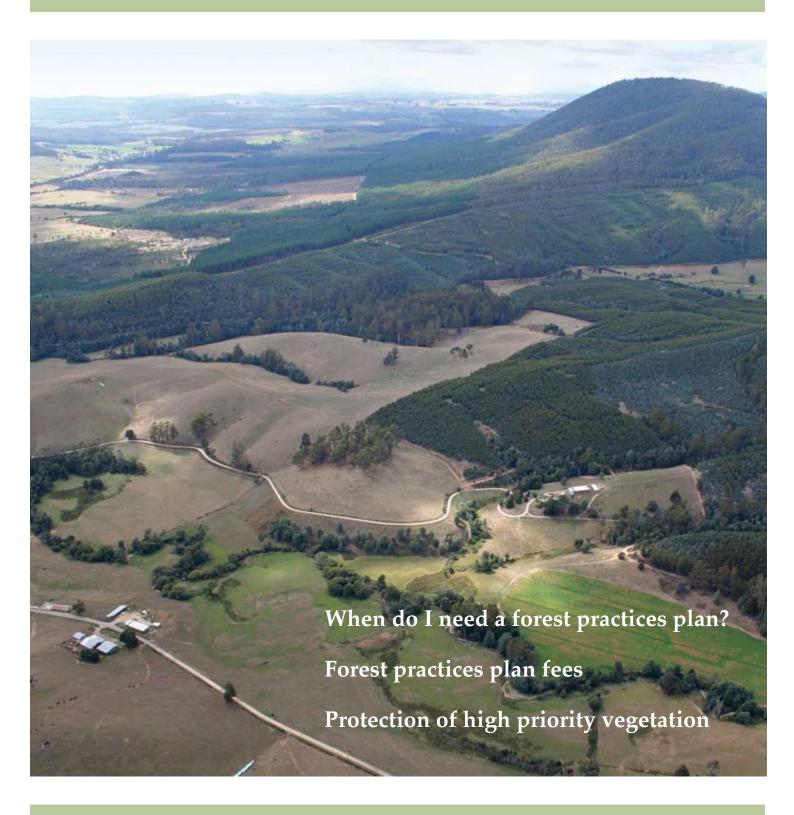
TREELine

PRIVATE FORESTS TASMANIA





Welcome

Private forest owners and managers are increasingly expected to deliver social, economic and environmental outcomes that benefit the broader community as well as their own enterprises. While it is reasonable for the community to have

Welcome to the Winter 2007 edition of TREELine.

broader community as well as their own enterprise. While it is reasonable for the community to have expectations of outcomes to be delivered, the cost and complexity for owners and managers of undertaking forestry operations to deliver the desired outcomes are under-appreciated by the community.

This edition provides an updated decision-making tree that takes into account recent changes to the Forest Practices Act 1985, together with information on revised fee schedules. The decision-making tree is intended to serve as a general guide only and specific advice in respect of any planned activities or operations should be sought from a Forest Practices Officer or the Forest Practices Authority.

We have also included an article on how to generate additional commercial returns from innovative small-scale processing operations, and an article on the project designed to provide further protection of threatened riparian vegetation.

We have also enclosed with this edition a brochure relating to the Community Achievement Awards, with an accompanying nomination form. We urge you to think about appropriate people you may know who could qualify for nomination.

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Cover photo: Integrated farming practices, North East Tasmania

Private Forests Tasmania promotes sustainable management of native forests and plantations, and fosters the use and value of trees in land management.

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Pulp mill offers a win-win for Tasmania

The pulp mill development proposed to be built by Gunns Limited at Longreach in the Tamar Valley offers the chance for a real win-win outcome for Tasmania by offering a world-class pulp mill generating employment and reducing export revenue while at the same time meeting all necessary environmental guidelines. The pulp mill will not proceed if a majority of the Parliament is not satisfied that the environmental outcomes sought can be achieved.

While it has to be acknowledged that there is a level of criticism against the proposed project, much of this needs to be considered in a broader context. The pulp mill site at Longreach is in an industrialized region of the Tamar Valley. Heavy industry has existed in the Tamar Valley for many decades, something many opponents of the proposed project elect to ignore. Longreach is further from Launceston than the Boyer pulp mill is from population centres at Glenorchy, Bridgewater, Brighton, Claremont, and the northern suburbs of Hobart. While the Tamar Valley has some environmental characteristics different from the Derwent Valley, these are considered in the project proposal.

Over the course of its proposed life, the pulp mill will increasingly rely on plantation grown timber for supply, further accelerating what is already a feature of the changing nature of Tasmania's harvests from privately owned forests. In 2005–06, plantations supplied 56.5% of the total timber harvest from private forests in Tasmania compared with just 23.3% five years ago. More importantly from the perspective of the proposed pulp mill project, plantation supplied pulpwood accounted for 55.8% of the total pulpwood harvested from private forests, up from just 29.6% five years ago. This trend will continue over the life of the pulp mill and is something all Tasmanians should support and be comfortable with.

Recognising primary industry achievers

Private Forests Tasmania is proud to support the 2007 Community Achievement Awards, and is a category sponsor for the Primary Industries and Agricultural award category. We believe it is both appropriate and needed that Tasmanians recognise the achievers in our rural communities, as they provide both leadership for their communities and deliver benefits for all Tasmania in a wide range of activities and areas. Enclosed with this edition is a nomination form for the Awards, and we encourage you to nominate any person or organisation deserving of nomination.

When do I need a forest practices plan?

Recent changes to the Forest Practices Act and Regulations means requirements for forest practices plans have changed. A decision table has been prepared to help determine whether or not a forest practices plan is required. Work down the four sections and follow the 'Yes' or 'No' pathways. This is an updated version from the version that appeared in Spring 2005 edition and replaces that version.

The underlined terms are explained in the following section 'Terms and definitions'.

Section 1	Clearance and conversion of a threatened native vegetation community		
If the	Clearance and conversion associated with dam works authorized by a dam permit?	Yes	No plan required
answer	Clearance and conversion associated with the construction and maintenance of electricity	Yes	No plan required
is 'No'	infrastructure in accordance with an environmental management system endorsed by the FPA?	100	r to plan required
continue down the	Clearance and conversion associated with the construction and maintenance of gas pipelines or public roads ?	Yes	No plan required
list	Clearing to provide a <u>reasonable buffer</u> for existing <u>infrastructure</u> if necessary to maintain the infrastructure or for public safety?	Yes	No plan required
	Clearing of <u>native vegetation regrowth</u> from <u>previously cleared and converted land?</u>	Yes	No plan required
	Clearance and conversion in accordance with a <u>conservation covenant</u> or vegetation management agreement approved by the FPA?	Yes	No plan required
	Clearance and conversion carried out for fire <u>management work</u> under a fire management program approved by the FPA?	Yes	No plan required
	Any other scenario?	Yes	Plan required
Section 2	Harvesting of timber or clearing of trees (includes collection of firewood)		
	Harvesting or clearing associated with dam works authorized by a dam permit?	Yes	No plan required
	Harvesting or clearing associated with the construction and maintenance of electricity infrastructure in accordance with an environmental management system endorsed by the FPA?	Yes	No plan required
	Harvesting or clearing associated with the construction and maintenance of gas pipelines or public roads ?	Yes	No plan required
	Clearing <u>native vegetation</u> to provide a <u>reasonable buffer</u> for existing <u>infrastructure</u> if necessary to maintain the infrastructure or for public safety?	Yes	No plan required
	Clearing native vegetation regrowth from previously cleared and converted land?	Yes	No plan required
	Harvesting or clearing in accordance with a <u>conservation covenant</u> or vegetation management agreement approved by the FPA?	Yes	No plan required
	Clearing carried out for <u>fire management work</u> under a fire management program approved by the FPA?	Yes	No plan required
	Is the land 'vulnerable land'?	Yes	Plan required
	A 'Yes' to any question means the land is vulnerable land:		
	- within a streamside reserve or machinery exclusion zone		
	- slope exceeding landslide threshold slope angles		
	 within High or Very High Soil Erodibility Classes presence of a threatened native community 		
	- inhabited by threatened species		
	- contains vulnerable karst soils		
	- contains trees reserved from harvesting or clearing under an expired FPP?		
	Harvesting or clearing more than 1 hectare?	Yes	Plan required
	Harvesting or clearing more than 100 tonnes per property per year?	Yes	Plan required
	Harvesting or clearing requires road construction or quarry operations?	Yes	Plan required
	Harvesting or clearing less than 100 tonnes per property per year and less than 1 hectare?	Yes	No plan required
Section 3	Establishment of trees		
	On land that has contained trees or a <u>threatened native vegetation community</u> within the immediate preceding 5 years?	Yes	Plan required
	Requires the construction of a road or the operation of a quarry	Yes	Plan required
	On land that has not contained trees or a threatened native vegetation community in the immediate preceding 5 year period:		
	- more than 10 hectares per property per year?	Yes	Plan required
	- less than 10 hectares per property per year?	Yes	No plan required
Section 4	Harvesting tree ferns		
	More than 6 tree ferns per property per year?	Yes	Plan required
	6 or less tree ferns per property per year?	Yes	No plan required

This information is for guidance only. Formal advice on the need for a Forest Practices Plan is available from Forest Practices Officers and the Forest Practices Authority (FPA).

Landowners should consult with their local government authority to determine whether planning approval is necessary for the activity.

Terms and definitions:

Clearing of trees – the removal of trees by clearing, cutting, pushing or otherwise removing; or destroying the trees in any way.

Conservation covenant – a conservation covenant according to the *Nature Conservation Act* 2002.

Fire management work – the burning off of vegetation and constructing firebreaks and access tracks, where the sole purpose is to reduce fire hazards or control wildfires; and trees affected are not harvested or cleared for any other purpose; and reasonable precautions are taken to avoid harming natural and cultural forest values.

Forest – an area containing trees.

Forest practices – the process involved in establishing forests, clearing trees, growing or harvesting timber, or clearing and converting threatened native vegetation communities; and works (including: construction of roads, development and operation of quarries) connected with establishing forests, clearing trees, growing or harvesting timber.

Forest practices plan (FPP) – an FPP or FPP Variation certified by the Forest Practices Authority.

Harvest – in relation to timber, to cut and remove timber from a forest.

Infrastructure – includes roads, fences and buildings.

Native vegetation – vegetation, of a species, that existed in Tasmania before European settlement.

Native vegetation regrowth – native vegetation containing no more than twenty (20) eucalypt plants more than two (2) metres in height, on any half (0.5) hectare area.

Previously cleared and converted land -

a. land on which the owner can demonstrate a history of agricultural or non-forest land use over at least 5 consecutive years since 1985, during which the land did not contain trees or threatened native vegetation communities; or

b. land that has been cleared or converted within the last 5 years, in accordance with a certified FPP.

Property – any land recorded as one valuation on the Valuation Roll.

Public road – a State highway, subsidiary road, country road or a highway under local management.

Reasonable buffer – an area of land necessary to provide safe vehicle access to the infrastructure or to protect the infrastructure from being damaged by falling timber.

Threatened native vegetation community – as specified in the *Nature Conservation Act* 2002.

Timber – the trunk, branch and any other part of a tree or fallen tree, whether or not it is cut up, sawn, hewn, split or otherwise dealt with.

Tree fern – a plant of the species *Dicksonia antarctica*.

Trees – any woody plants with a height or potential height of 5m or more, whether living, dead, standing or fallen, that are – native to Tasmania; or introduced and used for the harvesting or processing of timber; and tree ferns.

Additional references:

Forest Practices Regulations 1997

Forest Practices Act 1985

Forest Practices Code 2000

www.fpa.tas.gov.au

www.thelaw.tas.gov.au

Forest practices plan fees

Forest practices plan fees have been increased. The following table can be used to calculate the fee. First determine the type of operation (0, 1, 2, 3 or 4). Look up the fee applied for that type of operation in the fee schedule.

	Type of land covered by FPP		
	С	P	NF
Type (operational code) of FPP (as assessed by Forest Practices Officer (FPO)	Cleared land or land containing scattered trees or degraded forest (see full description below)	Forest established by planting trees	Forest established by the natural or assisted regeneration of trees from seed or other natural propagules
Light selective logging or low-level operation (eg. collecting timber for firewood)	0	1	1
Retention system (eg. thinning operation leaving forest substantially intact)	0	1	2
Clearfall system (eg. felling all trees and allowing land to regenerate)	0	2	3
Conversion to non-forest (eg. felling all trees and converting land to agricultural use)	0	2	4
Conversion to plantation or clearance & conversion of threatened native vegetation community (TNVC) (eg. converting native forest to pine plantation, converting native grassland to cropping)	2 or 4*	2	4
Road, quarry (eg. constructing vehicle access to facilitate timber harvesting)	3	3	3

"C" signifies treeless land or land containing scattered or degraded forest that the Forest Practices Authority has determined comprises: (a) trees that (i) are mostly dead or show signs of severe dieback; and (ii) show no signs of healthy regeneration; or	(c) mature trees that (i) have, collectively, a canopy cover of less than 5% of the canopy cover that would be expected in a healthy forest; and (ii) occur only as solitary specimens, or in small stands of fewer than 10 trees, within a largely cleared landscape; or
(b) trees that (i) are mostly in poor health; and (ii) have an extensively disturbed or modified understorey dominated by introduced species of grass or other vegetation (such as broom, gorse or blackberry); and (iii) have a low potential to regenerate naturally or regain long-term health; or	(d) native vegetation regrowth on previously cleared and converted land;

^{*} Operational code 4 for an FPP involving the clearance and conversion of a threatened native vegetation community. Operational code 2 for another kind of FPP.

Fee schedule - all fees GST inclusive

FPP ranking	Prescribed fee	Actual fee (as at 1st July, 2007)
0	52 fee units (fee unit \$1.25 1 July 2007)	\$65.00
1	The higher of the following amounts: (a) 52 fee units (fee unit \$1.25) (b) 6 fee units for each hectare (or part hectare) of land covered by the plan	\$65.00 The flat rate would be charged if the area covered by the plan is less than 8.7 hectares. Plans covering more than 8.7 hectares cost \$7.50 per hectare.
2	The higher of the following amounts: (a) 77 fee units (fee unit \$1.25) (b) 16 fee units for each hectare (or part hectare) of land covered by the plan	\$96.25 The flat rate would be charged if the area covered by the plan is less than 4.8 hectares. Plans covering more than 4.8 hectares cost \$20.00 per hectare.
3	The higher of the following amounts: (a) 129 fee units (fee unit \$1.25) (b) 25 fee units for each hectare (or part hectare) of land covered by the plan	\$161.25 The flat rate would be charged if the area covered by the plan is less than 5.2 hectares. Plans covering more than 5.2 hectares cost \$31.25 per hectare.
4	The higher of the following amounts: (a) 513 fee units (fee unit \$1.25) (b) 30 fee units for each hectare (or part hectare) of land covered by the plan	\$641.25 The flat rate would be charged if the area covered by the plan is less than 17.1 hectares. Plans covering more than 17.1 hectares cost \$37.50 per hectare.

"FPP ranking" means a forest practices plan's ranking on a scale of complexity ranging from 0 to 4 (with 0 being the least complex and 4 being the most complex).

Who pays the fee?

The plan applicant will be invoiced for the fee.

Private Forest Service Levy

Since 2001 all forest practices plans on private land are subjected to a levy based on the net area in the plan. This levy becomes due 6 months after a plan has been certified and is currently set at \$14.00 per hectare.

Additional References

Forest Practices Regulations found at http://www.thelaw.tas.gov.au

This information is for guidance only. Formal advice on the need for a Forest Practices Plan and fee payable is available from Forest Practices Officers and the Forest Practices Authority (FPA).

Landowners should consult with their local government authority to determine whether planning approval is necessary for the activity and any fees required.

The 2006/2007 'Targeted Protection of High Priority Terrestrial and Riparian Vegetation' project overview

The Targeted Protection of High Priority Terrestrial and Riparian Vegetation Project was delivered by Private Forests Tasmania in partnership with NRM North in 2006/2007, with funding supplied by the Australian Government's National Heritage Trust. This project was implemented by the Project Leader Scott Livingston and Project Officer Semone Keppel.



Riparian Vegetation along the Little Forester River, near Scottsdale. This vegetation has now been protected

This project addressed biodiversity conservation and sustainable management of environmental resources on private land in the northern Natural Resource Management (NRM) region. This project implemented on-ground works that targeted priority areas and developed vegetation management plans where none currently existed. Activities were targeted at high priority native vegetation in the Ben Lomond and mainland Flinders bioregions with assistance of Dorset NRM Sub-region. This project delivered outputs and outcomes sought in the *Northern Tasmania Natural Resource Management Strategy* including:

 maintenance and enhancement of terrestrial and riparian vegetation in priority areas;

- protection, maintenance and enhancement of high priority vegetation communities, regional corridors and critical fauna habitat;
- increased biodiversity;
- · reduced pests, weeds and diseases; and
- · community capacity building.

An overview of the on-ground works achieved shows that this project and its implementation were a success.



View of a part of the protected riparian vegetation on the Little Forester near the coast

On- ground Works

	Target	Achieved	% of target achieved
Riparian fencing (km)	22	38.9	177 %
Priority Vegetation Communities (ha)	n/a	128.5 ha	No set target
Threatened Species habitat (ha)	n/a	154.5 ha	No set target
Other Terrestrial Vegetation (ha)	n/a	43.4 ha	No set target
Total threatened species ecological communities and habitats (ha)	242	283 ha	117 %
Other Riparian Vegetation (ha)	44	96.1 ha	218 %
Wetlands (ha)	20	31.3 ha	157%
Total vegetation under management agreements	484 ha	492.7 ha	102 %

This project assisted in the protection of 91.5 ha of high priority vegetation communities. These specific vegetation communities include the following:

Vegetation Title	Status
Lacustrine herbland	Vulnerable
Fresh water aquatic sedgeland and rushland	Vulnerable
Wetland (undifferentiated)	Vulnerable
Eucalyptus ovata forest and woodland	Endangered
Eucalyptus viminalis - Eucalyptus globulus coastal forest and woodland	Rare & Vulnerable
Lowland Poa labillardierei grassland	Endangered
Subalpine Diplarrena latifolia rushland	Rare
Highland grassy sedgeland	Rare
Allocasuarina littoralis forest	Rare
Melaleuca ericifolia swamp forest	Rare & Endangered
Notelaea - Pomaderris - Beyeria forest	Rare & Endangered
Riparian scrub	Vulnerable
Eucalyptus viminalis wet forest	Endangered



 $\textit{Project participant Arthur Webster and Project Leader Scott Livingston, assessing the vegetation condition of a \textit{Eucalyptus amygdalina} forest$

This project has contributed in the reversal of the decline of native vegetation in the following ways:

- Providing incentives to landholders to implement vegetation management plans that address Resource Condition and Management Action Targets as identified in the NRM North Strategy.
 - Implementing integrated management of special values, which can include threatened flora, fauna, vegetation communities and riparian vegetation, and providing information on these values and their management to landowners. in Site Management Plans as part of their property level planning,
 - Encouraging appropriate fire management practices,
 - Encouraging the adoption of grazing practices that are sustainable and reduce unsustainable grazing, and
 - Establishing baseline data for comparison over time of change in vegetation condition as a tool for monitoring management practices and indicating where changes in practices may be required.

- 2. By maintaining and improving water quality through adoption of best management agricultural practices that protect riparian and wetland vegetation.
- 3. By building capacity through:
 - Communicating information on the location of high priority vegetation. to raise awareness and promote strategic implementation of projects that encourage best practice management of terrestrial and riparian vegetation to the community, and
 - Provision of training to NRM professionals in Vegetation Condition Assessment and GPS use.

The project in conjunction with the NLP funded 'Sustainable Farm Forestry' project organized a second field day on the 1st June 2007, located on two of Stephen Creese's properties, 'Bowood' and 'Boobyalla Park' in the north east of the state. The projects on these properties reflect best land management practices, including indigenous species and protection of remnant native vegetation and radiata pine shelterbelts. This field day, attended by 70 persons, was an outstanding success and Stephen looks forward to another field day in 10 years time!

Semone Keppel, Project Officer

Converting plantation and regrowth thinnings into firewood – the easy way

Our changing forest resource to plantation and regrowth forests will produce timber with different characteristics to the traditional mature timbers and they will generally be smaller dimensions. The challenge lies in the viable harvesting and efficient utilization of these timbers, the situation is more difficult as the scale becomes smaller.

Private Forests Tasmania (PFT) has recently been working on options for small-scale harvesting operations, culminating in the upcoming publication of a report "Appropriate Technologies for Small Scale Forest Harvesting Operations in Tasmania".

As a progression of this investigation are the timber processing options for small-scale harvest operations; currently there are very few options for processing small volumes of small logs. As part of their investigation PFT, in collaboration with SWT Tajfun Australia, recently trialed and evaluated a small-scale harvest operation in Southern Tasmania.

The site was an 8 hectare privately owned *Eucalyptus nitens* plantation planted in 1994, approximately 1000 stems per hectare, 20cm diameter at breast height (dbh), an average height of 13m and an average volume of .15m per stem.

The plantation was manually line-thinned, a chainsaw used for the felling and delimbing process, before the timber was skidded-out using an aged 2WD David Brown tractor and 3-point linkage mounted Tajfun EGV 40 AHK forest winch. The timber was then converted into firewood lengths using a Tajfun RCA 320 firewood processor powered by another aged David Brown tractor.

The felling process is a relatively straightforward, although arduous, operation and a competent faller should be able to fell, delimb and present approximately 100 trees per day ready for extraction.



Aged David Brown tractor with radio control throttle attached



Tajfun winch attached to 3-point-linkage



Tractor and winch ready for action



Timber is attached using chain chokers..

The extraction operation was completed using the Tajfun EGV 40 AHK mounted on the tractor 3-point linkage and powered by the power take-off (PTO). The operation was made more efficient and safe by the addition of a radio remote control that controls the tractor's engine speed and the winch. This is a one man operation as the remote control can be operated up to 200m from the tractor, each drag was able to pull 6-8 trees and a pulley-block enabled the timber to be dragged around corners and out of inaccessible areas with safety and ease. Apart from attaching the trees to the winch rope with chokers, any manual handling of timber during the extraction process was avoided.

The processing of the timber into firewood was conducted using the Tajfun RCA 320 firewood processor connected to a tractor PTO. Following the extraction of timber with the tractor and winch, the timber was stacked adjacent to the firewood processor on skids using the winch's butt plate. The stacking helps facilitate the automated loading procedure, the timber is then transferred via rollers and a conveyer to be cut-to-length at a predetermined length, the log then drops into a bunk to be split to a desired size, then transferred via conveyer to a holding receptacle ie. ute, bin, box, skip etc. The whole process of loading, cutting to length, splitting and unloading is conducted without a need for manual handling: resulting in a highly efficient, safe and productive system.

Output volumes for the Tajfun RCA 320 firewood processor will vary greatly according to site set-up and timber dimensions, in the trial the machine achieved 3-5 m³/hour with small hardwood thinnings.

The combination of a purpose-built forestry winch and firewood processor powered by inexpensive agricultural tractors provides an effective and safe option for small-scale forest harvesting operations. There are very few options for processing small volumes of small logs; however, with a firewood processor a large proportion of logs previously destined for waste, fencing or pulpwood can now be processed into quality firewood.

There are opportunities for small businesses to develop a more standardized, quality firewood product from a renewable and often underutilised resource.

Rob Smith, Private Forest Advisor



and winched to the tractor



Tajfun processor ready for timber



Tajfun processor in operation



Firewood processor ready for transport

Private Property Plantations in the Landscape in Tasmania

Recently there have been a number of stories appearing in the media about the extent to private plantation cover in Tasmania, with many exaggerated and unsupported contentions being made. Private Forests Tasmania has recently prepared the most authoritative analysis of the plantation estate on private land and some of the key findings are:

- Tasmania now has 254,200 hectares of plantations with 150,407 hectares (59%) of plantations on private land;
- There were 23,500 hectares of plantations established on private land in the 12 months to 31 December 2006;
- Plantations on private land occupy 2.2% of Tasmania's landmass;
- There are 4,853 private properties in Tasmania with plantations, and on 2,825 properties (58.2%) the plantation cover is 10% or less of the property;
- There are 5,290 hectares of plantations established on land mapped as prime agricultural land, representing 3.5% of the total private plantation estate and 4.9% of the total area of 107,005 hectares of land mapped as prime agricultural land (Class 1-3 land);



- In calendar year 2006, there were 226 ha of plantations established on land mapped as prime agricultural land, representing 1.0% of the private plantation area established in 2006, and covering 0.2% of the total area of land mapped as prime agricultural land (Class 1-3 land);
- Over the five years 2002 to 2006, there were
 1,357 hectares of plantations established on land
 mapped as being Class 1-3 land representing
 2.2% of plantations established during that period,
 and covering 1.3% of the total area of land mapped
 as Class 1-3 land;

A copy of the paper is available on our website (www.privateforests.tas.gov.au).

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Opinions expressed in this bulletin are not necessarily the views of the editor or Private Forests Tasmania.