



2008-09

*stewardship report*



Forestry Tasmania



In 2008/09, Vos Constructions completed building the Eagle's Eyrie at Abbotts Peak. The construction of the building proved challenging because of the difficult environment, with the teams battling strong winds, heavy rain and even snow. The Eyrie is a key attraction at the Maydena Adventure Hub.

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Front cover: Charlie Davis and Andrew Davis, tree-fellers working for forest contractor Taslog in north west Tasmania. In 2008/09, Forestry Tasmania employed 547 staff and 1,228 contractors, supporting economic sustainability in regional communities.



Internal pages printed on Envi.



# report card 2008/09

Following is an overview of our performance for 2008/09 as measured against sustainable forest management performance objectives and targets set for each of the sustainability objectives and aims within our Sustainability Charter. It also includes performance against our corporate objectives, which are as follows:

- Embrace science to achieve best practice environmental stewardship and maintain Australian Forestry Standard certification.
- Create long-term business and employment opportunities for the community by managing the forests for multiple use and encouraging downstream processing.
- Achieve positive financial returns through sound, ethical business practice.
- Build community trust through honest dialogue.

✓ *Positive performance as based on progress against our targets and indicators*

✗ *More effort is required to improve our performance*



## Sustaining biodiversity and habitat

### Sustainability charter objectives

- Maintain a reserve system in state forests in accordance with the Regional Forest Agreement and Tasmanian Community Forest Agreement.
- Work with other forest managers to maintain Tasmania's comprehensive, adequate and representative (CAR) reserve system.
- Maintain a diversity of natural habitats and mixed aged forests to support biodiversity across the forest estate.
- Maintain the current proportion of native forest in state forests.
- Maintain viable populations of all existing animal and plant species and communities found in state forests.
- Maintain a minimum of 250,000 hectares of old growth forest in reserves in state forests (25 per cent of Tasmania's reserved old growth forest) for conservation values.
- Retain old growth elements including large trees, stags, understoreys and logs across the forest estate.
- Identify and protect giant trees in state forests.

### Performance highlights 2008/09

- ✓ Good progress continues to be made in the development of alternatives to clearfelling. In 2008/09, partial logging, including variable retention, contributed to 64 per cent (1,460 hectares) of the total old growth area harvested (2,270 hectares).
- ✓ Ten research projects were undertaken that specifically covered threatened species (flora and fauna).

## Sustaining jobs for current and future generations

### Sustainability charter objectives

- Promote and support domestic processing and value-adding of wood products.
- Maintain a sustainable supply of commercial timber.
- Ensure an ongoing long-term supply of the highest quality eucalypt timber from native forests.
- Ensure an ongoing long-term supply of specialty timbers.
- Establish and manage plantations to maintain timber supply levels to industry.
- Manage state forests to ensure an ongoing supply of leatherwood nectar and other non-wood products and services.

### Performance highlights 2008/09

- ✓ An operating profit of \$9.3 million, up from \$8.6 million the previous year, was achieved.
- ✓ The estimated value of wood production from state forests, based on the price paid by Forestry Tasmania's customers at the mill door, was \$217 million.
- ✓ Total payments made to suppliers, contractors and employees was \$185 million.
- ✓ A total of 245,000 cubic metres of high quality sawlog was supplied to Forestry Tasmania's customers. This volume is well within the sustainable production level.
- ✓ Opening of the second rotary peel veneer mill by Ta Ann in North West Tasmania resulted in further value-added manufacturing taking place in Tasmania.
- ✓ An additional 2,191 hectares of hardwood plantation was created bringing the total hardwood plantation estate to 54,640 hectares.
- ✓ Of the 7,522 hectares of native forest regenerated, 93 per cent (7,002 hectares) met the prescribed standard.
- ✓ From the post-logging residue assessments conducted, the standard of less than five merchantable tonnes per hectare was achieved in all 95 harvested areas assessed.

## Sustaining carbon stores, clean air, water and healthy forests

### Sustainability charter objectives

- Manage state forests for long-term carbon storage and provide a sustainable source of products that contribute to locking up carbon and reducing emissions.
- Monitor emerging climate change scenarios and trends and adapt forest management practices.
- Reduce the impact of planned burning on air quality.
- Ensure availability of clean water from state forests.
- Protect soil values and geodiversity.
- Control weeds, pests and diseases to protect state forests.
- Avoid use and minimise risks of chemical control methods.
- Use controlled fire to emulate natural conditions and achieve ecological, silvicultural and forest health benefits.
- Reduce the risk and impact of wildfire

### Performance highlights 2008/09

- ✓ For commercial eucalypt and pine plantations, pesticides are required to reduce weed and pest infestations to acceptable levels. All of the 196 water samples collected and submitted for independent testing following the application of pesticides were free of chemicals.
- ✓ The ratio of Spinosad® (Forestry Tasmania's preferred organic insecticide used instead of cypermethrin) has shown a favourable increase as compared to usage over the past two years.
- ✓ Air quality monitoring against the air quality particulate standard (PM<sub>10</sub>) showed that this standard was not exceeded as a result of any planned burns conducted by Forestry Tasmania.
- ✗ As a result of eight recorded spills approximately 273 litres of fuel and oil were released into the environment. Following the theft of fuel from a contractor's operation, approximately 50 litres were found to have run down a side drain and entered a class 4 stream.
- ✓ Based on the re-analysis of the results from the study commissioned by Forestry Tasmania in 2007, the average annual growth in state forests stores about 6.75 million tonnes CO<sub>2-e</sub>. Using the figures from this calculation, it is anticipated that the net carbon store on state forests will increase by about 17 per cent over the next 50 years.

## Sustaining community access and heritage

### Sustainability charter objectives

- Encourage active recreation.
- Promote opportunities for commercial tourism ventures.
- Provide public access to state forests.
- Provide for traditional activities.
- Promote safe work practices and safe use of state forests.
- Identify, protect and maintain Aboriginal and historic cultural heritage values in state forests.
- Seek active consultation with the Aboriginal community to develop opportunities for collaborative management of Aboriginal sites and values.
- Protect regional, rural and natural landscape values.
- Actively promote open and constructive relationships with stakeholders and the broader community.
- Be a good neighbour.

### Performance highlights 2008/09

- ✗ A safety performance figure of 12.54 (LTIFR or lost time injury frequency rate) was achieved, slightly higher than the performance measure of 10.
- ✓ Forestry Tasmania staff attended 465 community forums.
- ✓ Approximately \$100,000 in sponsorship was awarded to organisations and individuals under the Forestry Tasmania-Southern Cross Community Assist Program. A further \$50,402 was awarded to a wide range of community programs, events and projects through district sponsorship programs.
- ✓ A significant milestone was achieved with the completion of the Eagle's Eyrie lookout at Abbotts Peak, which is part of the Maydena Adventure Hub, our latest tourism venture. Other significant tourism projects included a new facilities at the Blue Tier and the opening of three mountain bike tracks at Tarkine Forest Adventures.

## Sustaining science-based stewardship

### Sustainability charter objectives

- Comply with the law.
- Maintain independent, third-party certification of forest management.
- Use science to inform continuous improvement in forest policy and management.
- Maintain accurate information, effective systems and procedures, and skilled personnel for forest management.

### Performance highlights 2008/09

- ✓ A score of 3.8 (maximum is four) was achieved in the external audits conducted by the Forest Practices Authority. This is above the benchmark of 3.5 set by Forestry Tasmania.
- ✗ Six notices were issued to Forestry Tasmania under Section 41 of the Forest Practices Act, as a result of outstanding certificates of compliance and three notices to Forestry Tasmania's contractors as a result of not complying with either the Forest Practices Plan or Forest Practices Code.
- ✗ Two notices were issued to Forestry Tasmania contractors under Section 38 of the *Workplace Health and Safety Act 1998*.
- ✗ A non-conformance against the AS/NZS ISO 14001 (Environmental Management System) and AS/NZS 4801 (Occupational Health and Safety) standards was raised by our external auditors in an external audit that took place in November 2008. This was rectified prior to the follow-up audit in February 2009.
- ✓ Following a comprehensive re-certification audit in June 2009, Forestry Tasmania retained certification against the AS/NZS ISO 14001 (Environmental Management System), AS4708 (Australian Forestry Standard) and AS/NZS 4801 (Occupational Health and Safety) standards.
- ✓ A total of \$4,208,000 was contributed to furthering sustainable forest management research.

# The year AT A GLANCE

## Year at a glance 2009

	2008/09	2007/08	2006/07
<b>Forest estate ('000 hectares) at 30 June</b>			
Total state forest (includes forest reserves)	1,492	1,489	1,489
Total forest reserves	222	222	222
Total plantations <sup>1</sup>	107	106	103
Area certified to Australian Forestry Standard <sup>2</sup>	1,439	1,437	1,441
<b>Forest areas established ('000 hectares)<sup>2</sup></b>			
Native forest regenerated	11.3	11.2	8.0
Hardwood plantations established (includes replanting)	3.2	3.8	3.5
Softwood plantations established (including replanting)	1.3	1.7	1.7
<b>Native forest area harvested ('000 hectares)</b>			
Clearfell, selective harvesting and thinning <sup>4</sup>	12.4	12.9	11.5
<b>Wood production</b>			
Hardwood – sawlog, veneer and peeler <sup>1</sup> (m <sup>3</sup> )	522,600	622,334	585,406
Hardwood – pulpwood (tonnes)	2,005,450	2,230,874	2,136,687
Hardwood – plantation pulpwood (tonnes)	135,550	176,703	126,163
Softwood – sawlog (m <sup>3</sup> )	231,100	269,680	223,597
Softwood – pulpwood (tonnes)	223,220	243,563	254,076
<b>Fire management services</b>			
Number of fires attended	49	83	110
Area of state forest burnt (hectares)	5,277	8,500	34,000
Cost of suppression (current values \$'000)	1,219	2,251	2,885
<b>Roads</b>			
Constructed (kilometres)	128	184	180
<b>Employment</b>			
Lost time injury frequency rate	12.5	11.4	10.9
Operating revenues per employee (\$'000)	330	353	361
Earnings before interest and tax per employee (\$'000)	18	21 <sup>5</sup>	40
Wood production per employee (tonnes)	5,782	6,775	6,091
<b>Finance (\$'000)</b>			
Operating revenue, grants and reimbursements (excluding interest)	180,468	184,698 <sup>5</sup>	197,297
Operating expenditure (excluding interest)	170,390	173,474	176,605
Operating profit before tax	9,256	8,567	2,743
Earnings before interest and tax (EBIT) <sup>6</sup>	10,063	10,977 <sup>5</sup>	21,898
Dividend and tax equivalents paid	0	0	1,297
Dividends recommended as % of operating profits after tax	0%	0%	0%
Return on assets	1.1%	1.2% <sup>5</sup>	2.4%



### Notes:

1. Figures exclude plantation areas harvested but not yet replanted. Includes all plantations on state forest and Forestry Tasmania-managed plantations on other land tenures.
2. Figures are for operations that were completed during the financial year period.
3. This area excludes some leases over state forest, and joint venture and leasehold plantations that are not managed by Forestry Tasmania, but may be separately certified.
4. Thinning includes both commercial and non-commercial thinning.
5. The statistics in 2007/08 are not directly comparable to prior years due to changes in accounting policies that have impacted on the value of earnings before interest and tax.
6. Earnings before interest and tax and accounting revaluations.

# OUR ORGANISATION

Forestry Tasmania is entrusted by the Parliament of Tasmania with the stewardship of the 1.5 million hectares of state forest on public land within the State. This land contains 39 per cent of Tasmania's forests.

Just under half of state forest (685,400 hectares) is available for wood production, with the rest being set aside for conservation and recreation.

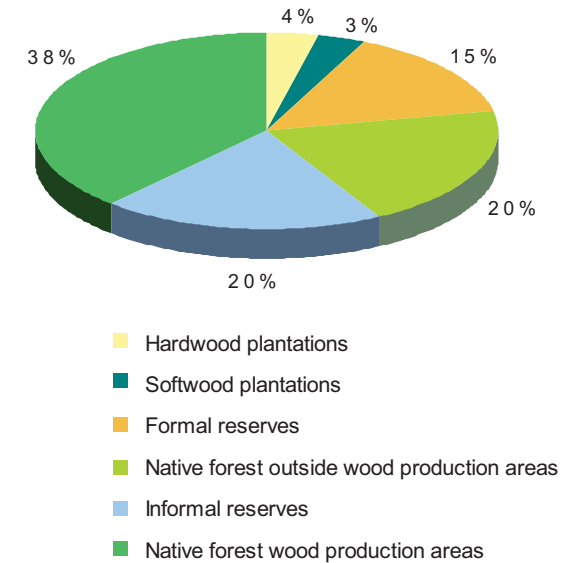
Forestry Tasmania is a government business enterprise operating in five districts around regional Tasmania, with a head office situated in Hobart, employing 547 staff and 1,228 contractors.

Forestry Tasmania supplies three million tonnes of hardwood and softwood timber products to Tasmanian customers for processing into sawn timber, rotary peeled veneer and pulp

and paper products. In 2008/09, 3.3 million cubic metres of sawlog and pulpwood were harvested from state forest, generating around \$217.5 million based on the price paid by our customers for logs delivered 'at the mill door'.

Tasmania is an island of 68,331 square kilometres and outstanding natural beauty situated 240 kilometres off the south-east corner of the Australian mainland. It is Australia's southernmost state. Tasmania has a population of around 500,000 people and benefits from a temperate climate.

Tasmania is rich in natural assets and is the most forested state in Australia. Its relatively unspoilt beauty attracts visitors from all over the world.



# OUR PURPOSE

## Our vision

Tasmania's state forests will be a globally trusted source of sustainable timber and other forest products and services for this and future generations.

## Our mission

Forestry Tasmania manages state forests for optimum community benefit, using environmental best practice to create long-term wealth and employment for Tasmanians.

## Our values

- We care for people and their environment.
- We get things done.
- We do what we say we will do.
- We are proud of who we are and what we do.
- We think before we act.

# corporate GOVERNANCE

The Board of Directors of Forestry Tasmania is responsible for the overall corporate governance of the organisation. This includes setting strategic direction, overseeing financial performance and business affairs, setting management goals and monitoring management's performance.

As a fully state-owned government business enterprise, the Board of Directors is responsible directly to the Minister for Energy and Resources for its operations.

Directors are appointed in accordance with the *Forestry Act 1920* and their responsibilities are outlined in the *Government Business Enterprises Act 1995*. Remuneration fees for non-executive directors are set by government.

The financial statements included in this report were audited by the Tasmanian Audit Office and were found to present fairly the

financial position of Forestry Tasmania. In addition, they comply with the Australian Accounting Standards, the Government Business Enterprises Act and the International Financial Reporting Standards.

For the purposes of calculating the value of our forest estate, we comply with the Australian Accounting Standard AASB 1037 – Self-Generating and Regenerating Assets for its forest valuation and AASB 1041 – Revaluation of Non-current Assets for other assets, where applicable. This value can fluctuate from year to year due to changes in the variables used in the valuation model.

Our sustainable forest management performance is independently audited against three certification standards: namely the Australian Forestry Standard (AS4708); Environmental Management Standard (AS/NZS 14001); and the Occupational Health and Safety Standard (AS4801).

## Board of Directors 2008/09

Adrian Kloeden (Chairman) – MSc (BusStudies) *Lond*, BScFor(Hons) *ANU*, FAICD

Deborah Radford – BEc *LaTrobe*, GradDipFin&Inv *SecInstAust*

Humphrey J Elliott – BScFor *ANU*, DipAgricEnt *Syd*, PhD *Syd*

Miles Hampton – BEc (Hons) *Tas*, FCPA, FCIS, FAICD

Geoff Coffey – FCPA, ACIS ACIM, GAICD, Dip FP

Robert L Gordon – BSc, MIFA, MAICD

## Secretary to the Board

John Mazengarb – BComm *Tas*, ACA

For full information about corporate governance, board committees, legislative and policy compliance, board performance review and Managing Director's statements, refer to Appendix 1 (on the attached DVD) – Financial statements.



L-R Adrian Kloeden, Deborah Radford, Geoff Coffey, Bob Gordon, Miles Hampton, Humphrey Elliott.



# reporting STRUCTURE AND SCOPE

This Stewardship Report combines the sustainable forest management report with the annual financial report to provide the most comprehensive analysis of our economic, environmental and social performance.

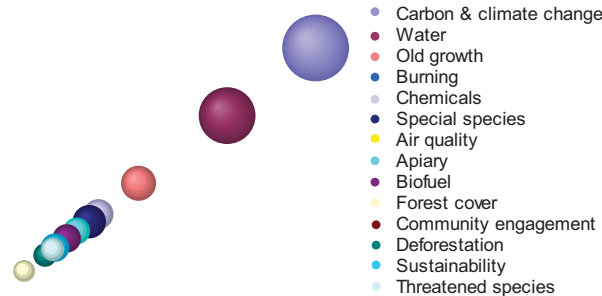
Information in this report provides a summary of our performance for the 2008/09 financial year. Footnotes are used to clarify data collected on a calendar year basis.

Our Sustainability Charter, launched in November 2008, provides the framework for the sustainable management of Tasmania's state forests for the next decade. Accordingly, it also provides the structure to this report. Community feedback during the development of the Sustainability Charter showed a high level of public interest in carbon and climate change, water and old growth forest management.

We expect these areas of interest will change over time and the content of the Stewardship Report will be modified year to year to ensure the document remains useful and relevant to our stakeholders. However, data tables used in this report will continue to be provided in future years, so that long-term trends become transparent over time.

In addition to reporting against the Sustainability Charter, this year we have also chosen to report against the G3 Global Reporting Initiative sustainability reporting guidelines. These voluntary guidelines are recognised throughout the world. Through the self-assessment process, this report fulfils application level 'C' of the Global Reporting Initiative guidelines.

## Key topics raised by our stakeholders during the preparation of our Sustainability Charter.



\* Not to scale

The "X" axis represents the number of submissions received for each of the topics listed and the "Y" axis represents the number of times each topic was listed within an individual submission.

The Global Reporting Initiative content index is available at the end of this report and shows the Global Reporting Initiative indicators that we have reported against, and where this information can be found. To continually improve our corporate reporting, we will be assessing the benefits to our organisation, and our stakeholders, of reporting at an application level of B+ for the 2009/10 report. This will involve reporting against more of the Global Reporting Initiative indicators and having the report assessed by the Global Reporting Initiative.

Read more about the Global Reporting Initiative at:  
[www.globalreporting.org](http://www.globalreporting.org)

The Stewardship Report covers all the processes and activities involved in the management of state forests. This includes forest land management, road establishment and maintenance, plantation and native forest timber establishment and maintenance, timber harvesting and sales, tourism and recreation management and development. Where Forestry Tasmania is a joint venture partner, for example, Taswood Growers (joint venture between Forestry Tasmania and GMO Renewable Resources), Forestry Tasmania's share of the contribution or benefits is specified.

The 'year at a glance' section provides a quick reference to some of this year's statistics. The 'performance summary' section provides a snapshot of our overall performance, showing the areas where we have been successful in improving our performance and acknowledging those areas where more focus and improvement is required. This is as measured against our sustainable forest management objectives and our corporate objectives.

The 2008/09 financial statements and the sustainable forest management data underpinning this report are available as appendices on the DVD accompanying this report.

The majority of the data used in this report have been obtained through internal data sources like our forest operations database (an in-house asset management system) and through the overlaying of spatial information using our geographical information systems. The remaining data have been obtained from external sources such as the Forest Practices Authority and the Department of Primary Industries, Parks, Water and Environment.

# *message* FROM THE CHAIRMAN AND MANAGING DIRECTOR

**Our operating result demonstrates the delivery of a sound profit performance in a challenging market is consistent with our continued focus on balanced environmental and social outcomes.**

It is our great pleasure to present Forestry Tasmania's first Stewardship Report.

This report marks a significant milestone for our business, being the first time that we have combined our annual financial report with our sustainable forest management data.

The Stewardship Report tracks our progress against our corporate objectives, and the objectives of our Sustainability Charter, and thus consolidates our commitment to openness and transparency by providing the most comprehensive overview of our business to date.

We are pleased to report that Forestry Tasmania has emerged from the 2008/09 trading year in a robust financial position, despite the difficult trading conditions created by the global financial crisis.

The delivery of an operating profit of \$9.3 million demonstrates that our business is economically resilient. The result maintains our record of achieving an operating profit every year since corporatisation in 1994. This year's outcome reflects the determined efforts made by our team to contain costs during difficult trading conditions. In many cases, our employees have risen to the challenge by introducing innovations, such as the development of internet telephony, which will save us considerable expense over the long term.

During 2008/09 Forestry Tasmania further consolidated its role as a provider of expertise on sustainable forest management

by launching a new business arm, Forest Technical Services. This business, which will allow us to work with other land managers and forest companies on a consultancy basis, has already seen the development of a number of projects on the Australian mainland and internationally.

The highest profile project operated by Forest Technical Services is a memorandum of understanding between Forestry Tasmania and the Gumatj Corporation of east Arnhem Land, which was signed with Gumatj Chairman Galarrwuy Yunupingu AM in March 2009. Under the MOU, Forestry Tasmania is working with the Gumatj Corporation to develop a

sustainable timber industry, based on selective harvesting and management of hardwood on the Gumatj clan estate. The partnership is delivering jobs, training, a timber milling industry and the opportunity for the Gumatj people to build houses from local materials on their own homelands. The first project to be completed under the partnership, a five-bedroom bunkhouse at Garrathiya, near Nhulunbuy, was officially opened in August 2009.

Our operating result also demonstrates the delivery of a sound profit performance in a challenging market is consistent with our continued focus on balanced environmental and social outcomes.



Mark Pambuk, a forestry worker in Wadeye, Northern Territory. Forestry Tasmania is currently working with the Thamarrurr Development Corporation to develop a sustainable timber industry in Mark's community.

For example, in 2008/09 we invested \$330,000 in searches for wedge-tailed eagle nests as part of a dedicated program that ensures adequate habitat is protected for this iconic species on state forest. This year, a further 51 nests were found, which brings the total of known wedge-tailed eagle nests on state forest to 553. Each of these nests is protected in a reserve that is a minimum of 10 hectares.

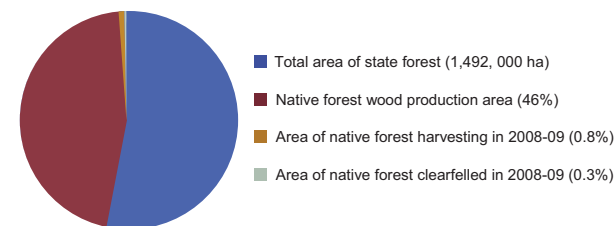
We also conducted a re-analysis of the results from the 2007 study into carbon storage on state forest, carried out by MBAC Consulting of Melbourne. The re-analysis confirmed that state forests are a carbon sink, storing an average of 6.75 million tonnes of carbon dioxide annually. Furthermore, it found that annual emissions from planned burns represent less than a quarter of this amount. Nevertheless, Forestry Tasmania remained committed to finding alternatives to planned burns, and continued to explore options for the development of biomass energy.

After many years of research, we launched the report *A new silviculture for Tasmania's public forests: a review of the variable retention program*. The report confirmed that Forestry Tasmania will meet the target to reduce clearfelling in old growth forests to 20 per cent of the annual old growth harvest, as set under the Tasmanian Community Forest Agreement in 2005. Significantly, the report also found that the addition of more old growth forest to Tasmania's already extensive reserves would deliver little further ecological benefit.

Instead, scientific best practice now favours the retention of old growth elements across the landscape. Accordingly, Forestry Tasmania will now begin to trial variable retention as a harvesting method in suitable regrowth coupes.

The year also saw the release of Forestry Tasmania's draft special timbers strategy for public comment. The strategy, which is due for final release in the 2009/10 financial year, meets one of the key aims of the Sustainability Charter, namely, "to ensure an ongoing, sustainable supply of specialty timbers". It sets three key aims for the management of Tasmania's iconic special timbers: sustaining the resource, maximising value recovery, and promoting special timbers to the world. Together, these aims will ensure the long-term sustainable supply of the special timbers resource, which is an essential part of the Tasmanian brand.

We were also encouraged by the success of many of our community projects, which went from strength to strength during the year. The *Going Bush* television program entered its second series, becoming the most highly-rating show in its timeslot. The Community Assist program, a sponsorship program operated in conjunction with Southern Cross Television, also continued to enjoy a high profile, receiving many more applications than could possibly be funded. We were privileged to discover some truly remarkable Tasmanians through the program, such as 70-year-old Vlastik Skvaril, who ran from Shark Bay to Byron Bay to raise funds for CanTeen.



Research conducted during the year on the community's perceptions of Forestry Tasmania was also particularly heartening. The poll, conducted twice yearly by independent marketing research company EMRS, found that FT had a high standing within the community, and that previously-held misconceptions about our business were beginning to erode. It also found that 92 per cent of the community is opposed to the type of illegal protest activity seen in the Upper Florentine Valley during the first half of 2009.

Forestry Tasmania's ability to deliver such strong economic, social and environmental results during such a challenging year is a strong sign of the Tasmanian forest industry's resilience. We believe that the sector as a whole is well placed to take advantage of the economic recovery when it comes.

Adrian Kloeden  
Chairman

Bob Gordon  
Managing Director

# *sustaining* BIODIVERSITY AND HABITAT



**More than 54 per cent of state forest is managed for the protection of environmental values, including more than 34 per cent within the comprehensive, adequate and representative reserve system and another 20 per cent that lies outside areas identified for timber production.**

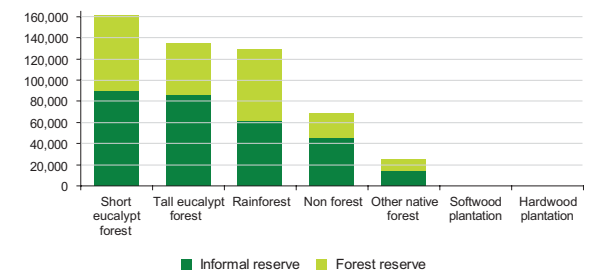
Our management of biological diversity includes contributing to the statewide reserve system and special management of communities and habitat, old growth and threatened species. We understand that not all values can be represented on any one part of the estate at a particular time, and therefore aim to ensure that these values are balanced in time and space.

## **Reserve system**

In state forests, the comprehensive, adequate and representative (CAR) reserve system is made up of formal reserves (known as forest reserves) and informal reserves. All reserves are zoned for protection under our management decision classification system. Formal forest reserves have been proclaimed by parliament. Informal reserves are also used to maintain CAR reserve values identified in the Regional Forest Agreement and can be modified to meet forest management requirements, provided that the overall level of protection of CAR reserve values is maintained.

More than 54 per cent of state forest is managed for the protection of environmental values, including more than 34 per cent within the CAR reserve system and another 20 per cent that lies outside areas identified for timber production.

**Area of forest type by protection classification in state forest.**



The Tasmanian Reserve Management Code of Practice (the Code) was prepared in 2003 and specifies appropriate standards and practices for new activities in any land-based formal reserve.

In response to this Code, we developed a comprehensive assessment process for all activities to be carried out within formal reserves. In addition, we took the decision to also use this process for the assessment of all projects not covered under a Forest Practices Plan or one of our existing procedures.

In 2008/09, 18 of these activities were audited, 11 of which had taken place within forest reserves. Overall, these audits found that:

- all planning was done to a high standard;
- operations were generally well implemented;
- all fuel reduction burns met the desired burning objectives;
- recreational events left state forest in good condition upon completion; and
- the water infrastructure project was also completed to a high standard.

However the audit found two non-compliances. In one case, drainage prescriptions for a new road in a reserve were not met. In the second case, a private operator built a walking track without council approval over land they manage under a forest lease.

#### Area protected in state forest.

Land classification state forest area (ha)	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	(%) SF area at 30/06/09
Forest reserves	175,000	175,000	175,000	174,900	222,200	222,200	<b>222,100</b>	<b>14.7%</b>
Informal reserves	196,000	198,000	200,100	347,500 <sup>4</sup>	292,400	295,600	<b>298,000</b>	<b>19.7%</b>
Native forest outside wood production areas <sup>1</sup>	369,000	370,000	385,900	288,200	292,000	295,500	<b>306,900</b>	<b>20.3%</b>
Total non production area <sup>2,3</sup>	740,000	743,000	760,900	810,600	806,600	813,300	<b>827,000</b>	<b>54.7%</b>
Managed primarily for protection	49%	49%	50%	53%	53%	54%	<b>55%</b>	

1. Areas currently not part of the wood resource due to such factors as non-commercial forest, excessive slope, streamside reserves, inaccessibility, etc.
2. Area includes Buckland Military Training Area.
3. Figures in total rows are not the sum of the columns, but the actual rounded totals. Percentages calculated on actual areas.
4. This figure includes land intended for formal reserve under the TCFA. The formal TCFA reserves were not yet dedicated as at 30 June 2006, so are counted as informal.
5. Some figures amended to include reserved plantations in reserves, rather than production forest.

#### Summary of non-FPP and reserve activity audits.

Type of activity	2007/08		2008/09	
	Number of activities outside reserves	Number of activities in reserves	Number of activities outside reserves	Number of activities in reserves
Fuel reduction burns		5	2	0
Tourism infrastructure	1	2	0	1
Roads and related infrastructure	1	1	0	1
Cables and tailholds		2	0	0
Water infrastructure		1	1	0
Recreational events			4	9

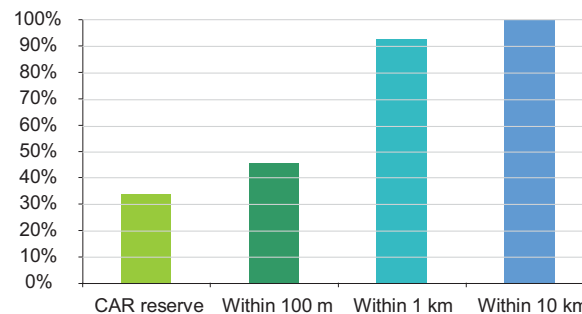
# sustaining BIODIVERSITY AND HABITAT

## Landscape metrics

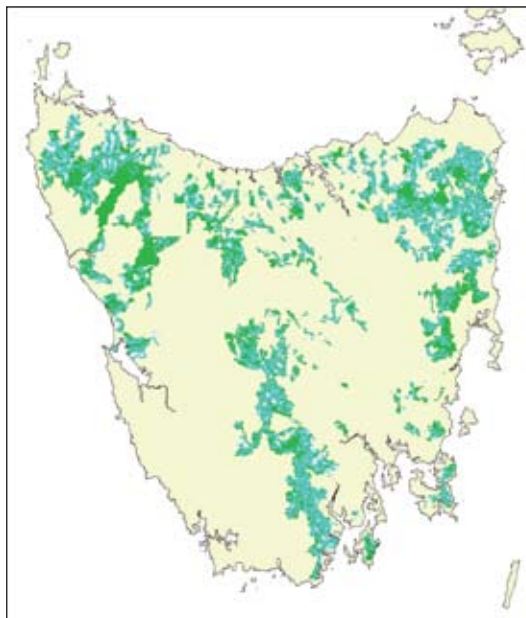
The landscape level is the most appropriate scale at which to examine many forestry and conservation issues. While forestry and natural disturbances can both change the nature of individual stands of trees overnight, the survival and wellbeing of most species is more closely linked with their responses to long-term changes in the composition and configuration of the landscapes that they inhabit. CAR reserves are intended to provide security for species that might otherwise be disadvantaged by production forestry, by providing both continuity of habitat and, for many plants and animals, recolonisation sources. In this latter function, CAR reserves can be said to have 'influence' over the surrounding production forest, with the level of influence being proportional to distance into the production forest from the reserve.

This past year we prepared a simple landscape metric, derived from geographical information system analyses, that demonstrates the varying degrees to which the CAR reserve system 'influences' different parts of the production forest matrix. This demonstrates that in 2008/09, about a third of state forest was designated as CAR reserves; nearly half of state forest was either in a CAR reserve or within 100 metres of one; more than nine-tenths of state forest lies within one kilometre of a CAR reserve, and no state forest is more than 10 kilometres from one.

## The proportion of state forest influenced to varying degrees by CAR reserves.



The map below allows visualisation of which parts of the forest estate are most or least 'influenced'. The same colour-scheme is used as in the graph above, so that CAR reserves are shown in green; state forest within one kilometre of a CAR reserve is shown in mid-blue, and state forest more than one kilometre from CAR reserve is shown in pale blue.



Over the coming years, regular reporting of key landscape metrics will provide us with a means of tracking changes to the estate at this level. For instance, the comprehensive, adequate and representative reserve proximity metric might suggest areas where it would be desirable to enhance or rationalise the existing network of wildlife habitat strips.

These metrics come with many *caveats*. They are only as accurate and as up-to-date as the underlying spatial data layers used to generate them. They also make no distinction among the various land uses and vegetation types present in state forests, whether it is unharvested native forest, silvicultural regeneration, plantation or buttongrass moorland. Furthermore, the modelled influence of a 100 metre-wide wildlife habitat strip is deemed to be equal to that of, say, a one kilometre-wide reserve, because influence is determined purely by distance from the edge of the attribute in question, not by its area.

A more meaningful set of metrics might report influence only in relation to *silvicultural regrowth in state forests*, rather than in relation to the *entire forest estate*. This is one aspect that is currently being explored, with a view to its use in future reporting. Another aspect is the size-class distribution of discrete patches of an attribute – for example, less than 10 hectares; 10-100 hectares; 100-1000 hectares; 1000-10,000 hectares; more than 10,000 hectares. Larger patches may be more resilient to isolation and to edge-effects than smaller patches (a characteristic that the influence concept fails to capture), so it would be ecologically meaningful to report on which patch-size-class of comprehensive, adequate and representative reserves contributed the largest overall

percentage of each forest block or other landscape unit. All of these metrics would additionally be put into a more meaningful context through comparison with the situation on non-state forest land within the same landscape unit.

## Biodiversity

We foster biodiversity in state forests through the comprehensive, adequate and representative reserve system, application of the Forest Practices Code and by maintaining a permanent native forest estate. The maintenance of a permanent forest estate means that 95 per cent of the area of native forest as mapped in 1996 is to be maintained as native forest on a statewide basis. This objective is achieved through the State's permanent native forest estate policy and is given effect by the Forest Practices Authority through Forest Practices Plans.

The permanent native forest estate policy also requires that non-threatened forest communities must be maintained at a level no less than 50 per cent of their extent in each IBRA (interim biogeographic regionalisation for Australia) bioregion. To flag forest communities approaching this threshold, communities with 40 per cent or more cleared since 1996 (across all tenures) in each IBRA bioregion are identified annually. State forest acts as a buffer to protect communities when the statewide clearing threshold is approached. Areas approaching their clearing limit as a result of clearing on private land may require additional protection in state forests and to this effect *Eucalyptus viminalis*/*E. ovata*/*E. amygdalina*/*E. obliqua* damp sclerophyll forest and wet *E. viminalis* forest on basalt within the Ben Lomond bioregion

are now fully protected in state forests. Forestry Tasmania no longer affects the extent of native forest cover through broadscale clearing.

Forestry Tasmania uses a management decision classification (MDC) system to assist in the management of biodiversity values across state forests. Under this system, land is divided into management zones according to its availability for wood production. Management zones help balance competing demands on the forest estate and make it easier to prioritise management objectives and enable areas with particular values to be identified and managed to protect, maintain and enhance these values.

Through this system, all land is initially classified in primary zones according to whether it is to be managed for production or protection. A second level of special management zones is then used to define and indicate where management for special values is needed. Within the protection zone, special management zones can include, for example, areas of high fauna or flora values and wildlife habitat strips.

### Areas managed for additional protection of biodiversity values in state forests.

Area managed (ha)	2006/2007	2007/2008	2008/2009
Biodiversity spines	201,696	201,520	201,813
Fauna	60,569	63,131	92,917
Flora	385,892	399,608	386,788 <sup>1</sup>
Wildlife habitat strips	71,632	72,639	71,947

1. The area in 2007/2008 included some erroneous polygons, which were removed in 2008/2009 as part of a management decision review.



Forestry Tasmania's management decision classification system assists in protecting biodiversity on state forest. The system defines production and protection zones, the latter of which include wildlife habitat strips.

# *sustaining* BIODIVERSITY AND HABITAT

Harvest residues, including both fine and coarse woody debris, have traditionally been seen as an impediment to forest regeneration, and broadcast burning after harvest has long been seen as a practical way of creating a suitable seedbed for new seedlings. Proposals for industrial fuelwood harvesting for power generation would see much of the coarse woody debris picked up and burnt under controlled conditions in a biomass plant.

Our research and modelling over the past decade has demonstrated that coarse woody debris provides important habitat for a vast range of species. Consequently, we have developed and adopted rules to make sure a proportion of coarse woody debris is retained on the forest floor. For example, one third of the area subjected to clearfell and partial harvesting will be designated as off-limits for fuelwood collection. These restrictions will not apply to forest harvested by aggregated retention, because coarse woody debris will be retained within the unharvested aggregates. However, good operational practices will be encouraged in all native forest harvesting operations, to ensure that sufficient coarse woody debris is retained for habitat. This means that excessive heaping, crushing or burying of coarse woody debris will not be allowed; neither will the harvesting of stumps. Plantations are the exception to these rules, because coarse woody debris serves little value as habitat in these areas.

## **Threatened species, communities and habitats**

We manage threatened species, communities and habitats in accordance with the Regional Forest Agreement and Tasmanian Community Forest Agreement, threatened species legislation and the Forest Practices System. The statewide network of formal and informal reserves includes viable examples of all 50 forest and old growth communities outlined in the Regional Forest Agreement, and provides the core protection for threatened species and communities.

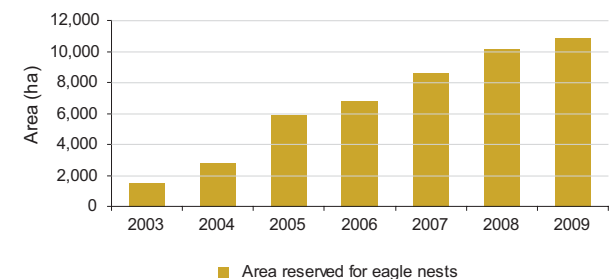
In addition, we are pro-active in the management of threatened species and apply management prescriptions at both the strategic and local level. At the strategic level, together with specialists from the Forest Practices Authority and the Threatened Species Section (Department of Primary Industries, Parks, Environment and Water) we develop strategic plans for the management of threatened flora and fauna species in state forests (for example, fairy lanterns and Simons stag beetle). At the local level, threatened species are identified through searches undertaken as part of our operational planning.

Protecting wedge-tailed eagles and their nesting habitat is a good example. Each year, we search state forests (in areas planned for operations) for new nesting sites before the breeding season begins, mostly by helicopter. New nests are reported to the Forest Practices Authority and a reserve that

is a minimum of 10 hectares is designed and implemented for each nest. In addition, discreet field checks of known nests within operational areas are performed during the breeding season, at periods designated by the species specialists, to determine which nests within operational areas are being used by eagles (as many eagle territories contain multiple nests but not all of them are used in any one year). Forestry activities are then excluded within 500 metres and one kilometre line of sight of all active nests during the breeding season (August to January inclusively).

The average size nest reserve in state forests is 16 hectares, although many nests are incorporated into larger reserves that also protect other special values such as flora, other fauna and geological features. The comprehensive, adequate and representative reserve system and the matrix of areas set aside from harvesting in operational areas, complement the protection of current nests by reserving large tracts of potential nesting habitat for the future.

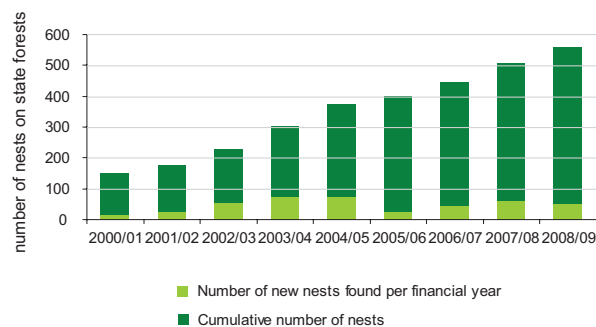
## **Cumulative area specifically reserved for wedge-tailed eagle nests in state forests.**





The current number of known wedge-tailed eagle nests within Tasmania is 1,040, of which 553 are in state forests. This number has grown as we have searched new areas over the years, and may continue to grow into the future. During 2008/09, approximately 42,000 hectares of state forest was searched for nests, resulting in 51 new nests found. This searching program involves many hours of detailed planning and resources, and costs around \$330,000 per year.

**Number of new wedge-tailed eagle nests found each year and the cumulative number of nests per year.**



A training program provided by the Forest Practices Authority trains forest industry staff in eagle behaviour, nest searching and management. During 2008/09, 18 of our staff completed this training and are now enthusiastically putting their training into practice. Each of our five districts around the State has an eagle coordinator to oversee the eagle management program.

In 2008/09 we continued to fund doctoral research at the University of Tasmania focusing on clarifying the ecology and habitat requirements of the threatened Mount Mangana stag beetle (*Lissotes menalcas*). This species is a resident of rotting logs on the forest floor – a habitat that is potentially vulnerable to intensive forest management. It also has a restricted range, centred on Tasmania’s southern forests. This research aims to develop sufficient understanding of the species’ requirements to help plan for continuous improvements in forest management within this region.

During the year we also actively participated in inter-agency meetings aimed at developing a strategic conservation management plan for the endangered swift parrot (*Lathamus discolor*). Much of the breeding range of this migratory parrot is on private land near Tasmania’s south east coast, but important habitat also occurs in state forests, particularly

nesting habitat (old, hollow-bearing trees). We recognise that this is a complex conservation issue, and are pursuing long-term, strategic approaches that seek to provide effective protection to critical breeding habitat while fulfilling sometimes competing legislative and market requirements for delivery of sawlogs.

*Phytophthora cinnamomi* is an introduced soil pathogen that infects and kills a wide range of native plant species, including many that are rare and threatened. Hygiene prescriptions imposed through the forest practices system are used to minimise the assisted spread of the pathogen with operations conducted in state forests. The spread of contaminated gravel is a major risk for the assisted spread of the pathogen. We manage this risk by ensuring all quarries providing roadwork material in sensitive areas are certified free of the pathogen. To assist this, quarry inspections are undertaken as part of our



Wedge-tailed eagles

# sustaining BIODIVERSITY AND HABITAT

forest health surveillance to determine the *Phytophthora* status of quarries we use. Nineteen quarries were inspected in 2008/09, and of the 99 quarries used in state forests that are currently on the register for *Phytophthora*-status, 80 are free of the pathogen.

A significant new population of the nationally-listed plant *Xanthorrhoea bracteata* (grass tree) was discovered in state forest in north eastern Tasmania during the year. Surveys have estimated the population to contain in the vicinity of 10,000 individuals, making it one of the largest known populations of the species. The population is currently free of *P. cinnamomi*, to which it is highly susceptible, and is well protected topographically from natural spread of the pathogen from surrounding areas. To assist conservation of the grass trees, the area containing the population has been assigned to a protection zone within our management decision classification system.

## Summary of work undertaken in 2008/09 that related to improving our understanding of threatened species or the management thereof.

	Flora	Fauna	Total
Total strategic management plans <sup>1</sup>	6	13	19
Research in 2008/2009 <sup>2</sup>	0	10	10
Area of habitat surveys in 2008/2009 <sup>3</sup>	6,147	50,869	57,016
New sites recorded in 2008/2009	390	108	498
Threatened species working groups/ meetings in 2008/2009	0	4	4

1. Strategic management plans include approved and draft (being implemented) recovery plans, PAMAs, strategic management agreements and management plans, agreed jointly between Forestry Tasmania, Forest Practices Authority and the Department of Primary Industries, Parks, Water and Environment.

2. Includes research studies conducted, funded, participated or initiated by FT.

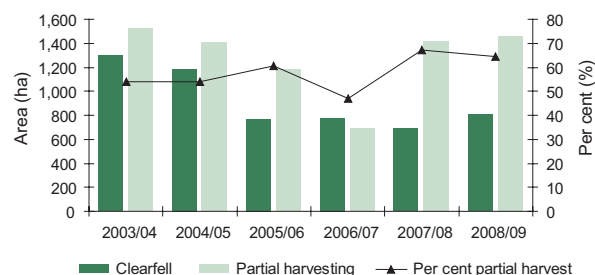
3. Surveys conducted in state forests by qualified experts.

## Old growth forests

Old growth forests are mature forests in which the effects of disturbance are now negligible. They make an important environmental, social and economic contribution to Tasmania. Within Tasmania, old growth occurs across all land tenures and it is our aim to maintain a minimum of 250,000 hectares of old growth forests in state forest reserves for conservation values.

In addition, a small proportion of old growth in state forest is available for harvesting and it is this portion that is vital for sustaining the supply of high quality sawlogs. The total area of old growth harvested in 2008/09 (clearfell and non-clearfell) was 2,270 hectares. Of this, 810 hectares, or 36 per cent, was clearfelled, bringing the total of old growth forest clearfelled in state forests since 30 June 2001 to 8,200 hectares. This represents 0.7 per cent of the total old growth forest area in Tasmania. Of all old growth forest harvested in state forests since 2002/03 (the first year from which accurate records are available), clearfelling accounts for 52 per cent of the harvest area and the balance is partial harvesting, including variable retention, shelterwood and selective logging.

## Area of old growth harvested by year using clearfell and partial harvesting techniques.



Seventy-nine per cent, or one million hectares, of old growth forest is protected in Tasmania. Forestry Tasmania maintains 250,000 hectares of old growth forest in conservation reserves on state forest.

**Old growth harvesting (clearfell and partial).**

Harvest Year	Old growth clearfelled in year <sup>1</sup>	Cumulative area of clearfell <sup>1</sup>	Cumulative clearfell as % of total Tas. OG	Old growth partial harvesting <sup>(1)</sup>	Total old growth harvesting <sup>(1)</sup>
2001/02	1,350	1,350	0.11%	Not available	Not available
2002/03	1,310	2,660	0.21%	1,270	2,610
2003/04	1,300	3,960	0.32%	1,520	2,820
2004/05	1,190	5,150	0.42%	1,400	2,590
2005/06	770	5,920	0.48%	1,180	1,950
2006/07	780	6,700	0.54%	690	1,470
2007/08	690	7,390	0.60%	1,420	2,110
<b>2008/09</b>	<b>810</b>	<b>8,200</b>	<b>0.67%</b>	<b>1,460</b>	<b>2,270</b>

1. Figures are rounded actual totals.

**Review of alternatives to clearfelling in old growth forests**

In 2005, following advice provided by us, the Tasmanian Government adopted a target of reducing the use of clearfelling in old growth state forests. This target was based on a decade of public consultations and research by us into alternative silvicultural techniques.

The Tasmanian Community Forest Agreement set a target to reduce clearfelling to 20 per cent of annual harvest in old growth forests by 2010. This target was subject to a publicly reported review and confirmation that appropriate progress was being made across a full range of ecological, social and economic objectives. The main alternative to clearfelling has proven to be variable retention, which was developed in North America in the 1990s and is now applied internationally. Variable retention incorporates biological legacies (such as old trees, large logs, rainforest shrubs) from the old stand into

the new stand. Under variable retention, the majority of the harvested area is retained for at least one full rotation (at least 80 years) so that the oldest trees become at least 160 years old.

On May 22, 2009 we published *A new silviculture for Tasmania's public forests: a review of the variable retention program*. This 108-page review summarised progress with our implementation of alternatives to clearfelling in old growth forest to date and evaluated the ecological and social drivers, as well as the implications for safety, silviculture, fire management, economics, timber supply and forest management. It also included insights from the Old Forests New Management Conference held in Hobart in February 2008 and a synthesis provided by a science panel of international experts. This information was fully considered to develop the review's summary and 14 recommendations, which are consistent with our Sustainability Charter.

The review reported that our staff had developed innovative methods to adapt variable retention for Tasmania's wet eucalypt forest. This includes 'slow' burning techniques that require sparse lighting of dry fuels under conditions of rapidly rising humidity, for example, at dusk. Slow burning requires more specific weather and fuel moisture conditions, which reduce the burning window for these types of burns.

The review concluded that variable retention is better than clearfelling in retaining old growth species and structures at the harvesting area level. By adopting fewer but larger retained patches, worker safety standards can be maintained. Sawlog supply and jobs can also be maintained, partly through additional plantations funded under the Tasmanian Community Forest Agreement, but variable retention increases mill door costs by seven to eight per cent, or \$1 million per year.

The review recommended a variable retention program of up to 1,000 hectares per year.



Front cover of our report titled *A new silviculture for Tasmania's public forests: a review of the variable retention program* (view this report at [www.forestrytas.com.au](http://www.forestrytas.com.au)).

# *sustaining* BIODIVERSITY AND HABITAT

Modelling indicates that we should be able to meet the 80 per cent non-clearfell target for the annual old growth harvest with an average of about 700 hectares variable retention per year over the next two decades, with around 1,000 hectares per year being required in the initial years. In releasing the report, we indicated that the next big step forward in environmental forestry would be to use variable retention to retain and restore old growth elements across the forest estate.

Increasingly, scientific thinking is moving away from a narrow focus on the protection of old growth in Tasmania, where over 79 per cent, or one million hectares, is now protected, towards identifying areas of forest where old growth elements are sparse, and seeking to re-introduce those elements through techniques such as variable retention. From an ecological perspective, it is better to distribute old growth habitat throughout the landscape, rather than add an equivalent amount to the large existing reserve system.

Beyond the next few years there will be a developing capacity to implement variable retention in regrowth forests with a priority for conservation, although this would have further implications for timber supply. The report recommends a further review of the variable retention program in 2015.



Aerial view of Warra 1E, which was harvested using variable retention.

## Giant trees

Our giant tree policy requires the protection of all trees over 85 metres in height or 280 cubic metres in volume. This is implemented by searching in areas with the potential to contain giant trees, taking detailed measurements of trees that are potentially giants, with proven giants being protected in reserves of at least 100 metres in radius (but most giants are in larger reserves). In 2008/09, six new giant trees were added to the giant tree register, taking the total in the register from 89 to 95 trees.

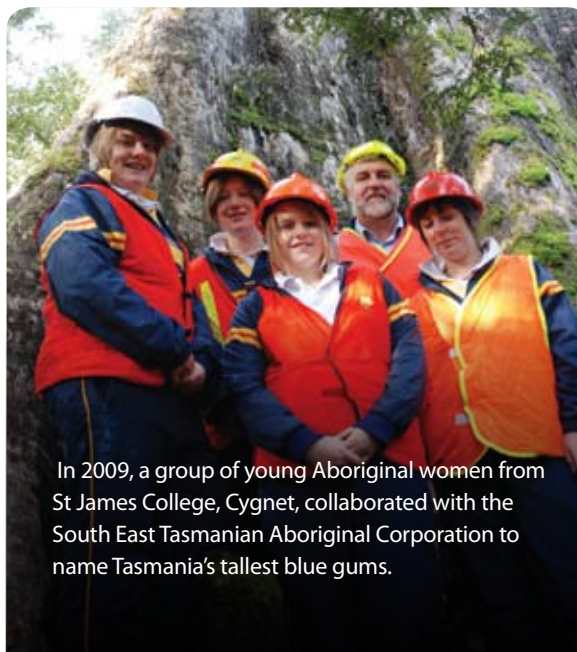
View the giant tree register at [www.gianttrees.com.au](http://www.gianttrees.com.au)

The Giant Tree Consultative Committee met twice this year to visit some giants of special interest and to review and improve the giant tree register. The Giant Tree Consultative Committee is a body appointed by us to provide independent advice on the protection, management and promotion of giant trees. The committee also updated the giant tree website as well as making management recommendations for some of the newly found trees.

As a result of the Giant Tree Consultative Committee's desire to increase the range of species represented on the register, massive myrtle and blackwood trees have been recently nominated for inclusion. The myrtle is located in the Savage River rainforest, whose name belies a beautiful forest of myrtles, manferns and moss-covered logs on a forest floor littered with golden myrtle leaves fallen from the trees. The majestic myrtle tree stands at 46.7 metres tall and has a diameter of 2.6 metres. The blackwood tree is located near the

Sumac Road, also in north western Tasmania, which is perhaps the finest blackwood stand in Australia. Standing 49.9 metres tall with a diameter of one metre, the tree occurs among a grove of other blackwoods of similar size just a short stroll from the Arthur River.

This year, a group of young Aboriginal women from St James College in Cygnet named four giant blue gums in the south of Tasmania. Blue gum (*E. globulus*) is Tasmania's floral emblem and is planted throughout the world. The young women chose Aboriginal names, in conjunction with the South East Tasmanian Aboriginal Corporation, from the language of the Bruny Island, Oyster Cove, and southern Tasmanian peoples. The lyrical names describe the trees: Rullah-Longatyle meaning Strong Girl, Rotulih Lotte meaning Tall Tree, Muggrah Nire-Lowa meaning Hiding Beauty and Neeminah Loggoralé Meena meaning Mother and Daughter.



In 2009, a group of young Aboriginal women from St James College, Cygnet, collaborated with the South East Tasmanian Aboriginal Corporation to name Tasmania's tallest blue gums.

This giant tree stands 99.6 metres tall and has been named "Centurion". In comparison:

- London Eye – 135 metres
- St Paul's Cathedral – 111 metres
- Wrest Point Casino – 73 metres



Arborist Tom Greenwood climbing the Centurion tree to gain an accurate measurement of its height. In 2008, Forestry Tasmania's David Mannes and Mayo Kajitani discovered the tree, which is the tallest hardwood in the world at 99.6 metres, using LiDAR remote sensing technology.



# *sustaining* JOBS FOR CURRENT AND FUTURE GENERATIONS

**Forestry Tasmania's operating profit for 2008/09 was \$9.3 million, up from \$8.6 million the previous year.**

Ongoing jobs rely on sustainable forest management. To achieve this, we model and monitor the sustainable yield to ensure that harvesting and use of wood products from native forests and plantations is consistent with the long-term productive capacity of Tasmania's state forests. In addition to supporting jobs directly linked to sustainable supply of wood products, state forests also provide a number of job opportunities through making available a host of non-wood products such as leatherwood honey and other services.

## **Financial performance**

Forestry Tasmania's business model is unusual, with the enabling legislation for Forestry Tasmania establishing both commercial and non-commercial objectives. In addition to commercial objectives, we must perform and fund a range of community services. Forestry Tasmania is also subject to a number of commercial constraints that aim to ensure a long-term sustainable forest industry. These policies impact on the profitability of the business today and it is appropriate to assess the financial performance of the business with reference to these issues.

## **Markets**

Forestry Tasmania's commercial performance is impacted on by cyclic patterns in international and domestic markets. These have a direct impact on our customers. For example, the past five years have seen increasing pressure on markets for hardwood pulpwood from Tasmania. These markets have

suffered, relative to their peak conditions during the period 2000 to 2004, because of the increasing value of the Australian dollar, increased freight rates, and reduced overall demand.

Although 2007/08, and the first half of 2008/09, saw an increase in demand from Tasmania's export markets for hardwood pulpwood, these markets softened in late 2008, with the onset of the global financial crisis, and have not yet recovered. Over the year, revenue from timber sales reduced slightly from \$156 million to \$155 million.

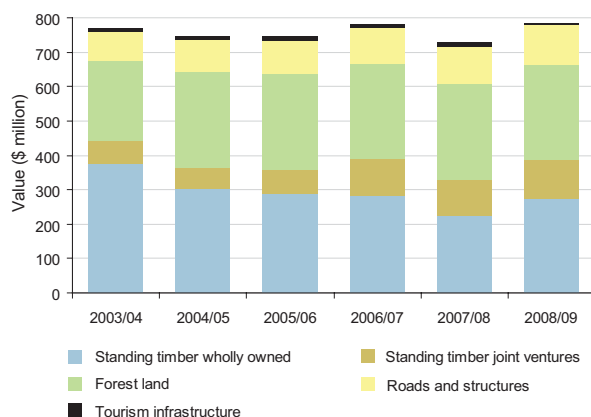
Although there are, as yet, no clear signs of a recovery in these markets, most observers agree that one inevitable result of increased wealth in developing countries in the south Asia region will be increased demand for hardwood pulpwood and for timber building materials. In the meantime, we continue to investigate other opportunities for sales in domestic and international markets, and have assisted our customers to obtain log supply to service new markets that have been found.

## **Non-operating impacts**

In reviewing Forestry Tasmania's commercial performance for 2008/09, the principal item that impacted on the profit performance of our business relates to the accounting treatment for the movement in the valuation of the biological assets, which is taken through the income statement in compliance with Australian accounting standards. This value can inhibit meaningful interpretation of the financial statements and the short-term operational performance of the business.

Forestry Tasmania's operating profit for 2008/09 was \$9.3 million, up from \$8.6 million the previous year. After the inclusion of an increment of \$43,449 million associated with the non-cash accounting treatment related mainly to the movement in the value of the biological assets, the net operating profit after tax was \$32.286 million.

**The changing valuation of our forest assets over the past six years.**



The increment in the value of the biological asset is impacted on by several factors, none of which impact on the cash reserves of the organisation. The increase in value can principally be attributed to an increase in the average stumpage price, resulting from renegotiated contracts, used in the valuation estimate.

**Tasmanian Community Forest Agreement**

In 2004/05 the Tasmanian and Australian governments signed the Tasmanian Community Forest Agreement. Forestry Tasmania is a recipient of funds for specific projects within the

agreement. In 2008/09, \$12.988 million was spent on projects associated with establishment of new hardwood plantations, increased forest management activities, road construction for special timbers management units and various other research related tasks.

Although the majority of funds expended were on capital programs, in compliance with Australian accounting standards, the funds received for the completion of these programs are taken to profit and appear on the face of the income statement and split between income for capital and operating activities. This accounting treatment will continue while Forestry Tasmania is in receipt of funds from the Tasmanian Community Forest Agreement.

**The operating performance of the business remains strong as indicated in the following table.**

Operating performance	2008/09 \$000	2007/08 \$000
<b>Financial performance</b>		
Operating revenue (including interest)	182,634	186,167
Less operating expenditure	(173,378)	(177,600)
<b>Profit before tax and valuation changes</b>	<b>9,256</b>	8,567
Add Tasmanian Community Forest Agreement funds	9,484	15,670
Increase/(decrease) in profit due to changes in balance sheet valuations	43,449	(79,480)
Less income tax expense/(credit)	11,963	(16,786)
Net profit/(loss) after tax and valuation changes	32,286	(38,456)
Return on assets (before tax and valuation change)	1.1%	1.2%
<b>Payments to suppliers</b>		
Operating and capital expenditure payments (including interest)	195,252	201,489
Percentage of operating and capital expenditures payments made direct to Tasmanian suppliers	93%	91%

**Legislative commitment to supply 300,000 cubic metres of veneer and sawlog**

In addition to the community service activities outlined on the following page, Forestry Tasmania is also subject to significant commercial constraints. Under existing state legislation, we are required to make available a minimum annual hardwood veneer and sawlog quantity of 300,000 cubic metres. This must be produced on a long-term sustainable basis.

From a purely commercial standpoint, this requirement acts as a constraint on the volume of product Forestry Tasmania can sell in any one year. This significantly extends the length of the commercial harvesting cycle. While there are sensible broader public interest reasons for this constraint, that is support for local sawmills and long-term environmental benefits, the requirement reduces our ability to deliver a fully commercial financial performance.

# sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

## Community service activities

In addition to deriving economic returns from wood production activities, Forestry Tasmania is also responsible for a range of activities to maintain the non-wood values of state forests. These are referred to as community service activities and include the following:

- conservation of flora, fauna, land forms and cultural heritage;
- management of forest reserves for conservation;

- the provision and maintenance of forest roads and other facilities for public access; and
- provision of public information and education programs.

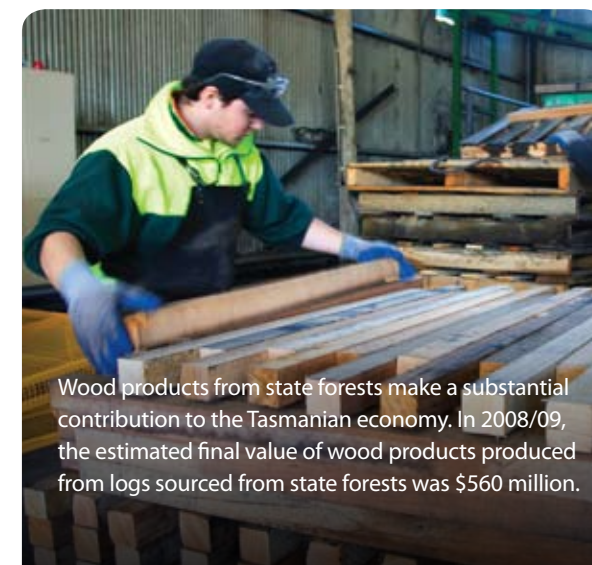
Forestry Tasmania incurs significant costs in performing these activities. These costs are not separately funded, unlike other public forest managers in Australia. In Tasmania, they are funded from our commercial activities. These costs are included in deriving the annual profit from the commercial operations of the business. In assessing the purely commercial performance of our business, these costs should be excluded.

Community service activities	2008/09 \$000	2007/08 \$000
<b>Recreational and tourism use of the forests</b>		
In accordance with legislative requirements, Forestry Tasmania develops and maintains a network of public access roads, walking tracks, picnic areas and related infrastructure throughout our state forests which is provided at no cost to users.	1,266	2,115
<b>Forest research and conservation activities (native forest)</b>		
In accordance with legislative requirements, Forestry Tasmania undertakes a range of research and development for specific conservation outcomes to protect and enhance the non-wood values of our forest estate and support the sustainability of our forest activities.	822	956
<b>Management of forest land not used for wood production</b>		
In accordance with legislative requirements, Forestry Tasmania manages significant forest land (811,200 hectares), which will never be harvested for timber. This includes 222,200 hectares of land that has been formally gazetted by the Government as forest reserves (which are effectively equivalent to national parks). In addition it includes large parcels of land that, for varying public interest reasons, will never be harvested. As part of the responsibility for this land, Forestry Tasmania incurs costs associated with activities such as: pest, disease and fire control; weed management; and provision of access arrangements. Forestry Tasmania manages these lands because they occur within the general production forest areas and can be managed most cost effectively.	2,215	2,018
<b>Fire management</b>		
Forestry Tasmania is a participant in a statewide multi-agency approach to fire management. This activity is not undertaken in the commercial interests of Forestry Tasmania.	723	787
<b>Total</b>	<b>5,026</b>	<b>5,876</b>

## Wood products

The estimated value of this wood production from state forests based on the price paid by customers for logs delivered 'at the mill door' is \$217.5 million. In terms of estimated value, approximately \$163 million (75 per cent) came from native forests, \$9.5 million (4 per cent) from hardwood plantations and \$45 million (21 per cent) from softwood plantations. The estimated final value of wood products produced in Tasmania from these logs in 2008/09, based on the best available information on recovery and value of each product, was \$560 million. This underpins the actual annual contribution of the wood and paper product manufacturing sector, based on final sales of \$1.4 to \$1.6 billion to the Tasmanian economy.

In addition to the revenue from timber sales, some of the other mechanisms through which we contributed to the Tasmanian economy included employing 1,775 staff and contractors, staff payroll of \$33.9 million and total payments made to suppliers, contractors and employees totalling \$185 million.



Wood products from state forests make a substantial contribution to the Tasmanian economy. In 2008/09, the estimated final value of wood products produced from logs sourced from state forests was \$560 million.



Forestry Tasmania is also involved in a variety of joint venture arrangements. The terms of these vary considerably and range from: the lease of state forest to other forest companies; joint equity in plantations established in state forests; and joint equity in plantations established on private land. One such arrangement is where GMO Renewable Resources and Forestry Tasmania each have 50 per cent equity of the majority of the softwood estate in state forests.

Financial performance data in this report are based on Forestry Tasmania accruing 50 per cent of the revenue from the sale of softwood from the GMO partnership. However, as a means of accounting for the total volume of wood products generated from state forest, Forestry Tasmania includes 100 per cent of the softwood production. Using this as a basis in 2008/09, native forests produced 2,538,300 cubic metres, hardwood plantations produced 143,300 tonnes and softwood plantations produced 626,500 tonnes of wood.

### Wood quality

The Forestry Act contains a requirement for us to make available to industry a minimum quantity of high quality eucalypt sawlog each year. The term 'high quality' is defined as logs meeting veneer or category 1 or 3 sawlog grades.

### Summary showing the financial contribution made to the Tasmanian economy.

Contribution method	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Employment (staff and contractors)	1,944	2022	1,920	1,889	1,793	1,775
Payroll (\$'000) (staff only)	29,823	30,017	32,273	32,931	32,994	33,899
Total payments to State Government (\$'000)	8,795	11,106	1,117	3,401	2,017	2,034
Total payments to local government (\$'000)	365	1,902	1,892	2,039	2,380	2,483
Total payments to suppliers, contractors and employees (\$'000) (Capital and operating payments)	-	-	169,400	203,000	188,965	184,937
Revenue from timber sales <sup>1</sup> (\$'000)	-	-	131,763	151,272	156,274	155,272

1. Revenue from the sale of timber products only. Revenue is also derived from professional services and other activities. Refer notes 6 and 7 in the financial statements (appendix 1).

### Demonstrating the benefits of industry assistance

In order to gain accurate information about the level and benefit of government subsidies to major Tasmanian industries, the Tasmanian forest industry commissioned IMC-Link and Dr Bruce Felmingham to undertake a study into the returns received by the community through industry assistance. This study looked at five industry sectors and showed that in absolute terms the subsidies paid to tourism are more than twice the value of industry support for agriculture and fishing and three times greater than the support provided for the timber and forestry sector.

Through ranking each industry according to the subsidy intensity index developed by Dr Felmingham, it was possible to determine the added value governments are getting for each dollar of assistance provided. The study showed the forestry sector in Tasmania received an average \$25.24 million a year in direct government subsidies for the period 2004-2008 and generated \$1.408 billion in the 2006/07 financial year. This equates to \$56 being generated by the forest industry for every dollar invested, compared with \$15 for the tourism industry.

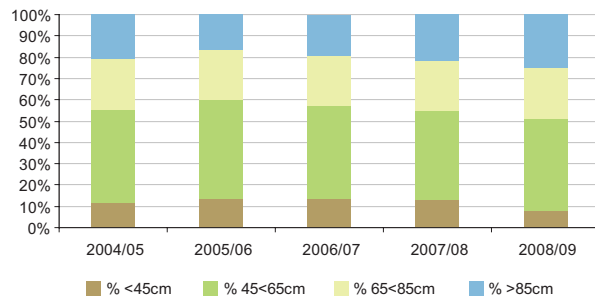
The full report can be found at [www.forestrytas.com.au](http://www.forestrytas.com.au)

# sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

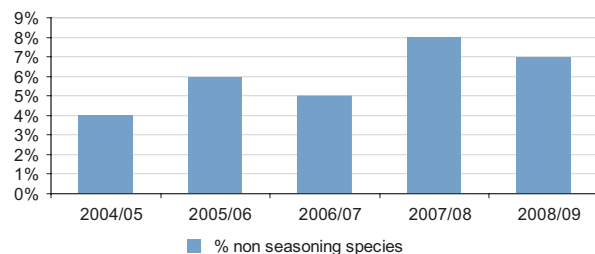
It is recognised that as a result of the increased proportion of sawlogs to be supplied from plantation and regrowth forests, and less from mature native forests, the average size and characteristics of sawlogs will decrease over time. This will require the processing industry to change technologies over the next five to 10 years.

The two indicators developed to monitor these changes and provide the processing sector with an indication of the rate of change in wood quality over time are log diameter (a well-recognised proxy for sawn timber recovery and therefore value) and the non-seasoning percentage. This year's log diameter data have shown a decline in the percentage of logs within the <45 cm group, with average volume of logs across all the other diameter classes remaining fairly consistent.

**Percentage of category 1 and 3 sawlogs by four log diameter groups sold over the past five years.**



**Percentage of non-seasoning species sold in 2008/09.**



## Product recovery

We have two main processes in place to ensure the recovery of wood volumes and values is maximised. These include carrying out pulpwood audits at mills and landings to determine the presence of any sawlogs that may have been misclassified as pulpwood and conducting post-logging residue assessments to quantify the merchantable forest residue remaining after harvesting operations. Information collected from the pulpwood audits conducted this year shows that 169 tonnes of sawlogs were recovered out of a total 158,559 tonnes audited. This was based on a sample size of eight per cent, which is over the prescribed standard of five per cent. The recovered volume (169 tonnes) is greater than the three-year average of 81 tonnes, thus representing that a slightly higher proportion of sawlog was misclassified as pulpwood this year.

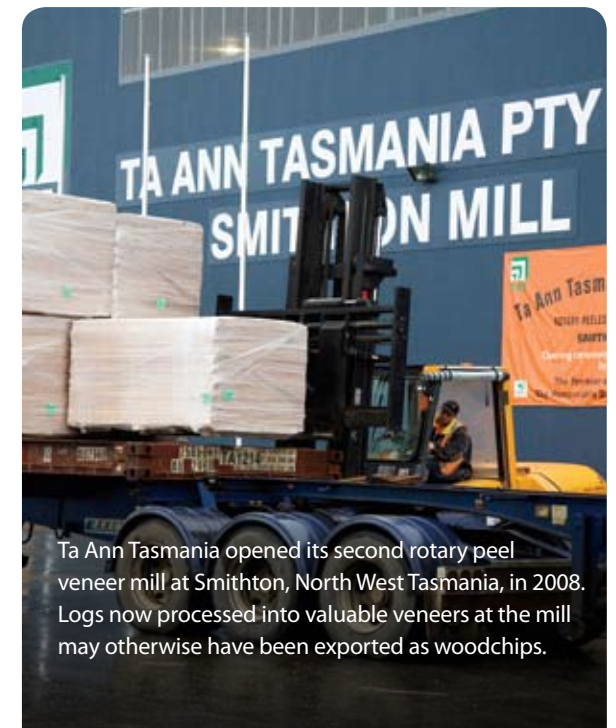
We are committed to maximising the use of all felled trees from harvested areas. This is achieved through the selection of craftwood, special species timbers, high quality sawlogs and veneer with the remainder being available as pulpwood where it meets specification.

In 2008/09, logging residue assessments were conducted in 95 harvested areas. These assessments are a measure to ensure the efficient removal of forest products, and minimise merchantable wood being left on the forest floor. The standard of less than five merchantable tonnes per hectare was achieved in all the production areas sampled.

In 2008/09, Ta Ann Tasmania opened its new rotary peel veneer mill at the Circular Head Wood Centre. This is now

the second mill of its type in Tasmania, which was part of our strategy to prepare investment-ready sites and to encourage companies to increase the extent and range of value-added wood products using new processing and best technology. The logs we are now supplying to Ta Ann represent a new product for Tasmania, in that value is now being added to logs that would otherwise be exported as woodchips.

Around 150,000 tonnes of logs to be cut into veneer lengths are supplied each year to Ta Ann operating at the Circular Head Wood Centre. Ta Ann will in turn supply a lucrative export market in veneers in both South East Asia and Japan. The decision by Ta Ann to develop the mills in Tasmania is a huge vote of confidence in the State's ability to supply high quality and sustainably produced timber.



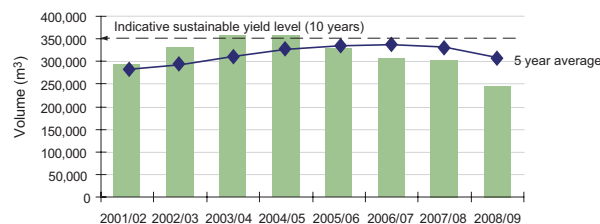
Ta Ann Tasmania opened its second rotary peel veneer mill at Smithton, North West Tasmania, in 2008. Logs now processed into valuable veneers at the mill may otherwise have been exported as woodchips.

## Sustainable yield

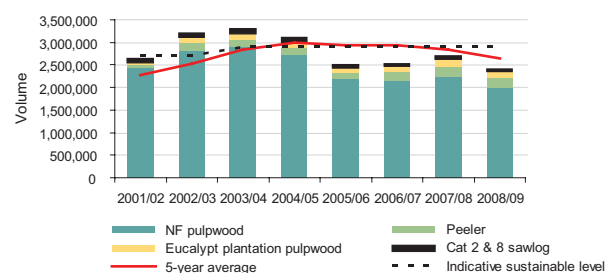
A vital prerequisite for sustainable forest management is that the volume of timber harvested from the forest estate does not exceed its productive and regenerative potential over a given time period. We manage harvesting in state forests to maintain a sustainable supply of at least 300,000 cubic metres of high quality eucalypt sawlog, as required by the Forestry Act. The availability of at least 300,000 cubic metres per year of high quality eucalypt sawlog is also recognised in Clause 77 of the Regional Forest Agreement.

In 2008/09 a total of 245,154 cubic metres of high quality sawlog and veneer was produced, which was indicative of the depressed sawlog market. The five-year average sawlog yield remained within the sustained yield strategy, while average pulpwood yield was below the indicative long-term supply level of 2.8 million tonnes.

### Production levels of high quality sawlog and veneer.



### Pulpwood production levels against sustained yield.



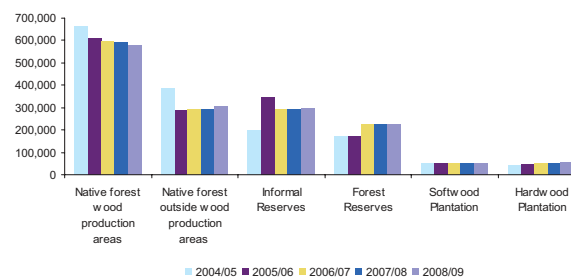
## Eucalypt wood production.

Product Group	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	Indicative sustainable level <sup>1,2</sup>
High quality sawlog and veneer (m³)	357,088	359,185	329,979	307,088	303,951	245,154	320,000
Low quality sawlog (m³)	117,247	99,878	85,057	51,778	87,090	56,613	Not defined
Peeler log (m³)	176,183	159,433	150,934	211,197	209,590	208,334	Not defined
Plantation pulpwood (t)	104,426	118,440	89,619	126,163	176,703	135,549	Not defined
Native forest pulpwood (t)	2,902,786	2,724,303	2,191,132	2,136,687	2,230,874	2,005,448	Not defined
<b>Total arisings (t)</b>	<b>3,300,642</b>	<b>3,102,054</b>	<b>2,516,742</b>	<b>2,525,825</b>	<b>2,704,257</b>	<b>2,405,944</b>	<b>2,800,000</b>

1. Based on FT (2007) Sustainable high quality eucalypt sawlog supply from Tasmanian state forest, Review No. 3, from 2006 onwards.
2. Indicative level of arisings from the sustainable yield of high quality sawlog supply is 2,800,000 tonnes, based on FT (2007). Arisings include pulpwood, peeler and low quality sawlog.

To maintain the ongoing supply of timber a sufficient area of production forest is required. Only 45 per cent of the 1.5 million hectare state forest estate is used for wood production, with native forest production areas totalling 580,000 hectares (38 per cent) and plantations totalling 105,400 hectares (seven per cent). The remaining area (55 per cent) is included in formal and informal reserves and other native forest outside production areas.

**An overview of the six components that make up the total forest estate, showing that approximately 45 per cent of this area is used for wood production.**



Since 2000/01, the area available in native forest production areas has reduced by 19 per cent or 129,000 hectares. The majority of this decrease has been as a result of additional reserves being implemented under the Tasmanian Community Forest Agreement. However, the conversion of a portion of native forest to plantation has also contributed. Ongoing losses also occur due to areas being removed from wood production during pre-harvest planning to protect conservation values.

# *sustaining* JOBS FOR CURRENT AND FUTURE GENERATIONS



In August 2009, the Gumatj clan and the Fairbrother Group completed a five-bedroom bunkhouse at Garrathiya, a Gumatj cattle station about 100 kilometres south of Nhulunbuy. The bunkhouse was the first major project to be delivered under a memorandum of understanding between the Gumatj Corporation and Forestry Tasmania. It was designed to suit the traditional Yolngu lifestyle, with an outside communal living area, kitchen and a separate ablution block.

## **Timber partnership to deliver sustainable development in Arnhem Land**

In 2008/09 Forestry Tasmania signed a memorandum of understanding (MOU) with Galarrwuy Yunupingu AM, Chairman of the Gumatj Corporation. The Gumatj clan are Yolngu people and traditional owners of land on and around the Gove Peninsula in north east Arnhem Land in the Northern Territory, including the Rio Tinto Alcan bauxite mine near Nhulunbuy. Under the terms of this MOU, we have been working with the Gumatj Corporation to develop a sustainable timber industry, based on selective harvesting and management of hardwood on the Gumatj clan estate and using this timber for a range of associated industries. This initiative is providing training, business opportunities and cheaper building materials for both the Gumatj clan and other local businesses.

The first task in this project involved teaching a group of Gumatj men sawmilling and timber handling techniques. Through the help of other Tasmanian partners, such as the Fairbrother Group, construction also started on a five-bedroom bunkhouse that was designed by University of Tasmania Associate Professor Greg Nolan from the Centre for Sustainable Architecture with Wood, and the local community. This house was completed after the reporting period (in August 2009), and will now be used as a blueprint for future houses in the area.

Through this initiative, we and a number of other Tasmanian partners have the opportunity to share our knowledge with communities seeking to develop their forest resources in ways that are socially, environmentally and economically sustainable. A similar arrangement is currently being worked out with the Thamarrurr Development Corporation at Wadeye, with eight men being trained in milling and racking local timber.

## **Native forests**

As outlined previously, of the 685,400 hectares available for wood production, the majority of this area (580,000 hectares) is native forest. This area provides the majority of the high quality eucalypt sawlogs and veneer logs, peeler logs and pulpwood as well as special timbers from non-eucalypt species.

## **Eucalypt forests**

We aim to ensure that productivity in state forests is always maintained. In order to achieve this, forest regeneration practices are constantly monitored and reviewed. Successful eucalypt regeneration generally requires:

- effective site preparation by fire or by mechanical disturbance to create receptive seedbeds;
- an adequate supply of high quality seed; and
- freedom from heavy frosts, drought and excessive damage by insects and browsing animals.

To ensure high quality native forest regeneration, we actively maintain a native forest quality standards process. This process enables the timely, effective and accurate monitoring and reporting of silvicultural operations in native forests. The process uses goals, targets, standards and performance indicators to determine the success of regeneration operations. An annual quality standards review is held to discuss issues of concern relating to silvicultural operations, to ensure a constructive approach to improving practices, and to provide a forum for exchange of information and ideas. The following information represents a summary of the information collated from this process.

## Site preparation

Site preparation has a significant impact on the success of regeneration. Site preparation techniques include high or low intensity burning, mechanical loosening of the soil or excavator heaping and subsequent burning of logging slash. In some cases the disturbance caused by harvesting produces sufficient seedbed for adequate regeneration.

The quality standard for clearfelled areas is that receptive seedbed is created over at least two-thirds of the area to be regenerated. In partially harvested areas, the quality standard is that receptive seedbed is created over at least one-third of the area to be regenerated, less than 10 per cent scorching of retained stems, and the achievement of an acceptable level of fire protection.

In 2008/09, 8,672 hectares (2,619 hectares of clearfelled area and 6,053 hectares of partially harvested area) of native forest were treated for site preparation, including areas carried over from the previous year. A total of 91 per cent of clearfell and 93 per cent of partial harvest areas respectively achieved the site preparation quality standard. This compares with the five-year average of 92 per cent and 93 per cent for clearfell and partial harvest respectively. Three partial harvest areas and nine clearfelled areas did not meet the standard as a result of poor burns. Five partially harvested coupes did not meet the standard because of excessive scorch to retained trees.

## Seed and sowing

Forestry Tasmania classifies the source of seed sown onto harvested native areas into three categories:

- **On-site seed** is collected from the harvested area or immediately adjacent to it from an area that has a similar topography, elevation, aspect, parent material and forest type. On-site seed is highly desirable as it maintains gene pools and ensures that regeneration is well adapted to the site.
- **In-zone seed** is from the same seed zone as the nominated harvesting area. The seed zones are detailed in *Native Forest Silviculture Technical Bulletin No. 1 Eucalypt Seed and Sowing*. For the purposes of the performance indicator, in-zone seed does not include the on-site seed component.
- **Out-of-zone seed** is collected from outside the seed zone of the nominated coupe. This is the least preferred seed source. When there is insufficient on-site or in-zone seed, the most appropriate available out-of-zone seed is selected following the guidelines set out in *Technical Bulletin 1*.

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and how to obtain a copy from:  
[www.forestrytas.com.au](http://www.forestrytas.com.au)

The seed provenance quality standard is that each harvested area should be regenerated with at least 10 per cent on-site seed with the remainder being in-zone seed matched to forest type. These seed provenance targets need to be met for each species in the sowing mix.

In 2008/09, 2,821 hectares were sown with eucalypt seed. A total of 1,553 hectares (55 per cent) of this area achieved the seed provenance quality standard. This is a five per cent increase when compared with the five-year average of 50 per cent of area achieving the standard. The main cause of not achieving the desired standard was insufficient on-site seed being available.

In 2008/09, 3,012 kilograms of eucalypt seed were sown, of which 41 per cent was on-site, 54 per cent in-zone and five per cent out-of-zone. This is similar to the five-year average of 38 per cent on-site, 56 per cent in-zone and six per cent out-of-zone seed.

The quality standard for sowing operations is that the delay between site preparation completion and artificial sowing should be less than 21 days, and shorter if possible. This is because the best regeneration generally occurs when seed is sown on the freshest and most receptive seedbed. In 2008/09, 94 per cent of the artificially sown area achieved this standard. This is similar to the five-year average (94 per cent). The lack of available helicopters for aerial sowing was the main reason for six per cent of the area not meeting the standard.

## Regeneration success

Regeneration success of eucalypt areas is reported after they are three years old, while swamp blackwood, rainforest and Huon pine forest coupes are reported after they are five years old. Regeneration success is determined by undertaking regeneration surveys. The percentage of assessed plots that were stocked is reported for each regenerated area. For each forest type, there is a set minimum stocking standard

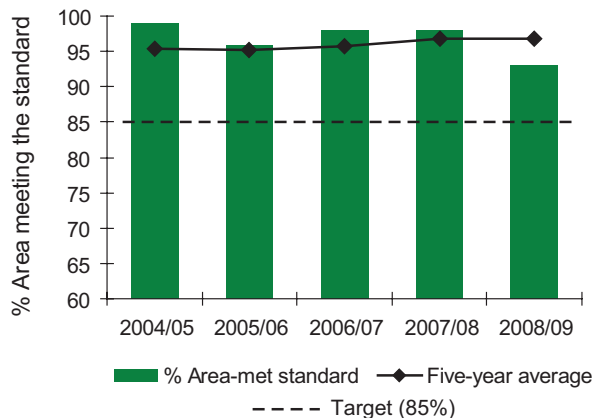
# sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

that needs to be achieved. This approach complies with the recommended national methodology for regeneration success monitoring.

In 2008/09, 7,521 hectares of native forest regeneration reached the relevant reporting age for regeneration success. Of this area, 93 per cent achieved the required stocking standard. This is a decrease of three per cent on the five-year average (96 per cent) but exceeds our target of 85 per cent of harvested area being regenerated to standard.

Sixteen areas totalling 520 hectares did not meet the stocking standard. All these areas contained sufficient regeneration or retained trees to be considered as ecologically stocked and useful for wood production at a reduced rate. The majority of this area (444 hectares) was dry eucalypt forests. These forests were logged using partial harvest silviculture. Mature standing trees remaining on these areas will continue to provide seed for further seedling recruitment, and stocking is likely to improve further in the near future.

## Five-year regeneration success summary.



## Special timbers

Special timbers have an iconic association with Tasmania. They are used to produce high value furniture and craftwood products. Examples include blackwood, black-heart sassafras, myrtle and celery-top pine. We are committed to the ongoing long-term supply of these timbers to the Tasmanian craft and design industries. With the exception of blackwood, the other special timbers are mostly derived from harvesting operations in wet eucalypt forests (predominantly old growth).

A recent study into the Tasmanian woodcraft sector found that more than 2,000 people are directly employed in the commercial woodcraft industry, which generates around \$70 million each year for the State's economy. This industry largely comprises small businesses and sole operators, working independently in such diverse fields as sawmilling,

furniture design, boat building, musical instrument manufacturing, and craft retailing. A further 8,500 Tasmanians participate in woodcraft as a hobby or on a limited commercial level, which is the highest participation rate in Australia.

This study has been extremely useful in informing our own strategy for special timbers management, which was released for public comment in August 2009. The strategy details a number of objectives under the three broad aims of sustaining the resource, maximising value recovery, and promoting special timbers to the world. These aims and objectives will set the framework for the management of special timbers for the next decade.

The draft Special Timbers Strategy can be viewed at:  
[www.forestrytas.com.au](http://www.forestrytas.com.au)

Forestry Tasmania established Island Specialty Timbers Tasmania in 1992 to maximise the recovery, processing and supply of highly figured special timber, found in logs, burls or stumps, not usually processed in sawmills.

More information on Island Specialty Timbers Tasmania can be found at: [www.islandspecialtytimbers.com.au](http://www.islandspecialtytimbers.com.au)



The special timbers sector supports employment for more than 2,000 people in Tasmania, and generates around \$70 million each year for the State's economy. In 2008/09 Forestry Tasmania released a draft Special Timbers Strategy for public comment. The document details a number of objectives aimed at ensuring the resource is sustainably managed for the next decade.

### Harvesting through the ages on Mt Barrow

The forests of Mt Barrow, east of Launceston, have been harvested on a virtually continual basis since the 1880s, when gold-fuelled development beyond Bass Strait forced timber merchants to look further afield for construction material. Activity has waxed and waned over the years, but continues today with some areas being harvested for a third rotation on a completely sustainable basis.

The post-war era involved various companies building spot mills, huts and tramways on Mt Barrow to harvest high quality *E. delegatensis* sawlogs. These logs were harvested using axes and crosscut saws and hauled by horses using logging shoes to prevent the logs from snagging on rocks. The sawlogs were snigged to the timber tramways and transported to the mills on small trams, also horse-powered. The mills were built from bush poles and used vertical saws powered by steam. The mills were generally located close to streams for sourcing boiler water. Huts were located close by for timber getters and mill workers to camp in during the working week. Once an area was cut out the mill gear was moved to the next site. Sawn timber was taken by tram to the nearest track for loading onto trucks for transport to Launceston and beyond.

Some of these mills, tramways and huts were re-used or new ones built through the 1950s and 1960s. More modern methods brought circular saws to bigger mills and rail motors for the tramways to haul logs. Haulers were set up to harvest sawlogs from steep areas. By the late 1950s, cable blade dozers were being used for road making, hauling and loading the logs. This was also the time the first chainsaws were introduced to Tasmania's forests.

The advent of the woodchip industry in the late 1970s and the introduction of bigger excavators and skidders soon changed harvesting methods. Supply of high quality sawlogs was still the focus but the head logs and limb wood could be used for woodchips instead of being left in the bush. Regeneration of the forests had become a higher priority, with the burning of harvesting slash and mechanised logging disturbance providing a good seedbed. Partial harvesting systems were also developed to retain high quality potential sawlogs and shelter seedlings and saplings from frost damage on exposed sites. The old thinking of *"taking the best and leaving the rest"* – resulting in a gradual genetic decline in the quality of trees – was replaced with *"taking the rest and leaving the best"*, which enables the best traits of tall, solid trees to be maintained. Mt Barrow is something of

an informal laboratory for forest practices. The first cable clearfell harvesting coupe in the north east was trialled in the Weaver Creek valley in the 1980s. In 1998 thinning of regrowth forest originating from wildfires in the 1950s started and continues to the present day.

To allow the wider public a window into a working forest, Forestry Tasmania opened the Mt Barrow Forest Discovery Trail in 2005. The 24-kilometre, self-guided tour also recognises the involvement of the Padgett family in Tasmania's forest industry, and the mountain in particular. Patriarch Andy Padgett first went to the mountain in 1946 and his enthusiasm for the place infects anyone who chances to meet him. The tour route illustrates the continuum from the historic to present day harvesting with interpretation signage, a lookout and visitor centre showcasing the sustainable working forest that is Mt Barrow.

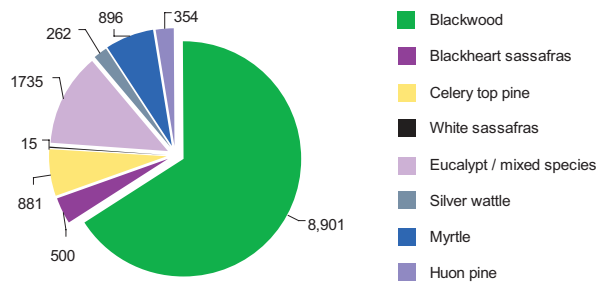


# sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

During 2008/09, a total of 13,543 cubic metres of special species were sold. This included 12,496 cubic metres of high quality special species sawlog and craftwood. Blackwood made up 65.7 per cent of this volume with the rest of the volume being made up by species such as myrtle, celery-top pine and eucalypts with attractive craft features such as burls.

Although the total species volume represents a decrease of 38 per cent (8,400 cubic metres) on the volume sold last year, this figure is in line with sustainable supply as outlined in our draft special species strategy.

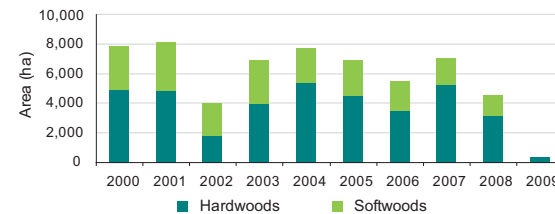
## Production of special timbers sawlogs in 2008/09.



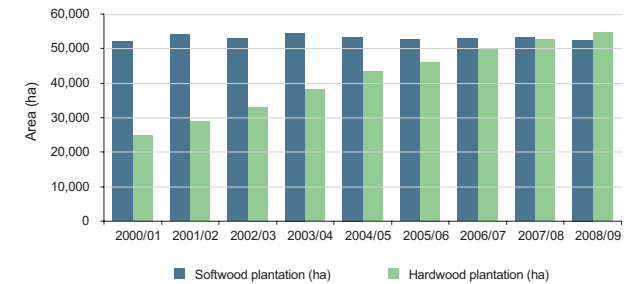
## Plantations

In line with our commitment to make available at least 300,000 cubic metres per year of high quality eucalypt sawlogs from state forests, the plantation estate will play a vital role in supplying an increasing percentage of this volume over the next 10-15 years. To meet this requirement, the plantation estate must be managed to maximise production, while balancing long-term sustainability. In 2008/09, a total of 2,191 hectares of new eucalypt plantations were established in state forests bringing the total hardwood plantation estate to 54,640 hectares. A total of 1,013 hectares of hardwood plantation were re-established. We have 100 per cent ownership of 57.8 per cent of the hardwood plantation estate, with the remainder being managed through joint venture and lease arrangements.

## Area of plantation by age class 2000-2009.



## Hardwood and softwood plantation area 2000/01 to 2008/09.



On 1 June 2007, in line with the requirements of the Australian Forestry Standard, we announced an end to the practice of converting native forests to plantations. This statement was in the context of:

- native forest production areas that were commenced (that is road work completed, harvesting commenced) before 31 December 2006 being completed and planted over the next two years; and
- native forest production areas that had commenced after 1 January 2007 being returned to native forest.

This year, a total of 2,191 hectares of plantation was established on land that met the above criteria.

Increasing the productivity from our defined plantation estate is the key to our future. Over the next five years, an increasing proportion of the plantation estate will be ready for harvesting, and subsequent second rotation establishment. To ensure growth rates and silviculture objectives are met, we have developed a series of plantation quality indicators, which are reported annually. For existing plantations, the focus is on improving growth and ensuring silvicultural treatments occur in a timely manner. For any new plantations established, the focus is on improving practices and techniques learned during the first rotation.



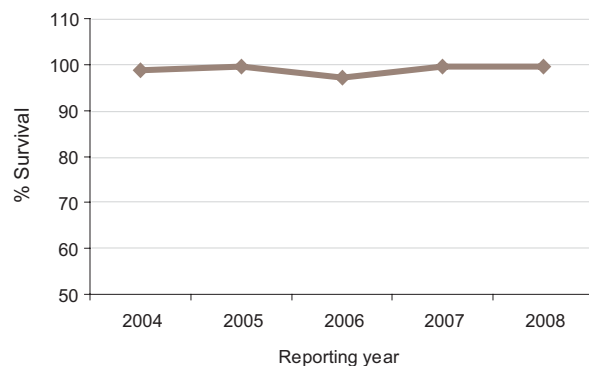
Plantations are an important part of the forest estate. As the forest industry makes a transition from the use of old growth timber, they will play a significant role in ensuring that Forestry Tasmania continues to meet its legislative commitment to make available 300,000 cubic metres per year of sawlogs and veneer logs from state forests.



### Successful plantation establishment

Following planting out in the field, survival surveys are carried out initially at nine to 12 months to determine the percentage of seedlings that have survived and whether any refill planting is required to meet target stocking. A further survey is conducted by age two to determine the plantation area is successfully established, with this year's data continuing to show that there is a consistently high percentage survival rate in our plantation estate. The challenges for plantation establishment in these early years include damage from insect and animal browsing, frost incidents, drought and weed competition. Further detail on the management of these damage agents has been provided in the forest health section of this report.

#### Percentage area of plantations successfully established by age two.



### Strategic use of fertilisers

Many Tasmanian soils are low in several key nutrients required for long-term sustainable timber production from plantations. Sites are examined to determine which (if any) fertilisers are required and a program put in place to ensure the trees receive the essential nutrients for proper growth and development. Most sites receive an initial fertiliser application at planting. This involves hand application of nitrogen and phosphorus, with copper where required. Secondary (or later age fertilising) generally involves ground or aerial application of nitrogen, a combination of nitrogen and phosphorus, or copper. It was not possible to fertilise some areas, due to Forestry Tasmania's commitment to avoiding operations around sensitive times of the year for endangered fauna.

#### Area identified for secondary (aerial) fertilising that was fertilised in 2008.

Reporting year	2006	2007	2008
Area fertilised - hectares	2,011	2,522	3,690
Percentage area fertilised	100%	100%	96%

Our research staff continually review the products in use and application techniques, in line with Australian Forestry Standard requirements, to favour cost-effective methods with reduced negative outcomes on the environment. In addition, site preparation techniques for second rotation sites are continually being improved to maximise nutrient retention on sites, so as to minimise fertiliser usage.

### Meeting pruned wood targets

In order to meet our requirement for high quality eucalypt sawlogs and veneer logs, plantations need to be pruned to grow clear-wood (knot-free timber). Pruning occurs in one to three lifts, to a target height in line with industry requirements. Following research into improvement of our pruning techniques, our specifications have changed over the past 12-18 months to retain a greater amount of the crown (or growing area of the tree). This has meant that the trees are slightly older when pruned, to allow for that initial crown growth. The amount of area pruned over the past three years has increased significantly, in line with our goal to produce an increasing amount of plantation-grown sawlogs.

#### Summary showing that in 2008\*, 79% (832 hectares) of plantation within Forestry Tasmania's defined forest area that was originally intended to be managed for solid wood production received first lift pruning at age four. \* Based on calendar year.

Reporting year	2006	2007	2008
First lift - hectares	146 (57%)	574 (83%)	832 (79%)
Second lift - hectares	112	120	219
Third lift - hectares	0	0	0
Total area pruned - hectares	258	693	1,051

# *sustaining* JOBS FOR CURRENT AND FUTURE GENERATIONS

## Improved growth of stands

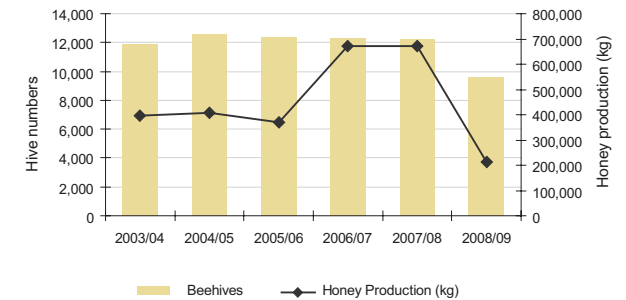
To maximise the growth of pruned stems, plantations are thinned at around age 10-12 years. As well as improving the silvicultural management of the stand, thinning also provides a good supply of pulpwood and small sawlogs. After thinning, approximately 300-350 stems are left to grow into high quality sawlogs and veneer logs. We also have a program to model the risk of wind-throw to a stand that allows planners to schedule thinning at an appropriate time to avoid loss or damage to the stand.

## Non-wood products and services

### Honey production

The vast majority of beekeepers in Tasmania depend on land managed by Forestry Tasmania for access to leatherwood. Leatherwood trees predominantly occur in mature wet eucalypt forest and rainforest. Approximately one million hectares of forest within Tasmania has been identified as likely to contain leatherwood. Of this area, 359,000 hectares (33 per cent) occur in state forests, with about 106,000 hectares of this area being within areas zoned for wood production. Where practical, forest management prescriptions exclude leatherwood from harvesting and since 1993, less than three per cent of leatherwood-rich state forests has been harvested. As opposed to clearfelling, the application of non-clearfelling techniques like variable retention in old growth will lessen the predicted reduction of accessible leatherwood from 10 per cent to six per cent over the next 90 years. This will provide some assurance to beekeepers that the majority of the leatherwood will be secure from harvest operations over the long term.

Honey production in 2008/09 was 210,061 kilograms, down about 461,150 kilograms on last year's figure. According to beekeepers this drop in volume was attributed to a very cold December and a very poor leatherwood flowering season. Although the total number of hives reduced, out of the 378 hive sites available, 303 were used, representing a use rate of 80 per cent, which is higher than last year's figure of 75 per cent.



The introduction of new variable retention harvesting techniques will provide an assurance to beekeepers that stands of leatherwood trees will be retained on state forest over the long term.

# sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS



**Given the important role forests play in offsetting carbon dioxide emissions, we manage state forests to ensure they continue to act as a long-term carbon store while providing a sustainable source of products.**

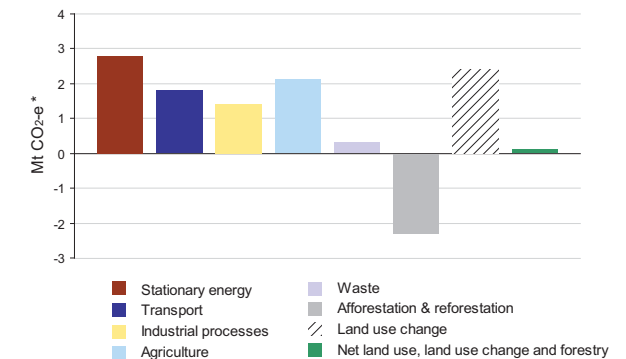
The maintenance of ecosystem health and vitality is important for the long-term sustainability of the forest and relies on good management of potential threats such as fire, weeds, pests and diseases. We use an integrated approach and monitor forest health so that we can take action to prevent significant damage to the nature and condition of state forests when required. Given the important role forests play in offsetting carbon dioxide emissions, we manage state forests to ensure they continue to act as a long-term carbon store while providing a sustainable source of products.

## Carbon and climate change

### The Tasmanian position

Tasmania's total greenhouse gas emissions in 2007 were 8.5 million tonnes CO<sub>2</sub>-e (State and Territories Greenhouse Gases Inventories 2007). This represents 1.4 per cent of total national emissions (597.2 million tonnes CO<sub>2</sub>-e). Tasmania's 2007 net carbon emission for the Land Use, Land Use Change and Forestry (LULUCF) sector was 0.2 CO<sub>2</sub>-e. The two components added together to derive this figure include a negative 2.3 million tonnes CO<sub>2</sub>-e removed by plantations (sinks) established since 1990 on previously cleared agricultural land and a positive 2.4 million tonnes CO<sub>2</sub>-e from greenhouse gas emitted as a result of converting forests to grassland, cropland and residential uses.

**Tasmania's emissions as CO<sub>2</sub> equivalent for each of the sectors.**



### Carbon storage in state forests

Based on the re-analysis of the results from the study by MBAC Consulting of Melbourne commissioned by us in 2007, average annual growth in state forests results in the capture and storage of about 6.75 million tonnes CO<sub>2</sub>-e. From this amount, an average of 2.19 million tonnes CO<sub>2</sub>-e is removed in timber products being harvested in accordance with our sustainable yield strategy. Given that the volume of products removed each year is less than the annual growth, an amount of 4.56 million tonnes CO<sub>2</sub>-e is left (2.37 million tonnes CO<sub>2</sub>-e in above and below-ground residues store and 2.19 million tonnes CO<sub>2</sub>-e in annual tree growth). Using the figures from this calculation, it is anticipated that the net carbon store in state forests will increase by about 17 per cent over the next 50 years.

# sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

## Average annual carbon pools in state forests

**2006 - 2060** (re-analysed data from *Forestry Tasmania's Carbon Sequestration Position* – an independent audit by MBAC Consulting of Melbourne).

\*Carbon assumed to be lost through regeneration burning, ie. the above-ground component

	Carbon (Millions tonnes CO <sub>2</sub> -e)
<b>Annual forest growth</b>	<b>6.75</b>
<b>Carbon in the form of wood products harvested</b>	
- solid wood	0.86
- pulpwood	1.33
<b>Total</b>	<b>2.19</b>
<b>Carbon in annual forest residues</b>	
- above-ground	1.46*
- below-ground	0.97
<b>Total</b>	<b>2.37</b>

This re-analysis also demonstrated that annual emissions from planned burns represent less than a quarter of the total carbon stored each year in state forests. The scientific assumption is that any carbon dioxide emitted as a result of regeneration burning is offset by the growth of the existing and newly established forest. However, as a means of trying to quantify this emission, our modelling makes the assumption that, following the removal of harvested wood products, all the remaining above-ground residues are lost as a result of the regeneration burn. Using this method, our modelling shows that a total of 1.46 million tonnes CO<sub>2</sub>-e is lost from the forest carbon pool. Given that in reality a large proportion of the heavy fuels present after harvesting is not burnt, this methodology exaggerates the volume burnt, and therefore the amount of carbon assumed to be lost. Recognising this weakness, we will continue to use this method until more accurate methods and credible research are available.

## Developing an understanding of our energy use and emissions

The main energy inputs used by Forestry Tasmania are fuel (unleaded and diesel), mainly for the purpose of transport of staff, and electricity used to power our offices and workshops. The total emissions as a result of this energy use amount to 0.0036 million tonnes CO<sub>2</sub>-e.

### Summary of energy usage and resulting CO<sub>2</sub>-e emissions as a result of fuel used for transport and energy usage within our offices.

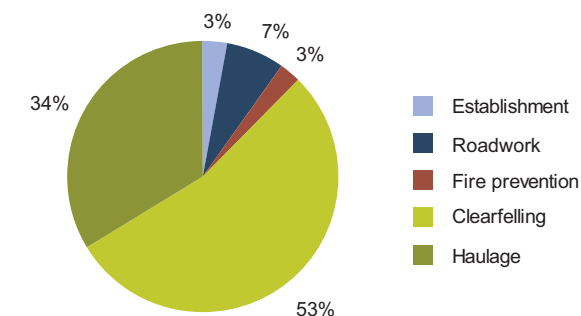
\*Australian Government Department of Climate Change, 2009. National Greenhouse Accounts Factors. <http://www.climatechange.gov.au>.

Input	Usage	CO <sub>2</sub> -e*
<b>Fuel</b>		
Unleaded	339,292 litres	774,040 kg CO <sub>2</sub> -e
Diesel	894,728 litres	2,389,926kg CO <sub>2</sub> -e
Oil	6,120 litres	17,712 kg CO <sub>2</sub> -e
Electricity	1,892,478 kilowatt hours	435,270 kg CO <sub>2</sub> -e
<b>Total</b>		<b>0.0036 million tonnes CO<sub>2</sub>-e</b>

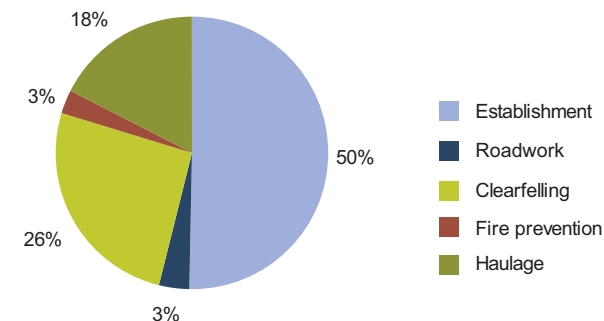
In trying to better understand our energy usage and greenhouse gas emissions in relation to forestry operations, we participated in a recent study undertaken by the CSIRO and Forest and Wood Products Australia. This study has resulted in the formulation of the first comprehensive Australian life cycle inventory database for forest and wood products. All the inputs and outputs used in this study reflect a 'cradle-to-gate' view that captures the flow of materials and energy from seed and seedling production to the delivery of logs to processing facilities within Tasmania. In addition, upstream (indirect) energy use and greenhouse gas emissions from the production and transport of materials, fuels and electricity used in the forest processes were included.

For our component of the study, the major inputs (including energy) and outputs (including emissions) for an average cubic metre of sawlog produced from regrowth native forests in central Tasmania were calculated. The results from this study showed that petrol and diesel are the main energy inputs with 356 megajoules (about nine litres) of fuel being consumed for every cubic metre of sawlog delivered. Of the total energy used, harvesting accounted for the largest component (53 per cent) with the other major forest management activities being haulage (34 per cent) and roadwork (7 per cent).

### The proportion of energy as measured in MJ used in each of the main forest management activities.



### The proportion of greenhouse gases emitted during each of the main forest management activities.



With regard to calculating emissions as a result of these forest management activities, one of the assumptions in this study was that all CO<sub>2</sub> emissions associated with the burning or decomposition of forest debris are balanced by CO<sub>2</sub> sequestered by the remaining trees. This means that only non-CO<sub>2</sub> greenhouse gases resulting from burning activities were included, as it is assumed that these are not taken up by the forest. Therefore, in factoring 8.5 kilograms of CO<sub>2</sub>-e of emissions per cubic metre of sawlog from upstream processes (for example, fuel production and distribution) total CO<sub>2</sub>-e emissions were calculated as being 67.3 kilograms CO<sub>2</sub>-e per cubic metre of sawlog produced. This includes 50 per cent (33.9 kilograms CO<sub>2</sub>-e) from burning, 26 per cent (17.5 kilograms CO<sub>2</sub>-e) from harvesting, 18 per cent (11.8 kilograms CO<sub>2</sub>-e) from haulage and six per cent (4.1 kilograms CO<sub>2</sub>-e) from other management operations.

With the total amount of CO<sub>2</sub>-e sequestered in the hardwood logs being estimated as being 1,030 kilograms CO<sub>2</sub>-e per cubic metre of sawlog, the total emissions produced in the growing, harvesting and transporting of hardwood logs therefore represents only six per cent of the amount of CO<sub>2</sub>-e sequestered in the logs. Therefore, despite some of the data uncertainties around emissions from fuel reduction burning, haulage distance and wood density of different forest products, this study clearly showed that emissions from forestry activities are very low compared to the total amount of CO<sub>2</sub>-e sequestered in wood products removed from the forest.

In order to find viable alternatives to burning the residue remaining after harvesting, we have been exploring the advantages and disadvantages of biomass energy for a number of years. In order to add to understanding gained so far, our Managing Director attended the LIGNA World Fair for the Forestry and Wood Industries held in Hanover, Germany earlier this year. The environmental benefits of wood-fired power stations were obvious at this fair. It was also possible to gather information about the past 20 or 30 power stations that have been established in Europe, which are almost exactly the same as the ones we would like to see built in Tasmania. Modern biomass energy production is clean, cheap and renewable and produces virtually no emissions.

To assist in reducing office energy consumption, our information technology department has consolidated multiple separate servers into a few servers running at peak efficiencies. This has had the benefit of reducing the power requirements needed to run the data centre by 30 per cent. According to the software manufacturer VMware, every server retired from a data centre saves an estimated 3.6 tonnes of CO<sub>2</sub> emissions.

## Air quality

### Planned burning and air quality monitoring

Planned burning is undertaken throughout Tasmania on private land and state forests each autumn. Burning is dispersed and only a limited number of operations occur on any one day. This burning is important to reduce the fuel

hazard resulting from logging residue and to create a seedbed for eucalypt regeneration. Eucalypt seeds and seedlings need a mineral soil seedbed, abundant sunlight and reduced competition from other plants to establish and grow. In drier eucalypt forest, burning is undertaken to remove the residues remaining after harvesting, so as to reduce the fuel load and fire hazard.

Unfortunately, smoke is an inevitable product of this burning process. However, unlike the smoke from summer bushfires, a number of pro-active management options are available to assist in minimising the effects of this smoke on local communities. One of these options includes conducting burning operations on days when forecast weather conditions indicate the smoke will be dispersed away from settled areas. To keep stakeholders informed about burn locations, relevant information is provided through the Tasmanian planned burn website ([www.plannedburntas.com.au](http://www.plannedburntas.com.au)).

In 2008, trial smoke management guidelines were introduced by the Forest Practices Authority in response to public demand, and a series of severe smoke nuisance events in Tasmania arising from forest industry burning activity. Drawing on the experience of the 2008 trial, the autumn of 2009 saw the introduction of a second trial, this time in the form of smoke management guidelines supported by the coordinated smoke management strategy, again managed by the Forest Practices Authority.

Recognising the need to minimise the incidence of smoke nuisance, Forestry Tasmania, along with other forest industry

# *sustaining* CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

companies and the Parks and Wildlife Service, conducted all silvicultural and fuel management burning activities during the autumn of 2009 within the framework of the coordinated smoke management strategy. Another trial is planned for 2010.

The coordinated smoke management strategy provides for the coordination of planned burns to minimise the risk of high concentrations of smoke within individual air sheds. Under the strategy, restrictions on burning were imposed, as required, to limit the number of burns on days when weather forecasts predicted poor smoke dispersal.



In 2008/09, all the 196 water samples we collected and submitted for independent testing following the application of pesticides were free of chemicals.

The results of the 2009 trial are being analysed and a report will be available in late 2009. Indications are that the number of complaints about smoke received by the Forest Practices Authority, the Environment Protection Authority, the forest industry and the Parks and Wildlife Service is considerably fewer than in previous years.

In addition to working within the framework of the coordinated smoke management strategy, this year we entered into an agreement with CSIRO to measure the levels of particles and chemical components of smoke in the Huon Valley, siting measuring equipment at Grove and Geeveston. This is intended as a pilot study, and will gather information on year-round atmospheric levels of combustion products, and the additional loads arising from our silvicultural burning program. The equipment was installed in time for the commencement of the 2009 season and will remain in place until at least June 2010.

National environment protection measure monitoring of air quality occurs at Hobart, Launceston and Judbury. The Department of Primary Industries, Parks, Water and Environment is responsible for monitoring the Hobart and Launceston stations, while Forestry Tasmania manages the Judbury site. The maximum concentration guideline for particles is  $50\mu\text{g}/\text{m}^3$  ( $\text{PM}_{10}$ ), averaged over a 24-hour period. This is based on a level above which impacts on human health may be experienced with measurements taken at ground level. During 2008/09, measurements taken at these stations showed that none of the monitoring results were above the  $\text{PM}_{10}$  standard.

## **Water, soils and geodiversity**

### **Water quality**

Forestry Tasmania has had a formal water quality sampling system in place since 1993 to test against contamination related to chemical spray applications. The system has been continually refined in the past decade based on operational experience and research findings. Our water sampling policy states the conditions under which water sampling is to be done. Three sets of water samples are taken: one sample set prior to application to establish any background contamination; the second after the application; and the third set of samples is taken following the first significant rain after spraying has occurred, to detect any contamination due to run-off and leaching.

The health and guideline values for drinking water prescribed by the National Health and Medical Research Council are used as the standards for determining the need for investigation and corrective action when pesticides are detected in water samples. Where no guideline values are prescribed for particular pesticides, we use any detection of the pesticide in water samples as the trigger for investigation. For the 2008/09 spraying season, 196 samples were submitted for chemical analysis with no samples returning a positive result.

### **Water quantity**

In 2008/09 an information sharing agreement was signed with CSIRO that will assist with research into flood prevention and better use of limited water resources, and may also help improve future fire management practices. Under the agreement, information from our Snow Hill automatic weather

station south of Fingal, together with information from four CSIRO automatic weather station sites, will be integrated into the South Esk Hydrological Sensor Web.

The web links rainfall, temperature and wind speed information with predictive water flow models to enable more accurate stream flow forecasting, better assessment and management of flood risks and more sustainable allocation of limited water resources. We will also have access to the CSIRO data and there are plans to use the web technology as a fire-monitoring sensor and for a range of other cooperative applications in the future. The Snow Hill facility is one of six Forestry Tasmania automatic weather stations that supplement weather information available from the Bureau of Meteorology.

### Soil and geomorphology

In preparing a Forest Practices Plan, soil and geomorphology values are among the total set of site environmental values that need to be considered under the forest practices system. The Forest Practices Code provides guidance as to how forest operations are to be planned and conducted under specific soil and geomorphological conditions to ensure that soil damage such as compaction and erosion is minimised. In addition to applying these sound operational prescriptions and practices, some areas require special management, or even total protection, due to their sensitivity to disturbance. As at the end of 2008/09, a total of 4,289 hectares had been declared as being unavailable for harvesting due to the risk of erosion, with a total of 166,323 hectares being managed for soil and geoconservation values.

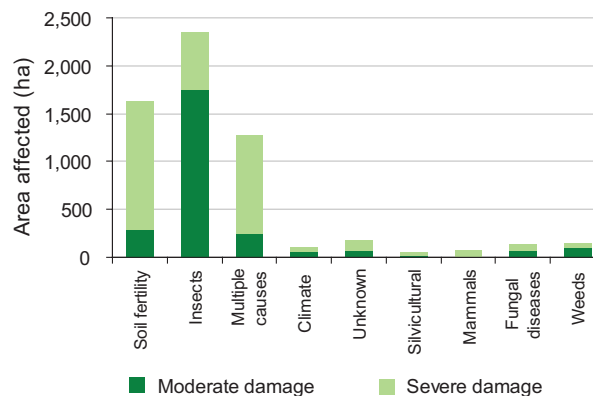
## Weeds, pests and diseases

### Forest health surveillance

Management of pests and diseases in state forests involves forest health surveillance for the general detection of health problems. There are also two pest-specific management programs: one for browsing mammals, and integrated pest management for chrysomelid leaf beetles (leaf beetle integrated pest management).

This year, forest health surveillance, involving aerial, roadside and follow-up ground inspections, was done in 41,656 hectares of eucalypt plantation. Notifications for field staff were produced for 122 detected health issues in this plantation estate. There was a large increase in the area affected by insect damage, primarily defoliation by chrysomelid leaf beetles (*Paropsisterna bimaculata*) and gum leaf skeltoniser (*Uraba lugens*). There has been a steady increase in the area of plantations suffering moderate or severe defoliation by leaf beetles during the past three years.

### The main health problems causing moderate or severe damage in eucalypt plantations in state forests.

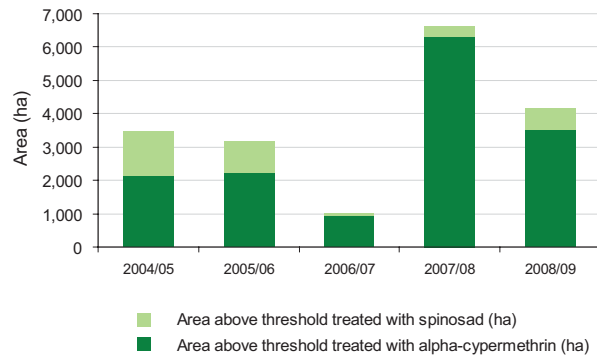


Two factors are contributing to this: the damage caused by adult beetles feeding during late summer and autumn, and an ageing plantation estate in which an increasing proportion of the plantations are beyond the age span currently targeted by the leaf beetle integrated pest management. Research is in progress to investigate the potential of lethal trap trees in providing better management of leaf beetles, particularly the late-season feeding by adult beetles. Soil and site-related issues (including multiple causes) contributing to moderate to severe nutrient deficiency or variable growth and survival affected large areas of the plantation estate. Many of these areas, once identified, are targeted to receive secondary fertiliser application.

Leaf beetle integrated pest management involves monitoring two-to-six-year-old eucalypt plantations to measure the size of leaf beetle populations. Control operations are triggered in those plantations that have over-threshold populations that would cause economic damage if not contained. Leaf beetle monitoring was done in 20,515 hectares of eucalypt plantation this year. There was a reduction in the area with over-threshold leaf beetle populations compared with previous years and a coincident reduction in the area sprayed. A more environmentally-friendly insecticide, spinosad (Success®, Entrust®), was used in 15 per cent of spray operations. This was a marked increase from the previous year.

# sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

## Area treated for leaf beetle populations with spinosad and alpha-cypermethrin.



Browsing mammals are managed in young (first one to two years) plantations and native forest regeneration. Management is heavily reliant on lethal control involving shooting (including trapping). Shooting is done prior to planting, and after planting (or seed germination in native forest) where indicated by browsing damage plots. The use of non-lethal methods to reduce reliance on shooting has increased in 2008/09. Fencing is the main non-lethal method used to protect native forests that are being managed to grow blackwood, while in plantations tall seedlings and seedling stockings are the main non-lethal methods currently used. The effectiveness of browsing management in plantations is indicated by a reduction in the area suffering moderate or severe damage that was detected during forest health surveillance.

## Use of pesticides

We strive to manage native forests organically, using processes that mimic nature. Generally, native forests are pesticide (herbicide, insecticide and fungicide) free, except in exceptional cases where introduced weeds, pests and disease pose an unacceptable risk to the environment. For commercial eucalypt and pine plantations, pesticides are required to reduce weed and pest infestations to acceptable levels. Fertilisers are required to promote optimum growth.

The usual chemical pesticide regime for plantations is to apply herbicides in the first two years and insecticides or fungicides in response to pest outbreaks. Weed control usually takes place as an initial site clean-up to remove difficult-to-kill species prior to planting the crop trees. Once planted, and depending on weed growth, follow-up weed control may be required in the same planting season or later in the following year. For each of these spraying operations we prepare a comprehensive spray plan in which streams, wet areas and mandatory buffer strips are delineated.

As of September 2008, we have been using a new risk assessment tool known as PIRI-Tas. This is a Tasmanian adaptation of the CSIRO's Pesticide Impact Rating Index (PIRI), which analyses the mobility and toxicity of chemicals according to site, operational and climatic conditions. PIRI-Tas allows staff to make decisions on pesticide use based on risk assessment, with the capacity to alter plans to reduce the risk. PIRI-Tas determines the risk of various pesticide operations based on mobility, toxicity to indicator plant, invertebrate, fish and mammal species, and site-specific variables such as soil type and landscape. It can also assess the risk of pesticide

operations to human health through comparison with the Australian Drinking Water Guidelines.

Our policy is to carry out water quality monitoring at sites where there may be a risk associated with pesticide use. PIRI-Tas provides our staff with a scientific means of identifying those sites, allowing our water monitoring resources to be effectively targeted.

For the purpose of weed control and pest management, a total of 4,515 kilograms of active ingredient was applied to 13,653 hectares within Forestry Tasmania's defined forest area (area certified to the Australian Forestry Standard) during 2008/09. This represents a significant decrease of 4,196 kilograms compared to the amount applied in 2007/08. At our Perth nursery, a total of 159.4 kilograms of active ingredient was applied for the purpose of controlling weeds, pests and fungi.

## Fuel and chemical spills

All accidental spills of fuels or chemicals are recorded in our corrective action request system and managed to ensure that potential environmental impacts are mitigated. The Department of Primary Industries, Parks, Water and Environment is notified of spills greater than 20 litres. As a result of eight recorded spills, approximately 273 litres of fuel and oil was released into the environment. The majority of this amount (100 litres) was attributed to an oil spill as a result of a harvesting excavator that was destroyed after catching alight. In another incident, approximately 50 litres was found to have run down a side drain and entered a class 4 stream following the theft of fuel from a contractor's operation.



## Fire

A wildfire is an unplanned fire and is also known as a bushfire. Wildfires have many causes, some natural such as lightning and some as a result of human activity such as campfires, escapes from planned burning operations, and some from arson. Wildfires are highly variable in intensity and duration, which is determined by the interaction of weather conditions, topography, fuel load, type and arrangement. An effective and coordinated approach to wildfire suppression and fire protection planning requires close liaison and working arrangements with other emergency and support services. We have a close working relationship with the Tasmania Fire

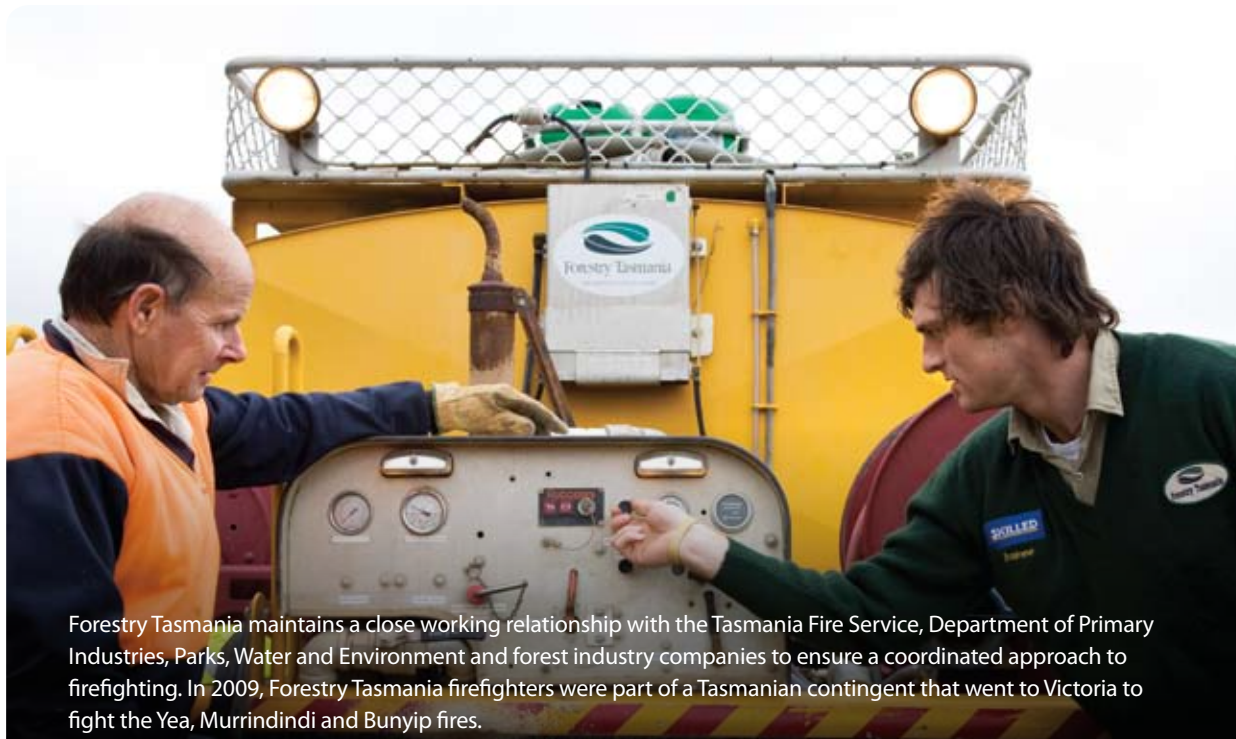
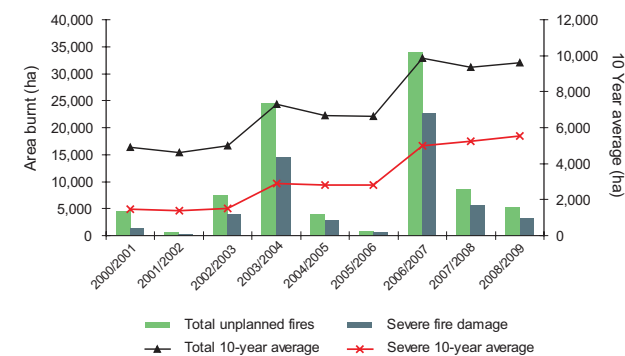
Service, Department of Primary Industries, Parks, Water and Environment and forest industry companies.

We are pro-active in attempting to reduce the area burnt and severity of fire damage on land for which we are responsible. We work co-operatively with other fire management agencies through a program of hazard reduction, training, communication, education on the use of fire, and prosecutions for the illegal or negligent use of fire.

In 2008/09, approximately 5,277 hectares was burnt as a result of 49 unplanned fires, with 2,302 hectares of this area being considered as severely damaged. A total of \$1,218,847 was spent on fire suppression activities.

In February 2009, Forestry Tasmania provided 37 firefighters and 12 vehicles to help fight the devastating bushfires that swept across Victoria. The crew formed part of a Tasmanian contingent that flew to Victoria. Their vehicles were shipped over on the *Spirit of Tasmania*, with costs donated by the TT Line. These firefighters were deployed in fireground operations at the Yea, Murrindindi and Bunyip fires.

### Area burnt in 2008/09 compared with the 10-year average.



Forestry Tasmania maintains a close working relationship with the Tasmania Fire Service, Department of Primary Industries, Parks, Water and Environment and forest industry companies to ensure a coordinated approach to firefighting. In 2009, Forestry Tasmania firefighters were part of a Tasmanian contingent that went to Victoria to fight the Yea, Murrindindi and Bunyip fires.

# *sustaining* COMMUNITY ACCESS AND HERITAGE



**Forestry Tasmania manages state forests for tourism and recreation alongside wood production and other non-wood values, to deliver social benefits including access to the forests and employment in regional communities.**

We consider it imperative that the social dimensions of forest management are considered along with the environmental and economical dimensions. We therefore aim to manage state forests for tourism and recreational, indigenous and non-indigenous cultural heritage, landscape and visual amenity values.

## **Tourism and recreation**

### **Provision of tourism and recreational facilities**

Forestry Tasmania manages state forests for tourism and recreation alongside wood production and other non-wood values, to deliver social benefits including access to the forests and employment in regional communities. Over the past year, we increased our focus on the long-term financial and social sustainability of Forestry Tasmania's tourism product through the implementation of new approaches to marketing and site management.

Find out more about our visitor sites:  
[www.adventureforests.com.au](http://www.adventureforests.com.au)

Forestry Tasmania's tourism attractions were marketed under the 'Adventure Forests' brand and collectively recorded a profitable trading result during the period. The Tahune AirWalk and Hollybank Treetops Adventures continued to

be financially successful tourism operations, while a re-assessment of Tarkine Forest Adventures positioned it for the next stage of its development.

The year saw a significant change in Forestry Tasmania's tourism management structure, with individual tourism attraction managers no longer reporting to the districts but to the General Manager Corporate Relations and Tourism, through a newly appointed Tourism Operations Manager. The move has created greater efficiencies through the availability of increased tourism expertise, application of professional resource management, synergies in purchasing, assistance with marketing and increased economies of scale.

During the year, we also developed an online marketing strategy, which over the coming years will see an increasing focus on e-commerce and a decreased reliance on more traditional forms of promotion such as brochures.

A master plan is being developed for Tahune AirWalk, which reached the plateau stage of the product life cycle over previous trading periods. The master plan is aimed at increasing customer yield by adding value to the current experience through interpretation, and by developing new tourism product that will appeal to the rapidly growing 'short break' market in Hobart and surrounds. The master plan will be implemented over the next five years.

Hollybank Treetops Adventures, a joint venture between Forestry Tasmania and Australian Canopy Tours, consolidated the promise of its first year of operation by becoming a highly successful tourism attraction. The attraction won an honourable mention in the New Tourism Development Category of the Tasmanian Tourism Awards in 2008.

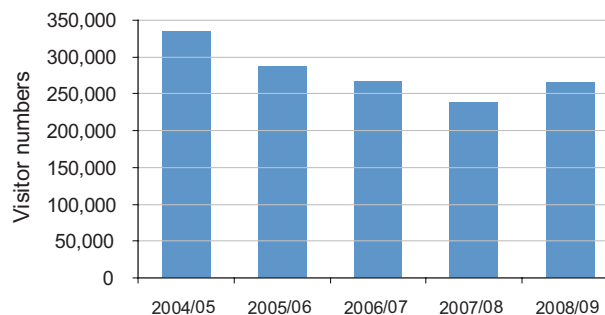
One of the key tasks undertaken during the year was an assessment of the financial performance and product mix at Tarkine Forest Adventures. Strategies were implemented to increase the efficiency of staffing levels and to stimulate the market through the development of a new mountain bike track and discounted entry price. While recognising that the attraction, and the broader Tarkine region, has significant potential for growth, it was also acknowledged that Forestry Tasmania's large overheads were an impediment to the attraction meeting its full potential. Subsequent to the end of the trading period, expressions of interest were sought from the private sector to take Tarkine Forest Adventures to its next stage of development.



The multi-sport Ben Lomond Descent was one of many events in state forests supported by Forestry Tasmania in 2008/09.

### Recorded visitor numbers\* to state forest tourism and recreational sites.

\*These figures only include those sites where accurate numbers have been kept. The increased visitation in 2008/09 is attributed to the fact that in previous years family tickets sold at the Tahune AirWalk were counted as one visitor, whereas this year the actual number of visitors entering on a family ticket has been accounted for.



A significant milestone was achieved during the year at the Maydena Adventure Hub, with the completion of the Eagle's Eyrie lookout at Abbotts Peak. Forestry Tasmania also appointed two site managers for the operation and initiated discussions with private sector tourism operators, with a view to retailing tourism products from the Maydena booking office.

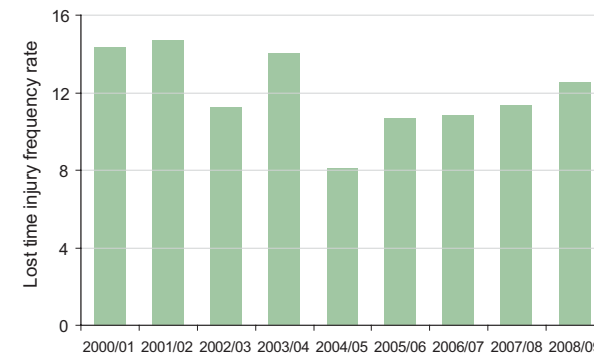
This year we also continued to encourage recreational use of the forests. The Corporate Relations and Tourism branch organised or supported a number of significant events in state forests during the year, including the Tahune AirWalk Bushfire Appeal Family Day, Targa Wrest Point, the Ben Lomond Descent, the Australian Orienteering Championships and the Tour of Tasmania Scody Cup Cycling Series.

### Health and safety

Forestry Tasmania is committed to a zero workplace injury and illness culture and sets annual performance measures for all employees. Forestry Tasmania identifies its major hazards and risks, and subsequently implements relevant safety initiatives and programs to support the set performance measures. Recent initiatives and programs have included crash-free driving programs; occupational health and safety culture presentations; and influenza vaccinations.

In the past financial year, Forestry Tasmania sustained 12 lost time incidents (LTIs). Analysis of these incidents has provided a basis for new initiatives and programs for the 2009/10 financial year. The intention will be to improve on the recent performance with the goal of zero injuries.

### Our safety performance as measured using the lost time injury frequency rate.



# *sustaining* COMMUNITY ACCESS AND HERITAGE

In addition, Forestry Tasmania has signed a partnership agreement with the Tasmanian Forest Contractors Association to implement hazard identification and risk assessment training for all harvesting contractor employees. The specific intent of this partnership and safety program is to provide encouragement and skills, so contractors' employees are continuously alert to all potential safety hazards in the bush.

Budget centre managers are responsible for convening at least one toolbox meeting group (there may be more groups depending on the location of the employees within the budget centre) who are required to meet at least once every quarter. This means that every employee within Forestry Tasmania is involved in a toolbox meeting at least four times a year. Safety and environmental issues relating specifically to the individual budget centre as well as those that relate more broadly to Forestry Tasmania are discussed at these meetings.

Safety and environmental issues of significance are further discussed by regional safety and environment bodies (members elected by their peers). Issues can then be forwarded to the statewide Safety and Environment Group, the Field Operations meeting and finally the General Management Team and the Board of Directors, which meet monthly. Safety and environmental issues are also communicated from the Board of Directors down to toolbox meetings through this structure.

## **Workers compensation**

The number of new workers compensation claims received was consistent with previous years, with a total of 33 claims. Forestry Tasmania continued to closely manage its claims portfolio, resulting in a significant reduction in expenditure. Both the cost of new claims and cost of all claims were the lowest figures in Forestry Tasmania's records, despite increases in medical and pharmaceutical expenses.

Forestry Tasmania maintained its strong focus on return-to-work and providing suitable alternative duties wherever possible. This is reflected in the fact that 58 per cent of claimants who incurred lost time injuries were back at work within one week. The severity of lost time injuries continues to remain relatively low, with 75 per cent of claimants receiving a medical clearance within one month of sustaining injury.

## **Aboriginal and historic cultural heritage**

Archaeological surveys are undertaken during pre-harvest assessment of special values. These can yield new sites, or redetection of old sites. Redetection includes sites found by us that are mentioned in historical records, but their exact location was not known. Once sites are found they are assessed and protected. They include former mines, tramways, huts, artefact scatters, boilers and old mill sites.

During the year 570 hectares were surveyed for non-Aboriginal heritage, with 26 new sites being found. These included timber tramways, huts, water races and early prospecting implements. One new Aboriginal cultural heritage site was found as a result of surveys conducted over an area of 211 hectares.

## **Community engagement**

Our stakeholders include those who can affect, or are affected by, our actions, decisions, policies or practices. These include, but are not limited to, neighbours, local councils, government, and the tourism industry. Over the years, we have aimed to develop comprehensive stakeholder lists; however, due to the size and nature of our business we are still finding that there are cases where a particular group or individual was not originally identified. When these become evident, either by such a stakeholder seeking to be acknowledged or through us conducting operations in new areas, their details are added to our lists.



In 2008, we held our first-ever open day at our Hobart headquarters. The day proved to be a great success, with 200 students as well as members of the public visiting and taking the opportunity to learn more about our approach to sustainable forest management.

We believe that one of the best mechanisms to minimise our impact on our stakeholders is to keep them informed. We have a number of formal and informal processes in place to inform stakeholders, including:

- the preparation of a Three-Year Wood Production Plan, which includes schedules for road construction and harvesting of all forest products on a district basis and provides an excellent opportunity for stakeholders to gain an overview of planned operations and to seek discussion on specific issues;
- issuing notification letters outlining the nature and scale of planned operations to neighbours who have been identified during preparing a Forest Practices Plan;
- providing full briefings to those stakeholders directly affected by a planned forest operation before the plan becomes operational, to allow for any discussions and reasonable changes to be made;
- maintaining open consultation with neighbours and the local community by providing reasonable access to information on certified Forest Practices Plans; and
- the employment of a community liaison officer within each of our five district offices, who provides a conduit for the exchange of information and resolution of local issues.

View our Three-Year Wood Production Plan at:  
[www.forestrytas.com.au](http://www.forestrytas.com.au)

During the year, we continued the implementation of our program of community re-engagement, consolidating many of the initiatives developed following the brand audit conducted last year, and engaged in many new events and outreach activities. Formal polling conducted by EMRS (Enterprise Marketing and Research Services) and informal stakeholder feedback indicated that these strategies had proved successful in increasing the community's awareness about Forestry Tasmania.

We support community activities and regularly attend community meetings on relevant issues to improve public participation and foster ongoing relationships, including being a good and socially responsible neighbour. During 2008/09 our staff attended 465 community forums, which is six per cent more than those attended last year. These included 44 community forums attended by our Corporate Relations and Tourism team on key issues such as the proposed Tarkine Drive, tourism planning, climate change, conservation and stakeholder relationships. Seven of these meetings were events initiated by Forestry Tasmania. We continue to be pro-active in our involvement and contribution towards community issues, where we can be the most effective.

Our Corporate Relations and Tourism branch represents Forestry Tasmania in forums and on issues with regional or statewide significance. It also coordinates Forestry Tasmania's regional community forums, head office open day and other official events and launches.

We manage state forests for the benefit of the entire community and aim to ensure economic returns and good environmental management are balanced with constructive

contributions that support people living in regional areas. During 2008/09 approximately \$100,000 in sponsorship was provided through the Forestry Tasmania-Southern Cross Community Assist program, and a further \$50,402 was provided to a wide range of community programs, events and projects through our district sponsorship programs.

One of the most significant events organised during the year was the first-ever open day, held at our Hobart head office. This event marked the launch of our Sustainability Charter and featured an exhibition based on the charter's five objectives. Some particularly popular displays and demonstrations included talks on locating wedge-tailed eagle nests, the Tasmanian forest insect collection and a practical demonstration of how to measure tree height using lasers.

Highlights of the event included demonstrations and presentations by 17 Forestry Tasmania staff and a live broadcast by Hobart radio station Sea FM. Visitors had the opportunity to learn about the operations we carry out on a daily basis. Over 200 students, as well as members of the public, attended the open day.

### **Community perceptions of Forestry Tasmania**

In October 2008, our Corporate Relations and Tourism branch launched a television advertising campaign, *Environmental Forestry: for the next generation*, to support the launch of our Sustainability Charter. These advertisements specifically targeted many community misconceptions about Forestry Tasmania that were revealed in an EMRS poll conducted in 2008, for example, that we still used 1080 poison and that the forests would be permanently stripped of trees in 90 years' time.

# *sustaining* COMMUNITY ACCESS AND HERITAGE

A new EMRS poll conducted in March 2009 showed that our approach to community engagement is yielding positive results, with an improvement in public knowledge of our approach to sustainable forest management. Significantly, this poll also revealed that 92 per cent of the community is opposed to illegal forest protests, such as those seen in the Upper Florentine Valley during January 2009.

## **Media relations**

EMRS polling also found that the majority of the Tasmanian community relied on the media for most of its information about Forestry Tasmania. Consequently, our Corporate Relations and Tourism branch continued its pro-active approach to ensuring that the media, and by extension, the wider community, were well informed about our activities.

During the year, 117 formal media statements were issued, and many more media enquiries were dealt with on an informal basis. Media conferences were also held on significant issues including the signing of the memorandum of understanding with the Gumatj Corporation, the release of a report on government subsidies for the forest industry, and the management of the Upper Florentine Valley.

## **Release of freedom of information responses and other key documents**

In 2008/09 we continued our policy of releasing to the media all freedom of information requests, except those relating to personal matters. A total of 13 freedom of information requests were received, with three of these being dealt with outside the freedom of information requests process. Three of these requests related to the proposed Tarkine road and three to the Florentine Valley.

In addition to these freedom of information responses, we also posted on our website copies of a number of major wood supply agreements, in order to demonstrate our commitment to being open and transparent in our commercial dealings.

## **Branchline**

Forestry Tasmania's e-newsletter, *Branchline*, continued as the primary means of keeping our stakeholders informed, with 24 issues released over the year. The newsletter is published on a flexible schedule to ensure timeliness and relevance in relation to key issues and announcements. Several improvements were also made to the format and content of the newsletter during the year, in response to stakeholder feedback and website analytics.

## **Going Bush**

The *Going Bush* television series, produced by Forestry Tasmania and Southern Cross Television, entered its second series and gained increased popularity during the year. This program, which is hosted by Nick Duigan and Andrew Hart of *Hook, Line and Sinker* fame, takes a light-hearted approach to exploring forestry and sustainable forest management issues. *Going Bush* was the top-rating program in its timeslot when it screened in February and March 2009, with polling undertaken by EMRS showing that 33 per cent of Tasmanians could recall seeing the program on television. A third series of the program has been commissioned for 2010.



The inimitable Nick Duigan and Andrew Hart, presenters of the popular *Going Bush* television series. The program was the most highly-rating show in its timeslot in 2009.

## Forestry Tasmania-Southern Cross Community Assist program

Community Assist also continued to enjoy a high profile in 2008/09, with EMRS polling showing that 30 per cent of Tasmanians were aware that Forestry Tasmania and Southern Cross were partners in the program. Many more applications for sponsorship from worthy individuals and organisations were received in 2008/09 than could possibly be funded.

Community Assist is aligned to Forestry Tasmania's values, and applications that demonstrated the ways in which proponents shared those values were eligible to be considered for funding.

In 2008/09, Community Assist once again provided a total of \$100,000 in financial assistance to individuals and organisations working to make their communities better places in which to live. Funding was available in one of three categories:

- **Care for people:** sponsorships of up to \$1,000 for individuals and regional organisations involved in projects with a strong humanitarian focus.
- **Building regional pride:** sponsorships of up to \$15,000 for dynamic and innovative organisations that encourage Tasmanians to value sporting, academic, business, artistic, scientific and/or environmental achievement.
- **Building state pride:** significant sponsorships for organisations that can demonstrate major promotional opportunities for Tasmania or show significant benefits from their project for a wide cross-section of the Tasmanian community.

Of 70 requests for funding, 17 applications were successful.

The largest sponsorship of \$30,000 went to Football Federation Tasmania to support the Tasmanian Premier League. Rowing Tasmania received a major sponsorship of \$15,000 towards the 2009 National Rowing Championships and Kings Cup, held at Lake Barrington in March, and a similar sponsorship was granted to the Southern Cross Young Achievers awards in the Regional Initiative category.

A number of last year's successful applicants also received sponsorships in 2008/09.

Canoe Tasmania received sponsorship of \$10,000 to run the 2009 Whitewater Championships and the Hydro Tasmania Wildwater World Cup 2009, and the Tasmanian Axemen's Association was allocated \$8,000 to assist with expenses of running woodchop events throughout the State.

The Tasmanian Forest Memorial Sub-Committee of the Geeveston Streetscape Committee received \$5,000 to create a memorial to those who have worked in the forestry industry. The Tamar Canoe Club's Ben Lomond Descent, the Derwent Valley Autumn Festival and the Rotary Club of Hobart's Art Show at the Wrest Point Boardwalk Gallery were again successful in their applications and each received \$4,000 in sponsorship towards their events.

Fundraising cyclist Sally Fletcher received \$3,000, and \$2,500 in sponsorship went to the Kilburn Netball Club. The Derwent Sea Scouts received \$2,000 to purchase two sails, Launceston's Northern Suburbs Community Centre received a similar amount for its community carols by candlelight. The Australian Three Day Orienteering Championships Carnival in Launceston also received \$2,000 in sponsorship. Young Burnie shooter Kye Clarke received \$1,000 to assist him in his quest to be part of the 2112 Olympics in London.



Inspirational Tasmanian ultra-marathon runner Vlastik Skvaril (centre, pictured with *Going Bush* presenters Nick Duigan and Andrew Hart), who was sponsored by the Forestry Tasmania-Southern Cross Community Assist program to ride a push scooter from Darwin to Adelaide as a fundraiser for cancer charity CanTeen.

# *sustaining* COMMUNITY ACCESS AND HERITAGE

## Care for People schools award

The 'Care for People' schools award was once again offered in 2008/09. The awards recognise worthy students who make a significant contribution to their communities, but are unlikely to benefit from the Community Assist program.

All Tasmanian schools were again eligible to participate in the award, and were approached by Forestry Tasmania during the latter part of the school year to nominate a student who had demonstrated compassion or thoughtfulness towards others. Participating schools were awarded a perpetual shield on which the student's name was inscribed, and the student was awarded a gift from Forestry Tasmania, which consisted of a backpack, drink bottle, sunhat and a family pass to either the Tahune AirWalk or Tarkine Forest Adventures.

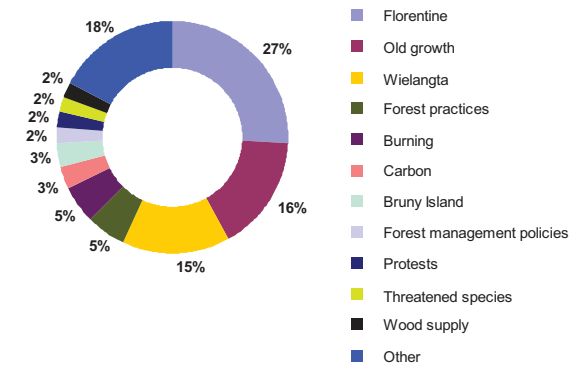
2008/09 marked the second year of the Care for People schools award, during which 95 students around the State were recognised for their achievements and 93 new shields were presented to schools.

## Understanding the areas on which we need to work

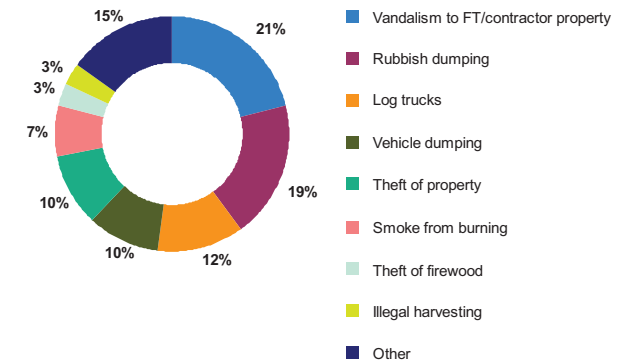
Questions, concerns or complaints about our operations and activities are received as a result of people writing or speaking to the Office of the Minister for Forests or through communicating directly with us. Some of these questions, concerns and complaints are outside our control, for example, those that relate to legislation. However, those that are relevant to us are recorded in our corrective action request system. Through this process, a responsible person is nominated to address the specific issue raised. Responses usually involve a letter, a telephone call or a meeting. In some cases, the response to a complaint includes an operational response (that is, attending to a reasonable request).

The Office of the Minister for Forests received 256 letters or other forms of correspondence this year. This represents a significant increase on last year's figure of 105. A large proportion of these (39 per cent) related to harvesting of old growth within the Florentine Valley, or the harvesting of old growth in general. A total of 183 complaints were received directly by Forestry Tasmania, the majority of which related to vandalism, mostly to contractor equipment (21 per cent); rubbish dumping in state forests (19 per cent); and log trucks and other vehicles (12 per cent).


## Percentage by topic of the main categories of letters received by the Minister for Forests about Forestry Tasmania.



## Percentage by topic of the main categories of complaints received by Forestry Tasmania.







# *sustaining* SCIENCE-BASED STEWARDSHIP

**Forestry Tasmania has a significant investment in research and development. The three goals of productivity, sustainability and profitability guide our research planning.**

Our objective is to comply with all relevant legislation and supplementary standards and we aim to continually improve the productivity of state forest and our management practices. We achieve this through maintaining a practical research program, independent third-party certification, and by ensuring that our organisational capacity is supported by the collection and use of accurate information, effective systems and procedures and skilled personnel.

## **Legal compliance**

### **Compliance with the Forest Practices Act**

Within Tasmania, all forest practices must be carried out in accordance with a certified Forest Practices Plan that contains specifications for harvesting, road works and reforestation activities in accordance with the Forest Practices Code. The code requires special provisions to protect natural and cultural values, including flora, fauna, geomorphology, soils and water, cultural heritage and visual amenity.

The emphasis of the forest practices system is to achieve high environmental standards through planning, training and education. Where problems arise corrective action, including the remediation of damage, takes place. This is followed by review, analysis and improvement of systems to ensure that similar errors do not occur in the future. Where the problem is considered serious, legal enforcement can be applied in a number of ways. This includes verbal or written notification by a Forest Practices Officer issued under Section 41 of the Forest

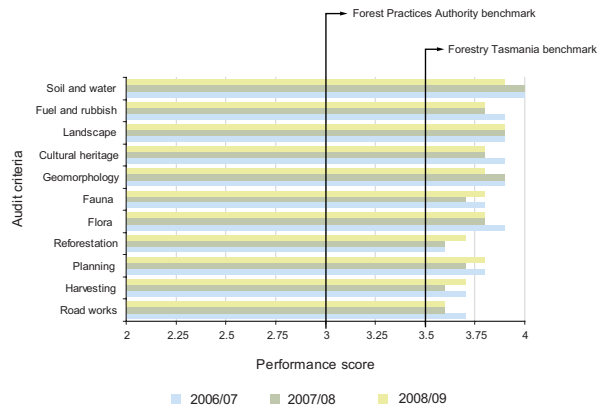
Practices Act. The Forest Practices Authority can also prosecute for failure to comply with a certified Forest Practices Plan or may impose a fine as an alternative to prosecution.

During the year, we were issued with six notices (five S41.1s and one S41.2) under Section 41 of the Forest Practices Act as a result of outstanding certificates of compliance. Certificates of compliance are the means by which forestry activities covered by a Forest Practices Plan are signed off as being completed and outline as to whether the forestry operations complied with the Forest Practices Plan or not. Certificates of compliance are required to be submitted to the Forest Practices Authority within 30 days of completion of the operation or expiry of Forest Practices Plan and the Forest Practices Authority aims to have 100 per cent lodged on time. Three notices were also issued to our contractors as a result of breaches under the Forest Practices Code.

The Forest Practices Authority undertakes an independent annual audit of a representative sample of Forest Practices Plans. The audit covers forest harvesting, road works and site preparation at various stages of completion. In addition to the assessment of operational performance, the audit checks the standard of the plan, including all assessments and procedures required by the forest practices system. The overall outcome of the 2008/09 Forest Practices Authority audit was an average statewide rating of 3.8, which is better than the "above sound" benchmark (3.5) set by Forestry Tasmania.

# sustaining SCIENCE-BASED STEWARDSHIP

## Our performance measured by the Forest Practices Authority over the past three years.



## Workplace Health and Safety Act

During the year, Workplace Standards issued two notices to Forestry Tasmania contractors for breaching the *Workplace Health and Safety Act 1998*.

## Certification

Forestry Tasmania's sustainable forest management performance is independently audited against three certification standards: namely the Australian Forestry Standard (AS4708); Environmental Management Standard (AS/NZS 14001); and the Occupational Health and Safety Standard (AS4801). These requirements are managed through Forestry Tasmania's forest management system. During the surveillance audit undertaken by SAI Global in November 2008, our third-party auditor raised a non-conformance against the Occupational Health and Safety Standard and Environmental Management Standard in one of our districts.

As a result of the good progress made by the district in addressing the relevant system requirements, the non-conformance was closed out at the follow-up audit that took place in February 2009.

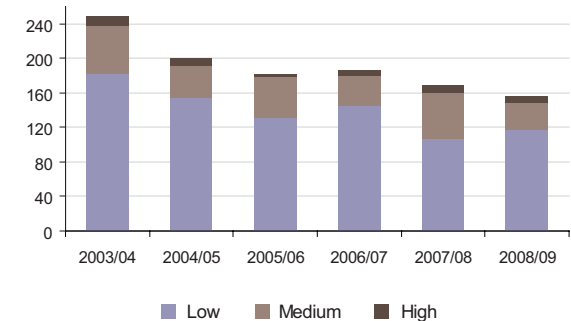
Following a rigorous tender process, NCS International was appointed as our new third-party auditor for the next three years. As part of the transitional process between SAI Global and NCS International, a comprehensive document review was undertaken in May 2009 and a detailed site audit was completed against all three certification standards in June 2009.

In addition to the external auditing of our systems, a strong component of our forest management system is the ongoing monitoring of forest operations and activities. If any non-conformances as measured against our standard operating procedures are found, a corrective action request is lodged, which includes taking the immediate corrective action required and allocating a responsible person to ensure the issue is fully addressed. For 2008/09, 155 environmental issues were registered, of which five were categorised as high, 31 as medium and 118 as low.

View our audit public summary reports:

[www.forestrytas.com.au](http://www.forestrytas.com.au)

## Number of corrective action safety requests.



The environmental corrective action requests categorised as high were as a result of:

- a harvesting machine crossing the Ransom River and removing forest produce;
- an excavator being totally destroyed after catching on fire;
- incorrect marking of a proposed road line across a class 4 stream;
- a stolen or abandoned car being burnt in a plantation block; and
- a portion of the Blue Tier forest reserve and informal reserve being harvested by a private property contractor, as a result of the boundary between the private property and harvesting area being marked incorrectly.

In addition to the regular monitoring of operations, corrective action requests are also raised through findings made in internal and external audits. In 2008/09, a total of 131 corrective action requests were raised following the 11 audits (three external and eight internal) that were conducted.

## Research

We have a significant investment in research and development, and our research capacity is concentrated in our Division of Forest Research and Development. The three goals of productivity, sustainability and profitability guide the division's research planning. Much of the Division of Forest Research and Development's research is performed in collaboration with others, as this is by far the most cost-effective way to bring into Forestry Tasmania the wide range of relevant expertise and knowledge in other institutions. Examples of these collaborations are participation in the CRC for Forestry, the Bush Fire CRC and a number of Australian Research Council linkage grants.

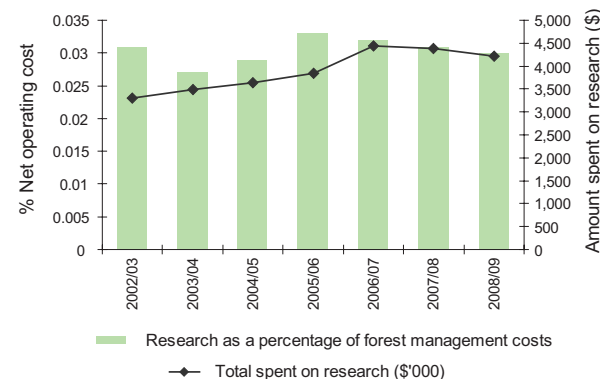
Research informs forest management and operations directly as part of Forestry Tasmania's daily business, but it is also important that this is specifically demonstrated and communicated to the wider community. The scientific and technical staff of the Division of Forest Research and Development are involved in publicising research and its implementation. The Division of Forest Research and Development is a significant player in National Science Week activities in Tasmania.

The job of a Division of Forest Research and Development researcher requires maintaining an awareness of national and international developments in their forest science speciality, performing their own research, and ensuring that results are

used to inform Forestry Tasmania's forest management and operations, as well as being involved in publicising their work. The strength of the research carried out in the Division of Forest Research and Development is grounded in its close links with both practical forest management and policy setting in a commercial environment.

During National Science Week, school groups visited the Tahune AirWalk to see a variety of science displays and to quiz the scientists who were on site. The big screen at the newly opened Warra theatre provided insight into the research being undertaken across the Tahune bridge at the Warra Long Term Ecological Research site. Over the weekend of National Science Week, Forestry Tasmania scientists hosted four free bus tours into the Warra Long Term Ecological Research site, where participants saw first-hand the extensive research being undertaken.

### Amount spent annually on research compared as a percentage of Forestry Tasmania's operating cost.



## Organisational capacity

Forestry Tasmania's key strategic human resources issues are the maintenance of the right level of skills and experience in the face of budgetary constraints and the implementation of innovative knowledge retention strategies.

Forestry Tasmania employees' conditions of employment are covered by an enterprise agreement. The current agreement, UCA No 1, had a completion date of 30 June 2009. It continues to operate while the unions who are parties to the agreement and the organisation negotiate to achieve shared objectives to enable the organisation to move forward under a new agreement.

## Training and development

During the 2008/09 financial year Forestry Tasmania's Registered Training Organisation extended its scope of operation to include the public safety training package to better meet client and business needs in relation to firefighting training.

Another extension of scope included a Certificate I in Forest and Forest Products to allow Forestry Tasmania to customise a program of training, including a Certificate II in Forest Growing and Management, to assist indigenous communities in the Northern Territory to develop sustainable forest industries.

Forestry Tasmania has a performance review and development program in place for its employees. This program includes the shared development of key result areas to indicate the outcomes that need to be achieved in the year ahead, reviewing the level to which key result areas from the past year were achieved, and a training and development program that

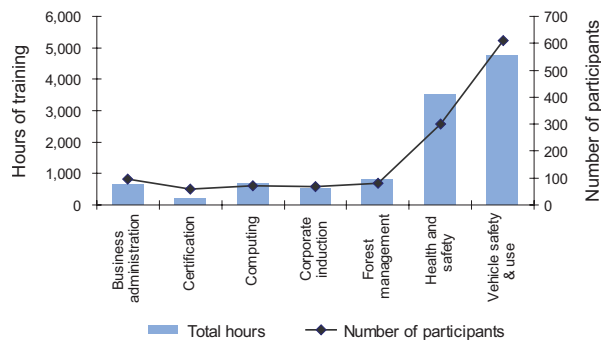
Visit [www.warra.com](http://www.warra.com) for more information on the Warra Long Term Ecological Research site.

# sustaining SCIENCE-BASED STEWARDSHIP

will be applied in the following year. This year approximately 220 (40 per cent) of Forestry Tasmania employees participated in a formal personal review and development program.

Over the year, staff attended a total of 1,284 training sessions, clocking up a total of 11,165 training hours. Training delivered in the area of health and safety and vehicle use and safety accounted for 74 per cent of this training.

## Number of people who underwent training this year and the total number of hours per subject area.



## Bursaries

The Forestry Tasmania bursary program with the University of Tasmania provides tangible support for young people from regional areas who would have difficulty attending university without financial assistance. Forestry Tasmania bursaries provide students with paid work experience, mentoring and general support during their studies. They also receive a sum of money each year for the duration of the course:

- general bursary –\$3,000 per year;
- indigenous bursary – \$13,000 per year.

In June 2009 Forestry Tasmania paid two \$3,000 bursaries and one \$13,000 bursary. In 2010, Forestry Tasmania will offer assistance under the National Forestry Masters Program.

## Trainee field foresters

The trainee field foresters program is structured over four years, and provides trainees with comprehensive on and off the job programs and formal external study periods. At the end of the program the trainees are experienced and skilled in all aspects of field operations, including contractor management.

## Summer university students

Forestry Tasmania commenced the summer university student program in 2000. Forestry students are recruited from the Australian National University, Southern Cross University and University of Melbourne. The program offers 10 to 12 weeks of summer work and has been found to be beneficial for the organisation. A number of students have returned to Forestry Tasmania as employees. The students are provided with skills and hands-on experience and they make a valuable contribution towards various projects and assist with operational work, such as inventory and survey, and supporting field staff.

## Study assistance

Assisted study is provided to help employees undertake approved studies at Tasmanian, interstate or international educational institutions or through training providers. Forestry Tasmania expects that assisted study will provide benefits both in developing employees' potential and in improving the corporation's ability to fulfil its functions and meet its business objectives.

## Recognising long-serving employees

This past year a number of long-serving employees who have reached 40-year, 35-year and 25-year milestones with Forestry Tasmania were recognised at events held at Smithton, Scottsdale, Hobart and Geeveston in November. Between them they clocked up a total of 715 years with Forestry Tasmania, with Murchison staff contributing 215 years' service, Bass 135 years, Derwent and head office 295 years and Huon 70 years.



We implement a training and development program, which allows our employees to meet their potential while meeting the needs of the business.

## Resources

To support our needs in managing forest and road operations, a major upgrade of Forestry Tasmania's forest asset management system took place in 2008/09. The upgraded system will be released early in 2009/10 and will provide the basis for a further series of functional enhancements planned for the system over the following year.

Following the successful conclusion of an 18-month operational trial of LiDAR (light detection and ranging) technology and associated systems, we have taken the decision to capture LiDAR data across state forests over three years. Estate-wide availability of LiDAR will dramatically increase our knowledge of the landscape and the forest resource, and will be applied to planning, research, harvest and engineering applications.

A new phone system was installed for the Huon district during the year. This uses our data network, including wireless links to Tahune and Southwood, to carry voice traffic, thereby

significantly reducing costs while providing new functionality such as voice mail and faxes directly to staff email accounts.

This year also saw an upgrade to the electronic log docket system that we administer on behalf of the forest industry. The upgrade means that forest contractors can receive their next week's work schedule on their handheld computer at the same time as they download product details of harvested sawlogs for the previous week.

Following the success of the pruning assessment tool as a field data capture application, a new electronic data management tool called the browsing monitoring tool was developed. The browsing monitoring tool facilitates more efficient monitoring of browsing damage during the critical early stages of forest establishment. Computerised tools were also developed for mapping the planned transportation of timber volumes over Tasmania's road network, and for enabling field staff to enter and edit spatial information into corporate mapping systems.



We successfully completed an 18-month trial of LiDAR (light detection and ranging) in 2009. The technology will now be used across state forest and will enhance our planning, harvesting and engineering.

# where to FROM HERE?



Listed below are some of the challenges and priorities we will be striving to achieve in 2009/10 to ensure we continue to deliver the aims outlined in our Sustainability Charter.

## **Sustaining biodiversity and habitat**

- Development of landscape metrics to prioritise management for restoration of old growth elements in forests where they are now sparse.
- Ensure the full adoption and implementation of “coarse woody debris management prescriptions for fuelwood and commercial firewood harvesting” for all biofuel recovery operations on state forest.
- Development of a plan for conserving swift parrot habitat in state forests in Huon district.

## **Sustaining jobs for current and future generations**

- Complete the development of Island Specialty Timbers’ new premises at Smithton.
- Develop a strategy to undertake harvesting in the Dial Range forests that considers landscape, community values and fuel reduction issues.
- Coordinate public comments on the draft Special Timbers Strategy and prepare final strategy.
- Develop an apiary management plan/strategy in consultation with the Tasmanian Beekeepers Association.

## **Sustaining carbon stores, clean air, water and healthy forests**

- Appoint a specialist in forest carbon research.
- Develop generic equations to model plantation water usage by *Eucalyptus nitens* plantations.
- Analysis of the linkages between river health and land-use patterns.
- Establish industry-wide coordination of insect pest management.

## **Sustaining community access and heritage**

- Seek adventure activity providers to partner with us at the Maydena Adventure Hub.
- Complete collaborative ARC research project with Melbourne University on visualisation of alternative forest management scenarios.
- Develop process for lodging certified forest practice plans on our website.
- Develop an online forum in which the Managing Director and other key staff answer questions from the public.

## **Sustaining science-based stewardship**

- Redevelop the forest operation database to deliver long-term asset management functionality.
- Achieve area, cost and quality targets for the first year of the LiDAR data capture program and train all field staff to access and use LiDAR map/image products.

# GLOBAL REPORTING INITIATIVE CONTENT INDEX

GRI Ref.	Description	Core or additional	Location within this report
<b>Strategy and analysis</b>			
1.1	CEO statement.	Core	Message from the Chairman and Managing Director
1.2	Description of key impacts, risks, and opportunities.	Core	Message from the Chairman and Managing Director
<b>Organisational profile</b>			
2.1	Name of the organisation.	Core	Our organisation
2.2	Primary brands, products and services.	Core	Our organisation
2.3	Operational structure.	Core	Our organisation
2.4	Headquarters' location.	Core	Our organisation
2.5	Countries of operation.	Core	Our organisation
2.6	Nature of ownership and legal form.	Core	Our organisation
2.7	Markets served.	Core	Our organisation
2.8	Scale of organisation.	Core	Our organisation
2.9	Significant changes during the reporting period regarding size, structure or ownership.	Core	Message from the Chairman and Managing Director
2.10	Awards received during the reporting period.	Core	Tourism and recreation
<b>Report parameters</b>			
<b>Report profile</b>			
3.1	Reporting period.	Core	Reporting structure and scope
3.2	Date of most recent previous report.	Core	Reporting structure and scope
3.3	Reporting cycle.	Core	Reporting structure and scope
3.4	Contacts.	Core	Contact us
<b>Report scope and boundary</b>			
3.5	Process for defining report content.	Core	Reporting structure and scope
3.6	Boundary of the report.	Core	Reporting structure and scope
3.7	Limitations of the scope or boundary of the report.	Core	Reporting structure and scope
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that could affect comparability.	Core	Reporting structure and scope
3.9	Data measurement techniques and assumptions.	Core	Reporting structure and scope
3.10	Explanation of the effect of any restatements of information provided in earlier reports.	Core	Reporting structure and scope
3.11	Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report.	Core	Reporting structure and scope

# GLOBAL REPORTING INITIATIVE CONTENT INDEX

GRI Ref.	Description	Core or additional	Location within this report
<b>GRI content index</b>			
3.12	GRI content index.	Core	GRI content index
<b>Governance, commitments and engagements</b>			
<b>Governance</b>			
4.1	Governance structure.	Core	Corporate governance
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Core	Corporate governance
4.3	State the number of members of the highest governance body that are independent and/or non-executive members.	Core	Corporate governance
4.4	Mechanism for shareholders and employees to provide recommendations or direction to the Board.	Core	Corporate governance
<b>Stakeholder engagement</b>			
4.14	List of stakeholder groups engaged by the organisation.	Core	Community engagement
4.15	Basis for identification and selection of stakeholders with whom to engage.	Core	Community engagement
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Core	Community engagement
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting.	Core	Understanding the areas we need to work on
<b>Economic performance</b>			
<b>Economic performance</b>			
EC1	Economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Core	The year at a glance Financial performance
<b>Market presence</b>			
EC6	Policy, practices, and proportion of spending on locally based suppliers at significant locations of operation.	Core	Wood products
<b>Indirect economic impacts</b>			
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro-bono engagement.	Core	Community service activities



GRI Ref.	Description	Core or additional	Location within this report
<b>Environmental</b>			
<b>Materials</b>			
EN1	Materials used by weight or volume.	Core	Wood products
<b>Energy</b>			
EN3	Direct energy consumption by primary energy source.	Core	Developing an understanding of our energy use and emissions
EN4	Indirect energy consumption by primary energy source.	Core	Developing an understanding of our energy use and emissions
EN5	Energy saved due to conservation and efficiency improvements.	Additional	Developing an understanding of our energy use and emissions
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Additional	Developing an understanding of our energy use and emissions
<b>Biodiversity</b>			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Core	Reserve system
EN14	Strategies, current actions and future plans for managing impacts on biodiversity.	Additional	Biodiversity
<b>Emissions, effluent and waste</b>			
EN16	Total direct and indirect greenhouse gas emissions by weight.	Core	Developing an understanding of our energy use and emissions
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Additional	Developing an understanding of our energy use and emissions
EN23	Total number and volume of significant spills.	Core	Fuel and chemical spills
<b>Compliance</b>			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Core	Compliance with the Forestry Practices Act
<b>Transport</b>			
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce.	Additional	Developing an understanding of our energy use and emissions

GRI Ref.	Description	Core or additional	Location within this report
<b>Social</b>			
<b>Employment</b>			
LA1	Total workforce by employment type, employment contract and region.	Core	Wood products
<b>Occupational health and safety</b>			
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Additional	Health and safety
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region.	Core	Health and safety
<b>Training and education</b>			
LA10	Average hours of training per year per employee.	Core	Organisational capacity
LA12	Percentage of employees receiving regular performance and career development reviews.	Additional	Organisational capacity
<b>Society</b>			
<b>Community</b>			
SO1	Nature, scope and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting.	Core	Community engagement

# *sustainable* FOREST MANAGEMENT POLICY 2009

Forestry Tasmania is a forest land manager responsible for the management of Tasmania's state forest resource.

Forestry Tasmania is committed to continual improvement and ensuring that this forest resource is managed for optimum community benefit, using environmental best practice to create long-term wealth and employment for Tasmanians.

Under this policy, Forestry Tasmania will:

- Conduct operations to meet or exceed all relevant Australian and Tasmanian environmental and forest management legislation, standards and codes.
- Actively engage with stakeholders and neighbours and encourage them to provide feedback on Forestry Tasmania's progress in sustainable forest management.
- Maintain a Sustainability Charter (Forest Management Plan) that outlines Forestry Tasmania's strategic aims and goals.
- Undertake and promote collaborative research that will ensure that operational practices are underpinned by sound science.
- Maximise product recovery, minimise waste and implement measures that strive to prevent pollution as a result of forest operations.
- Maintain a comprehensive forest management system that is externally certified against ISO14001 and the Australian Forestry Standard (AS4708).
- Regularly monitor, audit, review and publicly report on our forest performance.
- Clearly define and communicate environmental and forest management responsibilities to our employees and support them with training and appropriate resources to ensure those responsibilities are fulfilled.
- Encourage and facilitate compliance with environmental and sustainable forest management standards by suppliers, contractors, and the users of state forests.

Bob Gordon  
Managing Director  
June 2009

This policy supersedes our sustainable forest management policy dated November 2007.



*Adjacent page: tear-out feedback form.*

# feedback FORM

## Tell us what you think

In line with our commitment to continuously improve on our annual reporting, we would like to invite you to comment on how this report met your expectations and requirements. In addition to the completion and return of this section, any other comments or suggestions on how we might be able to enhance our report to more clearly report on issues relating to the productive, protective and social roles of forests and forest ecosystems can be directed to the contact details given below.

### 1. How much of our report did you read?

All  The majority  Some

### 2. Overall, how do you rate the report?

Not at all informative  1  2  3  4  5  
Extremely informative/useful

### 3. Please rate the following criteria by checking the appropriate category:

	Poor	Good	Very good
Substance / Content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Readability / Understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completeness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appearance / Format	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 4. What is your opinion on the following sections?

	Poor	Good	Very good
Sustaining biodiversity and habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustaining jobs for current and future generations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustaining carbon stores, clean air, water and healthy forests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustaining community access and heritage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustaining science-based stewardship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 5. As a result of reading the report, do you have a clear and sufficient understanding about Forestry Tasmania's approach to sustainability and financial reporting?

Yes  No

#### Comments can be directed to:

Senior Environmental Planner  
e-mail: [kevin.swanepoel@forestrytas.com.au](mailto:kevin.swanepoel@forestrytas.com.au)  
Division of Forest Management, Planning Branch  
Forestry Tasmania, GPO Box 207  
Hobart Tasmania 7001

### 6. What additional information would you like to see in future reports?







Forestry Tasmania