R.T. Baker F E. nitida Hook, f. F S W E. ovata Labill, W *E. rodwayi R.T. Bak & H.G. Sm. W *E subcrenulata Maiden & Blakely S *E. vernicosa Hook, f. A *Leptospermum glaucescens S. Schauer B F R S W L. lanigerum (Ait.) Sm. B F S W I. nitidum Hook, f. B S Sh L. scoparium J.R. & G. Forst. B F S Sh W Melaleuca squamca Labill. A B S M. squarrosa Donn ex Sm. B F S W Onagraceae Epilobium sp. A Oxalidaceae Oxalis lactea Hook, A Pittosporaceae Billardiera longiflora Labill, A F W R Plantaginacea *Plantago daltonii Dene. A Aq *P. paradoxa Hook, f. Ag Proteaceae *Agastachys odorata R. Br. A B F R S W Banksia marginata Cav. B F S W *Cenarrhenes nitida Labill. S Hakea microcarpa R. Br. W *Lomatia polymorpha R. Br. A F S W *Lomatia tinctoria R. Br. F *Orites diversifolia R. Br. A *O. milliganii Meisn. in Hook. A *O. revoluta R. Br. A *Persoonia gunnii Hook. f. A R S *Telopea truncata (Labill.) R. Br. S F

Ranunculaceae *Anemone crassifolia Hook A Ranunculus rivularis Banks & Sol. ex DC Ag Rhamnaceae Pomaderris apetala Labill, F Rosaceae Acaena novae-zelandiae Kirk W F *Rubus gunnianus Hook, A F Rubiaceae Coprosma nitida Hook, f. A Sh C. quadrifida (Labill.) Robinson F Rutaceae Boronia citriodora Gunn ex Hook, f. A B F R S Sh W B. parviflora Sm. B B. pilosa Labill. B S B, rhomboidea Hook, S W Phebalium squameum (Labili.) Engler F Santalaceae *Exocarpos humifusus R, Br, A B Scrophulariaceae *Euphrasia gibbsige Du Rietz A *E. hookeri Wettst. A *E striata R. Br. B R Mimulus repens R. Br. Aq Stylidiaceae *Forstera bellidifolia Hook, f. A R *Phyllachne colensoi (Hook, f.) Bergg, A Stylidium graminifolium Swartz A B S Sh Thymelaeaceae *Pimeleg lindleyana Meisn, B F R S W Tremandraceae Tetratheca pilosa Labill. B Violaceae Viola hederacea Labili. F Winteraceae Drimvs lanceolata (Poir.) Baill. A F Angiospermae: Monocotyledonese Centroleoidaceae *Centrolepis monogyna (Hook. f.) Benth. A *Gaimardia fitzgeraldii F. Muell. & Rodway A Cyperaceae Carpha alpina R. Br. A Gahnia grandis (Labill.) S.T. Blake A F S W Gymnoschoenus sphaerocephalus (R, Br.) Hook, f. A B S Sh W Lepidosperma filiforme Labill. A B S W *Oreobolus acutifolius S.T. Blake A O. distichus F. Muell. A O, pumilio R. Br. A Schoenus tenuissimus Benth. A B Sh Scirpus subtillisimus A Tetraria capillaris (F. Muell.) J.M. Black B Uncinia compacta R. Br. A U tenella R. Br. F Gramineae Deveuxia monticola (Roem, & Schult.) Vickery A Hierochioe fraseri Hook. A *Microlaena tasmanica (Hook. f.) Benth. A B S W M. stipoides (Labill.) R. Br. W *Poa gunnii Vickery A Tetrarrhena distichophylla (Labill.) R. Br. F Iridaceae *Campynema lineare Labill, R *Diplarreng latifolia Benth, A B F D. moraea Labill. F *Isophysis tasmanica Hook. A B R Patersonia fragilis Druce B S Juncaceae Juncus gregiflorus L.A.S. Johnson Aq (F) Luzula so A

 Triglochin procera R. Br. Aq
 Leptoca

 Liliaceae
 Restion

 Astelia alpina P., Br. A R W
 Restion

 Astelia alpina P., Br. A R W
 Restion

 Blandfordia punicea Sweet A F S W
 *R. mon

 Dymophila cyanocarpa R. Br. F Sh W
 *R. mon

 Dymophila cyanocarpa R. Br. F Sh W
 R. tetrap

 *Miligania densiflora Hook. A
 Xyridaceae

 Caladenia lyalli Hook. f. B
 Zannichelli

 *Calaronbus elongatus Labiilt S W
 Lepilaen

Empodisma minus (Hook, f.) L.A.S. Johnson & Cutler

Leptocarpus tenax (Labill.) R. Br. B S W Leptrodia tasmanica Hook, f. B S Restio australis R. Br. A

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Lepyrodia lasmanica Hook. 1, B S Restio australis R, Br. A R, complanatus R, Br. A B SSh *R, monocephalus var. glabrum Rodway A R, tetraphyllus Labill. Aq F S Xyridaeeae *Xyris marginata Rendte B S Zannichelliaceae Lepilaena sp. Aq

COLOUR - DYED WADERS

ABERSShW

In August and September, 1982, a team of nearly 60 people participated in the Australasian Wader Studies Group North-west Australia Expedition. This month-long research expedition was centred in the Broome-Port Headland area in northern Western Australia, where over 150,000 migratory waders spend the summer months. On this expedition, four thousand waders were colour-dyed on the underparts with Picric Acid. This is a bright yellow dye which fades to orange after a week or so, and lasts up to four months. People visiting coastal areas or areas where waders are present anywhere in Australia and New Zealand, are asked to watch for colour-dyed birds and report the details of any sightings to the addresses below. Date, place (lat & long if possible), number of birds, size of flock and habitat should be noted. The colour dyeing involved all species of waders.

The Secretary, OR Australian Bird Banding Scheme, CSIRO Division of Wildlife Research, P.O. Box 84, Lyneham, 2602, A.C.T. AUSTRALIA

Australasian Wader Studies Group, c/o Royal Australasian Ornithologists Union, 21 Gladstone Street, Moonee Ponds, 3039, Victoria. AUSTRALIA

BRETT A LANE

Australasian Wader Studies Group, National Co-ordinator

P.S. One Red-necked Stint, colour-dyed on this expedition, has been reported from S. Tasmania. (Editor).

CLUB EXCURSIONS

Mt. Field National Park. 6 - 7 March, 1982.

Prof. W. Jackson, of the Botany Dept. of The University of Tasmania, was leader of a party visiting this national park. On Saturday, 6 March, the first stop was at the park entrance where we walked to Russell Falls taking particular note of the ferns lining the track. Then taking the road to Lake Dobson the party stopped at several places to note the differenct plant communities at increasing altitudes, and finally some time was spent on the sub-alpine Wombat Moor. The night was-spent at Pandanni Hut where one of the highlights was the observation of Native Cats (Dasyurus viverrinus).

Juncaginaceae

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The following morning was spent in the upper part of the Broad River Valley before proceeding to the slopes of Mt. Mawson and the Tarn Shelf where the alpine plant communities were observed in some detail.

Woodbridge Marine Study Centre, 1 April, 1982.

A visit to this Education Dept. Study Centre was arranged by courtesy of the masterin-charge, Mr. Alistair Martin, We were able to look through the laboritories and to hear of the activities available to visiting school classes - a worthwhile insight into a little publicised special school which has a very beneficial impact on all participants. Pawleena, 3 July, 1982.

L.E. Wall led this excursion with the main purpose of seeing a small stand of one of Tasmania's rare and endemic eucalypts, *Eucalyptus cordata*, about three kilometres north of the reservoir. Some specimens of *E. tenuiramis* were also in that vicinity. The bird list for the day was:-

White-backed Magpie, Noisy Miner, New Holland Honeyeater, Eastern Spinebill, Yellowthroated Honeyeater, Grey Shrike-thrush, Grey Butcherbird, Laughing Kookaburra, Black-headed Honeyeater, Brown Thornbill, Golden Whistler, Grey Fantail, Crescent Honeyeater, Goldfinch, Yellow-tipped Pardalote, Common Bronzewing, Spotted Quailthrush, Clinking Currawong, Spur-winged Plover, Black Duck, Hoary-headed Grebe, Coot, Black Swan, Yellow-rumped Thornbill, Tasmanian Native Hen.

A Bettong (Bettongia gaimardi) was flushed from the scrub on the edge of the reservoir in the late afternoon.

A NEW MOSS RECORD FOR TASMANIA

Ischyrodon lepturus (Tayl.) Schelpe

by

S. Harris, National Parks and Wildlife Service, and D.A. Ratkowsky 117 York St., SANDY BAY

A single collection on Tasman Island is the first and only Tasmanian record of the moss *Ischyrodon leprurus* (Tayl.) Schelpe. (Family Fabroniaceae). The moss was one of a collection of plants made by one of us (S.H.) during a helicopter visit to the island on 17th June, 1982.

The species is found in New Zealand and South Africa and is common (Scott et al 1976) in Western Australia, South Australia, Victoria and New South Wales.

The specimen was found on shallow, well-drained dolerite soil on the steep eastern slope of the island in the vicinity of the old haulageway. Scott et al. (1976) claim that the moss is "quite common in dry stony and sandy soils".

The species is superficially similar to *Brachythecium albicans* (Hedw.) B.S.G., but microscopic examination reveals that although that species has square cells in the leaf base, these are confined to the alar groups. whereas in *Ischyrodon lepturus* the square cells reach, and overly, the midrib. The specimen is lodged with the Tasmanian Herbarium (HO).

ACKNOWLEDGEMENT

We are indebted to Dr. G.A.M. Scott for confirming the determination of the specimen.

REFERENCE

Scott G.A.M., Stone I.G. and Rosser, C. 1976. The Mosses of Southern Australia. Academic Press. London.

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THE BEREAVEMENT OF A BANDICOOT

Georgina Davis

A pair of Brown Bandicoots (*Isoodon obesulus*) was seen on the road approaching Swan Point, West Tamar, at about 1900 on 30 July, 1982.

The male of the pair was dead on the road, with the distressed female standing alongside, raised on her hind legs, when first observed. She bent over her mate and with forearms and paws appeared to be trying to drag him off the road. Unsuccessful at this she then hugged and nudged her mate. Becoming frustrated and further distressed she then scratched and bit the dead bandicoot vigorously before leaping in the air a couple of times and wandering off to the roadside. She moved slowly along the road as we watched. (Barred Bandicoots *Perameles gunnii*) have also been seen in the vicinity on two recent occasions.)