

From: [Denise Hoggan](#)
To: [TPC Enquiry](#)
Cc: [Fred Duncan](#); [ANNI MCCUAIG](#); [Jenny Rayner](#); [Catherine Nicholson](#); [John Hodgman](#)
Subject: A further submission
Date: Wednesday, 16 December 2020 3:27:33 PM
Attachments: [FD Rec Zone analysis.pdf](#)

Dear commission members,

Attached is a document that I received in recent days as a member of the Rosny Hill Friends Network. I feel that the contents are of relevance to the Commission with respect to considerations of the zoning of Rosny Hill in the Clarence City Council LPS.

I have discussed the contents with Ms Rayner, Ms McCuaig, Mr Hodgeman and Ms Nicholson, who all made submissions, and each of them stated their belief in the value of this information to the TPC.

I offer it as a further submission with the hope that it can still be accepted and considered.

Kind regards,
Denise Hoggan

Sent from my iPad

Recreation Zone analysis – Rosny Hill NRA and Clarence Municipality

1. Background

Aspects of Recreation Zones in Clarence were recently analysed by Mr Fred Duncan in the course of the recent RMPAT hearing into the development approved by Clarence Council in Rosny Hill NRA. Mr Duncan is an environmental consultant who undertook studies and prepared statements of evidence on behalf of Rosny Hills Friends Association.

The Rosny Hills Friends Association feel that this analysis is very relevant to the current Tasmanian Planning Commission enquiry, and we ask that the analysis be considered as an adjunct to representations that we have already made.

Mr Duncan has given his written approval for his analysis to be provided to the Tasmanian Planning Commission enquiry. This approval is attached, along with contact details if further information is required (page 7).

2. Reason for analysis

The reason for the analysis was the apparent discrepancy between natural values and land use in Rosny Hill NRA compared to other properties zoned as Recreation Zones in Clarence Municipality.

The analysis compared vegetation and conservation values in Rosny Hill NRA with vegetation and conservation values in other areas zoned as Recreation Zone.

3. Methods

All 36 recreation zones indicated on The List map (under Clarence Interim Planning Scheme) were included in the analysis. Areas of each Recreation Zone property were calculated.

The area of vegetation communities (TASVEG communities) on each property were calculated using mapping tools on The List site. The vegetation communities were grouped into:

- Non-native vegetation – comprising those communities indicated as “Agricultural, urban and exotic vegetation”.
- Native vegetation – comprising native forest and woodland, native grassland and coastal/wetland vegetation.

Presence of conservation values (comprising threatened species and communities) were assessed for each Recreation Zone area using layers available on The List (e.g. recorded locations of threatened species; presence of threatened communities).

Results for Rosny Hill NRA were compared to:

- individual results from other Recreation Zone properties; and
- the average results from the combined other 35 Recreation Zone areas.

4. Results

The raw results for each of the Recreation Zone properties are given in Table 1 (pages 4-6) of this submission). The main points from the analysis are given in Tables 2, 3 and 4.

Table 2. Native and non-native vegetation in Rosny Hill NRA compared to other Recreation Zone properties in Clarence.

<i>Property</i>	<i>Area of non-native vegetation (ha)</i>	<i>Area of native vegetation (ha)</i>	<i>Percentage of Recreation Zones covered by native vegetation</i>
Rosny Hill NRA <ul style="list-style-type: none"> Total area is 20.9 ha 	3.3 ha	17.6 ha	84.2 %
All other Recreation Zone properties in Clarence <ul style="list-style-type: none"> Total number is 35 Total area is 505.6 ha 25 Recreation Zone properties have no native vegetation and a further 4 properties have <1 ha of native vegetation. 	469.8 ha	35.8 ha	7.0 %

Table 3. Presence of native vegetation communities in Rosny Hill NRA compared to other Recreation Zone properties in Clarence.

<i>Property</i>	<i>Native vegetation (TASVEG) communities</i>
Rosny Hill NRA	Contains 5 native plant communities including a vegetation community with high conservation value
All other Recreation Zone properties in Clarence (total number is 35)	Four Recreation Zone properties contain threatened communities in remnant vegetation – total area of these threatened communities is 0.9 ha.

Table 4. Presence of threatened plant species in Rosny Hill NRA compared to other Recreation Zone properties in Clarence.

<i>Property</i>	<i>Threatened plant species</i>
Rosny Hill NRA	Contains records of 3 threatened plant species: <i>Thelymitra bracteata</i> , <i>Dianella amoena</i> and <i>Vittadinia muelleri</i> . Other species of conservation significance are also present.
All other Recreation Zone properties in Clarence (total number is 35)	Only the Tasmania Golf Club is known to have threatened plant species (<i>Eutaxia microphylla</i> , <i>Caladenia caudata</i>) in remnant native vegetation

5. Conclusions:

- Rosny Hill NRA contains a much higher proportion (84%) of native vegetation than any other Recreation Zone property in Clarence. The next highest property (Richmond Golf Club) has 25% of native vegetation (mostly degraded). The average for the 35 Recreation Zone properties (i.e. all Recreation Zone properties excluding Rosny Hill NRA) is 7% native vegetation.
- Rosny Hill NRA has a higher diversity of native vegetation (TASVEG) communities than any other Recreation Zone property. Rosny Hill NRA has 5 identified native TASVEG communities – the next highest Recreation Zone property is Tasmania Golf Club with 3 native TASVEG communities. 25 of the properties have no native TASVEG communities.
- Flora surveys indicate that Rosny Hill NRA has a relatively high diversity of native plant species compared to other Recreation Zone properties. Three species listed as threatened in Tasmania (under the *Tasmanian Threatened Species Protection Act*) are recorded from Rosny Hill NRA, with the only other Recreation Zone property with records of threatened plant species being Tasmania Golf Club (2 threatened species). Other species considered to be of conservation significance have also been recorded from Rosny Hill NRA.
- Rosny Hill NRA is the only State Reserve zoned as Recreation Zone, apart from South Arm NRA – where a substantial golf course development and facilities have been approved by Council, and where only 2.2 ha(1.8%) of the 120.2 ha area supports native vegetation.
- The vegetation, conservation values and current land use in Rosny Hill NRA are much more in alignment with those of properties zoned as Open Space in Clarence (noting that no terrestrial areas in Clarence are zoned as Environmental Management under the Clarence Interim Planning Scheme). Other Open Space properties that are comparable to Rosny Hill NRA include Gordon Hill NRA, East Risdon NR, Waverley Flora Park and Natone Hill Bushland Reserve.
- Rosny Hill NRA is an important urban remnant in Clarence – to a much greater degree than any other Recreation Zone property occurring in urban and semi-urban areas of the municipality.
- Rosny Hill NRA is a very distinct outlier compared to other Recreation Zone properties in Clarence Municipality, and its current zoning appears to be inappropriate. The current use, extent of native vegetation and conservation values in Rosny Hill NRA:
 - have very little relationship with these attributes in other Recreation Zone properties in Clarence;
 - have a much stronger relationship with properties zoned as Open Space in Clarence.

Table 1: Vegetation Analysis in Recreation Zones – Clarence Municipality.

TASVEG community codes are given in TheList website. Non-native communities are indicated by brown font. Native communities are indicated by blue font. Threatened communities and other communities with a high priority for conservation are given in bold italics.

	Property	Principal activity	Area (ha)	Vegetation Communities (TASVEG)	Area of non-native veg (ha)	Area of native veg (ha)	Proportion of native veg (%)	Threatened species (from NVA)
1	Richmond Village Green 20 Victoria St RICHMOND	Recreational park and facilities	2.6	FAG 2.6	2.6	–	0	
2	Richmond Tennis Club 2 Victoria St RICHMOND	Tennis courts	0.4	FAG 0.4	0.4	–	0	
3	'Kelly Fields' 142 Colebrook Rd RICHMOND	Oval and model aircraft flying	16.5	FAG 16.5	16.5	–	0	
4	'Richmond Public Golf Course' - 123 Middle Tea Tree Rd RICHMOND	Golf course and facilities	18.4	FAG 18.4	18.4	–	0	
5	Risdon Vale Oval, 26 Sugarloaf Road RISDON VALE	Oval and Risdon Vale Community Centre	4.7	FUM, FUR 4.7	4.7	–	0	
6	Geilston Bay Oval and Geilston Bay Tennis Club, 18 and 48 Debomfords Lane GEILSTON BAY	Oval, tennis courts, parkland and carpark	6.0	FUR 6.0	6.0	–	0	
7	Geilston Bay Boat Club, 60 Debomfords Lane GEILSTON BAY	Marina Facilities & Clubrooms	0.1	FUR 0.1	0.1	–	0	
8	ANZAC Park, 19D Lincoln Street LINDISFARNE	Oval, bowls club and parklands	10.0	FUR 10.0	10.0	–	0	
9	Lindisfarne Memorial Tennis Club, 4 Park Road LINDISFARNE	Tennis courts	0.4	FUR 0.4	0.4	–	0	
10	Motor Yacht Club and Lindisfarne Sailing Club, 1, 1A and 1B Ford Parade LINDISFARNE	Marina and facilities	0.5	FUR 0.5	0.5	–	0	
11	Clarence Aquatic Centre, 4 Loinah Crescent MONTAGU BAY	Swimming Pool and Change Rooms	2.3	FUR 2.3	2.3	–	0	

12	Rosny Park Public Golf Course, 2/22 and 3/22 Rosny Hill Road ROSNY PARK	Golf Course and facilities	17.1	FUR 17.1	17.1	-	0	
13	Rosny Park Tennis Club, 18 Bastick Street ROSNY PARK	Tennis courts and facilities	0.9	FUR 0.9	0.9	-	0	
14	Rosny Park Bowls Club, 40 Bastick Street ROSNY PARK	Bowls club	1.8	FUR 1.8	1.8	-	0	
15	Kangaroo Bay Oval (Clarence District Cricket Club), 20 Kangaroo Bay Drive ROSNY PARK	Cricket grounds	5.3	FUR, FPE 5.3	5.3	-	0	
16	Edgeworth Street Sports Ground, 100 Bligh Street WARRANE	Sports grounds	3.0	FUR 2.7, FPE 0.3	3.0	-	0	
17	Olympia Football Club, 5/15 Dampier Street WARRANE	Sports grounds	3.5	FUR 3.5	3.5	-	0	
18	North Warrane Oval, 62 Bounty Street WARRANE	Sports grounds	7.8	FUM 4.0 FRG 2.5, FUR 0.5, FPE 0.5	7.8	-	0	
19	Bellerive Oval / Blundstone Arena, 15 Derwent Street BELLERIVE	Sports Grounds	7.0	FUR 7.0	7.0	-	0	
20	Eastern Shore Croquet Club, 61 South Street BELLERIVE	Croquet Club	0.4	FUR 0.4	0.4	-	0	
21	Wentworth Park, 165A Clarence Street HOWRAH	Sports grounds	10.9	FAG 9.7, FUR 0.9 SAL 0.3	10.6	0.3	2.7	Green & gold frog
22	Howrah Community Centre, 11 Howrah Road HOWRAH	Bowls and tennis	3.0	FUR 2.5 SAL 0.5	2.5	0.5	16.7	
23	Rokeyby Village Green, 10 Church Street ROKEBY	Sports ground	1.0	FUR 1.0	1.0	-	0	
24	Cambridge Memorial Oval, 1000 Cambridge Road CAMBRIDGE	Sports ground	7.7	FUR 7.4 DGL 0.3	7.4	0.3	3.8	-
25	Richmond Golf Club, 345 Richmond Road CAMBRIDGE	Golf course and facilities	23.2	FAG 17.3 DVG 3.2 DAS 2.7	17.3	5.9	25.4	-
26	Tasmania Golf Club, 1420 Tasman Highway CAMBRIDGE	Golf course and facilities	63.2	FUM 53.7 DAC 6.3, ASS 2.5, DVC 0.7	53.7	9.5	15.0	EB Bandicoot <i>Caladenia caudata</i> <i>Eutaxia microphylla</i>

27	Hobart Golf Club, 20 Regal Court SEVEN MILE BEACH	Golf course and facilities	94.2	FUM 51.3;FPL 15.6, FRG 10.0 FPU 4.5, FUR 2.3; OAQ 2.1 DVG 0.9;NBA 9.6	83.7	10.5	11.1	
28	Lauderdale Yacht Club, 5 Kirra Road ROCHES BEACH	Sailing club	1.2	FUR 1.2	1.2	–	0	
29	Llanherne Golf Club, 132 Surf Road SEVEN MILE BEACH	Golf course and facilities	45.5	FUM 37.2; FPL 1.8, FPE 0.5; OAQ 0.4 NBA 4.7	40.4	4.7	10.3	
30	Lauderdale Oval, 10A Dona Road LAUDERDALE	Sports ground	3.2	FUM 2.2, FUR, 0.5, FRG 0.1 ASS 0.4	2.8	0.4	12.5	
31	Sandford Oval, 949 South Arm Road SANDFORD	Sports ground and community hall	1.8	FAG 1.8	1.8	–	0	
32	Cremorne Bowls Club, 10 Wisteria Avenue CREMORNE	Bowls club	0.3	FUR 0.3	0.3	–	0	
33	Iron Pot Golf Club, 2972 South Arm Road SOUTH ARM	Golf course and facilities	19.7	FAG 18.2 DVG 1.5	18.2	1.5	7.6	
34	South Arm Oval, 21 Harmony Lane SOUTH ARM	Sports ground and community hall	1.4	FUR 1.4	1.4	–	0	
35	150 Spitfarm Road OPOSSUM BAY Tasmania 7023	Planning approval for Golf course and facilities	120.2	FAG 118.0 NAV 2.1, GHC 0.1	118.8	2.2	1.8	
			505.6		469.8	35.8	7.0	
36	Rosny Hill Nature Recreation Area, 12A Akuna St, ROSNY	Nature Recreation Area	20.9	FUM 3.3 NAV 10.3, GCL 2.8, GTL 0.8, NAB 1.1, DVG 2.4	3.3	17.6	84.2	<i>Thelymitra bracteata</i> <i>Dianella amoena</i> <i>Vittadinia muelleri</i>

TOTALS			526.5		473.1	53.4	10.1	
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Declaration

I undertook the analysis as detailed in the preceding pages and I have read the document that is intended to be submitted to the Tasmanian Planning Commission.

The submission is an accurate record of my analyses and my conclusions.

I am prepared to provide further information to the Commission if that is considered useful.



Fred Duncan

16 December 2020

Contact details:

***Address:* F. and M. Duncan, 386 Richmond Road, Cambridge, Tasmania 7170**

***Email:* fredericotas@gmail.com**

***Phone:* 0458 804584**

Experience and qualifications of environmental consultant Fred Duncan

I have worked as a botanist/ecologist in Tasmania for over 40 years. I have evaluated vegetation and other natural values, and the effects of different land uses, in all major Tasmanian environments. Relevant employment includes working as a botanical project officer and researcher with the Tasmanian Parks and Wildlife Service and Tasmanian Forestry Commission, and from 1987 to 2010 I was employed by the Tasmanian Forest Practices Authority as Senior Botanist and subsequently Manager of the Authority's Biodiversity Program (and on occasions as Acting Chief Forest Practices Officer). Since 2010, I have worked on environmental consultancies and projects for the Forest Practices Authority, Tasmania Fire Service, Parks and Wildlife Service, Port Arthur Management Authority, forestry companies, schools, community groups and private landowners. On many of these projects, I have worked with my partner, Mercedes Duncan, who is also a botanist.

During my employment in Tasmania, I have been responsible for developing classifications of different forest types and native grasslands, and I have contributed to development of the TASVEG classification system. I have also been involved with many projects and evaluations relating to species and communities with a priority for conservation, and their recognition and management in different land uses (including by developing codes of practice and planning tools and providing training and advice on management).

I have participated in reviews and provided advice on nominations for listing and de-listings of threatened species and communities under Tasmanian and national legislation. I have initiated, worked on and supervised various projects that have examined the effects of land use and natural processes on vegetation, including successional effects of different fire regimes.

Much of my work has required me to give practical advice on land management, taking into account legislative and policy guidelines; conservation values and management requirements to maintain those values; and the economic and social aspirations of landowners, land managers and communities.

I have undertaken environmental and land use assessments and prepared management advice in connection with many development and infrastructure projects. They include: forestry operations; agricultural activities; communication infrastructure and road works; tourism developments; subdivision, housing and other construction projects; fuel reduction burning; and landscape design projects. I have been a member of the Tasmanian Forest Practices Advisory Council since 2013.

I have been involved, throughout my career in Tasmania, with evaluating reserve proposals on public and private land, and assessing their assets, threats and management requirements. I have contributed to works programs, research studies and interpretation for several reserves. I am currently a member of scientific and reserve evaluation committees of the Tasmanian Land Conservancy and undertake similar roles as a member of DPIPWE's Property Advisory Group.

I have lived in Clarence since 1985, and have prepared comprehensive reports on native vegetation (species, vegetation communities and conservation priorities) for the whole of Clarence Municipality. I have assessed natural values, management requirements and fire plans for several reserves and participated in land care and education activities in many reserves. They include Rosny Hill NRA, Meehan Range NRA, Natone Hill Bushland, Waverley Flora Park, East Risdon Nature Reserve and Seven Mile Beach Protected Area. We also manage our own large bushland property in the Meehan Range – the property is a covenanted private reserve and its management plan has been developed to maintain its conservation values.

Most recently, I was engaged as a consultant by Rosny Hill Friends Association Inc. to undertake assessments of natural assets in Rosny Hill NRA and to assess the impact on natural assets on the proposed tourism development in the reserve. In the course of this work I examined aspects of natural area management and zoning in the reserve and in other areas zoned as Recreation Zone and Open Space in Clarence Municipality.

I have attached a more detailed resumé.

My contact details are:

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Phone: 0458 804 584 Email: fredericotas@gmail.com



Fred and Mercedes Duncan – *The Plant Press*

F. and M. Duncan (ABN: 13 542 236 682)

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Resumé: Fred Duncan – Botanical and Ecological Consultant

Contact details:

Address: F. and M. Duncan (The Plant Press)

386 Richmond Rd, Cambridge, Tasmania 7170

Phone: 0458 804584; *Email:* fredericotas@gmail.com

Tertiary education

Bachelor of Science (First Class Honours), University of Sydney

Current professional employment:

Botanical and ecological consultant

Other current professional activities

Member of Scientific Committee – Protected Areas on Private Land Program (Tasmanian Dept of Primary Industries, Parks, Water and Environment)

Member of Scientific Committee; and Property Committee – Tasmanian Land Conservancy

Member of Tasmanian Forest Practices Advisory Council

Past employment history

Botanical consultant: Various stages between 1980 and 2019

Manager (Biodiversity Program): Tasmanian Forest Practices Authority (2007-2010)

Senior Botanist: Tasmanian Forest Practices Authority (1987-2007)

Botanist: Forestry Commission of Tasmania (1986-1987)

Botanist: Tasmanian National Parks and Wildlife Service (1979-1985)

Biologist: Crocodile Research Project (Uni. of Sydney) in Northern Territory (1975-1977)

Work-related experiences and skills

- Conducting assessments of environmental values on public and private land (over 1500 surveys undertaken) including: preparing inventories of species and communities; identifying priorities for conservation and management; preparing detailed reports and maps; and liaising with land owners and managers; researchers; government agencies; Tasmanian councils; and field staff and contractors.
- Providing practical advice on management of biodiversity, in accordance with Tasmanian and national legislation, including: *Tasmanian Forest Practices Code; Forest Practices Act; Threatened Species Protection Act; Nature Conservation Act; Weed Management Act; Land Use Planning and Approvals Act; Regional Forest Agreement* and various *Interim Planning Schemes* and *Commonwealth Environment Protection and Biodiversity Conservation Act*.

- Having skills in using analytical tools relevant to assessing and managing natural values.
- Developing planning tools and manuals (including the Tasmanian Forest Practices Authority's *Forest Botany Manual* and *Threatened Plant Advisor* and Technical Notes).
- Developing, supervising and implementing research programs into many aspects of biodiversity and ecology, including ecology, distribution and status of threatened species and communities, and land use management.
- Researching impacts of fire on Tasmanian vegetation types, including susceptibility to fire of different vegetation communities and successional relationships between communities.
- Contributing to Tasmanian and national reviews relating to threatened species and communities and land management in Tasmania, including: threatened species listings and threatened community listings under Tasmanian and Commonwealth legislation; reviews of the Tasmanian *Forest Practices Code*; and major Tasmanian land use planning processes including the Tasmanian Regional Forest Agreement, World Heritage Area Management Plan and programs to achieve a representative Tasmanian reserve system.
- Communicating clearly and at an appropriate level in reports and presentations for land managers, assessment agencies, scientific specialists, students and the public. This includes:
 - Preparing articles, maps, and graphics for scientific publications and reports
 - Preparing text and images for publications, interpretation and other purposes.
- Providing expertise in ecology and management of biodiversity in forums that involve landowners and managers, the scientific community and the public – including conferences; public meetings; legal tribunals and scientific committees.
- Organising and conducting training programs on biodiversity and land management.
- Having good working relationships with staff of relevant government agencies (e.g. Department of Primary Industries, Parks, Water and Environment; Forest Practices Authority; Tasmanian Herbarium) and knowledge of processes within these organisations.
- Having knowledge and experience of forest management, regulation and conservation in South America, through receiving a fellowship to study these issues in Chile and Argentina (2005) and subsequent presentations and travels in Chile, Argentina and Brazil (2009; 2010, 2013) and ongoing liaison with South American forest scientists and ecologists.
- Having knowledge and experience of eucalypt tree breeding programs being conducted in Tasmania, in particular by seedEnergy Pty Ltd – this includes knowledge of establishment, pollination, harvesting and on-site management.
- Developing revegetation and planting plans for reserves, schools and private land.
- Contributing to land care activities and reserve management at a local level. This includes an ongoing commitment to conservation management on a large private reserve owned and managed by my wife and me in the Meehan Range, Coal River Valley.

Significant publications (some examples given on next pages)

Scientific publications: 52

Technical manuals and planning tools: 19

Substantive reports, articles and consultancy studies: 68

Examples of publications and references

Substantive reports and consultancy studies

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- Duncan, F. (2019). *Environmental assessment of proposed eucalypt seed orchard development: Fitzgerald, Tasmania*. Report by The Plant Press for seedEnergy Pty Ltd, November 2019.

Technical manuals

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- Wapstra, M., Duncan, F. and Chuter, A (2020). Threatened Plant Adviser: Literature Summary. Forest Practices Authority, Hobart.

Scientific publications

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- Kirkpatrick, J.B. & Duncan, F. (1987). Tasmanian high altitude grassy vegetation: its distribution, community composition and conservation status. *Australian Journal of Ecology* 12: 73-86.
- Duncan, F. (1989). Systematic affinities, hybridisation and clinal variation within Tasmanian eucalypts. *Tasforests* 1: 13-25.
- Williams, K.J. & Duncan, F. (1990). *Epacris limbata* sp. nov.: a localised heath from eastern Tasmania. *Papers and Proceedings of the Royal Society of Tasmania* 124: 95-97.
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- Wapstra, M., Duncan, F., Williams, K. & Walsh, D. (2003). The effect of silvicultural systems on vascular flora in wet sclerophyll forest in south-eastern Tasmania. *Australian Forestry* 66(4): 247-257.
- Wapstra, M., Duncan, F., Buchanan, A. & Schahinger, R. (2006). Finding a botanical Lazarus: tales of Tasmanian plant species 'risen from the dead' *Tasmanian Naturalist* 128: 61-81.
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- Davies, S., Duncan, F. & Chuter, A. (2005). Sustainable harvesting of tree ferns (*Dicksonia antarctica*) in Tasmania. *Poster presented XXII IUFRO World Congress. Brisbane*.
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