

# TREE *Line*

PRIVATE FORESTS TASMANIA



The right people for the job

Tasmanian tree ferns

A farm forester pioneer

Winter 2006 *A quarterly publication by Private Forests Tasmania*



Tasmania

# Welcome

*Included in this fourth edition of TREELine is a directory of service providers to the private forestry sector. The directory lists forest practices officers preparing and certifying plans, and other individuals and companies that provide related services.*

*The Biennial Conference of Australian Forest Growers is to be held in Launceston 22nd to 25th October.*

*Many may remember the AFG Conference in Launceston in 1994. The 1994 event was interesting, stimulating and fun. The 2006 conference is well-planned and will be worth attending. The sharing of experiences of farm foresters from Tasmania with visitors from the mainland and overseas is always rewarding.*

# Contents

Focus on people.....	2
The right people for the job .....	3
Marking the passing of a true farm forester pioneer .....	9
Tasmanian tree ferns .....	10
A useful guide.....	12
The view from above .....	12

Article on Tasmanian tree ferns provided by Dr Simon Davies – Forest Practices Authority.



Cover Photo : Well-equipped and trained officers are the right people for the job.

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# Focus on people

Very often in the forest industry the concentration is on resource availability, or the political environment, or on large-scale projects. This edition of *TREE Line* focuses largely on the service providers in the industry who are there to provide expert advice and assistance to farm foresters.

The right person providing the right advice can not only save time in getting things done but can save money as well. Appropriate silvicultural management, for example, can enhance the quality of the product and the price that product can command in the marketplace. Appropriate selection of species and location of trees in the landscape can deliver non-production economic and environmental benefits.

One of the most significant changes to the forestry landscape over the past decade has been the increase in not only the number of private service providers and consultants but the range of services they provide. These providers are in the business of making money – and deservedly so. What this shows is that forest owners, and more broadly farmers and landowners, are increasingly seeing the benefits for their businesses and environment of managing their native and plantation forests better.

A cursory look at many parts of Tasmania, but most notably the midlands, shows that trees don't just grow anywhere. Getting trees to grow in an optimum location and to the optimum extent takes knowledge and the use of appropriate skills and technologies.

Innovations in harvesting techniques and milling operations increasingly mean that smaller woodlots will become more viable than in the past. This has the potential to substantially increase the size of the private forest estate and the contribution the sector makes to the overall forest harvest.

So, for anyone needing professional advice or service in respect of their farm forestry requirements, we hope that this issue will prove of benefit and assistance.

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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# The right people for the job

Forestry is a complex undertaking with a wide range of skills needed. Tasmania is fortunate in having a number of forestry consultants whose combined skills able to deal with all aspects of forestry.

Private Forests Tasmania maintains a directory of people and organisations that provide a wide range of specialised services. Engaging a specialist is often the most effective means of progressing a project.

## Important note

The people and organisations listed below are in alphabetical order. Private Forests Tasmania does not recommend or endorse any person or organisation. The listing is provided as an easy-to-use directory. Users of the directory will need to contact the listed person or organisation and discuss their project. The information provided was current as at August 2006 but is not necessarily exhaustive.

### *Forest Practices Officer (FPO)*

There are a number of consultants that can be engaged to prepare and certify Forest Practices Plans (FPPs).

When engaging an FPO to prepare and/or certify a plan it is important to describe the type of plan required. There are a number of specialised Forest Practices Plans and only some FPOs are authorised to prepare such plans or, as consultants, only prepare some types of plans.

### *Types of Forest Practices Plans*

- Roads – often a separate FPP is prepared to gain access to the forest. It is desirable to build roads into forest in dry conditions and avoid using the road to allow it to settle.
- Quarries – special plans are required if a quarry is to be dug or used to provide gravel for forestry operations.
- Native forest harvesting and reforestation – these plans are often very complex with a number of environmental issues needing to be examined. It is desirable that a plan for harvesting native forest includes the provisions for reforestation.
- Plantation establishment and harvesting – usually separate plans for establishment and harvesting are prepared.

As plantations mature and are harvested, FPPs for plantation harvesting and re-establishment are more common. Operationally linking harvesting and establishment plans is preferable. How a plantation is harvested can affect how a plantation is re-established.

- Clearing for agriculture – with the introduction of new land-clearing regulation, preparing and certifying these types of plans can be complex. Consultants preparing FPPs usually charge by the hour. Delays in preparing such plans, as advice is required from Government agencies, can considerably increase costs to the landowner.
- Clearing for dams – a streamlined procedure for clearing of forest for construction of dams has been developed. There are accredited FPOs who can certify plans for dam developments.
- Clearing for subdivisions – clearing for subdivisions is treated in the same way as for other forestry operations but can become complicated as local government development approval processes also need to be followed.
- Tree fern harvesting – there are special conditions associated with tree fern harvesting.

It is also important to remember that a major component of the cost to have a consultant FPO prepare a plan is the cost of travel.

Many of these service providers provide a number of other services such as marketing of products, inventory, project management, timber assessment, harvesting supervision, soil testing and a range of other services.

See separate listing for details.

## Firms or organisations with Consulting Forest Practices Officers

The FPOs listed are available to prepare and certify plans for large forestry companies, sawmillers, land owners and the State grower Forestry Tasmania. In some cases an individual or firm may almost exclusively be working for one particular forestry company for a period of time.

### *Environmental Consultants International Pty Ltd (ECI)*

operates in Tasmania, and has a number of FPOs.

ECI operates statewide and has staff in all parts of the State.

Contacts:

Clint Webb – 0417 298 470

Dan Ryan – 0417 990 317

Mike Briggs – 0419 389 257

Joe Hawkes – 0417 525 725 Devonport based

### *Forest Contracting Services (Tas) Pty Ltd*

is a Hobart based company which is a specialist labour hire company. A large number of skilled forestry consultants work through this firm including a number of FPOs. Operates statewide.

Skills available through this firm include:

- Archaeologist
- Biologist
- Botanist
- Ecologist
- Forest practices audits
- Geologist
- Geomorphic inventory and field assessments
- GPS mapping
- Hydrologist
- Ornithologist
- Road construction supervision
- Speleologist
- Water sampling and catchment monitoring
- Zoologist

Contact: Paul Swifte – 6264 8990 or 0401 992 950

### *North Barker Ecosystem Services*

a Hobart based company prepares plans for clearing for agriculture, dams and sub-divisions.

Contact: Andrew North – 6231 9788

### *Sustainable Forest Management P/L (sfm p/l)*

is a Tasmanian company which prepares and certifies plans.

It operates statewide with staff in the north of the State.

Contact: Andrew Morgan – 6223 1839

### *TAS Land & Forest*

is a Tasmanian company Devonport based and operates statewide.

Contact: Brett Miller – 6423 1280

### *Woodstock Forest Services*

is a Tasmanian company based in the Launceston area, operating primarily in the north east of the State.

Contact: Rob McLelland – 6395 1234

## Consultant FPOs

The following FPOs operate primarily as single person operations. In addition many provide other services. Where possible the types of services provided are listed. Many FPOs are willing to provide a range of services if approached.

*Chris Barry* 6266 3964 or 0418 138 925

Based in Franklin but operates statewide preparing most types of plans. Also provides advice on land management and related issues.

*Ian Blades* 6376 1280

Based in St Helens but operates statewide preparing most types of plans. Also involved in marketing, timber valuation and road location.

*Sean Blake* 6352 2144

Based in Scottsdale and operating primarily in the north-east of the State. Also undertakes eagle nest searches and preparation of special values reports for forest practices plan preparation.

*Mark Chin* 6331 5615

Launceston based, operates statewide but usually in the north-east and central highlands. Operates almost exclusively on private land and a long-term operator. Also provides timber valuations services.

*David Dean* 0418 631 874

Trades as David Dean Pty Ltd. Based in Wynyard and operates primarily in the north-west of the State. Also provides other services such as: softwood estate management, pine and hardwood harvest scheduling, thinning to waste, pruning, FPP supervision, and brokerage of timber and land.

*Terry Johns* 0438 070 438

Based in Swansea and operates in the southern part of the State. Operates primarily in native forest on private land.

*Scott Livingston* 0438 951 021

Trades as Livingston Natural Resources Services.

Based in the Launceston area and operates in the northern part of the State. Prepares most types of plans; except road, quarry, sub-division and tree ferns. Operates primarily on private land. Provides a range of other services – vegetation management planning, 3-D landscape modelling for Forest Practices Plans and development applications, and GPS and GIS mapping.

*Phillip Mills* 0418 135 422

Trades as Forestry Solutions Launceston based but operates statewide. Prepares all types of plans except quarry and tree fern plans. Also provides other services including assessment of values for FPPs, marking reserves, coupe field marking,

utilisation supervision, cable logging engineering and road location, road line planing, location and supervision, quarry rehabilitation surveys, regeneration planning and burn plans, plantation planning, windrow marking, establishment supervision and survival surveys, aerial photography rectification and interpretation, field surveying, collection and collation of inventory data.

**Tony O'Malley** 0417 353 042

Based in Triabunna and operates in the southern part of the State. Prepares all types of plans except tree fern plans. Also provides other services including assessment of values for FPPs.

**Tony Stonjek** 0419 573 205

Trades as Forestry Consultancy Services. Based in the Launceston area and operates statewide. Prepares all types of plans. Also provides other services, such as timber valuation.



## Specialised services

There are a number of other individuals and firms that provide a range of other services.

Various government departments and agencies, including the Forest Practices Authority, occasionally undertake consultancies and other project-based studies. Agencies need to be approached individually to determine availability.

### **Armstrong Agricultural Services Pty Ltd**

Launceston based and operates statewide.

- Farm business management
- Preliminary environment assessment
- Feasibility studies
- Farm mapping

Contact: David Armstrong 6334 1033

### **BR Walker Forestry Consultant**

Hobart based but operates statewide.

- Forest estate modelling
- Landscape modelling
- Valuation
- Management planning
- Forest information systems
- Project management
- Business development

Contact: Bernard Walker 0417 163 961

### **Brueckner-Leech Forestry Consultants**

Launceston based and operates statewide.

- Special timber industry development
- Whole farm property planning
- Aboriginal heritage consultation
- Plantation forestry / trees on farms advice
- Policy advice

Contact: Mark Leech 6334 0915

### **Bushways Environmental Services**

Launceston based area and operates in northern Tasmania.

- Undertakes flora and fauna surveys/assessments/mapping
- Vegetation management plans
- Revegetation advice and planning
- Plant identification
- Riparian management

Contact: Helen Morgan 6395 4429

### *Cambium Pty Ltd*

Hobart based but operates statewide.

- Mapping for salinity (EMS mapping)
- GPS/GIS survey and mapping
- Asset management

Contact: Neil Meadows 0407 832 479

### *ECI or Environmental Consultants International Pty Ltd*

Hobart based but has staff statewide.

- Provides services in marketing of products
- Project manager for plantation establishment
- Operates small harvesting operation

Contact: 6233 5504

### *EcoTas*

Hobart based but operates statewide.

- Undertakes flora and fauna surveys/assessments
- Scientific writing and editing
- Plant identification

Contact: Mark Wapstra 6251 3212 or 0407 008 685

### *EIO Pty Ltd*

Launceston based and operates statewide.

- Salinity management training
- Market information for agriculture
- Group extension and facilitation

Contact: Malcolm Cowan 6331 1671

### *Forest Contracting Services (Tas) Pty Ltd*

Hobart based but has staff statewide.

This company has specialists available in many areas including:

- Geomorphology
- Roading
- Forest assessment
- Silvicultural advice
- Flora and fauna assessment

Contact: Paul Swifte 6264 8990 or 0401 992 950

### *GHD Pty Ltd*

An international firm with offices in Hobart and Launceston.

This company provides a wide range of services including a full range of environmental services.

Contact: 6210 0600

### *IndustryEdge*

Hobart based but operates statewide.

- Specialised market intelligence provider for the pulp and paper industry
- Market prices
- Forest project appraisal

Contact: Robert Eastment 6224 7166

### *LMRS Pty Ltd*

Hobart based but operates statewide.

- Land and vegetation management
- Quality and environmental management system
- Rehabilitation/revegetation design and implementation
- Rehabilitation design
- Contaminated site remediation

Contact: Tim Duckett 6231 5474

### *Natural Resource Consultant*

Hobart based, operates mainly in Southern Tasmania.

- Primarily providing fauna and flora surveys and reports for sub-division and development application.

Contact: Andrew Welling 6267 2630

### *North Barker Ecosystem Services*

Hobart based but operates statewide.

- Undertakes flora and fauna surveys/assessments
- Vegetation mapping
- Dam assessment
- Impact assessments
- GPS/GIS mapping

Contact: Andrew North 6231 9788

### *Schwabenforest Pty Ltd*

Launceston based area and operates statewide.

- Alternative forest management
- Holistic forest management
- On site milling
- Removal of problem trees

Contact: Frank Strie 0417 312 927

### *SEMF Pty Ltd*

Tasmanian company based in Hobart with offices in Launceston, Sydney and Melbourne. SEMF provides a wide range of services including:

- Forest assessment
- Riparian assessment
- Coupe assessment
- Environmental audits
- Environment management systems

Contact: Dr John McCambridge 6231 1211

### *Serve-Ag Pty Ltd*

Devonport based but with staff statewide  
Serve-Ag provides a wide range of services to agriculture and forestry including:

- Soil surveys
- Mapping
- Farm planning
- Analytical services – plant sap, soil nitrogen, water monitoring

Contact: Serve-Ag 6498 6800

### *Sinclair Knight Merz Pty Ltd*

An international firm with offices in Hobart and Launceston. This company provides a wide range of services including provision of satellite images and a full range of environmental services.

Contact: 6221 3745

### *Soil Professionals Pty Ltd*

Launceston based and operates statewide.

- Land resource assessment including soil mapping at detailed and reconnaissance scales.
- Selection of suitable sites for forest plantations (hardwoods, softwoods) and perennial horticultural crops (vineyards, orchards), and recommendation of appropriate management practices for sustainable use.

- Assessment of land degradation hazards (soil erodibility, landslide hazard) associated with operations in native forests and plantations, and research on impacts of forest practices on soil disturbance and site productivity.
- Extension/communication through talks, seminars, training courses, field days and publications (technical reports, feature articles, soil maps, scientific papers, books/manuals).
- Consulting on international and interstate soils/forestry projects

Contact: Mike Laffan 6394 3368

### *Sustainable Forest Management P/L (sfm p/l)*

Hobart based but has staff statewide.

- Timber assessment
- Harvest supervision
- Forest brokerage – timber and land
- Undertakes flora and fauna surveys/assessments
- Landscape analysis
- Property planning (PMP)
- Grant facilitation
- Geotechnical analysis/Soil testing
- Soil nutrient assessment
- Dam surveys
- Fire management and control (include fire crews)
- Cultural heritage assessment
- Planning scheme and development application expertise
- GPS/GIS mapping

Contact: Andrew Morgan 6223 1839



### *TAS Land & Forest*

- Forest and plantation inventory
- Timber valuations
- Forest management plans
- Undertakes flora and fauna surveys/ assessments
- GPS/GIS mapping
- Nature conservation plans

Contact: Brett Miller 6423 1280

### *Tasflora*

Hobart based, operates mainly in southern Tasmania.

- Specialises in removal of listed weeds
- Hand weeding, spot spraying and slashing
- Tree planting and erosion matting placement
- Willow poisoning

Contact: Andrew Woolford 0438 139 121

### *Tasmanian Herbarium*

Hobart based, operates statewide.

- Undertakes flora survey to identify species and communities
- Preparation of flora species lists
- Plant identification

Contact: Alex Buchanan 6226 1729

### *Tasmanian Land and Water Professional Pty Ltd*

Hobart based, operates mainly in Southern Tasmania.

- Specialises in weed management associated with natural resource management and agriculture

Contact: Sam Smee 6234 2939

### *Tastree Pty Ltd*

Launceston based and operates primarily in north east of the state.

- Fire risk management
- Fire planning – waterholes and access, fire breaks etc
- Control burning – prescribed burns
- Fuel reduction in thinned forest – using excavator and two stage burning
- Road construction and culvert installation
- Inter row slashing for plantation

Contact: Peter Ryan 0407 442 844

### *Technical Forest Services Pty Ltd*

Launceston based and operates in northern Tasmania.

- Assessment for browsing surveys, survival, weed surveys, pest and disease, pre-prune assessments, non commercial thinning (NCT), pre thinning, log residue assessment (LRA), wedge tail eagle nest searches, uneven age treatment, pre logging assessment, regeneration surveys (seedling and multi-aged), native forest seed crop assessment, stocking and volume assessment and establishment and growth assessments.
- Boundary surveys and reserve marking
- Controlled burning and fire fighting
- Special values assessment for Forest Practices Plans
- Water sampling
- Soils surveys
- Global Position System activities
- Date capture
- Crew supervision
- Quality audits for nurseries, land preparation, planting, fertilising, pruning, release thinning, harvesting, transport and safety

Contact: Clive Woodridge 0407 331 023

### *Woodstock Forest Services*

Launceston based and operates in northern Tasmania.

- Boundary location
- Streamside reserve assessment
- Logging coupe layout
- Regeneration surveys
- GPS/GIS mapping
- Insect monitoring
- Silvicultural assessment
- Browsing assessment - game shooting and 1080

Contact: Rob McLelland 6395 1234



# Marking the passing of a true farm forester pioneer

Farm foresters Tasmania-wide were saddened by the recent death of a pioneer Tasmanian farm forester – Bruce Downie of ‘Hazelwood’ at Copping, in southern Tasmania.

Bruce had a clear vision of how he wanted to develop the property, and how he wanted to develop shelter and harvest the native forest.

He and his wife Elaine first established pine plantations at Copping in 1971 in trial plots. In 1976 they established 46 hectares of agro-forestry plantings or wide-spaced planting, seeking to produce wood and grazing on the same area of land.

Further plantings in 1978, 1979 and 1980 followed. Bruce approached the task of establishing his plantation with care, and from the first days adopted the best available science.

He adopted the thinning and pruning approach developed by Neil Barr from New Zealand to manage the agro-forestry plantings. He was one of the first farm foresters to use clonal material in his plantations. He also established cypress, pampas grass and blackwood shelterbelts.

He thinned his native forest seeking to improve the sawlog yield, and milled the saw log on the property.

The 1982 State winner of the Australian Forest Growers Tree Farmer of the year, he went on to be the national winner of that award. Bruce was actively involved in promoting the ongoing development of farm forestry at both the farm level on his own property and also at the level of state policy development in establishing an appropriate framework to provide certainty and commercial potential for all landowners. He was instrumental in the development of “Private Timber Reserves” and the original “Forest Practices Code”. He believed the Forest Practices System was effective at tidying up the timber harvesting industry but



felt (strongly) that recent changes had hijacked the original intent and it was now being used to constrain the commercial potential of farm forestry and that landowners were being asked to give up too much for the “community good”. He travelled widely in Australia and New Zealand to exchange views and was an early member of the Private Forestry Council (now the Board of Private Forests Tasmania).

He was an active member of the Australian Forest Development Institute (now Australian Forest Growers) and was always keen to hold field days on his property to share his enthusiasm. His children have all been influenced by his efforts and continue to manage the plantations and native forest.

Together with Elaine, Bruce was an active member of his community. His farm forestry legacy is shared by many people and is very visible as people travel from Hobart to Port Arthur, as the road passes very close to the pine plantation, pruned and thinned, and is a clear testament to the vision and commitment of a pioneer farm forester.



*The result of sound planning and management with a long-term view, on ‘Hazelwood’, Copping.*



Large *Dicksonia* in Huon wet forest

## Tasmanian Tree Ferns

There are five ferns in Tasmania that form a trunk and are known as tree ferns, *Dicksonia antarctica* (manfern or soft tree fern), *Cyathea australis* (rough tree fern), *Cyathea cunninghamii* (slender tree fern), *Cyathea Xmarcescens* (skirted tree fern) and *Todea barbara* (king fern). *Dicksonia antarctica* is the most common and widely distributed tree fern in Tasmania forming an integral part of the canopy structure of wet forests and hosting many epiphytes.

## Commercial Tree Fern Harvesting

*Dicksonia* is harvested commercially in the state due to its robust nature and aesthetic properties associated with horticultural uses in domestic and public gardens. *Dicksonia* is generally sold as a live fern, however, secondary products may be created from the stems/ trunks for horticultural purposes e.g edging logs, garden steps, pots or mulch. The majority of tree ferns are salvage harvested from State forest which is to be converted to plantation. On average approximately 60,000 *Dicksonia* are harvested annually.



Harvesting *Dicksonia*

The harvesting of *Dicksonia* generally occurs prior to timber harvesting, however, in some instances this occurs following timber harvesting.

A chainsaw is used to trim off the fronds and cut through the stem. *Dicksonia* is unique in that the stem or caudex consists of aerial roots which means that it can be cut anywhere below the crown and be replanted with great success. Generally, *Dicksonia* 0.3-1m long are most desirable in the market place as they are easy to handle for both harvesters and consumers.

## Regulation of Tree Fern Harvesting

Tree fern harvesting was unregulated in Tasmania until March 2002 when the Tree Fern Management Plan for the Harvesting, Transporting or Trading of *Dicksonia antarctica* in Tasmania was introduced. The Tree Fern Management Plan was introduced due to concern that harvesting was unregulated and had the potential to threaten important populations of tree ferns. The inception of the Tree Fern Management Plan was underpinned by a tagging system under which all harvested tree ferns must be tagged with a Tasmanian Tree Fern Tag at the point of harvest. Tasmanian Tree Fern Tags indicate to consumers and regulators that the *Dicksonia* have been harvested in accordance with the Tasmanian

Tree Fern Management Plan. A levy (\$2.34 June 2006) is charged for each Tree Fern Tag. Levies from tree fern tags are designed for the industry to self-fund the regulation and monitoring of *Dicksonia* harvesting, and research into the sustainable management of the species.

With the introduction of the Tree Fern Management Plan the *Forest Practices Act 1985* was amended to include tree fern harvesting. The Tree Fern Management Plan and tagging system legitimise tree ferns in the market place and facilitate export trade under Commonwealth guidelines. This provides domestic and international consumers with confidence that the supply of tagged tree ferns is ecologically sustainable.

## Where Do the Harvested Tree Ferns Go?

The majority of harvested ferns are either shipped to Victoria for domestic distribution or are exported directly overseas. Overseas export is the primary end point for most Tasmanian *Dicksonia* ferns, with regular shipments to Europe and Asia. *Dicksonia* are exported in refrigerated containers to reduce the risk of damage and mortality in transit.

There is a great demand in Europe for *Dicksonia* due to their robust nature, ornamental uses and suitability in temperate climates. The market value of *Dicksonia* can be very high, with individual ferns being sold for hundreds of pounds in the United Kingdom. The salvage harvest and sale of Tasmanian *Dicksonia* is collectively worth millions of dollars to the state's economy. The Government agency Austrade has been working with Tasmanian tree fern harvesters and assisting them to find new export markets.



Tree Fern



Refrigerated container



Singapore Airport

## Where Can Tree Ferns be Harvested?

*Dicksonia* can only be legally harvested for commercial purposes under a certified Forest Practices Plan (FPP) where a specific prescription for tree fern harvesting has been included in the plan. *Dicksonia* may be harvested on a salvage basis from areas to be converted to plantation, agriculture or infrastructure (e.g roads, dams, powerlines) in consultation with the land owner. The salvage harvest of *Dicksonia* is limited to these areas, where they would otherwise be destroyed. The harvesting of *Dicksonia* must not dictate the change in land use and can only occur within one year of forest operations commencing. Forest Practices Officers may include a prescription for the harvesting of *Dicksonia* in an FPP if the forest type and future land use are suitable. A tree fern harvester must sign the FPP as a harvesting contractor prior to the commencement of harvesting.

Under the terms of the Forest Practices Regulations 1997 up to six tree ferns may be harvested from an area of applicable land during one year without the need for an FPP. The harvested tree ferns must be for personal use and not used for any commercial purposes.

## Opportunities for Private Land Owners

There are many challenges facing the Tasmanian tree fern harvesting industry, most importantly the issue of accessing tree fern resources associated with the phasing out of native

forest conversion on public and private land. Currently, tree fern harvesters primarily consult with Forest Practices Officers from Forestry Tasmania in search of suitable areas for *Dicksonia* harvesting. However, there are potentially many other options available for tree fern harvesters on private land associated with plantation conversion or land clearing operations. Forest Practices Officers and landowners should consider the salvage of *Dicksonia* from areas to be cleared when preparing an FPP. There may be opportunities for private land owners to generate some extra income and improve resource use from the salvage harvesting of *Dicksonia* from areas of their property to be cleared under an FPP. Consultation with Private Forests Tasmania, Forest Practices Authority or consultant Forest Practices Officers should provide information on the potential for tree fern harvesting associated with private land clearing.

For further information regarding Forest Practices Plans or tree fern harvesting prescriptions and regulation contact Private Forests Tasmania (6336 5300) or the Forest Practices Authority (6233 7966).

*Eucalypt and Acacia overstorey with Dicksonia understorey*





## A useful Guide

A new publication 'A guide to planning approvals for forestry in Tasmania' was released recently. The Guide explains how forestry is regulated by the *Forest Practices Act 1985* and the *Land Use Planning and Approvals Act 1993*. It was prepared by the Local Government Forestry Consultative Committee.

The 40 page guide is comprehensive, dealing with private timber reserves, forest practices plans, local government planning scheme zones and development applications, threatened species and threatened vegetation communities, and conservation on private land.

A copy of the Guide can be found on the web site of the Forest Practices Authority ([www.fpa.tas.gov.au](http://www.fpa.tas.gov.au)) or you can obtain a copy from Private Forests Tasmania.

## The view from above

Satellite imagery has been used since the 1970s for mapping changes in vegetation. However, these images were not high resolution images and at some scales, 1:25,000 or better, were very fuzzy and were of limited use.

More recently high resolution imagery at more affordable prices, combined with more sophisticated spatial mapping systems, usually embedded in a GIS (geographic information system), means high resolution imagery can be used for more detailed farm and forestry planning.

Private Forests Tasmania has initiated the appraisal of several types of high resolution imagery. Sample images from three different satellite imagery products with different levels of resolution have been tested. Private Forests Tasmania has selected QUICKBIRD imagery as being most suitable for general purposes across a broad range of uses. The QUICKBIRD imagery can be seamlessly integrated with existing digital mapping systems.

QUICKBIRD has sub-metre pixel size, suitable for regional and stand/property level mapping. Resolution is defined in terms of the size of the smallest discrete "pixel" of information collected by the satellite sensors, usually in several different bands in the colour and near infra-red part of the spectrum.

Private Forests Tasmania is about to sign a \$600,000 contract to buy QUICKBIRD high-resolution satellite imagery for large areas of private land in the State.

The next task will be to obtain cloud free images. To reduce the risk of images having cloud cover, and shadow effects associated with low sun angle, the annual data capture "window" is limited to about five months from November to March.

PFT is also determining how it can supply products based on QUICKBIRD imagery to help private landowners with land management.

**Disclaimer:** TREE Line is published quarterly by Private Forests Tasmania as a means of communicating to those interested in sustainable native forest and plantation management in Tasmania. Every reasonable endeavour has been used to ensure that the material is accurate at the time of publication. No legal responsibility can or will be accepted by Private Forests Tasmania for the accuracy, completeness, or relevance of such information to the user's purpose. Before undertaking any significant forestry project it is recommended that you seek personal professional advice from Private Forests Tasmania on the particular matter. Opinions expressed in this bulletin are not necessarily the views of the editor or Private Forests Tasmania.