



2009-10

stewardship report



Forestry Tasmania



Forestry Tasmania introduced Top of the World tours at the Eagles Eyrie, Maydena, in 2010. The intimate tours combine Tasmania's rugged mountain environment with fine food and wine and expansive views over the wilderness from the Eyrie.

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Grégore Thaurin, Division of Forest Research and Development.

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Front cover: Todd Hall, a forest contractor in north east Tasmania. Todd and his workmates from T&D Contracting won a Forestry Tasmania safety award in 2010 in recognition of their dramatically improved safety performance and strong commitment to maintaining a safe workplace.



CONSUMER INFORMATION pages printed on Envi.

report card 2009/10

Following is an overview of our performance for 2009/10 as measured against our sustainable forest management performance objectives and targets set for each of the sustainability objectives and aims within the 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; and
 - 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*



Lachie Clark, Division of Forest Research and Development and Simon Kang, Ta Ann Tasmania.

Sustaining biodiversity and habitat

- ✓ Progress continues to be made in the development of alternatives to clearfelling. In 2009/10 partial logging, including variable retention, contributed to 56 per cent (740 hectares) of the total old growth area harvested (1,320 hectares).
- ✓ Sixteen research projects were undertaken that specifically covered threatened species (flora and fauna).
- ✓ Audits showed all 27 authorised activities in forest reserves delivered good social and environmental outcomes.
- ✓ We prepared a draft interim three-year plan for the swift parrot on state forest in the southern forests and Bruny Island. This was the first landscape-scale strategic plan developed for the species.
- ✓ 12 new giant trees were added to the giant tree register.
- ✓ We developed a landscape metric that informs us of the extent of mature forest and its influence over the surrounding landscape in maintaining biodiversity.

Sustaining jobs for current and future generations

- ✗ An operating loss of \$8 million was recorded, significantly down from the \$9.3 million operating profit in the previous year.
- ✓ The estimated value of wood production from state forests, based on the price paid by Forestry Tasmania's customers at the mill door, was \$205 million.
- ✓ Total payments made to suppliers, contractors and employees was \$171 million.
- ✓ A total of 210,538 cubic metres of high quality sawlog was supplied to Forestry Tasmania customers. This volume is well within the sustainable production level.
- ✓ An additional 1,374 hectares of hardwood plantation was created, bringing the total hardwood plantation estate to 55,226 hectares.
- ✓ Of the 6,882 hectares of native forest measured against our quality standards, 89 per cent (6,156 hectares) met the prescribed standard.
- ✓ From the post-logging residue assessments conducted in 82 harvesting areas, the standard of less than five merchantable tonnes per hectares was achieved.

Sustaining carbon stores, clean air, water and healthy forests

- ✓ For commercial eucalypt and pine plantations, pesticides are required to reduce weed and pest infestations to acceptable levels. All of the 99 water samples collected and submitted for independent testing following the application of pesticides were free of chemicals.
- ✗ Air quality monitoring as measured at the Judbury station showed our planned burning contributed to elevated PM_{2.5} atmospheric particulate levels over a three-day period.
- ✗ Approximately 370 litres of fuel and oil was released into the environment in five recorded spills.

Sustaining safety, community access and heritage

- ✓ An outstanding safety performance figure of 8.56 (LTIFR or lost time injury frequency rate) was achieved against our performance measure of 10.
- ✓ Forestry Tasmania staff attended 748 community forums and meetings with stakeholders.
- ✓ Approximately \$372,000 in sponsorship was provided to organisations and individuals under the Forestry Tasmania–Southern Cross Community Assist Program and corporate sponsorship program. A further \$37,194 was provided to a wide range of community programs, events and projects through district sponsorship programs.

Sustaining science-based stewardship

- ✓ 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.
- ✓ No notices were issued to Forestry Tasmania under Section 41 of the Forest Practices Act.
- ✗ One S41 notice was issued to a Forestry Tasmania road contractor as a result of adversely affecting the water quality within a domestic water catchment area as a result of poor road construction practices.
- ✓ No notices were issued to Forestry Tasmania or its contractors for breaches against Section 38 of the *Workplace Health and Safety Act 1998*.
- ✗ A major non-conformance was raised by our external auditors in an external audit that took place in May 2010. This was as a result of the auditors finding that our integrated management system at Tarkine Forest Adventures had not functioned effectively for some time. A comprehensive action plan to address this finding was prepared and endorsed by the auditors, thus reducing the finding to a minor non-conformance.
- ✓ A total of \$4,060,000 was contributed to furthering sustainable forest management research.

The year AT A GLANCE

Year at a glance 2010

	2009/10	2008/09	2007/08
Forest estate ('000 hectares) at 30 June			
Total state forest (includes forest reserves)	1,490	1,492	1,489
Total forest reserves	222	222	222
Total plantations ¹	107	107	106
Area certified to Australian Forestry Standard ³	1,439	1,439	1,437
Forest areas established ('000 hectares)²			
Native forest regenerated	9.2	11.3	11.2
Hardwood plantations established (includes replanting)	1.4	3.2	3.8
Softwood plantations established (including replanting) ⁵	1	1.3	1.7
Native forest area harvested ('000 hectares)			
Clearfell, selective harvesting and thinning ⁴	8.7	12.4	12.9
Wood production			
Hardwood – high quality sawlog (m ³)	210,538	245,154	303,951
Hardwood – sawlog, veneer and peeler – all grades (m ³)	559,888	522,600	622,334
Hardwood – pulpwood (tonnes)	1,388,986	2,005,450	2,230,874
Hardwood – plantation pulpwood (tonnes)	179,495	135,550	176,703
Softwood – sawlog (m ³)	252,298	231,100	269,680
Softwood – pulpwood (tonnes)	276,206	223,220	243,563
Fire management services			
Number of fires attended	65	49	83
Area of state forest burnt (hectares)	6,461	5,277	8,500
Cost of suppression (current values \$'000)	3,701	1,219	2,251
Roads			
Constructed (kilometres)	109	128	184
Employment			
Lost time injury frequency rate	8.6	12.5	11.4
Operating revenues per employee (\$'000)	312	330	353
Earnings before interest and tax per employee (\$'000)	(14)	18	21
Wood production per employee (tonnes)	5,179	5,782	6,775
Finance (\$'000)			
Return on assets	0.30%	1.10%	1.2%
Operating revenue (including interest)	162,277	182,952	186,167
Operating expenditure before costs of non-commercial zones	(161,012)	(164,606)	(177,600)
Profit before tax, costs of non-commercial zones and valuation changes	1,265	18,346	8,567
Less costs of non-commercial zones	(9,262)	(9,090)	N/A
Profit before tax, and valuation changes	(7,997)	9,256	N/A



Grégore Thaurin and Elsa Libis, Division of Forest Research and Development.

Notes:

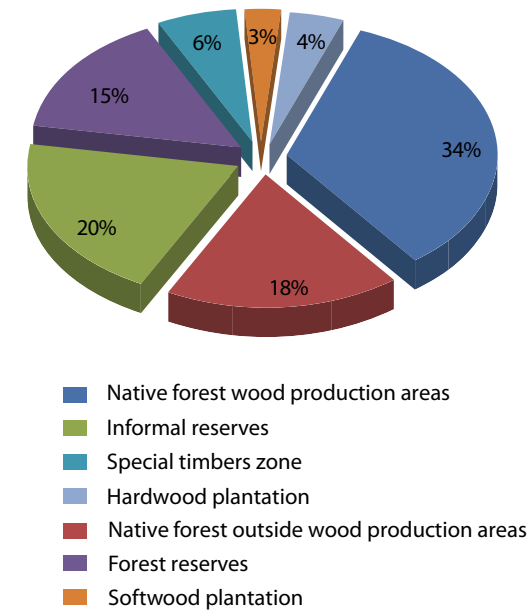
1. Figures exclude plantation areas harvested but not yet replanted. Includes all plantations in state forests and Forestry Tasmania managed plantations on other land tenures.
2. Figures are for operations that were completed during the 2009/10 financial year.
3. This area excludes some leases over state 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. Excludes some West Coast softwood plantation that is being harvested and naturally restocked from fallen cones.

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 approximately 39 per cent of Tasmania's forests.

Just under half of state forest (711,900 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 513 staff and 1,194 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 2009/10, 2.36 million cubic metres of sawlog and pulpwood were harvested from state forest, generating around \$205 million based on the price paid by our customers for logs delivered 'at the mill door'.



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 performance.

As a fully state-owned government business enterprise, Forestry Tasmania's Board of Directors is responsible directly to the Minister for Energy and Resources for its operations. All current directors have been appointed in accordance with the *Forestry Act 1920* and their responsibilities are outlined in the *Government Business Enterprises Act 1995*. As a result of recent changes in legislation future appointments will be in accordance with the *Government Business Enterprises Act 1995*. Remuneration for non-executive directors is set by government.

The financial statements included in this report were audited by the Tasmanian Audit Office and were found to accurately reflect 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. (See the Financial Performance section, p20 for more detailed information on our forest estate evaluation.)

Calculations of the value of our forest estate 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: the Australian Forestry Standard (AS4708); the Environmental Management Standard (AS/NZS 14001); and the Occupational Health and Safety Standard (AS4801).

Board of Directors 2009/10

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 – to 17 August 2010

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

reporting STRUCTURE AND SCOPE

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

Information in this report provides a summary of our performance for the 2009/10 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.

We expect 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, the data tables used in this report will continue to be provided in future years, so that long-term trends become apparent over time.

In addition to reporting against the Sustainability Charter, this year we again have 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.

The Global Reporting Initiative content index is available at the end of this report and shows the Global Reporting Initiative indicators against which we have reported, and where this information can be found.

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, and tourism and recreation management and development. Where Forestry Tasmania is a joint venture partner, for example, in 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 'report card' 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 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.

Read more about the Global Reporting Initiative at:
www.globalreporting.org

The 2009/10 financial statements and the sustainable forest management data underpinning this report are available as appendices on the DVD accompanying this report, and may also be downloaded from www.forestrytas.com.au



message FROM THE CHAIRMAN AND MANAGING DIRECTOR

Major downturns often have many causes. During 2009/10, the global financial crisis, a significant reduction in the export of Tasmanian wood products to Japan, and the well-publicised collapse of plantation managed investment schemes collectively created difficult trading conditions for Australian wood products. In short, during 2009/10, Forestry Tasmania sailed into the perfect storm.

Notwithstanding the difficult market conditions, we managed to record a small underlying profit of \$1.3 million before the cost of unfunded community service obligations (\$9 million) took the bottom line into the red for the first time since corporatisation.

The \$8 million operating loss was towards the bottom end of the \$7 million to \$10 million forecast in the March quarter.

The focus for the board and senior management had been to structure the company to survive the significant downturn in international markets.

The year's profit result reflects these adverse market conditions. We managed the fall in revenue by reducing operating expenses, down \$4 million on the previous year, and by winding back capital expenditure by 26 per cent.

Fortunately, the development of the rotary peeled veneer mills in the Huon and at Smithton reduced our dependency on the Japanese market, which cut worldwide pulpwood imports by 20 per cent.

By having alternative customers, such as Ta Ann, we were able to shield to some extent our forest contractors from the worst of the downturn – payments to contractors fell nine per cent from \$88 million to \$81 million.

The challenges of the trading year saw us develop and take the first steps in implementing a long-term strategy to develop new export markets in the economic powerhouse of China, which will eventually lead to the creation of further downstream processing opportunities here in Tasmania.

We primarily developed the strategy in response to the shift in market conditions in Japan, which for the past 30 years was the major destination for Tasmanian woodchips. However, as the pulp and paper mills in Japan age, Japanese investment in this infrastructure is now heading offshore to China, where the

same quality products can be produced more competitively. Smart exporters are recognising that China will emerge as a significant wood processing market, and are seeking to gain a valuable foothold with Chinese customers.

During the year, we were successful in securing new markets in China for our second-grade peeler logs, which were previously exported to Japan as woodchips. The peeler logs meet the demands of a different market to those currently processed by Ta Ann Tasmania, which produces veneer for applications such as cabinetry and flooring. The logs we are exporting to China are being processed into products such as laminated veneer lumber for building construction, and thus further diversifying our product base. We commenced exporting the logs to China in March 2010.



In 2009/10, our new business arm, Forest Technical Services, undertook projects in China, as well as Chile, Western Australia and Arnhem Land.

Just as we developed the export market for first-grade peeler logs in Asia before attracting Ta Ann to invest in Tasmania, we are now familiarising new customers with the benefits of our second-grade logs for use in construction products. In doing this, we are not looking one year, or even five years ahead, but 10 years hence. Ultimately, we plan to bring more investment to Tasmania, with the development of the State's own laminated veneer lumber mill.

Another issue during 2009/10 that was of major consequence to our business was the initiation of round table discussions between the forest industry and environmentalists. Following the March 2010 state election, the new Government proposed that round table discussions be held to develop positive solutions to the decades-long debate over the right balance between the social, environmental and economic objectives for Tasmania's multiple-use forests. Discussions between industry and environmental non-government organisations commenced, with a view to bringing agreed proposals to the Government for further consideration. Forestry Tasmania engaged positively with the round table discussions and will contribute information on the resource implications of various scenarios as they are identified.

The financial year saw us commission a revaluation of the state forest estate by international valuers James W Sewall. The revaluation stemmed from the need for Forestry Tasmania to identify its commercial assets (primarily harvestable forests), which generate a financial return, from its non-commercial assets, such as forest reserves. As a result of the revaluation, \$277 million in non-commercial land value was written off.

The revaluation has no impact on our cash position or ability to operate, but will provide a more accurate representation of our return on assets in coming years.

The year also saw a major review of our role as a tourism developer, during which we determined that market conditions were now strong enough for us to move away from our role in stimulating tourism growth, to that of an enthusiastic landlord. To this end, we spent much of the year preparing Tarkine Forest Adventures for divestment, and were pleased to sign a lease with private sector operators GMG Pty Ltd subsequent to the reporting period. We are confident that the company has the drive to bring this key north-west attraction to its full potential as a tourism destination.

Despite the challenges brought during 2009/10, the year was not without its notable successes. Our consulting business, Forest Technical Services, went from strength to strength, with projects undertaken as far afield as Arnhem Land, Western Australia, China and Chile. Our trial of LiDAR (light detection and ranging) remote sensing proved a great success, and we are now implementing the technology across state forest.

Following research and public review undertaken in the 2008/09 financial year, we also released our Special Timbers Strategy in February 2010. The strategy has seen the creation of a new 100,000-hectare Special Timbers Zone, which has delivered resource security to the 10,000 people involved in a sector that is integral to the Tasmanian brand.

Forestry Tasmania faced some of the greatest challenges in its 89-year history during 2009/10, yet we survived the year in a much stronger position than other businesses within our sector. Our diversification and focus on value adding over the previous decade ensured many of our markets were less affected by the prevailing economic conditions. This in turn gave us the capacity to respond to the downturn in Japan by seeking, and gaining, new opportunities. As a result, we weathered the storm and have emerged with a positive outlook for the future.



Adrian Kloeden
Chairman



Bob Gordon
Managing Director

sustaining BIODIVERSITY AND HABITAT



Our management of biological diversity includes contributing to the statewide reserve system and special management of rare communities and habitat, old growth and threatened species.

Science informs us that not all values can be represented in any one part of the estate at a particular time, and therefore we 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. While informal reserves are also used to maintain CAR reserve values identified in the

Regional Forest Agreement, they can be modified to meet forest management requirements, provided the overall level of protection of CAR reserve values is maintained.

CAR reserves provide security for species that might otherwise be disadvantaged by production forestry. They provide both continuity of habitat and, for many plants and animals, re-colonisation sources. In this CAR reserves can be said to have 'influence' over the surrounding production forest, with the level of influence proportional to the distance to the production forest from the reserve.

Almost 53 per cent of state forest is managed for the protection of environmental values, including 35 per cent within the CAR reserve system and another 18 per cent that lies outside areas identified for timber production.

Area protected in state forest.

Land classification state forest area (ha) ²	2005/2006	2006/2007	2007/2008 ⁴	2008/2009	2009/2010	(%) SF area at 30/06/10
Forest reserves	175,000	222,200	222,200	222,100	221,900	14.7%
Informal reserves	347,500 ³	292,400	295,600	298,000	299,100	19.8%
Outside wood production areas ¹	288,300	292,000	295,500	306,900	278,000 ⁵	18.4%
Non production total ⁶	810,800	806,600	813,300	827,000	799,000	52.9%

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. This figure includes land intended for formal reservation under the Tasmanian Community Forest Agreement. The formal Tasmanian Community Forest Agreement reserves were not dedicated as at 30 June 2006.
4. Some figures amended to include reserved plantations in with reserves, rather than production forest.
5. Reduction is as a result of assigning area to the Special Timbers Zones.
6. Figures in total row are not the sum of the columns but the rounded actual totals. Percentages based on actual areas.

State forest activity assessments

Our districts are working hard to improve relations with the community and other industries that work and play in state forest to ensure that activities performed outside the Forest Practices System are also meeting high environmental standards while providing great social and practical outcomes.

Forestry Tasmania manages a large reserve estate for multiple values under the guidelines of a reserve management code of practice. Activities that take place in these reserves and in state forests outside the forest practices system are environmentally assessed using our State Forest Activity Assessment process.

This covers a broad range of activities, from constructing new infrastructure, to fuel reduction burning, to hosting community events. Many of the activities are proposed by groups or parties wishing to make use of state forest. We work with them to produce a comprehensive plan of the proposed activity to ensure it meets our environmental standards.

The program of community events and strategic fuel reduction burning is growing every year. Accordingly, our State Forest Activity Assessment program has also grown, as have the skills and community relationships of staff performing the assessments, resulting in some notable achievements.

One example is the Tarkine Forest Adventures mountain bike trails, which were built in consultation with US mountain bike trail design expert Joey Klein. The trails range in grade from easy to difficult and attract riders of all abilities, ranging from families seeking a fun day out to serious sportspeople, and are a great asset for the north-west.

Community relations were strengthened by another example of the assessment process: the Warrawee Forest Reserve historic trail, south of Latrobe. This project was undertaken in conjunction with Green Corps and monitored by a local Landcare group. This special reserve is mostly looked after by the community who helped to build the trail.

Similarly, the Tahune AirWalk hosted a successful mountain bike marathon event and the last stage of Targa Wrest Point in 2009/10. These events were well managed between the Tahune site management, Huon District Planners and Corporate Relations and Tourism staff.

We work with other organisations active in state forests, such as Hydro Tasmania and Transend, to improve our knowledge of their practices and ensure they comply with our environmental standards. For example, we undertake planning work with Hydro Tasmania in their roadside vegetation clearing to manage the fire risk around power lines.

In 2009/10 a member of our planning team in Derwent worked with Hydro Tasmania and improved working relations and procedures through this process.

The 2009/10 audits of State Forest Activity Assessments showed that environmental plans continue to improve, and good social and environmental outcomes are being delivered. The results obtained from these audits clearly show that we are meeting the Code's key requirements. Given this, there are still some aspects that require minor improvement such as timely completion of the monitoring component of the process. Monitoring is an important step at the completion of an activity to ensure the relevant environmental controls and specific management actions have been implemented and, where relevant, that rehabilitation has been effective.

In 2009/10 all 27 of the activities that were audited had taken place within forest reserves.

State Forest Activity Assessment audits.

Type of activity	2007/08		2008/09		2009/10	
	Number of activities outside reserves	Number of activities in reserves	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	-	4
Tourism infrastructure	1	2	-	1	-	7
Roads and related infrastructure	1	1	-	1	-	3
Other	-	2	-	0	-	2
Water infrastructure	-	1	1	0	-	2
Recreational events	-	-	4	9	-	9

sustaining BIODIVERSITY AND HABITAT

Biodiversity

We ensure the integrity of biodiversity in state forests through the CAR reserve system, application of the Forest Practices Code and by maintaining a permanent native forest estate. The maintenance of a permanent forest estate means 95 per cent of native forest as mapped in 1996 is to be maintained as native forest on a statewide basis. This objective is achieved through Tasmania's permanent native forest estate policy and is given effect by the Forest Practices Authority through Forest Practices Plans. Forestry Tasmania has its own, more stringent guidelines for maintaining its permanent native forest estate. These prohibit broad-scale conversion of native vegetation in state forest.

We use a management decision classification system to assist us managing 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 across the forest estate. They 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.

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

Area managed (ha)	2006/2007	2007/2008	2008/2009	2009/2010
Biodiversity spines	201,696	201,520	201,813	201,100
Fauna	60,569	63,131	92,917 ²	80,900
Flora	385,892	399,608	386,788 ¹	388,100
Wildlife habitat strips	71,632	72,639	71,947	71,700

Note: These management categories are not mutually exclusive.

1. The area in 2007/2008 included some erroneous polygons. These were removed in 2008/2009 as part of a management decision classification review.
2. Change in methodology. Previously wildlife habitat strips were simply subtracted from total fauna area, but this then meant that any wildlife habitat strips that also had other fauna values were not counted for those fauna values. From 2008/09 they were run as separate queries, which showed that in fact about 30,000 hectares in wildlife habitat strips also have other specific fauna values.

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 types outlined in the Regional Forest Agreement.

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, Water and Environment), we develop strategic plans for the management of threatened flora and fauna species in state forests (for example the Simson's stag beetle). At the local level threatened species are identified through searches undertaken as part of our operational planning.

Improving our understanding of wedge-tailed eagle nests

The endangered Tasmanian wedge-tailed eagle is Tasmania's top land predator and has a very important role in the ecosystem.

As part of our commitment to good threatened species management, we search potential habitat in state forests for new wedge-tailed eagle nests every year and reserve at least 10 hectares of forest around each nest found. We are also developing a strategy to help ensure the continuation of nesting habitat. We now protect areas known to have supported nests in the past if patches of old growth are sparse in the landscape.

See landscape matrix article, page 16.

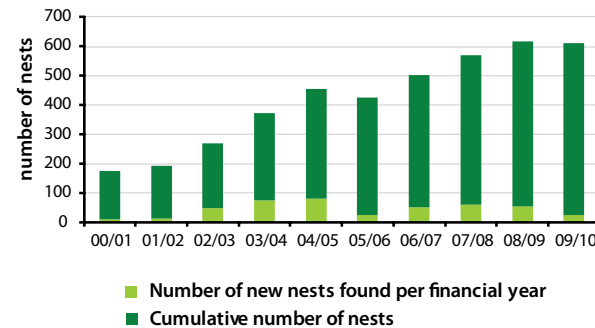
We have also been involved in research that identifies potential nesting habitat, so our planners can better find and protect nest sites prior to forest operational planning.

Under the forest classification system a forest is categorised as 'mature' or 'regrowth' depending on its most significant element, so there may be regrowth forest with the occasional old tree, and likewise some mature forest may have small patches of regrowth.

We recently found wedge-tailed eagle nests occurring in regrowth forest, challenging previous notions that nests only occur in old growth forest. We now have more data to help understand where suitable nesting habitat occurs. We have examined this data and found that 10 per cent of nests are in regrowth forest. One possible explanation is that regrowth forest can contain some mature forest trees.

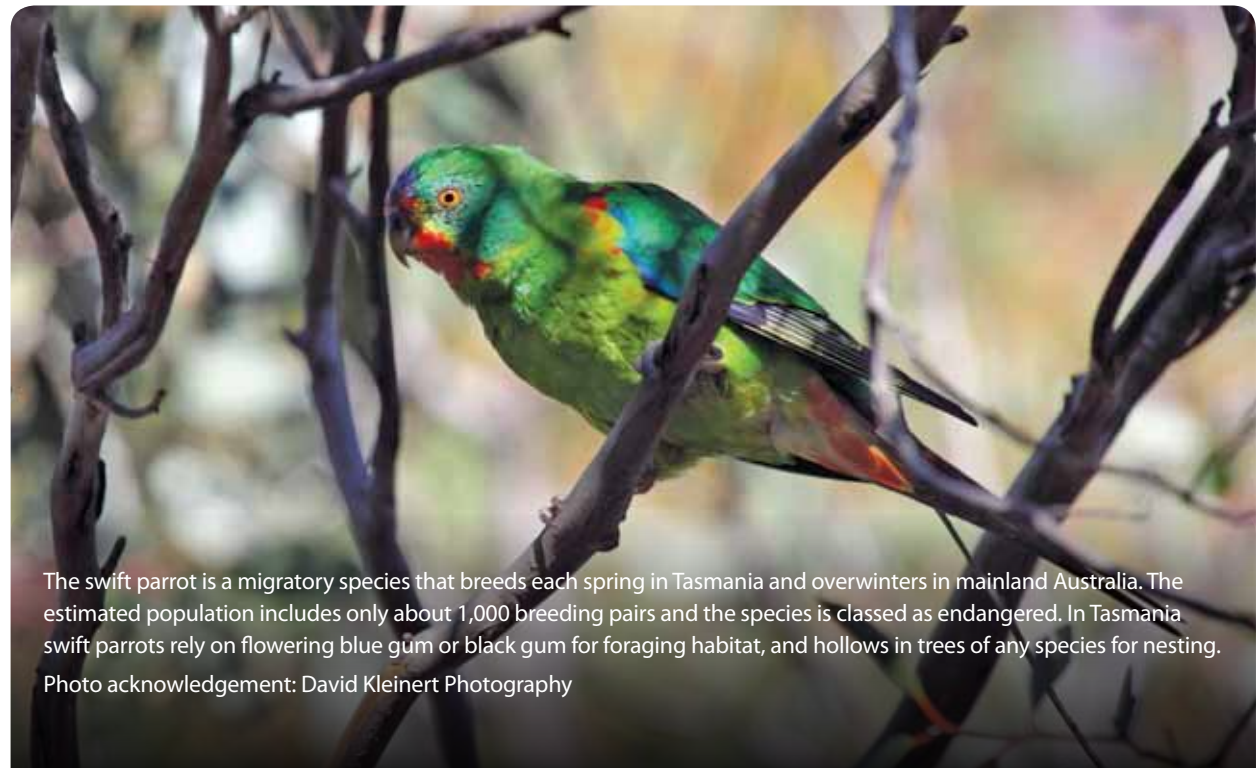
Accordingly, these results have been used to redesign nest habitat searches, to take account of regrowth forest that may also contain nests. This change has been added to our procedures for managing wedge-tailed eagle nests and nesting habitat. These results will also be used to ensure sufficient forest suitable for wedge-tailed eagle nesting is available into the future, as we continue to investigate the kinds of forest in which eagles build nests and breed successfully.

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



Landscape-scale strategic approaches for swift parrot habitat management in commercial forests

Forestry Tasmania; the Department of Primary Industries, Parks, Water and Environment; and the Forest Practices Authority have all recognised that landscape-scale strategic approaches to managing breeding habitat are needed for conservation of the endangered swift parrot. This was highlighted in the 2007/08 breeding season when over half of the swift parrot population was estimated to have bred in the southern forests, in forest areas not previously considered important for breeding. Previous conservation efforts for swift parrots had concentrated on the protection of potential foraging habitat (mainly grassy blue gum forests) and known nesting sites.



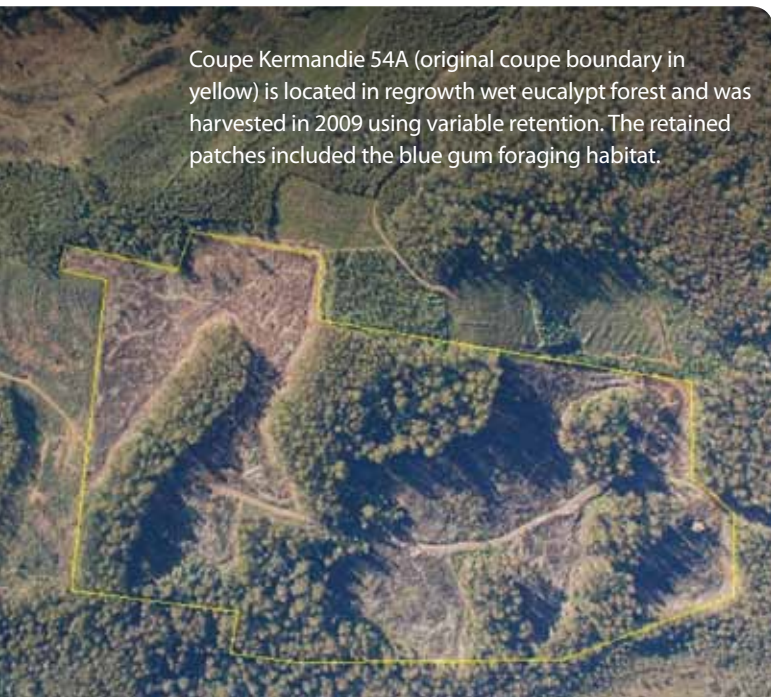
The swift parrot is a migratory species that breeds each spring in Tasmania and overwinters in mainland Australia. The estimated population includes only about 1,000 breeding pairs and the species is classed as endangered. In Tasmania swift parrots rely on flowering blue gum or black gum for foraging habitat, and hollows in trees of any species for nesting.

Photo acknowledgement: David Kleinert Photography

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In 2008 Forestry Tasmania, in consultation with Department of Primary Industries, Parks, Water and Environment scientists, responded to the new information on breeding habitat in the southern forests by identifying five interim Swift Parrot Important Breeding Areas in the southern forests. It also began developing a draft interim three-year plan for swift parrot in state forest in the southern forests and on South Bruny Island.

Meanwhile, the Forest Practices Authority has been developing swift parrot habitat planning guidelines for the retention of important components of swift parrot habitat on private and public forests subject to activities covered by the forest practices system. These guidelines are still a work in progress and expand the concept of Swift Parrot Important Breeding Areas to include areas additional to those originally identified in 2008.



Coupe Kermandie 54A (original coupe boundary in yellow) is located in regrowth wet eucalypt forest and was harvested in 2009 using variable retention. The retained patches included the blue gum foraging habitat.

An ongoing process of strategic plan development by the Department of Primary Industries, Parks, Water and Environment is also under way for swift parrots on all tenures. It will include additional activities such as subdivisions, not regulated by the forest practices system. A first draft is anticipated in late 2010. Further detailed population and habitat modelling should enable the strategic species plan to be finalised by June 2012.

Forestry Tasmania's draft *Interim three-year plan for swift parrot on state forest in the southern forests and on South Bruny Island* is the first landscape-scale strategic plan developed for swift parrot. It may be downloaded from www.forestrytas.com.au

The interim plan prescribes five key elements:

- Avoiding harvesting in the vicinity of known active nests during the breeding season.
- Tightly defined Swift Parrot Important Breeding Areas that require:
 - no harvesting in high-quality nesting habitat;
 - no harvesting in areas of high-quality foraging habitat; and
 - within-coupe retention of a substantial proportion of any additional nesting or foraging habitat through variable retention silviculture or equivalent means (see photo of coupe Kermandie 54A).

Forestry Tasmania has made the interim plan available to interested parties as an example of a practical strategic landscape approach for the management of swift parrots in state forests in the Huon District. It includes initiatives that may have relevance for the development of broader plans for other areas of state forest and for other tenures.

Our conservation planners and scientists continue to work cooperatively with the Department of Primary Industries, Parks, Water and Environment and the Forest Practices Authority on developing practical strategic approaches to managing the swift parrot. They will continue to support strategic breeding surveys that further increase our knowledge of, and conservation management capability in, breeding habitat requirements.

Summary of work undertaken in 2009/10 that related to improving our understanding of threatened species or the management thereof.

	Flora	Fauna	Total
Total strategic management plans ¹	3	4	7
Research in 2009/10 ²	2	6	8
Area covered by habitat surveys in 2009/10 ³	5,100	54,035	59,135
New sites recorded in 2009/10	28	28	56
Threatened species working groups/meetings in 2009/10	0	1	1

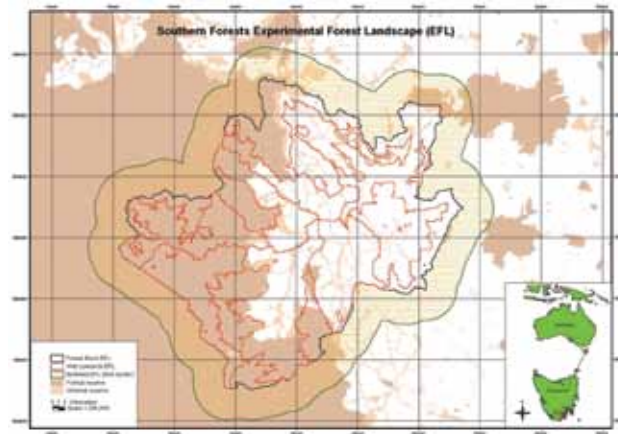
1. Strategic management plans include approved and draft (being implemented) recovery plans, public authority management agreements, strategic management agreements and management plans, agreed jointly between Forestry Tasmania, Forest Practices Authority, Threatened Species Section and the Parks and Wildlife Service.
2. Includes research studies conducted, funded, participated or initiated by Forestry Tasmania.
3. Surveys conducted on state forest by qualified experts.

Southern Forests Experimental Forest Landscape project

A study in the Southern Forests Experimental Forest Landscape is testing whether 'CAR reserves proximity' and 'mature forest proximity' metrics are useful for predicting biodiversity values at landscape scales. The study involves measuring the diversity and abundance of plants, birds and beetles in patches of mature forest and in patches of older (greater than 20 years old) silvicultural regeneration. These patches of forest have been chosen along a gradient of land use intensity ranging from near-natural landscapes in which forests have originated primarily from past wildfires, to heavily modified landscapes in areas where there is a concentration of plantations and cleared agricultural land.

We want to know whether mature forest continues to provide viable habitat for species that are mature forest specialists, not just in landscapes currently rich in mature forest but also in areas where mature forest is much less abundant. We also want to know whether re-colonisation of harvested areas by these mature forest specialists is influenced by proximity to mature forests, and if so, if that effect is constant across the gradient of land use intensity. The study may also detect thresholds of land use intensity above which there is a marked decline in the diversity and abundance of mature forest specialists.

Southern Forests Experimental Forest Landscape showing the distribution of CAR reserves.



Early results point to differences in the abundance and size of coarse woody debris along this gradient of land use intensity. Coarse woody debris, particularly large logs generated by mature trees, is an important habitat in tall, wet eucalypt forests. We found that in both mature forests and older silvicultural regeneration, those plots in parts of the landscape with the highest level of land use intensity had lower volumes of coarse woody debris than plots in landscapes with lower land use intensity. Moreover, a higher proportion of the volume of coarse woody debris was contributed by smaller logs (30-90 centimetre diameter). The effects of these differences in coarse woody debris on the dependent beetle fauna are being explicitly tested as part of current studies.

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. Seventy-nine per cent, or one million hectares, of old growth forest is protected in Tasmania.



We aim to maintain a minimum of 250,000 hectares of reserved old growth on state forest. Statewide, one million hectares, or 79 per cent, of Tasmania's old growth forests are protected across different land tenures.

sustaining BIODIVERSITY AND HABITAT

In addition, a small proportion of old growth in state forest is available for harvesting and this portion is vital for sustaining the supply of high quality sawlogs. The total area of old growth harvested in 2009/10 (clearfell and non-clearfell) was 1,320 hectares. Of this, 740 hectares (56 per cent) was undertaken using partial harvesting techniques and 580 hectares (44 per cent) was clearfelled. The total of old growth forest clearfelled in state forests since 30 June 2001 is 8,780 hectares. Based on 1996 baseline mapping, this represents 0.72 per cent of the total old growth forest area in Tasmania.

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, published in May 2009, and confirmation that appropriate progress was being made across a full range of ecological, social and economic objectives. The preferred

alternative to clearfelling is variable retention harvesting, which maintains mature forest patches through each harvesting area.

Modelling indicates that it is theoretically possible to meet the 80 per cent non-clearfell target for the annual old growth harvest with an average of about 700 hectares of variable retention per year over the next two decades. However, initially around 1,000 hectares per year will be required. Given the importance of us achieving this target, a process has been implemented that allows us to closely monitor this figure.

Landscape metrics for mature forest

We manage a significant area of Tasmania's landscape: one fifth of Tasmania's land area and one third of Tasmania's forests. Part of our role in maintaining a productive forest estate is ensuring and demonstrating that our management sustains biodiversity. We have been exploring landscape metrics to help measure our landscape management performance for biodiversity.

Last year, we reported on a simple landscape metric that used proximity to measure how well CAR reserves are distributed across the production landscape. This metric showed that 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. This suggests that the CAR reserves are well distributed across the landscape.

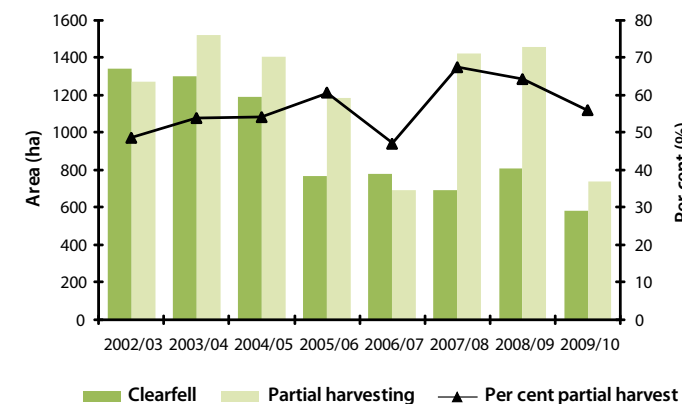
This year we developed a metric that informs us of the extent of mature forests and its influence over the surrounding landscape. Mature forests and younger forests that contain old growth elements provide specialised habitats, home to an equally specialised biota that can disperse into the surrounding landscape as the forests age.

Old growth harvesting (clearfell and partial).

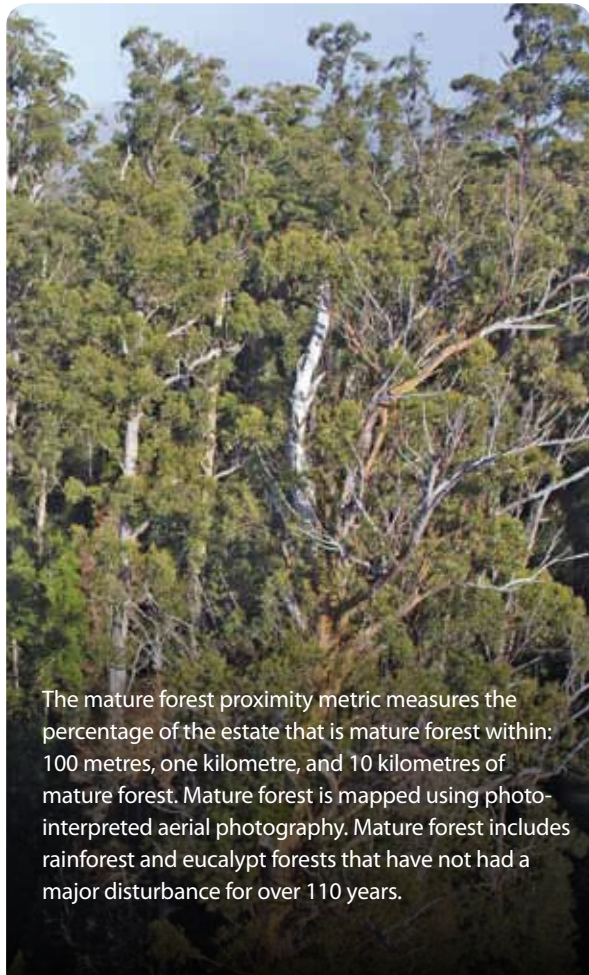
Harvest Year	Old growth clearfelled in year (ha) ¹	Cumulative area of clearfell (ha) ¹	Cumulative clearfell as % of total Tas. OG	Old growth partial harvesting (ha) ¹	Total old growth harvesting (ha) ¹
2001/02	1,350	1,350	0.11%	Not available	
2002/03	1,340	2,660	0.22%	1,270	2,610
2003/04	1,300	3,960	0.32%	1,520	2,820
2004/05	1,190	5,150	0.42%	1,410	2,590
2005/06	770	5,920	0.48%	1,190	1,960
2006/07	780	6,700	0.55%	690	1,470
2007/08	690	7,390	0.60%	1,420	2,120
2008/09	810	8,200	0.67%	1,460	2,270
2009/10	580	8,780	0.72%	740	1,320

1. Figures are rounded actual totals.

Old growth harvesting (clearfell and partial).



In 2009, about 730,000 hectares, or half of the state forest was mature; about one million hectares, or seven-tenths of the state forest estate was mature or within 100 metres of mature forests; about 1.45 million hectares, or 97 per cent of the state forest estate, was mature or within one kilometre of mature forest; and about 40,000 hectares of the state forest estate is more than one kilometre away from mature forests. No state forest is more than 10 kilometres away from mature forest.

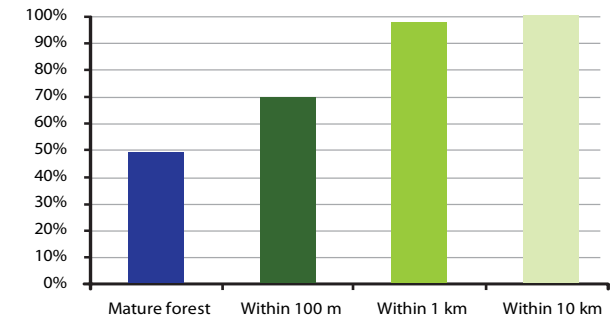


The mature forest proximity metric measures the percentage of the estate that is mature forest within: 100 metres, one kilometre, and 10 kilometres of mature forest. Mature forest is mapped using photo-interpreted aerial photography. Mature forest includes rainforest and eucalypt forests that have not had a major disturbance for over 110 years.

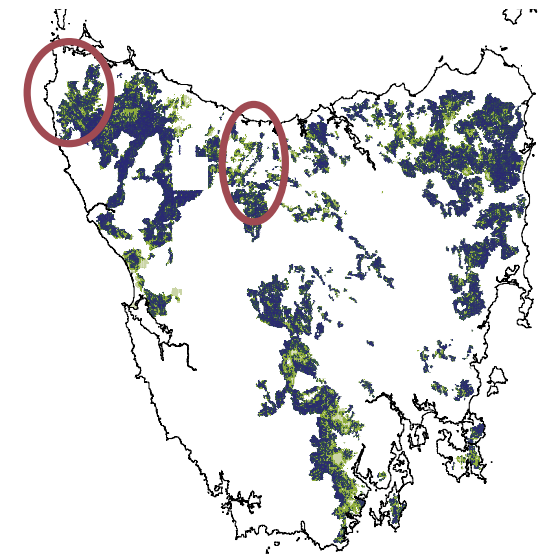
We are still very fortunate that much of Tasmania's state forest is mature native forests. The mature forest areas are well inter-dispersed providing good levels of influence over the forest estate and 99 per cent of the estate is within one kilometre of mature forest. While this gives us some comfort at the estate level, at a catchment scale the extent and spatial configuration of mature forests varies. Thirty-eight of Tasmania's 45 major drainage catchments showed good levels of mature forests in state forest, with over a third of the state forests being mature. However, the Welcome and Cam were identified as catchments that are heavily fragmented and low in mature forest elements. The Cam catchment contains very little state forest, and the Welcome catchment, which has 6,000 hectares of state forest, has 22 per cent in a mature forest condition.

We are still in the early days of understanding how these metrics can be used. We will be testing their validity through targeted landscape-scale research at the Southern Forests Experimental Forest Landscape west of Geeveston. In the meantime, we can start using this information to identify the 'gappy' parts of the forest, which will help prioritise areas for the restoration of old growth elements in forests where they are now sparse.

Proportion of state forest influenced to varying degrees by mature forest.



Map of Tasmania showing location of Cam and Welcome catchments.



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Variable retention metrics

A synthesis of the biodiversity benefits associated with the alternatives to clearfell, burn and sow silviculture rated aggregated retention to be the best. Based on research in the Warra silvicultural systems trial, and practices elsewhere, goals and operational guidelines were developed for the statewide roll-out of aggregated retention. The roll-out was overseen by our Variable Retention Implementation Group, which ensured the goals and guidelines were translated into feasible and effective practice.

Feedback from operational monitoring allowed refinement of practices during the roll-out. Twelve metrics that evaluated outcomes against key ecological objectives were developed as a focus for biodiversity monitoring. The metrics measured how well individual coupes achieved the three key ecological objectives:

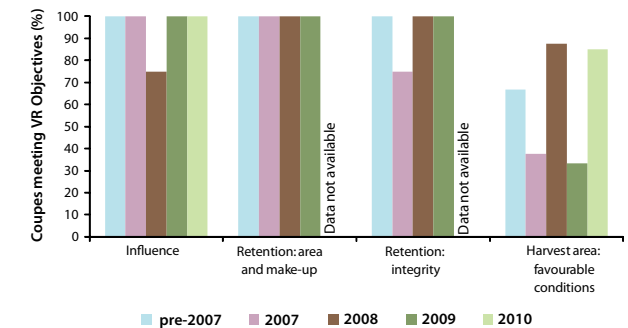
- Influence of retained forest on the harvested area.
- Retention of biological legacies such as old trees and patches of mature forest:
 - area and make-up of retention
 - integrity of retention.
- Ensuring favourable habitat conditions in the harvested area.

The roll-out of aggregated retention has been a process of adaptive management as we translate the goals from research to practice. During the first four years of the roll-out we successfully refined practices so they were both operationally feasible and achieved the desired ecological objectives.

For example:

- The introduction of the 'slow burning' technique in 2008 saw a marked and sustained improvement in the integrity of retention objective as fewer retained aggregates suffered fire damage (see graph below).

Biodiversity objective



- Forest influence was a difficult attribute for which to cater in the design of harvest boundaries in the initial roll-out of aggregated retention, and many of the 2007 coupes had higher than desired levels of retention (greater than 85 per cent of the harvested area within one tree length of retention). Adjustments in 2008 saw fewer coupes exceeding this target.

After many years of research, we now have the operational practices and tools necessary to meet our silvicultural and ecological goals for variable retention. During 2009/10 we developed operational guidelines for implementing variable retention statewide.

- Conventional practices for constructing firebreaks around the more complex shapes and high perimeter to area ratios of aggregated retention coupes saw many early operations fail to meet the third ecological objective (ensuring favourable habitat in the harvested area). An ongoing focus on minimising firebreak width and the switch from using bulldozers to using excavators to remove debris from firebreaks has seen a steady increase in the proportion of the production area.

The development of a tool to calculate forest influence enabled planners to design coupes that more consistently met influence targets (56-85 per cent of harvest area within one tree length of retention) by 2009.

We are now at a stage where we have the operational practices and tools necessary to meet our silvicultural and ecological goals for variable retention, and aggregated retention in particular. We are switching from detailed research-level monitoring of individual operations to more operationally-focused quality standards. Meanwhile, ongoing biodiversity studies at the Warra Silvicultural Systems Trial will indicate how and when species recolonise harvest areas and when clear differences start to appear between silvicultural treatments. Of particular importance is whether the closer proximity to retained forests results in mature forest species re-colonising harvest areas earlier in aggregated retention treatments than in conventional clearfells.

Giant trees

Our giant tree policy requires that all trees over 85 metres in height or 280 cubic metres in volume are protected. We implement this policy by searching in areas that are likely to contain giant trees, taking detailed measurements of trees and protecting proven giants in reserves of at least 100 metres in radius. Most giants are protected in larger reserves. In 2009/10, 12 new giant trees were added to the giant tree register, taking the total in the register from 95 to 107 trees.

The Giant Trees Consultative Committee provides independent advice on the protection, management and promotion of giant trees. It met twice during the year to visit some giants of special interest and to review and improve the giant tree register. The committee also updated the giant tree website and made management recommendations for some of the newly found trees.



Forestry Tasmania protects all giant trees on state forest over 85 metres in height or 280 cubic metres in volume.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS



During 2009/10, we were able to shield our contractors from the worst effects of the economic downturn through market diversification.

Ongoing forest industry jobs rely on sustainable forest management. To achieve this, we model and monitor the sustainable yield. This ensures jobs involving harvesting and the use of wood products from native forests and plantations are consistent with the long-term productive capacity of Tasmania's state forests. 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

Financial performance

Forestry Tasmania's business model is legislated to achieve both commercial and non-commercial objectives. We must perform and fund a range of community services including the management of significant areas of forest with limited or no commercial potential. 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 profitability and so it is appropriate to assess the financial performance of the business with reference to these issues.

Markets

In financial year 2010 export-dependent sectors of the Australian timber industry felt the full impact of the global financial crisis, unfavourable exchange rates, and an emerging shift in international wood fibre demand away from Japan towards China.

Japanese fibre imports fell 20 per cent for the year. The impact was felt most acutely in Tasmania, where exports to Japan were down by as much as 50 per cent.

Fortunately, Forestry Tasmania was not as adversely affected as other Tasmanian businesses in this sector. This is primarily because, over the past 10 years, we have sought to reduce our exposure to the woodchip export market by diversifying our customer base. Almost 300,000 tonnes of pulpwood that would otherwise be exported as woodchips are now processed annually into rotary peeled veneer at Ta Ann mills at Smithton and in the Huon Valley.

Forestry Tasmania was also able to find alternative markets for pulpwood logs in the rapidly expanding Chinese market, and resumed log exports to China in May.

Most of the sawn timber produced in Tasmania is sold in domestic markets in mainland Australia. These markets have held up reasonably well throughout the period. However, Forestry Tasmania's sawlog production has been constrained by the reduced markets for pulpwood and by the stock management strategies of some of its customers that have chosen to reduce log and timber stocks over the period.

World markets for wood products are highly cyclical. Since the end of the financial year, demand for Tasmanian wood products has returned to near normal levels. In the first quarter of the new financial year, demand has outstripped supply as forest contractors have had to ramp up their operations after 18 months of low activity.

Profitability

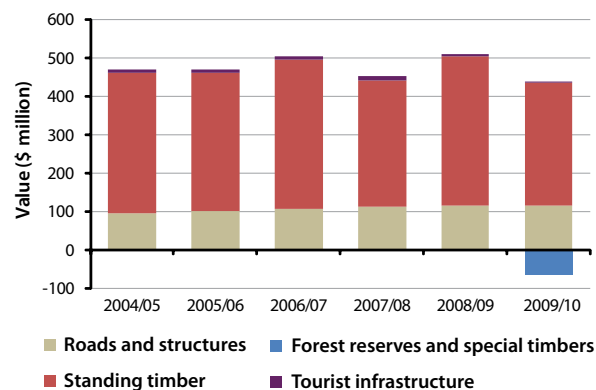
Forestry Tasmania made an operating loss for 2009/10 of \$8.0 million, a significant reduction from the profit of \$9.3 million of the previous year. This reflects the prevailing, very difficult market conditions that result from the global financial crisis. The cost of managing non-commercial forest zones (forest reserves and special timbers) was \$9.3 million, leaving an operating profit of \$1.3 million from general forest management.

The biggest change in 2009/10 was in the accounting treatment for the valuation of the forest assets. The valuation recorded in the income statement complies 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 commissioned an independent valuation of its forest assets during 2009/10. This was in response to volatility in markets and asset values as a result of the global financial crisis, and technical questions raised in reviews by Tasmanian Parliamentary Scrutiny Committees and the Auditor General. The review was undertaken by James W Sewall, a US-based firm with specific expertise in the valuation of forest assets, including within Australasia.

As a result of the new valuation, formal forest reserves and the special timbers zone have been recognised as a liability. Additionally, Forestry Tasmania has written down the value of the land it manages.

These movements have no impact on operational cash or profit results. They reflect the commercial constraints on land imposed by the Forestry Act, and are appropriately recognised in our financial accounts for the first time. These movements have been taken through the income statement as required, leading to an overall reported comprehensive expense for the year of \$306 million. The nature of these movements in our forest assets, excluding land values, is illustrated in the diagram below.



Tasmanian Community Forest Agreement

In May 2005 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 2009/10, \$10.118 million was spent on projects associated with establishment of new hardwood plantations, increased forest management activities and various other research-related tasks.



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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 are 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.

Community service activities

In addition to deriving economic returns from wood production activities, Forestry Tasmania is 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. Unlike other public forest managers in Australia, Forestry Tasmania's costs for community service activities are not separately funded. 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. These costs should be excluded when assessing the purely commercial performance of our business.

As noted above, for the first time Forestry Tasmania has separated out two categories of land that provide a clear community service function. They include forest reserves formally gazetted under the Forestry Act that cover 222,200 hectares; and special timbers forests including the blackwood and predominantly rainforest areas and covering 77,300 hectares that are managed under the Special Timbers Strategy released during 2010¹. As part of the responsibility for this land, Forestry Tasmania incurs costs resulting from the provision of public access roads, walking tracks, picnic areas and related infrastructure; pest, disease and fire control; and weed management. The cost of managing these forest areas was \$9.3 million in 2009/10.

Forestry Tasmania manages additional areas of land set aside from commercial forest production, including informal forest reserves and other areas unavailable for harvest, for which similar community service costs are incurred as outlined above. These lands are more intimately integrated with productive forest lands, and costs have not been separately identified.

¹ This does not include 18,600 hectares of wet eucalypt forests also managed for special timbers but where an initial commercial harvest is planned.

Operating performance	2009/10 \$000	2008/09 \$000	2007/08 \$000
Financial performance			
Operating revenue (including interest)	162,277	182,634	186,167
Less operating expenditure before costs of non-commercial zones	(161,012)	(173,378)	(177,600)
Profit before tax, costs of non-commercial zones and valuation changes	1,265	18,346	8,567
Less costs of non-commercial zones	(9,262)	(9,090)	NA
Profit before tax, and valuation changes	(7,997)	9,256	NA
Add Tasmanian Community Forest Agreement funds	5,836	9,484	15,670
Increase/(decrease) in profit due to changes in balance sheet valuations	(291,828)	43,449	(79,480)
Less income tax expense/(credit)	115,734	11,963	(16,786)
Net profit/(loss) after tax and valuation changes	(263,882)	32,286	(38,456)
Return on assets	0.3%	1.1%	1.2%
Payments to suppliers			
Operating and capital expenditure payments (including interest)	179,387	195,252	201,489
Percentage of operating and capital expenditure payments made direct to Tasmanian suppliers	96%	93%	91%

Forestry Tasmania is also subject to significant commercial constraints in the management of its productive lands. 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 wood products Forestry Tasmania can sell in any one year. It significantly extends the length of the commercial harvesting cycle and thus has an impact on the return.

Other requirements such as the introduction of variable retention harvesting as required under the Tasmanian Community Forest Agreement add additional costs.

While there are sensible broader public interest reasons for these constraints, including support for local sawmills, long-term environmental benefits, and indeed sustainability, the requirements reduce our ability to deliver a fully commercial financial performance, when judged by the short-term standards currently applied to business. While we have made a significant advance in the transparent reporting of these commercial issues during this year, there is further progress to be made.

Wood products

The estimated value of wood production from state forests based on the price paid by customers for logs delivered 'at the mill door' for the year was \$204.8 million. In terms of estimated value, approximately \$132 million (64 per cent)

came from native forests, \$12.2 million (6 per cent) from hardwood plantations and \$60.5 million (30 per cent) from softwood plantations. The estimated final value of wood products produced in Tasmania from these logs in 2009/10, based on the best available information on recovery and value of each product, was \$563 million. This underpins the actual annual contribution made by the wood and paper product manufacturing sector, based on final sales of \$1.2 billion-\$1.4 billion to the Tasmanian economy.



Wood products from state forest make a significant contribution to the state economy. In 2009/10, the estimated final value of wood products produced in Tasmania from logs sourced from state forest was \$563 million.

Some of the other mechanisms through which we contributed to the Tasmanian economy included employing 1,707 staff and contractors, staff payroll of \$34 million and total payments made to suppliers, contractors and employees of \$176 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 the softwood joint venture in which 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 2009/10, native forests produced 1,948,873 cubic metres, hardwood plantations produced 179,495 tonnes and softwood plantations produced 812,093 tonnes of wood.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

Summary showing the financial contribution made to the Tasmanian economy.

Contribution method	2005/06	2006/07	2007/08	2008/09	2009/10
Employment (staff and contractors)	1,920	1,889	1,793	1,775	1,707
Payroll (\$'000) (staff only)	32,273	32,931	32,994	33,899	34,002
Total payments to State Government (\$'000)	1,117	3,401	2,017	2,034	2,548
Total payments to local government (\$'000)	1,892	2,039	2,380	2,483	2,815
Total payments to suppliers, contractors and employees (\$'000) (Capital and operating payments)	169,400	203,000	188,965	184,937	176,447
Revenue from timber sales ¹ (\$'000)	131,763	151,272	156,274	155,272	135,182

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).

New team heads export push

In 2009/10, we established a new wood marketing division to enable direct exports of wood products from state forest. The new team is part of our push to move forward in difficult economic times. The team is actively seeking out new markets that will keep contractors in work, and will place us in a positive strategic position once markets improve.

The new team brings together expertise from various departments within Forestry Tasmania, and takes a multi-disciplinary, coordinated approach to our overseas marketing and sales. The team is headed by former Huon District Forest Manager Mike Farrow, who also took on the role of Acting General Manager Operations during 2009/10. Mike has a wealth of experience and extensive knowledge of forestry both in Australia and overseas.

Mike is supported by International Sales and Export Manager Sandy Chen. Sandy has proved himself invaluable to Forestry Tasmania in our dealings in China, and is responsible for obtaining new customers and export sales. Assistant General Manager Strategic Business Michael Wood is heading a number of strategic projects, while supply and shipment of products is being coordinated by Statewide Sales Coordinator Rod Hill.



Forestry Tasmania's new wood marketing division.
(Left to right) Sandy Chen, Mike Farrow and Rod Hill.

Wood quality

As a result of lower availability of logs from mature native forests and increased proportion that will be supplied from plantation and regrowth forests, the average size of sawlogs will decrease over time. Sawlog characteristics will also change. These factors will require the processing industry to transition to new technologies over the next five to 10 years.

The two indicators used 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 percentage of non-seasoning species in the sawlog supply. This year's log diameter data show a decline in the percentage of logs greater than 85 centimetres in diameter, with the average volume of logs across all the other diameter classes remaining fairly consistent.

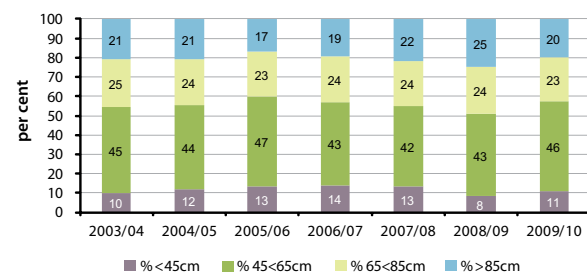
Product recovery

We maximise the use of all felled trees from harvested areas through the selection of craftwood, special timbers, high quality sawlogs and veneer, with the remainder being available as pulpwood and peeler logs where it meets specification.

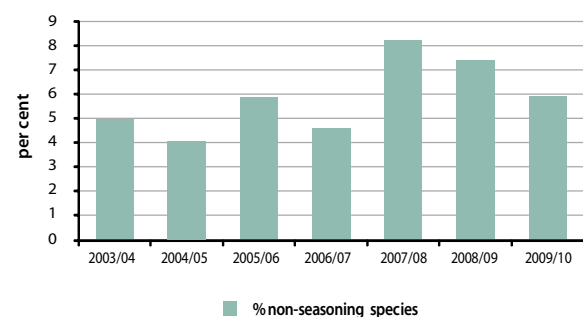
We have two main processes in place to ensure the recovery of wood volumes and values is maximised. They are: pulpwood audits at mills and landings to determine the presence of any sawlogs that may have been misclassified as pulpwood, and post-logging residue assessments to ensure the efficient removal of forest products and quantify merchantable wood being left on the forest floor after harvesting operations.

Information collected from the pulpwood audits conducted in 2009/10 showed that 139 tonnes of sawlogs were recovered out of a total 69,400 tonnes audited. Based on a sample size of five per cent, the recovered volume (139 tonnes) was greater than the three-year average of 101 tonnes, indicating that a slightly higher proportion (0.2%) of sawlog was misclassified as pulpwood this year.

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 2009/10.



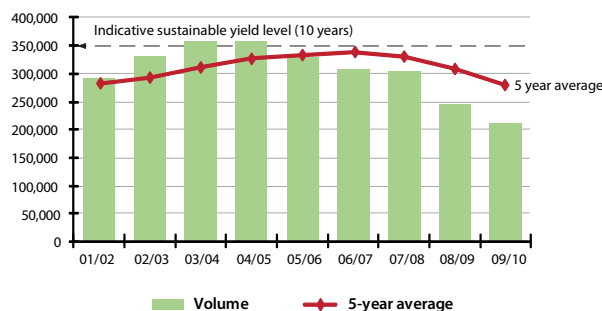
In 2009/10, logging residue assessments were conducted in 82 harvested areas. The standard of less than five merchantable tonnes per hectare was achieved in all the production areas sampled.

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. This management approach is required by the Forestry Act and Clause 77 of the Regional Forest Agreement.

In 2009/10 a total of 210,538 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.



To maintain the ongoing supply of timber a sufficient area of production forest is required. Only 47 per cent of the 1.5 million hectare state forest estate is used for wood production, with native forest production areas totalling 508,800 hectares (33.7 per cent), special timber zones totalling 95,900 (6.3 per cent) and plantations totalling 107,200 hectares (seven per cent). The remaining area (53 per cent) is included in formal and informal reserves and other natural areas outside production areas.

Since 2000/01, the area available in native forest production areas (including special timbers zone) has reduced by 15 per cent or 104,200 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.

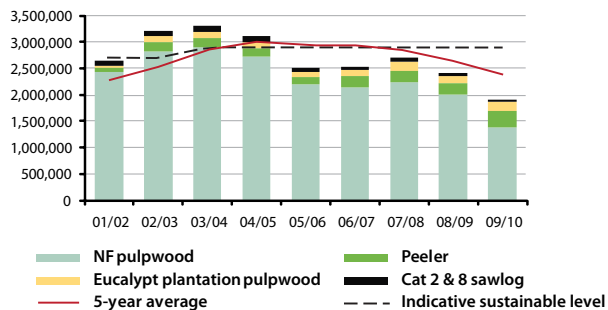
sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

Eucalypt wood production

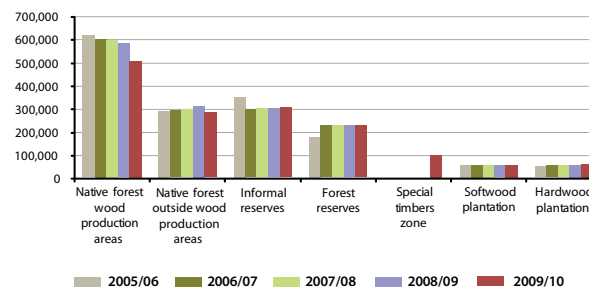
Product Group	2005/06	2006/07	2007/08	2008/09	2009/10	Indicative sustainable level ^{1,2}
High quality sawlog and veneer (m ³)	329,979	307,088	303,951	245,154	210,538	320,000
Low quality sawlog (m ³)	85,057	51,778	87,090	56,613	37,897	Not defined
Peeler log (m ³)	150,934	211,197	209,590	208,334	299,101	Not defined
Plantation pulpwood (t)	89,619	126,163	176,703	135,549	179,495	Not defined
Native forest pulpwood (t)	2,191,132	2,136,687	2,230,874	2,005,448	1,388,986	Not defined
Total arisings³ (t)	2,516,742	2,525,825	2,704,257	2,405,944	1,725,984	2,800,000

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).
3. Arisings include pulpwood, peeler and low quality sawlog.

Pulpwood production levels against sustained yield.



An overview of the seven components that make up the total forest estate, showing that approximately 47 per cent of this area is used for wood production.



Setting the scene for the next wood review

Maintaining the productive capacity of the forest is one of Forestry Tasmania's key sustainable forest management criteria. This criterion is most relevant when discussing high quality eucalypt sawlog supply. Forestry Tasmania models and monitors this sawlog supply to ensure harvesting is consistent with the long-term productive capacity of Tasmania's state forests.

The Regional Forest Agreement requires Forestry Tasmania to review its sustained yield calculation for high quality eucalypt sawlog supply every five years. The fourth such review, since the agreement was signed in 1997, is due in 2012.

Each review involves the major components of resource estimation (area of forest), yields of wood, and the forest management strategy. The process of estimating sawlog supply from the forest uses forest inventory, future growth estimates and historical harvest records. At each review since 1997 significant changes to sawlog supply have been identified. These changes are usually associated with a reduction in the area of native forest available for wood production, and increased contribution from a maturing plantation resource. For example, in 2005 the Tasmanian Community Forest Agreement reserved more old growth forest, thus reducing sawlog supply.

Preparations for the next review of Forestry Tasmania's sustained yield calculation will occur in 2010/11, based on a snapshot of our resource information systems as at July 2011, for modelling and reporting in 2012.

Native forests

As outlined previously, of the 711,900 hectares available for wood production, the majority of this area (604,700 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.

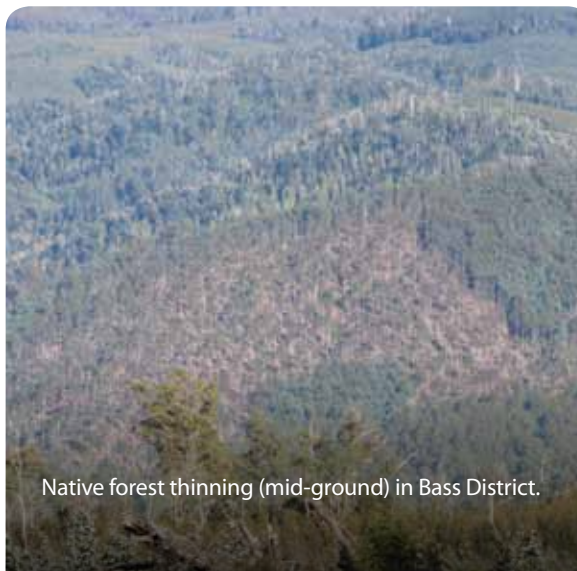
To ensure high quality native forest regeneration, we actively maintain a native forest quality standards process. This process enables the timely, effective and accurate monitoring and reporting of silvicultural operations in native forests. The process uses goals, targets, standards and performance 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, with less than 10 per cent scorching of retained stems, and the achievement of an acceptable level of fire protection.

In 2009/10, 8,436 hectares (3,087 hectares of clearfelled area and 5,349 hectares of partially harvested area) of native forest were assessed against these standards. A total of 94 per cent of clearfell and 90 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. Eleven clearfelled areas did not meet the standard as a result of poor burns. Six partially harvested coupes did not meet the standard, as an acceptable level of fuel management was not deemed to have been reached.



Native forest thinning (mid-ground) in Bass District.

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 from a similar area immediately adjacent to it.
- 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 harvesting area. This is the least preferred seed source.

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.

In 2009/10, 3,406 hectares were sown with eucalypt seed. A total of 2,457 hectares (72 per cent) of this area achieved the seed provenance quality standard. This is 18 per cent higher than the five-year average of 54 per cent. A shortage of on-site seed was the main reason for not achieving the desired standard.

In 2009/10, 3,628 kilograms of eucalypt seed were sown, of which 49.8 per cent was on-site, and 49.8 per cent in-zone and 0.4 per cent out-of-zone. This is a better performance than the five-year average of 41 per cent on-site, 55 per cent in-zone and four per cent out-of-zone seed.

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The quality standard for sowing operations requires that the delay between site preparation completion and artificial sowing be less than 21 days. This ensures the best chance of successful regeneration. In 2009/10, 92 per cent of the artificially sown area achieved this standard. This is similar to the five-year average of 94 per cent. Poor weather conditions and lack of available helicopters for aerial sowing were the main reasons for six per cent of the area not meeting the standard.

Regeneration success

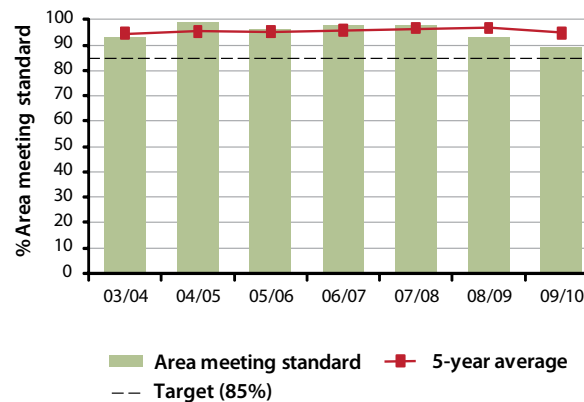
Regeneration success of eucalypt areas is reported after they are three years old. Swamp blackwood, rainforest and Huon pine forest coupes are reported after they are five years old. Regeneration success is determined by undertaking surveys. For each forest type, there is a set minimum stocking standard that needs to be achieved. This approach complies with the recommended national methodology for regeneration success monitoring.

In 2009/10, 6,882 hectares of native forest regeneration reached the relevant reporting age for regeneration success. Of this area, 90 per cent achieved the required stocking standard. This is a decrease of five per cent on the five-year average of 95 per cent but exceeds our target of 85 per cent of harvested area being regenerated to standard.

Eighteen areas totalling 671 hectares did not meet the stocking standard. The main reasons for understocking were poor regeneration burns, insufficient natural seed-fall and browsing by native mammals. All these areas contained sufficient regeneration or retained trees to be considered as ecologically stocked and useful for wood production at

a reduced rate. Ten of these coupes were forests that 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.

Native forest regeneration success summary.



Under this year's native forests quality standards program, Derwent District staff were awarded the Gilbert-Cunningham trophy, which recognises the achievement of excellence in regrowing native forests following harvesting. Huon District came a close second, having improved on its previous year's performance. 2009/10 was the seventh year that Forestry Tasmania has presented the Gilbert-Cunningham trophy.

Remedial treatments

We revised and republished *Native Forest Silviculture Technical Bulletin No 7, Remedial Treatments* in 2009/10. Remedial treatments are applied to understocked wood production areas to significantly increase the stocking of eucalypt regeneration. Remedial treatments must be applied to coupes

that have not reached at least a minimum ecological stocking.

Remedial treatments usually involve the preparation of receptive seedbed followed by the application of seed. Seedbed can be prepared by burning or mechanical loosening of the soil in larger areas or preparation of smaller spots by hand. Seed can be applied broadly by helicopter or hand-operated sowers, or sown by hand directly onto the prepared spots.

Remedial treatments are rarely as effective as getting it right in the first place. An important part of the remedial treatment process is adaptive management, or learning from our mistakes. Many of the quality standard indicators, such as that requiring seed to be sown within 21 days of a burn, have been developed following lessons learned from past mistakes. In this example, wood production areas that were not sown promptly after the regeneration burn were found to be often less well stocked than those sown promptly after the burn. Today, most coupes are sown within a week of the regeneration burn, and virtually all within the required 21 days.



The social acceptability of forest management options

Following the completion of an Australian Research Council project undertaken by Melbourne University with Forestry Tasmania, the Forest Practices Authority and Tourism Tasmania, the University of Melbourne produced a report in 2009 titled *Social Acceptability of Forest Management Options: Landscape Visualisation and Evaluation*, which compared the level of acceptance of a range of forest management scenarios.

The study was based on a survey involving 490 Tasmanians from the Huon Valley, other Tasmanian regions and recent visitors to the State who were asked to comment on innovative forest management options developed by industry, environment and forest management experts. Participants were sent a questionnaire that included computer-generated images of nine hypothetical forest management options over a period of 95 years. Also included was information about the outputs for the environment and wood supply of each scenario.

The survey also looked at values, with almost 60 per cent strongly agreeing that native forests should not be converted to plantations or clearfelled. However, only just over 20 per cent of people believed there should be no logging of native forests.

The findings show that most people judged the options primarily on effects on the environment. Options that were believed to have lighter impacts on the environment were seen as being more socially acceptable. Beliefs about effects on wood supply were also significant, but had much less overall effect on social acceptance. Aggregated retention, the creation of mosaic forests of different ages using a mix of systems, and the establishment of eucalypt plantations on private land or in state forests had the highest approval levels. These are all management options Forestry Tasmania has either used, or is using.

Ford, R.M., Smith, E.L., Williams, K.J. and Bishop, I.D. (2009). *Social Acceptability of Forest Management Options: Landscape Visualisation and Evaluation* – overview of the mail survey. University of Melbourne, Melbourne.

www.warra.com/documents/publications/Ford_etal_2009b.pdf



More than 2,000 people are employed in the special timbers sector, and a further 8,500 people are involved with special timbers woodcraft on a hobby or limited commercial basis. The highlight of our special timbers strategy, launched in February 2010, is a new special timbers zone that provides resource security to the people involved with this sector, which is integral to the Tasmanian brand.

Special timbers

Special timbers are an integral part of the Tasmanian brand. They are used to produce high value furniture and craftwood products, and include blackwood, black-heart sassafras, myrtle and celery-top pine. With the exception of blackwood, special timbers are mostly derived from harvesting operations in old growth forests.

Under our Special Timbers Strategy (see below), we will ensure the ongoing long-term supply of these timbers to the Tasmanian craft and design industries.

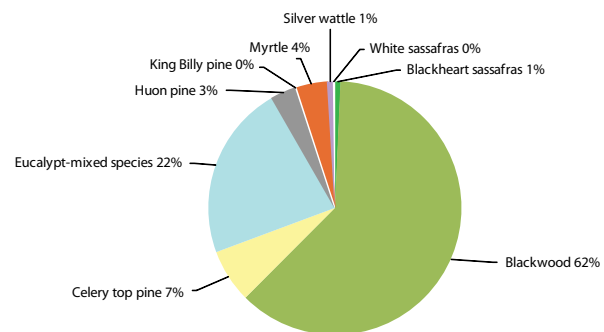
Forestry Tasmania established Island Specialty Timbers Tasmania in 1995 to maximise the recovery, processing and supply of highly figured special timber found in logs, burls or stumps, not usually processed in sawmills.

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.

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During 2009/10, a total of 12,887 cubic metres of special timbers were sold. This comprised 12,350 cubic metres of high quality special species sawlog, with the remainder craftwood. Blackwood made up 62 per cent of this volume, with the rest comprising species such as myrtle, celery-top pine and eucalypts with attractive craft features such as burls. These figures are in line with sustainable supply as outlined in our Special Timbers Strategy.

Production of special timbers sawlogs in 2009/10.



Special Timbers Strategy

In February 2010, we released our Special Timbers Strategy, which incorporated feedback from the public based on a draft strategy released in August 2009. The Special Timbers Strategy delivers on one of the aims of our Sustainability Charter, which is to ensure a long-term supply of special timbers.

The key highlight of the strategy is a new Special Timbers Zone², which we will manage to provide a sustainable supply of these timbers.

² Currently 95,900 hectares have been designated as special timbers zone and more areas will be added over time.

The strategy recognises that Tasmania's forests are home to some of the world's most precious and beautiful timber species. They are highly regarded both within Australia and throughout the world. Tasmania's special timbers are among the last commercially available premium timbers being produced from publicly managed forest operations in Australia. They have a social and economic significance for Tasmanians that is much greater than the relatively modest volume harvested each year.

The strategy sets three key objectives for managing special timbers, including:

- sustaining the resource;
- maximising value recovery; and
- promoting Tasmanian special timbers to the world.



The Special Timbers Strategy may be viewed at:
www.forestrytas.com.au

More information on Island Specialty
Timbers Tasmania may be found at:
www.islandspecialtytimbers.com.au

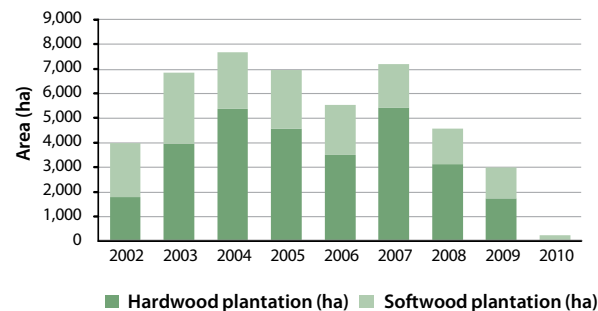


Harvesting of old growth forest (using variable retention) for high quality eucalypt sawlogs and special timber.

Plantations

Plantations play a vital role in the production of timber from our state forests. As our eucalypt plantations mature to a harvestable age, they will provide an increasing proportion of the high quality sawlogs required by the forest industry in Tasmania. To meet this requirement, we must manage the plantation estate to maximise production, while balancing long-term sustainability. In 2009/10, a total of 1,370 hectares of eucalypt plantations were established, bringing the total hardwood plantation estate to 55,200 hectares. As the bulk of the hardwood plantation establishment program did not begin until the 1990s, the re-establishment of harvested first rotation plantations is relatively minor at present. However, this will gradually increase over the next few years, to become a significant program.

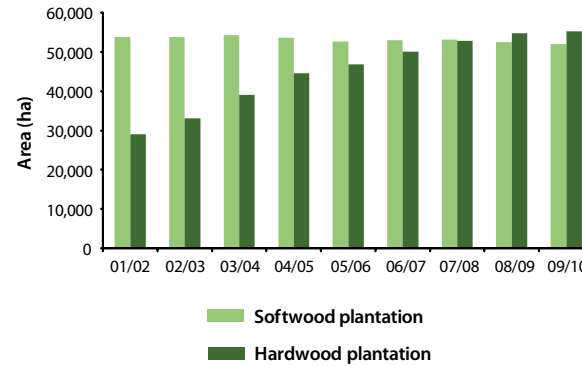
Area of plantation by age class 2002-2010.



Notes:

- Age classes are based on calendar year planting seasons, not financial years.
- Totals reflect plantation as at 30 June 2010, and include commercial acquisitions.
- Plantation established prior to 2002 is not shown.
- Planting of the 2010 age class was still in progress as at 30 June 2010.
- Excludes some west coast softwood plantation that is being harvested and naturally restocked from fallen cones.

Hardwood and softwood plantation area 2001/02 to 2009/10.

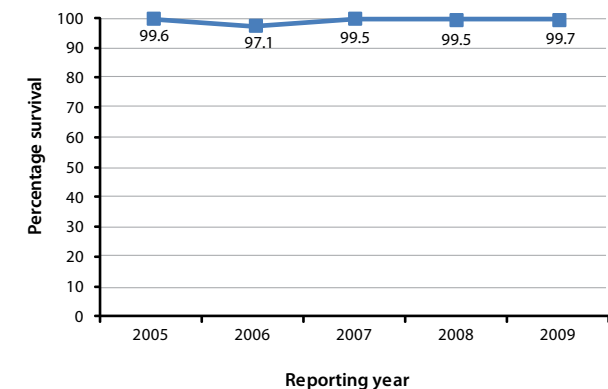


In addition to the establishment of plantations in state forests, we have commenced a new project, Trees on Farms. This project aims to offer farmers the chance to reclaim weed-infested land, secure a new revenue stream, capture carbon and provide long-term habitat for the swift parrot. Landowners have the opportunity to establish commercial woodlots on cleared land in a joint venture with Forestry Tasmania. This project provides many benefits to the community including the supply of an additional source of plantation timber into the economy, improving degraded land, and assisting rural landowners to remain viable.

Improvements in plantation establishment

In line with our commitment to long-term sustainability we are continually striving to improve techniques used in establishing plantations and minimise impact on soils, water and the atmosphere. Minimising soil disturbance, reducing burning of debris, and judicious use of chemicals are some of the ways we are working to achieve these outcomes. Monitoring the progress of seedlings is an important part of establishment, and our survival survey results indicate we are performing very well. 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 final plantation area. As the figure below illustrates, there is a consistently high percentage survival rate in our plantation estate.

Percentage area of plantations successfully established by age two.



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Fertiliser use

The targeted use of fertilisers is a key to increasing the productivity of our existing plantations. Many Tasmanian soils are low in several key nutrients required for long-term sustainable timber production. 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. New fertilisers available will enable us to reduce the quantity used, and tailor requirements for individual areas. Ensuring areas that require a secondary fertilising program (generally applied from age two through the remainder of the rotation) is integral and the table below illustrates there is a consistently high success rate for this target. A small area was not able to be fertilised, due to Forestry Tasmania's commitment to avoiding operations around sensitive times of year for endangered fauna.

Area identified for secondary fertilising that was fertilised.

Reporting Year	2006	2007	2008	2009
Area fertilised (hectares)	2,011	2,522	6,048	6,528
% Area fertilised	100%	100%	96%	96%

Modelling the potential productivity of fertilising

Recent estate-level wood-flow analysis, including inventory data to 2009, has predicted a deficit in plantation high quality sawlog production of some 45,000 cubic metres per year from 2020 onwards. This deficit will have many causes. However, secondary fertilisation may be able to remediate this deficit in some cases.

The impact on wood-flows of applying secondary fertiliser to the existing first rotation estate was modelled, based on Forestry Tasmania's nutritional research data. The modelling indicated that secondary fertilising of existing plantations at their current stage of age significantly improves wood-flow, creating an additional 15,000 cubic metres of high quality sawlog annually.

Larger long-term gains will be achievable from secondary fertilisation of plantations in their second rotation, as many first rotation sites are currently too old to respond fully to secondary fertilisation. Stand establishment may also improve in second rotation. Other shorter-term approaches to increase high quality sawlog production include more intensive thinning regimes, or a large native forest thinning program.

Maximising pruned wood volume

To produce high quality sawlogs and veneer, knot-free timber is required. To achieve this, Forestry Tasmania has been visionary in implementing pruning regimes throughout its plantations since the late 1980s. Pruning occurs in one to three stages (or lifts), to allow the tree time to renew leaf growth, and to allow the healing over of the stem to form the 'clearwood'. Monitoring the time of pruning, ensuring adequate numbers are pruned, and assessing the quality of pruning, are fundamental to maximising the quantity of pruned wood. Forestry Tasmania has a robust electronic data capture system in place for these pruning assessments, which also provides valuable information about the growth of the stand. The following table shows that the pruned area has increased markedly over the past few years.

Summary of eucalypt plantation (within Forestry Tasmania's defined forest area) pruned by age four.

Reporting Year	2007	2008	2009
1st lift (hectares)	574	832	594
2nd lift (hectares)	120	219	171
3rd lift (hectares)	0	0	2
Total area pruned (hectares)	693	1,051	767

Enhanced growth of plantation stands

To maximise the growth of pruned stems, plantations need to be thinned, to allow the remaining stems to put on extra volume. Thinning can be conducted at different ages and intensities, depending on the range and amount of products that can be grown on each site.

Research by Forestry Tasmania continues to be undertaken to determine the best silvicultural outcomes for each stand, and the best methods to conduct these thinning programs. Improvements in modelling data now allow us to schedule harvesting and predict timber volumes more accurately.

As noted earlier, 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; and
- native forest production areas that had commenced after 1 January 2007 being returned to native forest.

This year, a total of 702 hectares of plantation was established on land that met the above criteria.

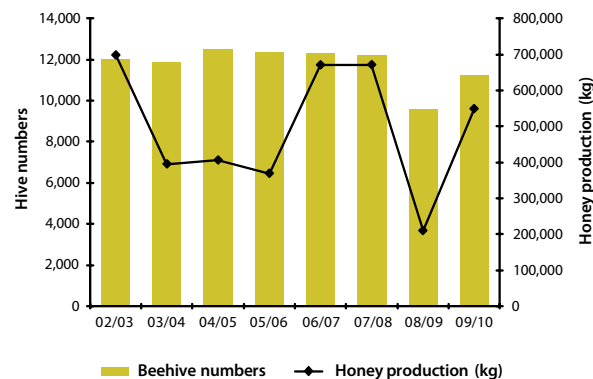
Non-wood products and services

Honey production

The majority of beekeepers in Tasmania depend on land managed by Forestry Tasmania for access to leatherwood nectar, although significant sources also occur in conservation reserves managed by other agencies. Leatherwood (*Eucryphia* species) 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 have been harvested. By moving largely to non-clearfelling techniques, such as variable retention, in old growth eucalypt forest the long-term availability of accessible leatherwood-rich forests will be maintained at a similar level over the next 90 years. Bee keeping is flagged as a management objective for areas with a high leatherwood component under Forestry Tasmania's management decision classification zoning system, and harvesting within these special management zones takes particular account of maintaining and enhancing leatherwood sources.

Honey production in 2009/10 was reported as 548,736 kilograms, up 338,675 kilograms (260 per cent) on last year's figure. Hive numbers also increased, from 9,583 in 2008/09 to about 11,200 in 2009/10.

Hive numbers and honey production¹.



¹ As reported by beekeepers to Forestry Tasmania.



Where practical, we exclude areas containing leatherwood from harvesting. Since 1993, less than three per cent of leatherwood-rich state forest has been harvested.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS



Dr Tim Wardlaw, Division of Forest Research and Development.

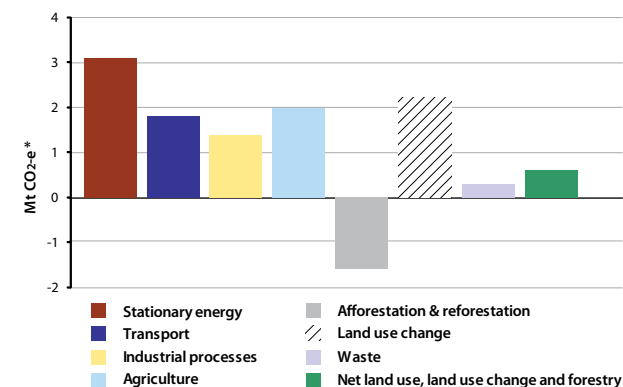
The maintenance of ecosystem health and vitality is important for the long-term sustainability of the forest and relies on good management of potential threats such as fire, weeds, pests and diseases. We use an integrated approach and monitor forest health so that we can take action to prevent significant 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 wood products.

Carbon and climate change

The Tasmanian position

Tasmania's total greenhouse gas emissions in 2009 were 9.1 million tonnes CO₂-e (State and Territories Greenhouse Gases Inventories 2010). This represents 1.6 per cent of total national emissions (581.9 million tonnes CO₂-e) and is a 19.9 per cent decrease on 1990 levels. Tasmania's 2008 net carbon emission for the Land Use, Land Use Change and Forestry (LULUCF) sector was 0.5 CO₂-e. The two components added together to derive this figure include a negative 1.6 million tonnes CO₂-e removed by plantations (sinks) established since 1990 on previously cleared agricultural land, and a positive 2.2 million tonnes CO₂-e from greenhouse gas emitted as a result of converting forests to grassland, cropland and residential uses.

Tasmania's emissions as CO₂ equivalent for each of the sectors.



Our carbon dioxide emissions

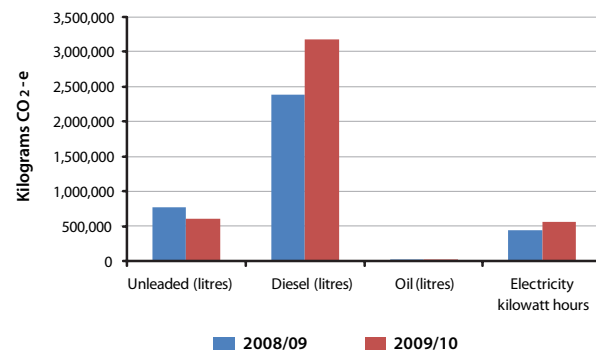
The main energy inputs used by Forestry Tasmania are fuel (unleaded and diesel), mainly for the purpose of transport of staff, and electricity used to power our offices and workshops. The total emissions as a result of this energy use amount to 0.0038 million tonnes CO₂-e.

Summary of energy usage and resulting CO₂-e emissions as a result of fuel used for transport and energy usage within our offices.

Input	Usage	CO ₂ -e*
Unleaded	264,160 litres	602,638 kg CO ₂ -e
Diesel	1,189,691 litres	3,177,808 kg CO ₂ -e
Oil	5,600 litres	16,207 kg CO ₂ -e
Electricity	2,426,347 kilowatt hours	558,059 kg CO ₂ -e
Total		0.0038 million tonnes CO₂-e

* Australian Government Department of Climate Change, 2009. National Greenhouse Accounts Factors. www.climatechange.gov.au.

Total amount of CO₂ emissions (expressed as kilograms CO₂-e) generated for the past two years.



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 2009, we appointed Dr Martin Moroni to lead our carbon research program. Dr Moroni brings a wealth of knowledge on forest carbon to Forestry Tasmania.

In 2009, Forestry Tasmania established a carbon research program to improve our understanding and confidence in reporting of forest carbon stocks. Dr Martin Moroni was appointed to lead the program and will evaluate forest carbon accounting tools, collate data for describing state forest carbon stocks, and collect data to address knowledge gaps. Collaborations have been established with the University of Tasmania, Cooperative Research Centre for Forestry and interstate research partners.

Improving our carbon modelling capabilities

Inventory-based analyses of the current distribution of forest and vegetation types show how not all forest stands are currently mature (old growth), with many regenerating from wildfire or regrowing after harvesting. The carbon stock in standing trees in state forest was calculated as 69 per cent of its theoretical maximum, with disturbance regimes (whether from wildfire or harvesting) limiting carbon stocks, especially in eucalypt forests, which occupy 63 per cent of total state forest area.

The tallest wet eucalypt forests of highest crown cover were the most carbon-dense (at an average of 470 tonnes carbon per hectare), but these only represent 0.2 per cent of state forest by area. Even at ecological maturity, the remainder of the eucalypt estate has carbon densities only 21-68 per cent of that of the tallest wet forest, and non-eucalypt forests has even lower carbon densities. Values for the most carbon-dense forests therefore cannot be extrapolated across state forest, as this contains forests of a wide range of productivity.

These findings have been submitted for publication. Our ongoing research on carbon in state forests will improve understanding and confidence in reporting these values.

Air quality

Planned burning is undertaken throughout Tasmania on private land and state forests each autumn. Burning is dispersed and only a limited number of forest industry 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.

Smoke is an inevitable product of this burning process. 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 burn operations on days when forecast weather conditions indicate the smoke will be dispersed away from settled areas.

Forestry Tasmania, forest industry companies and the Parks and Wildlife Service coordinate their autumn burning through their participation in the Coordinated Smoke Management Strategy, a Forest Practices Authority initiative. Each day the Forest Practices Authority sets maximum smoke load limits for Tasmanian air sheds and Coordinated Smoke Management Strategy participants manage their burning accordingly.

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At present the Coordinated Smoke Management Strategy only applies to burns carried out by the forest industry and Parks and Wildlife Service, and so many other burns go unrecorded.

To keep stakeholders informed about burn locations, relevant information is provided through the Tasmanian planned burns website at: www.plannedburnstas.com.au

National Environment Protection Measure (NEPM) 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. In addition, the Environment Protection Authority has established the baseline Air Network of Environment Tasmania (BLANKET), a network of 16 new air quality stations distributed around the State reporting real-time PM₁₀ and PM_{2.5} particulate levels. Thirteen stations are currently in operation, one awaits electrical connection, and the remaining two are in preparation. BLANKET is an Environment Protection Authority initiative that will increase the spatial coverage of air quality measurements in Tasmania, in particular (but not exclusively) for the monitoring of population exposure to smoke produced by planned burns.

During the autumn of 2010 Forestry Tasmania undertook its customary program of silvicultural burning, commencing in mid-March. Forestry Tasmania burning in the Huon Valley from 16-18 April coincided with the lighting of a large number of fires on private land, and a weather pattern which trapped

low-level smoke in the valley. This resulted in a five-day period of elevated PM₁₀ and PM_{2.5} atmospheric particulate levels.

Water, soils and geodiversity

Water quality

Forestry Tasmania works hard to maintain the quality of water in our streams and catchment areas. In order to minimise the risk of chemical contamination from any of our pesticide operations, we use the PIRI (Pesticide Impact Rating Index) computer software package that has been tailored for forestry usage. PIRI combines information about the properties of chemicals and specific site information, to provide a risk assessment of the potential for pesticides to move off-site, and their potential to affect aquatic organisms. It allows us to modify our choice of pesticide, timing or application rate if necessary, or implement any additional precautions required.

In addition, Forestry Tasmania conducts a water sampling program each year, in accordance with our Pesticide and Fertiliser Policy, to test pre- and post-application levels of selected chemicals in waterways. In 2009/10, 99 water samples were submitted for analysis and all were found to be free of chemicals.

Report of the George River Water Quality Panel

The Tasmanian Government convened the George River Water Quality Panel in March 2010 to investigate information reported on the ABC television program *Australian Story* in February 2010. In the program, allegations were made that toxicants in river foam, derived from *Eucalyptus nitens* plantations in the George River catchment, were having a deleterious effect on human

health in the St Helens community, which relies on the George River for drinking water, and on the health of commercial oyster farms in Georges Bay.

Based on the fact that we have *Eucalyptus nitens* plantations within this catchment, we provided the panel with information on our chemical use, tree breeding techniques and extent of plantations. The area of *Eucalyptus nitens* on public land (Forestry Tasmania and joint ventures) in the George River catchment is 458 hectares, which is about 15.7 per cent of the total area of *Eucalyptus nitens* within the catchment (2,923 hectares), and 1.1 per cent of the 42,742 hectare catchment.

We welcomed the George River Water Quality Panel's final report published in June 2010, which found:

- the incidence and pattern of cancer within the St Helens region did not show any characteristics of a 'cluster';
- foam samples on the George River, which were used to back claims made on *Australian Story*, were artificially concentrated during collection to levels up to 1,400 times above those in the river water, which explains their reported toxicity, and they were non-toxic at lower concentrations;
- the foam did not pose a risk to human health; and
- the foam was not linked to *Eucalyptus nitens* plantations, as it was also detected in a catchment devoid of these plantations.

View the full George River Water Quality Panel report at: www.georgeriverwater.org.au

Water quality monitoring at Tyenna

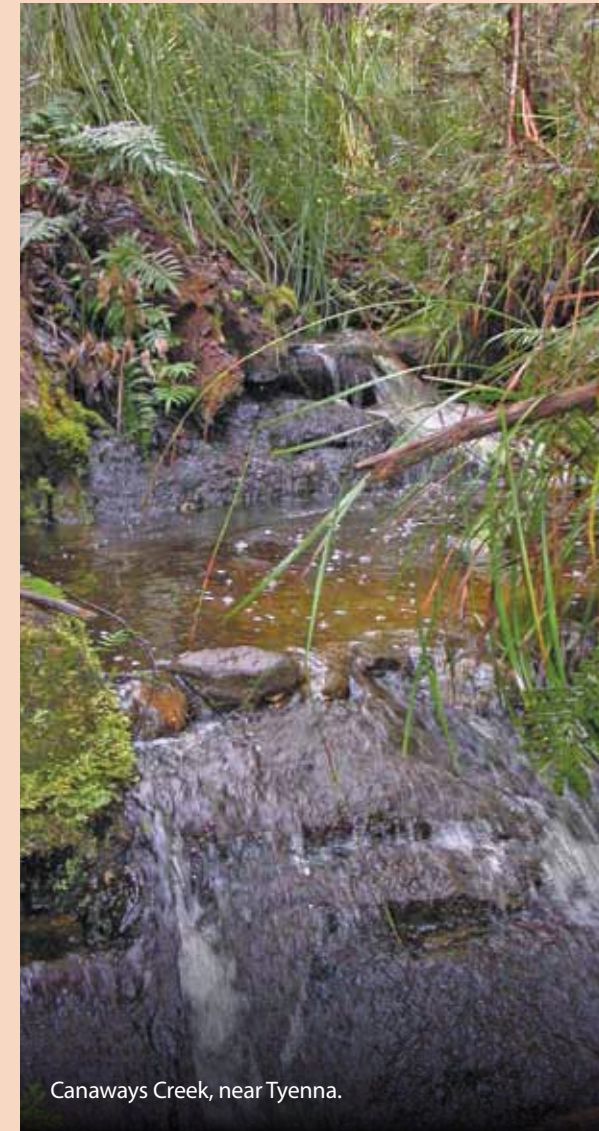
Local residents at Tyenna were concerned about the effects of proposed harvesting and road construction on the quality of water in nearby Canaways Creek. The soils in Canaways Creek catchment are highly erodible and road construction in an adjacent catchment resulted in erosion and increased sediment loads in a creek. Residents did not want to see a repeat of this in the creek on which they rely for household water. In response to these concerns, Forestry Tasmania undertook careful planning of road construction and harvesting operations with protection measures well above the standard required by the Forest Practices Code to protect water resources. In addition, we installed electronic sensors to monitor turbidity in Canaways Creek and in neighbouring Routs Creek. No stream crossings were constructed at Routs Creek, and streamside reserves were a minimum of 30 metres, ensuring the creek was minimally affected by harvesting and road construction. It therefore acted as a control for comparison to Canaways Creek, on which a number of stream crossings were constructed, and streamside reserves were a minimum of 10 metres.

Turbidity monitoring commenced in naturally occurring pools in the two streams in June 2006. In the period before road construction commenced, turbidity in Canaways Creek was usually about 20 per cent higher than turbidity in Routs Creek, and turbidity exceeded 5 NTU (the Australian Drinking Water Standard) approximately 20 per cent of the time.

Road and stream crossing construction occurred near Canaways Creek in April 2008. Monitoring during road construction showed that there were brief periods of elevated turbidity in Canaways Creek that coincided exactly with the days that culverts were being laid in the streambed and covered with fill and road base. Increased turbidity was not sustained beyond the days on which stream crossing construction occurred. Monitoring over the following months showed that there was no increase in median turbidity in Canaways Creek relative to Routs Creek, and that there was no increase in median turbidity in Canaways Creek in the period after road construction compared with the period before the road works.

Water quality monitoring is ongoing and will continue until harvesting is completed and Forestry Tasmania is satisfied that any effects on water quality in response to harvesting in the catchment of Canaways Creek have been detected and managed.

The data collected have been useful for demonstrating the effects caused by the operations, the effectiveness of careful road and stream crossing design, and drainage and batter slope management. Being able to use the water quality data to answer questions about water quality from the local residents has been a useful way of minimising conflict. The data also contribute to our understanding of the effects of forest management on water resources.



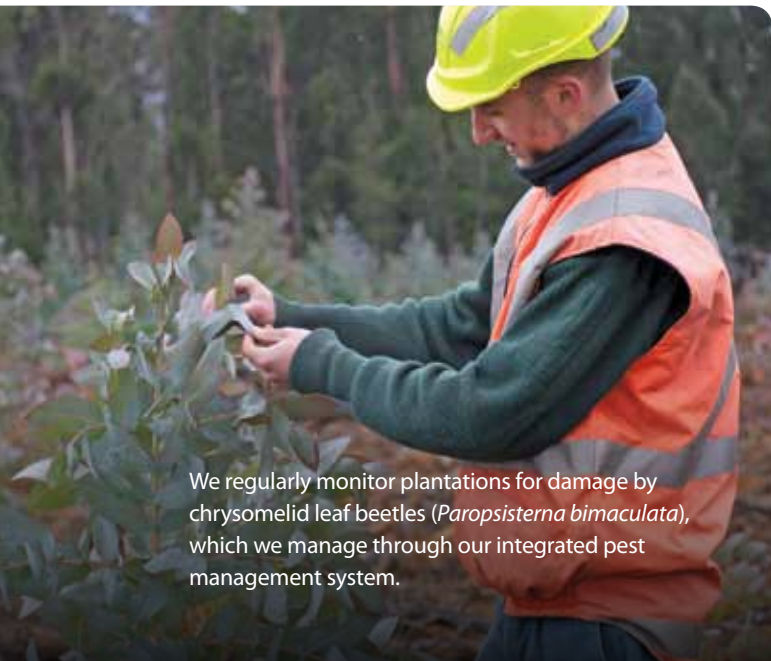
Canaways Creek, near Tyenna.

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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 2009/10, a total of 4,300 hectares had been declared unavailable for harvesting due to the risk of erosion, with a total of 169,100 hectares managed for soil and geoconservation values.



We regularly monitor plantations for damage by chrysomelid leaf beetles (*Paropsisterna bimaculata*), which we manage through our integrated pest management system.

Weeds, pests and diseases

Forest health surveillance

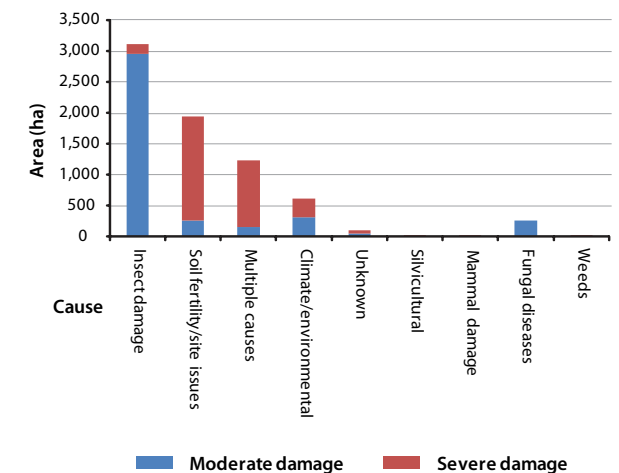
Management of pests and diseases in state forests involves forest health surveillance for the general detection of health problems. There are also two pest-specific management programs: one for browsing mammals, and one for integrated pest management for chrysomelid leaf beetles (*Paropsisterna bimaculata*).

This year, forest health surveillance involving aerial, roadside and follow-up ground inspections was undertaken in 41,656 hectares of eucalypt plantation. Notifications for field staff were produced for 122 detected health issues in this plantation estate. Soil fertility remains one of the main causes of forest health problems, causing a range of symptoms including stunted growth, poor form and premature shedding of foliage. Affected areas are incorporated into a comprehensive secondary fertiliser program.

There was a large increase in the area affected by insect damage, primarily defoliation by chrysomelid leaf beetles and gum leaf skeletoniser (*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.

Defoliation surveys showed that more than 50 per cent of all damage occurred in plantations greater than 10 years old, which is outside the integrated pest management monitoring age range.

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

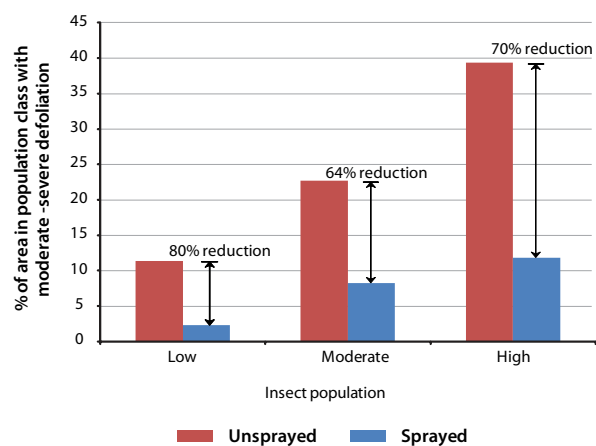


The large area experiencing problems due to multiple causes highlights the often complex nature of forest health issues. There was an increase in the incidence and severity of fungal disease this year, primarily the leaf blight *Mycosphaerella*, which was at least partly due to the heavy spring and summer rainfall experienced during the year.

The leaf beetle integrated pest management system involves monitoring plantations to detect where populations are over-threshold and require control. Monitoring was done in 25,690 hectares of plantations between the ages of two and 10 years in state forest in 2009/10. Of the total area monitored, 30 per cent had a beetle population that was over-threshold. Of this area over-threshold, 16 per cent was not sprayed because subsequent re-monitoring found populations had been controlled naturally by heavy rain and strong winds, or by the activity of natural predators of the beetle.

Annual forest health surveillance of our plantations allows us to measure the effectiveness of the leaf beetle integrated pest management. The surveillance found the likelihood of a plantation suffering moderate or severe defoliation increased with increasing size of the beetle population. It also found that spraying over-threshold populations was effective in preventing moderate or severe defoliation.

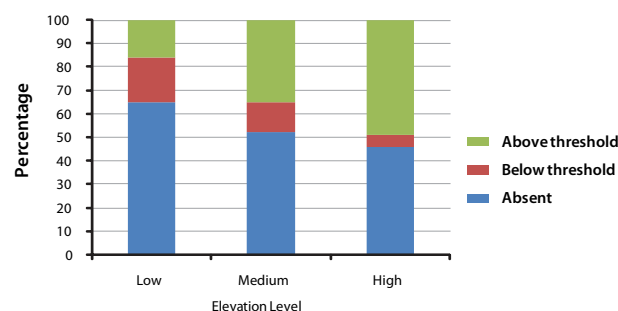
Proportion of plantation area with indicated leaf beetle population and spray outcome that suffered moderate or severe defoliation.



Further examination of the surveillance results found that a high proportion of the plantations that suffered moderate or severe defoliation were older than would normally be included in the integrated pest management monitoring program. It also showed that most leaf beetle damage occurs in high altitude plantations. Analysis of the leaf beetle population monitoring results obtained over the past three seasons found the likelihood of over-threshold populations

increased with increasing altitude. This shows we have the potential to make our future monitoring more effective by directing it to those areas most likely to experience over-threshold populations. Research is currently under way to examine how beetle populations vary across the landscape and identify those characteristics of site and landscape that are correlated with this variation. If such relationships are discovered, we should be able to further refine where we target our leaf beetle integrated pest management.

Comparison of the percentage of plantations from three seasons over four years (2007-2010) that were monitored for chrysomelid beetle populations at different elevations.



Browsing mammals are managed in plantations of one to two years of age and in 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 browsing damage plots indicate that control is necessary. However, the use of non-lethal methods to reduce reliance on shooting increased in 2009/10. Fencing is the main non-lethal method

used to protect native forests that are being managed to grow blackwood, while in plantations, planting tall seedlings and using mesh seedling stockings are the main non-lethal methods currently used.

The effectiveness of our 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 types of spraying operations we prepare a comprehensive spray plan in which streams, wet areas and mandatory buffer strips are delineated.

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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, we applied a total of 3,690 kilograms of active ingredient to 5,083 hectares within Forestry Tasmania's defined forest area (area certified to the Australian Forestry Standard) during 2009/10. This represents a decrease of 825 kilograms compared to the amount applied in 2008/09. At the Forest Nursery at Perth, a total of 295 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 adverse environmental effects are mitigated. We notify the Department of Primary Industries, Parks, Water and Environment of spills greater than 20 litres. As a result of eight recorded spills in 2009/10, approximately 370 litres of fuel and oil were released into the environment. The majority of this amount (200 litres) was attributed to a hydraulic oil spill as a result of a harvesting excavator being destroyed after catching fire.



In 2009/10, we attended 65 wildfires and funded fire suppression costs of over \$3 million.

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 are 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; the Parks and Wildlife Service of the Department of Primary Industries, Parks, Water and Environment; and forest industry companies. We work cooperatively with these 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. We are pro-active in attempting to reduce the area burnt and severity of fire damage on land for which we are responsible.

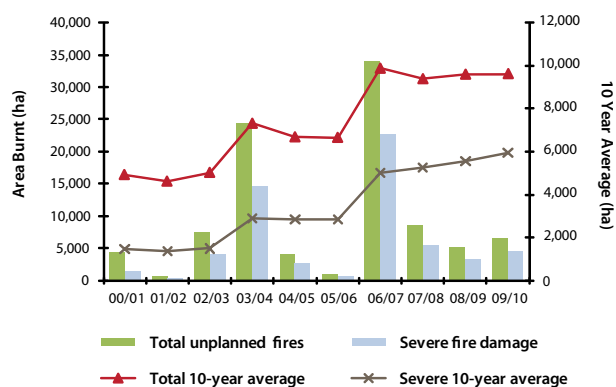
In 2009/10, approximately 6,461 hectares was burnt as a result of 65 unplanned fires, with 4,484 hectares of this area being considered as severely damaged. The area burnt in 2009/10 was 3,153 hectares less than the 10-year (2000-2009) average annual area burnt of 9,614 hectares. Additional costs of \$3,701,013 were incurred by Forestry Tasmania in the course of fire suppression activities.

Significant events included three multi-agency fires:

- the Snake Road fire on the boundary between the South West National Park and state forest to the west of the Florentine Valley;
- the Asbestos Road fire, in state forest, and on reserved land and private property west of, and at one stage threatening, the town of Beaconsfield; and
- the Wayatinah fire, which burnt both sides of the Derwent River from Wayatinah to Ouse.

In addition to these fires, our Mersey District was required to cope with a spate of maliciously lit fires, most of which failed to develop and were extinguished quickly. One fire in the upper Mersey Valley threatened to spread from state forest into the Walls of Jerusalem National Park before being extinguished by firefighting work and timely rain.

Area burnt in 2009/10 compared with the 10-year average.



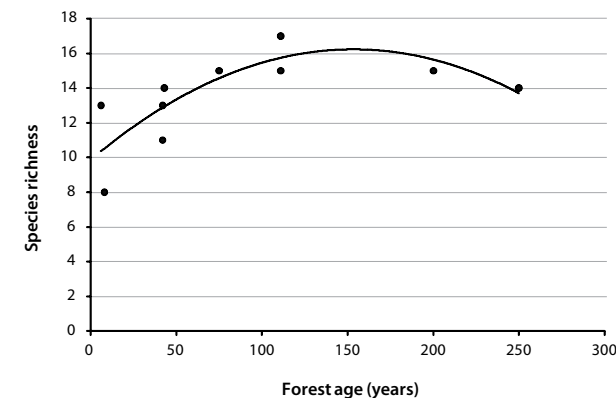
The Wildfire Chronosequence Project

We established the Wildfire Chronosequence Project in 2005 to provide a natural disturbance benchmark that documents how forests change in structure and species composition as they age following stand-replacing wildfires. Importantly, we wanted to contrast the changes that occur naturally following wildfire with those that follow harvesting. We carried out surveys of bird diversity along the chronosequence in 2009. The results found diversity and abundance of birds rose steadily as the time since wildfire increased, reaching a maximum at about 150 years since wildfire (see graph).

While the diversity of birds increased, the composition of the bird community changed as well. Different guilds of birds, the canopy-dwellers, the mid-layer species and the lower-layer species, each responded differently to the age of forest. While a small number were specialists – the superb fairy wren only being found in very young clearfells, the eastern spinebill only found in mature forest – most occurred across a range of ages and in forests of similar ages regardless of whether the disturbance was wildfire or harvesting.

As each forest age has a different mix of bird species, maximum bird diversity is likely when forests of different ages are interspersed through the landscape. We are increasingly recognising the importance for biodiversity of the patterning in the age structures of forests in landscapes resulting from wildfires. The challenge for management is to maintain similar mixes of old and young forests in the production forest landscapes.

Species richness of native bird species in *Eucalyptus obliqua* forests of different ages resulting from either wildfire or clearfelling.



sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE



Hannah Wiggins, Corporate Relations and Tourism.

Under our approach to sustainable forest management, we seek to balance the many different values attributed by the community to state forests. We aim to conserve environmental values and generate economic returns from the sale of wood products, and also maximise the benefits flowing to the community from the non-wood values of forests. Providing tourism and recreation opportunities, protecting indigenous and non-indigenous heritage, and maintaining landscape values are all core components of our role as manager of state forests.

Adventure Forests

The 2009/10 trading year saw a re-assessment of our role as a tourism operator, in response to the maturation of Tasmanian tourism product in the years since we took on the role of developer in 2001.

Plans for Forestry Tasmania to diversify into commercial tourism were devised in the late 1990s, which was a time when the State was contending with double-figure unemployment statistics, stagnating capital investment and low business confidence. Regional economies, such as the Huon Valley, were the most severely affected by this economic downturn.

The Tasmanian Government of the time saw tourism as a catalyst for regional development and employment; however, there was little investment in the tourism industry and no interest in developing new visitor attractions outside the Hobart area. Consequently, it looked to Forestry Tasmania, with its obligations under the Forestry Act to provide visitor opportunities in state forest, to stimulate tourism growth.

In 2001 the State Government encouraged us to invest \$5.7 million to develop the Tahune AirWalk. This project has been an undoubted success, becoming one of Tasmania's 'top ten' most visited attractions and a major impetus to economic growth in the Huon Valley.

Encouraged by this outcome, we implemented a regional tourism strategy that saw the development of Tarkine Forest Adventures, the Maydena Adventure Hub, and Hollybank Treetops Adventure, the latter successfully operating as a joint venture between Forestry Tasmania and Australian Canopy Tours.

Given that the Tasmanian tourism industry has grown since 2001, and private investment is now stronger, during 2009/10 we considered whether it was still appropriate for Forestry Tasmania to continue in the role of developer and operator. We concluded that the private sector is at this time better placed to effectively respond to market trends and develop new tourism product, and that we should now be focused on attracting more private sector entrepreneurs to invest in the Adventure Forests brand. Rather than continuing to stimulate tourism demand by developing major attractions, we will now move into the role of enthusiastic landlord, as a land manager, provider of visitor facilities, and as a joint venture partner with other entrepreneurs. To facilitate this, we are now working to develop a strong Adventure Forests franchise model.

A key step towards seeking increased private sector involvement in state forest tourism was the expressions of interest process we initiated at the start of the financial year, seeking operators with the drive and capacity to develop Tarkine Forest Adventures into its full potential as a destination.

Following an assessment of the financial performance and product mix of this attraction, which was undertaken during the previous reporting period, we concluded that Forestry Tasmania's corporate processes and overheads were impeding Tarkine Forest Adventures' economic viability and capacity for growth. We concluded that Tarkine Forest Adventures was suited to a small enterprise, which, unconstrained by Forestry Tasmania's business systems, could develop the product into a tourism hub. Following negotiations with various parties throughout 2009/10, we were pleased to sign a lease with GMG Pty Ltd subsequent to the reporting period.

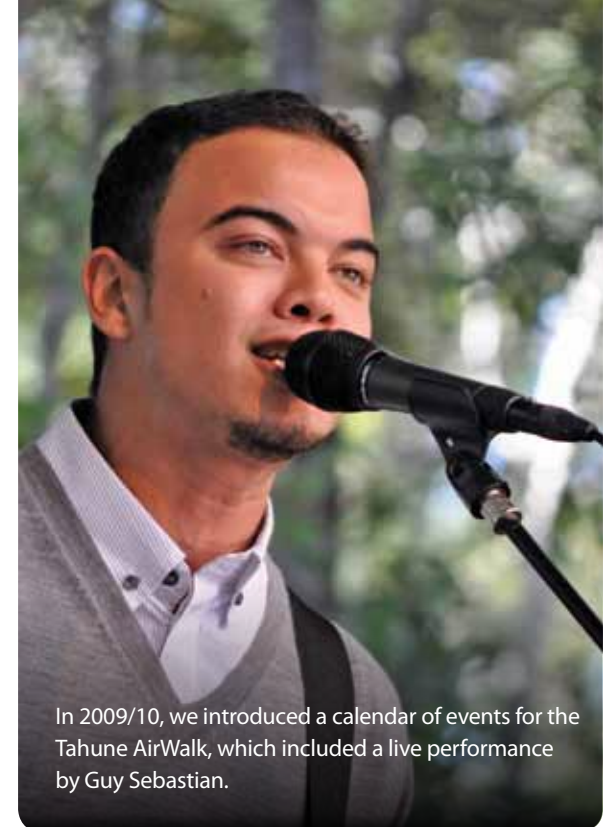
Tarkine Forest Adventures was a major development in an area that was previously devoid of significant tourism product. The attraction has provided a much-needed visitor drawcard for the emerging Tarkine destination. It has also achieved our goal of stimulating the discussion about the contribution of tourism development to economic growth in north-west Tasmania, which reached its most public expression in the debate over the proposed Tarkine Drive.

In a similar way, 2009/10 also saw us focus on developing the Maydena Adventure Hub as a community service that would create tourism growth and employment opportunities in the central highlands region. We established a number of partnerships to enhance the product mix at the attraction, including with leading chef Waji Spiby, adventure tourism operator Redbanks Fish and Field, and the Maydena Community Association, which runs one of the key activities, the Railtrack Rider. We will consider selling or leasing the ticketing office in 2010/11, and will continue our involvement in the Maydena Adventure Hub as operator of

the Eagles Eyrie lookout on Abbotts Peak, and as a partner with other tourism operators.

In the north of the State, Hollybank Treetops Adventure continued to operate profitably under the leadership of Mr Peter During. Its success was recognised by the Tourism Industry Council of Tasmania, which honoured it as best major tourism attraction at the Tasmanian Tourism Awards 2009.

The reporting period saw the implementation of a new interpretation plan for the Tahune AirWalk, as part of our master plan to upgrade the visitor experience at the site. We also implemented a calendar of events for the site to increase visitation among special interest groups, with the most high profile event being an appearance by pop singer Guy Sebastian. We also assumed management of the Forest



In 2009/10, we introduced a calendar of events for the Tahune AirWalk, which included a live performance by Guy Sebastian.



Top of the World tour, Eagles Eyrie, Maydena.

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

and Heritage Centre in Geeveston, which became the ticketing outlet for the AirWalk and the enquiry point for all calls to the Adventure Forests telephone number. We will be seeking government funding during 2010/11 to renovate the centre into a multimedia experience. In the meantime, we have installed temporary interpretive displays, which promote the tall trees of the southern forests and answer many of the common questions asked by our visitors.

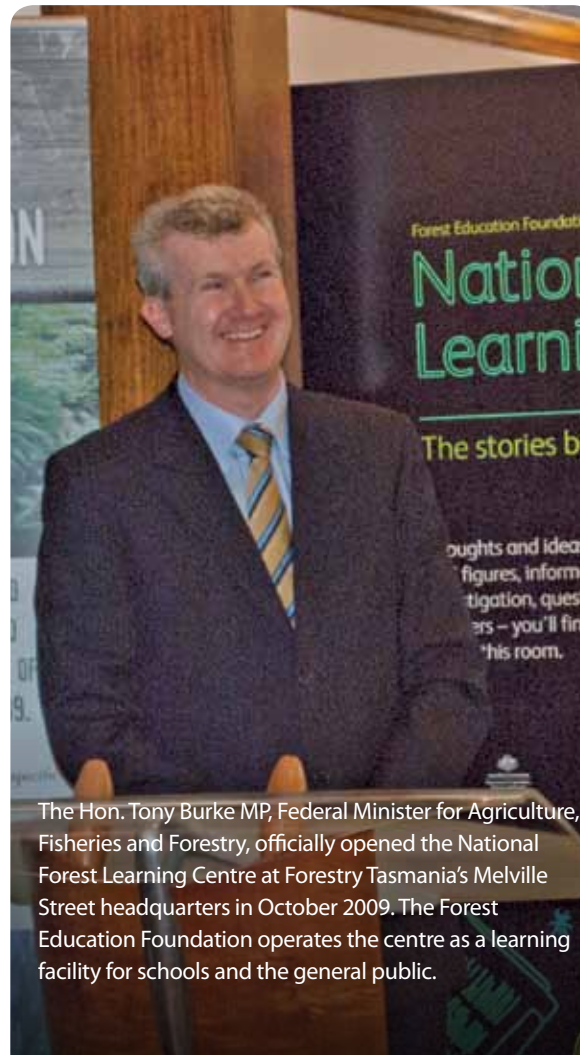
The financial year also saw our new Adventure Forests website go live. This consumer website promotes our entire tourism portfolio, provides information on special offers and activities, and is an e-ticketing outlet. For more information, visit www.adventureforests.com.au

The 2010/11 financial year was a challenging time for our tourism portfolio, with much of our focus on preparing Tarkine Forest Adventures for divestment. Our profit result was also negatively affected by the decision to impair the asset and write off the value of equipment and stock in preparation for the leasing of the attraction. However, Forestry Tasmania will always be inextricably linked with tourism, and we are confident that by partnering with dynamic private sector investors we will place the Adventure Forests brand in a strong position for the future.

Forest education

The National Forest Learning Centre, which is located within Forestry Tasmania's Melville Street offices in Hobart, was officially opened on 13 October 2009 by the Minister for Agriculture, Fisheries and Forestry, the Hon. Tony Burke MP.

The new facility provided the Forest Education Foundation with a high profile CBD location from which to deliver its quality learning experiences. Its development was funded by a Department of Agriculture, Fisheries and Forestry grant, and it builds on work undertaken in schools by the Forest Education Foundation since its inception in 1989.



The Hon. Tony Burke MP, Federal Minister for Agriculture, Fisheries and Forestry, officially opened the National Forest Learning Centre at Forestry Tasmania's Melville Street headquarters in October 2009. The Forest Education Foundation operates the centre as a learning facility for schools and the general public.

The Forest Education Foundation has established extensive networks throughout the education sector in Tasmania and has built a reputation for the production of high quality educational resources and the delivery of teaching and learning experiences. The centre combines innovative technologies with interactive displays providing activities on a number of forestry themes. The centre's programs can either be offered as stand-alone activities, or as precursors to more intensive field-based programs. It has allowed the Forest Education Foundation to expand its scope beyond schools, to involve the wider community.

With assistance from our Corporate Relations and Tourism Branch, the Forest Education Foundation marked the launch of the new centre with a schools' open day in November 2009. Over 150 students from six Hobart schools attended the open day, which featured scientific displays, hands-on learning activities, and an appearance by radio personalities from Heart FM. Many school groups have visited the centre to participate in learning experiences since its opening.

Health and safety

Forestry Tasmania aims to create a zero workplace injury and illness culture, and to this end, sets annual performance measures for all employees. To support these measures, we identify major hazards and risks, and implement safety initiatives and programs.

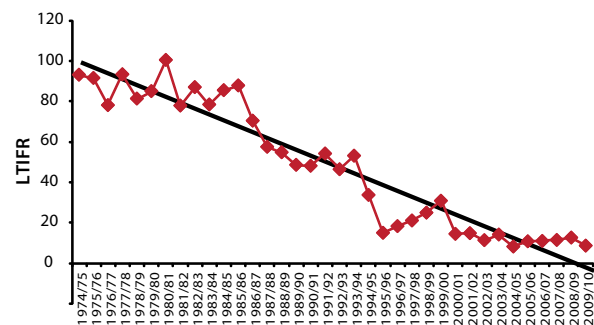
We continued with safety training programs and workshops, which were aimed at employees maintaining focus and concentration at work, especially while they are in the bush. These included initiatives such as 'Take 5', which is a

risk assessment process carried out by staff; safety circle workshops; and crash-free driver training.

While we acknowledge we cannot ‘engineer out’ some of the more common hazards forestry workers face on a day to day basis (for example, slips, trips and falls caused by walking on uneven ground), we can provide information and training that is designed to influence workplace behaviour. We believe that if employees are more focused and believe they are responsible for their own and their fellow workers’ safety and wellbeing, less lost time injuries are likely to occur.

We achieved a significantly improved safety record for the first six months of the 2009/10 financial year, with only one lost time incident in the period to December 2009. This was an outstanding achievement, which led to a result that was significantly under our lost time injury performance measure of less than 10 for the first time this financial year. It is also considerably less than in previous years, with 12 lost time incidents in 2008/09 and 11 in each of the previous three years.

Our long-term safety performance as measured using the lost time injury frequency rate.



One of the factors that contributed to our improved performance was our focus on crash-free driving, which made employees more aware of driver safety issues. The Safety Circle safety awareness program, which increases staff awareness of safe working practices, also had a positive effect. Both programs focused on managing risk, attitude and awareness. Staff were encouraged to be aware of what they were doing, to recognise constraints such as time and fatigue, and to make sure they stayed within the limits of safety.

In the field operations area Huon, Mersey, and Murchison Districts were incident free for more than one year, while the Forest Nursery at Perth was incident free for more than five years, which was an outstanding performance.

Similarly, since commencing the harvesting contractor safety program in July 2009, our contractor safety performance has improved greatly. The harvesting contractor safety program is a collaboration between Forestry Tasmania and the Tasmanian Forest Contractors Association (TFCA). It includes safety mentoring by TFCA officers and awards sponsored by us for excellent safety performance. Four harvesting contractors received safety awards during 2009/10 financial year. There were only three lost time injuries sustained by our contractors in 2009/10.

Developing a new approach to root cause analysis

In 2009/10, we contracted the services of Mr Alex Jerrim to develop an effective ‘root cause analysis’ process, with the aim of further improving our safety performance. Mr Jerrim is the creator of the ‘Crash-Free Driving’ program that we have implemented as a standard requirement for all employees who

drive a Forestry Tasmania vehicle. One of the core principles in the Crash-Free Driving program is a comprehensive analysis of vehicle incidents, to better understand where driving practices can improve. We firmly believe that if this core principle of analysis is applied to safety incidents in general, continual improvement in safety performance will result. We also believe the root cause analysis process could be applied in future to other areas of Forestry Tasmania, such as environmental and quality standards incidents.

In general, the process is about asking, ‘What were the immediate actions and conditions (contributing factors) that led to the occurrence of an injury incident?’ Further ‘why’ questions are then asked as to what led to those actions and conditions until eventually there comes a point where no further ‘why’ questions are possible. At this point, the ‘root cause(s)’ of the incident will be found and we will be in a better position to determine appropriate corrective actions.

Training in the root cause analysis process was delivered to all senior managers and supervisors around the State. Outcomes from root cause analysis will be included in monthly safety and environment reports to Forestry Tasmania senior management in the future.

Workers’ compensation

We recorded the lowest total of new workers’ compensation claims in 2009/10 with only 19 claims received. While the cost of new claims and cost of all claims were higher than in previous years, both came in under performance measure targets.

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

Rates for Forestry Tasmania employees returning to work following an injury remained consistently high. In the 2009/10 financial year, 25 per cent of claimants who incurred lost time injuries were back at work within one week, with a further 50 per cent back at work within one month.

As a self-insurer, Forestry Tasmania committed considerable time and resources to developing an Injury Management Program in order to comply with amended workers' compensation legislation, which took effect from 1 July 2010. Implementation of the program will enable us to further improve our return-to-work outcomes.

Aboriginal and historic cultural heritage

We undertake archaeological surveys during pre-harvest assessment of special values. These surveys can detect new sites, or re-detect old sites that were found by us in the past and mentioned in historical records, but which had no contemporary map reference. Once we find archaeological sites, we assess and protect them. These sites may include former mines, tramways, huts, artefact scatters, boilers and old mill sites.

During 2009/10, 875 hectares were surveyed for non-Aboriginal heritage, with 91 new sites found. These included timber tramways, huts, water races and locations of early prospecting implements. Ten new Aboriginal cultural heritage sites were also found as a result of surveys conducted over an area of 2,457 hectares.

Community engagement

Community perceptions of Forestry Tasmania

Following the social research we commissioned in 2008/09, we continued to monitor community perceptions of Forestry Tasmania through polling by respected market research company EMRS. We commissioned another survey of 600 Tasmanians in September 2009 to track whether our program of community re-engagement continued to change attitudes towards our business. We received favourable results, with the survey finding the community's perception of Forestry Tasmania as a good corporate citizen continued to improve during 2009/10.

Some of the key results of the survey included:

- a score of 4.7 out of a possible 7 for our reputation as a good corporate citizen, up from 4.5 in August 2008 and 4.6 in March 2009;
- only two per cent of respondents thought Forestry Tasmania's primary focus should be on making bigger profits; and
- 91 per cent of respondents were opposed to illegal forest protests in Tasmania.

Media relations

The EMRS poll also found that the majority of the community continued to gain most of its information about forestry through the media, which again highlighted the need for accurate reporting on forestry issues. On our part, we continued to release information pro-actively to the media, to keep our stakeholders well informed about our activities.

During the year we issued 111 formal media releases, a slight drop from the previous year's total of 117. However, many more media enquiries were dealt with informally by our Corporate Relations Branch. We also held media events to publicise new initiatives such as our 'safe driving on forest roads' campaign, and media conferences on significant issues such as the release of last year's financial statements and *Stewardship Report*.

Release of freedom of information responses and other key documents

In 2009/10 we continued our policy of releasing to the media and uploading to our website all freedom of information requests, except those relating to personal information. A total of 12 requests were received during the year, with one of these being later withdrawn by the applicant.

The *Right to Information Act 2009* came into effect subsequent to the reporting period, replacing the *Freedom of Information Act 1991*. The new Act provides greater public access to information held by government authorities, by mandating the routine and pro-active disclosure of information without the need for formal applications. It also provides the public with an enforceable right to information under assessed disclosure, which is restricted by limited circumstances.

In accordance with the requirements of the Act, Forestry Tasmania established a new 'Right to Information' section of its website on 1 July, which includes documents released under required and routine disclosure, and application forms for assessed disclosure. As part of our obligations under the Act, we have also created a new online shop from which copies of Forest Practices Plans may be purchased.

For more information, see www.forestrytas.com.au/right-to-information

Branchline

We continued to use our e-newsletter, *Branchline*, as the key means of informing our stakeholders about our activities. We produced 18 issues for our Australian stakeholders during the year, as well as two Japanese language editions. We continued to publish *Branchline* on a flexible schedule to ensure that it remained timely in reporting on key issues and announcements.

Going Bush

The popular Forestry Tasmania–Southern Cross Television series, *Going Bush*, entered a third season during 2009/10. Hosted by television personalities Nick Duigan and Andrew Hart, the series took a light-hearted approach to exploring key issues such as Forestry Tasmania's partnership with the Gumatj community in Arnhem Land, variable retention, special timbers management and carbon storage. The series will be produced for a fourth time in 2011.



Launceston's Jack Duffy, who has cerebral palsy spastic quadriplegia, was a recipient of Community Assist funding in 2009/10 for the "Kayak Jack Giving Something Back" fundraising event undertaken with his father, Chris Duffy.

Forestry Tasmania–Southern Cross Television Community Assist Program

The Community Assist Program is a joint venture between Forestry Tasmania and Southern Cross Television that provides funding for individuals and organisations endeavouring to make their communities better places to live. EMRS polling again showed that the program had a high profile among Tasmanians, with 30 per cent reporting they were aware it was a partnership between the two businesses.

Community Assist is aligned with Forestry Tasmania's core values, and applications that demonstrated how proponents shared those values were eligible to be considered for funding. In 2009/10, the program once again offered a total of \$100,000 in sponsorships, offered in one round rather than two, as had been the case in previous years. Sponsorship was also slightly restructured into two, rather than three, categories:

- **Category One: Care for People (Maximum \$1,000):** A series of small grants up to \$1,000 offered to individuals or organisations undertaking projects with a strong humanitarian focus that benefited their local communities, and that were in keeping with Forestry Tasmania's core values.
- **Category Two: Pride of Tasmania (\$5,000-\$40,000):** Sponsorships designed to build relationships with key Tasmanian organisations through the development of strategic ongoing partnerships. Successful applicants offer large-scale community benefit through contribution to sport, health and wellbeing, science, arts, environment or business.

The Community Assist Program 2009/10 received a record number of applicants, with 84 sponsorship applications for a combined total of \$840,000. This overwhelming response made the selection panel's decision very difficult, as all the applications represented extremely worthy projects. Of these applications, 26 were successful.

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

In 2009/10, Community Assist continued its partnership with the Football Federation Tasmania through a major Pride of Tasmania sponsorship for the Northern and Southern Premier Leagues to promote football within the State. This has been the second consecutive year Community Assist has supported the Football Federation, and the sponsorship has greatly assisted in developing football within Tasmania and providing opportunities from grassroots through to Premier League.

Community Assist also continued its association with the Rotary Club of Hobart in supporting the annual Charity Art Show, which was held at the Wrest Point Boardwalk Gallery on 2-4 July 2009. The show featured a record 300 pieces of work by 110 individual artists and raised over \$30,000 for local charities.

Sponsorships were also continued with the Ben Lomond Descent and the inspirational Vlastik Skvaril, who undertook a scooter ride from Darwin to Adelaide to raise money for cancer charity CanTeen.

In a four-year collaboration with the Derwent Valley Autumn Festival, Community Assist was the major sponsor of the New Norfolk event, which showcases entertainment and talent from around the region. The 2010 event was held on a beautiful autumn day at the New Norfolk Esplanade. In the event's 10th year, 15,000 people stepped out to take advantage of local entertainment, fine food and wine, and arts and crafts stalls.

The Southern Cross Young Achievers Regional Initiative Award and Kilburn Netball Club were also successful in receiving Pride of Tasmania sponsorship. The Forestry Tasmania Regional Initiative Award was presented to 19-year-old Christopher Cusick of Nugent, who has made a great contribution to his community through his involvement in a range of groups and organisations.

Several new partnerships were also created in 2009/10, including one with the Launceston Mountain Bike Club and Dirt Devils to support a statewide mountain bike cross-country and downhill series incorporating 12 events. The series culminated in championships held over the weekend of 6-7 March, and saw some of the State's top downhill and cross-country riders compete for honours.

The Schools' Triathlon Challenge also received sponsorship, allowing the event, which encourages participation and exercise amongst school aged children, to run again in 2009.



Football Federation Tasmania was a major beneficiary of the Forestry Tasmania-Southern Cross Community Assist Program in 2009/10.

Sixteen applicants received Care for People sponsorships of up to \$1,000. Included in the successful applicants was the Tasmanian Sail Training Association, which used the sponsorship to benefit its program taking disadvantaged youth aboard the *Lady Nelson* to teach them teamwork and sailing skills. The sail day involved students from Tasman District High School in a training and skill development session.

Uniting Care Tasmania received a \$1,000 sponsorship to assist with the set-up and running of its Mobile Op Shop, which delivered clothes and blankets to struggling areas in Tasmania. The program ran throughout 2010 around the southern midlands and central highlands and offered support to communities in remote areas.

Community Assist also continued to support young Tasmanian elite athletes with sponsorship grants of \$500 provided to Kye Clark (skeet shooting), Ebony Schuecker-Rush (diving), Emily Meaney (diving) and Michael Egan (rowing) to encourage further development and training of these promising young sporting stars. Emily and Ebony were both selected in the Australian Junior Squad following impressive performances at the Australian Elite Diving Championship in July 2009.

In total, \$105,750 was allocated through the Community Assist program 2009/10. A full breakdown of the recipients and the sponsorship money provided is detailed in Appendix 2.

Care for People schools award

The 'Care for People' schools award was again offered in 2009/10. The awards recognised worthy students who make a significant contribution to their communities, but are unlikely to benefit from the Community Assist program.

All Tasmanian schools were eligible to participate in the award, and were approached by Forestry Tasmania during the school year to nominate a student who had demonstrated compassion or thoughtfulness to 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, comprising a backpack, drink bottle, sunhat and a family pass to an Adventure Forests attraction.

2009/10 was the third year in which the award was offered, and many schools participated for the second or third time. A total of 115 students from 50 high schools and 65 primary schools throughout the State were presented with the award, and 30 new perpetual shields were provided to schools participating for the first time.

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 67 letters or other forms of correspondence this year, which was a significant drop from the previous year's total of 256. Of these letters, 27 per cent related to forestry activity on Bruny Island, 13 per cent to swift parrot conservation issues, and 10 per cent to forest harvesting in the Upper Florentine.

Forest Practices Plans now available on demand

Copies of Forest Practices Plans for production areas in state forests are now available for purchase from our online shop for \$20 each via our website. FPPs purchased online are provided as unique download links sent to a customer's registered online shop email account once payment has been verified.

Forest Practices Plans are part of the forest practices system administered by the Forest Practices Authority, which regulates forestry in Tasmania both on public and private land. They ensure forest practices provide reasonable protection for the natural and cultural values of forests.

Forest Practices Plans are prepared by Forest Practices Officers and other specialist staff employed by Forestry Tasmania. The plans cover all harvesting and forest establishment operations in Tasmania and associated activities such as quarries and road construction.

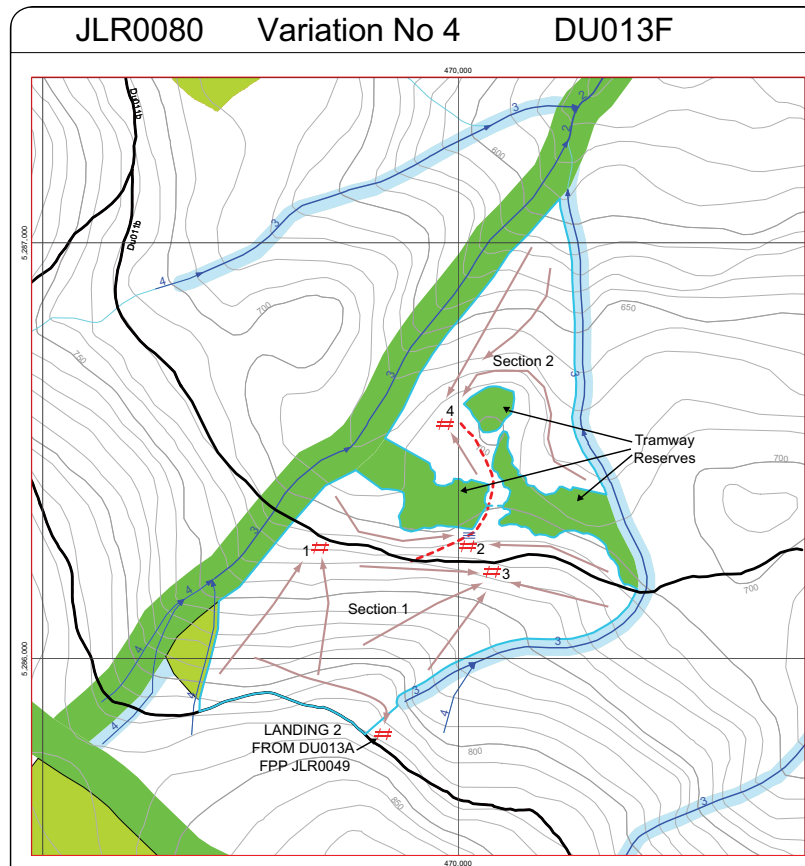
sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

Sensitive, confidential or commercial-in-confidence information is removed from Forest Practices Plans made available to the public.

The Forest Practices Plans online shop may be accessed through the online shops section at www.forestrytas.com.au.

Maps of specified areas may be previewed when making purchases through the Three Year Wood Production Plans coupe list section. Alternatively, Forest Practices Plans may be selected for purchase by clicking the appropriate forestry district, which can be accessed via the 'click to buy the FPPs' button.

Forest Practices Plans for harvesting areas established in the past and not available on the web may be viewed and purchased at district offices.



Scale 1:10,000

ELLEDALE 4628

Harvest Area: 55 hectares



LEGEND

Map Centre Coordinates: 470112mE; 5286299mN

Date: Friday, October 02, 2009

FPP boundary	Located or marked out road	Contractor boundary	Formal reserves	Constraint
Harvest boundary	Provisional marked road	Landing	Informal reserves on State forest	Hazard
Classed Stream	Walking Tracks	Crossing	Informal reserves on other tenures	Water
Unclassed Stream	Hydro/Cemts	Bridge	Streamside reserves	
Road class 1 - 3	Contours	Cattle setting	Conditional areas	
Road class 4	Strip direction	Special point feature	Private land	



NOTE: Map co-ordinates are based on GDA94. Topographic map data is supplied by DPIWE. Prepared by: jlr. (c) Copyright - Forestry Tasmania. P20091002 1459

FPP No: Page.....of..... FPO Initials..... L/O..... Appl.....

Forest Practices Plans are now available for purchase online at forestrytas.com.au

sustaining SCIENCE-BASED STEWARDSHIP



Eddie Willis, Derwent District.

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 our organisational capacity is supported by the collection and use of accurate information, effective systems and procedures and skilled personnel.

Legal compliance

Forest Practices Act

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 forest practices system emphasises 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 is 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.

No notices were issued to us under Section 41 of the Forest Practices Act in 2009/10. One notice was issued to one of our principal road construction contractors as a result of adversely affecting the water quality within a domestic water catchment area as a result of poor road construction practices.

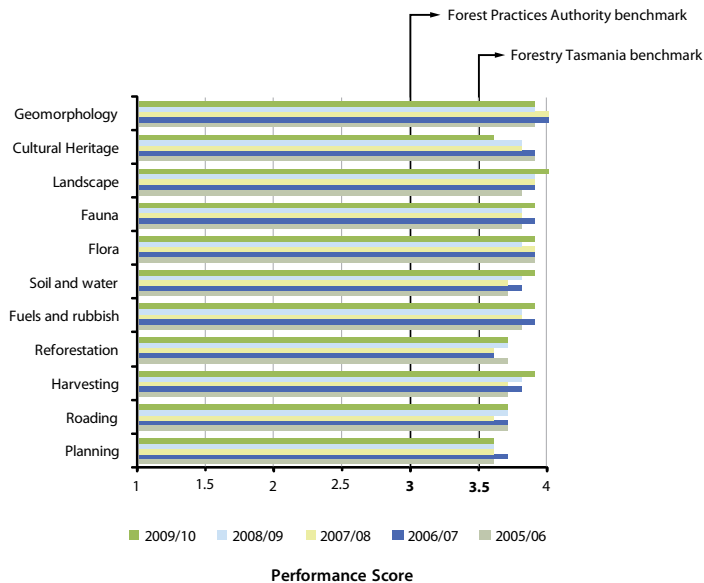
The Forest Practices Authority undertakes an independent annual audit of a representative sample of Forest Practices Plans. The audit covers forest harvesting, road works and site preparation at various stages of completion. In addition to the assessment of operational performance, the audit checks the standard of the plan, including all assessments and procedures required by the forest practices system. The overall outcome of the 2009/10 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.

According to the Forest Practices Authority, the 2009/10 audit was based on a sample size of 37 Forest Practices Plans, which is considered sufficient to give a meaningful performance result. Overall the performance was very good, with two follow-up investigations initiated as a result these audits. One was still being investigated by our district staff, while the other relates to road construction that was undertaken by an adjoining private property owner. The audit indicated that Forest Practices Plans would be improved by being prescriptive rather than descriptive, that is, only information specifically relevant to the forest operation should be included in a concise and clear manner.

sustaining SCIENCE - BASED STEWARDSHIP

The Forest Practices Authority issued one fine of \$1,500 to us in 2009/10, as a result of excessive crosses of a historical water race during one of our harvesting operations.

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



Workplace Health and Safety Act

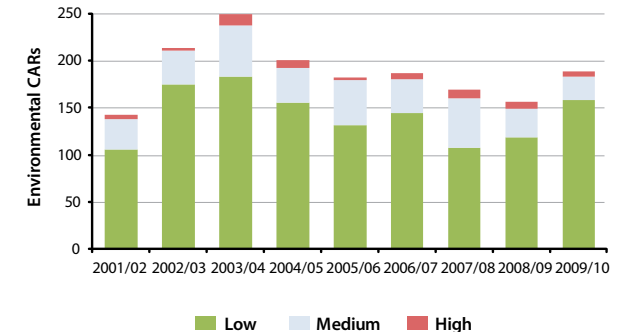
No Workplace Standards notices were issued to us or our contractors under the *Workplace Health and Safety Act 1998* during 2009/10.

Certification

Forestry Tasmania's sustainable forest management performance is independently audited against three certification standards: 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 external audit undertaken by NCS International in May 2010, our third-party auditor raised a major non-conformance as a result of the auditors finding that our integrated management system at Tarkine Forest Adventures had not functioned effectively for some time. A comprehensive action plan to address this finding was prepared and endorsed by the auditors, thus reducing the finding to a minor non-conformance.

In addition to the external auditing of our systems, ongoing monitoring of our forest operations and activities is also a strong component of our forest management system. If we find any non-conformances as measured against our standard operating procedures, 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 2009/10, 188 environmental issues were registered, of which five were categorised as high, 25 as medium and 158 as low.

Number of environmental corrective action requests raised by reporting category.



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

- a firefighting vehicle and a harvesting contractor's excavator catching alight and being destroyed;
- an eagle nest found during a harvesting operation;
- an unregistered section of a known archaeological site being slightly damaged as a result of it not being detected during a harvesting operation; and
- a smoke exceedence being recorded at the Judbury monitoring station on the same day Forestry Tasmania and a number of private landowners were conducting burning operations.

In addition to the regular monitoring of operations, corrective action requests are also raised through findings made in internal and external audits. In 2009/10, a total of 48 corrective action requests were raised following six audits (one external and five internal).

View our audit public summary reports:
www.forestrytas.com.au

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, complemented by our communications role. Much of the Division of Forest Research and Development's research is performed in collaboration with others, as this is by far the most 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 Cooperative Research Centre for Forestry, the Landscape Logic Commonwealth Environment Research Facilities (CERF) hub, the Australian National Flux (OzFlux) Network, and a number of Australian Research Council linkage grants.

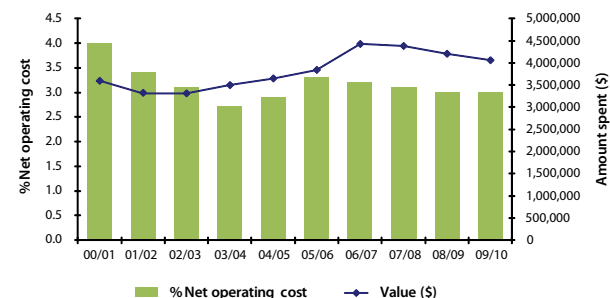
Research outputs, and science more generally, inform forest management and operations directly as part of Forestry Tasmania's daily business, but it is also important that this is specifically demonstrated and communicated to the wider community. The scientific and technical staff of the Division of Forest Research and Development are involved in publicising research and its implementation. The division 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 policy-setting and practical forest management in a commercial environment.

During National Science Week, school groups visited the Tahune AirWalk to see a variety of science displays and quiz the scientists on-site. The big screen at the Warra theatre provided insight into the research being undertaken across the Tahune bridge at the Warra Long-Term Ecological Research site.

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



Forestry Tasmania is a major player in National Science Week. In 2009, we hosted a number of school groups on science excursions to the Tahune AirWalk.

sustaining SCIENCE-BASED STEWARDSHIP

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, Union Collective Agreement Number 1, had a completion date of 30 June 2009. However, it continues to operate while the unions who are parties to the agreement and Forestry Tasmania negotiate shared objectives under a new agreement.

Training and development

During the year, the Training and Development unit of Human Resources continued to roll out Crash Free Driving and Safety Circle initiatives to all employees, highlighting the determination of Forestry Tasmania to keep employees safe.

Through the Registered Training Organisation we were also able to offer a Certificate IV in Forest Operations and Diploma of Forest and Forest Products to 18 employees. This program is being delivered in partnership with the Tasmanian Skills Institute under State Government Productivity Places Program funding gained through ForestWorks, the Industry Skills Council.

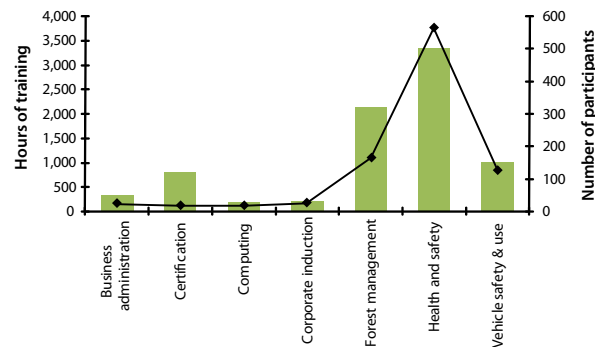
Last year we initiated a review of all firefighting training being delivered by Forestry Tasmania, a process that is ongoing and inclusive of recommendations from the Victorian Bushfires Royal Commission.

In the Northern Territory, Forestry Tasmania successfully delivered the first Units of Competence from the Certificate I in Forest Operations at Nhulunbuy. The initial two-week program was the first step to providing the indigenous community with nationally recognised qualifications under this project.

In recognition of the growing workload within the training area, Forestry Tasmania also appointed a new Training Officer. This will offer course participants far greater flexibility and a valuable resource for the development of new training within Forestry Tasmania.

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

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; and
- 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

In 2009/10, we recognised a number of long-serving employees who have reached 40-year, 35-year and 25-year milestones with Forestry Tasmania by holding special events at Smithton, Scottsdale, Hobart and Geeveston. These employees have served Forestry Tasmania for a combined total of 715 years, with Murchison staff contributing 215 years' service, Bass 135 years, Derwent and head office 295 years and Huon 70 years.

Resource information

Forestry Tasmania embarked on a program of acquiring LiDAR (light detection and ranging) data over approximately 90 per cent of state forest over a three-year period. The program was initiated after a successful pilot study indicated that LiDAR-derived products could save considerable money across the organisation and would lead to much higher quality planning for forest management activities such as timber harvesting and road works.

LiDAR is an innovative technology that uses lasers, fired from a light plane, to measure distance to objects. When used at high density, LiDAR can generate information on ground shape and forest structure that is far more accurate than any of the commonly available information sources. LiDAR will be used to replace existing ground and forest mapping.

Initially concentrating in north-eastern Tasmania, data on approximately half a million hectares were captured in an arc running from the Tamar River, through Scottsdale and Derby to St Helens and Scamander on the east coast.

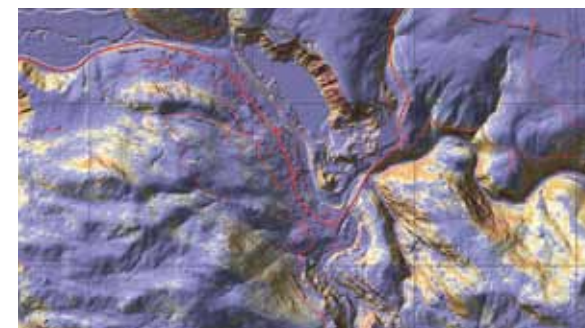
Extent of Forestry Tasmania's LiDAR capture in 2010.



Forestry Tasmania staff are finding that LiDAR-derived mapping allows them to concentrate on solving issues in forest management, rather than spending time searching for issues in the first place. This not only saves time in the planning process, but also leads to better environmental outcomes due to higher quality information about the topography and forest.

LiDAR has provided forest managers with a very detailed snapshot of forest conditions across the estate and is particularly useful for monitoring regenerating forest and plantations.

Mine workings at Derby, north-east Tasmania.



During the 2010/11 program, we aim to capture LiDAR data for over one million hectares by completing data capture for Bass District, and moving on to Huon and Derwent districts.

Business system developments

During 2009/10 we completed installing a new phone system across our business, following a successful roll-out of the new technology in Huon District during 2008/09. The system uses our data network, including our wireless links to the Tahune AirWalk and Huon Wood Centre, to carry voice traffic, thereby significantly reducing costs while providing new functions such as voicemail and faxes directly to staff email accounts.

The year also saw an upgrade to the Inventory Plot Tool, an application for use on field-based handheld devices, which allows it to be used in conjunction with the new LiDAR inventory management processes.

Following a tender process, we also selected new software for our human resources management system to replace our ageing system. The new system will be implemented in 2010/11.

where to FROM HERE?



Dr Matt Wood, Division of Forest Research and Development.

Listed below are some of the challenges and priorities we will be striving to achieve in 2010/11 to ensure we continue to deliver the aims outlined in our Sustainability Charter.

Sustaining biodiversity and habitat

- Develop rationale and study to understand the ability of CAR reserves to maintain biodiversity in the southern forest landscape.
- Provide input on the draft Strategic Swift Parrot Plan being developed by the Department of Primary Industries, Parks, Water and Environment.
- Conduct further geographic information system analyses to identify the main forest types that support known eagle nests.
- Achieve the 80 per cent non-clearfell target for old growth harvesting in 2010/11.

Sustaining jobs for current and future generations

- Prepare for 2012 Regional Forest Agreement Wood Review.
- Complete blackwood resource review.
- Implement feature grade specifications for non-sawlog special timber to assist its recognition and recovery.
- Further expansion of Trees on Farms project across the State.
- Finalise an apiary management plan/strategy in consultation with the Tasmanian Beekeepers Association.

Sustaining carbon stores, clean air, water and healthy forests

- Evaluate and integrate the Canadian carbon accounting tool with Forestry Tasmania's wood modelling tools to significantly enhance our ability to measure carbon balances.
- Develop understanding of impacts of landscape disturbance on water quality.
- Finalise a plan for management and conservation of karst in the West Picton region.
- Development of a statewide fuel reduction burning program for state forest.

Sustaining community access and heritage

- Invest in a signage program to inform visitors of particular hazards at Forestry Tasmania's recreational sites.
- Implement the new Root Cause Analysis process.
- Finalise protocol with Wine Industry Tasmania.
- Develop international help desk for customers.

Sustaining science-based stewardship

- Seek opportunities to underpin forest industry discussions with sound science on conservation and sustainability priorities.
- Revise Technical Bulletin 5 (Silvicultural Systems).
- Effectively implement changes to the *Workers Rehabilitation and Compensation Act 1988*.
- Effectively implement the *Right to Information Act 2009*.

GLOBAL REPORTING INITIATIVE CONTENT INDEX

GRI Ref.	Description	Core or additional	Location within this report
Strategy and analysis			
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
Organisational profile			
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
Report parameters			
Report profile			
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
Report scope and boundary			
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
GRI content index			
3.12	GRI content index.	Core	GRI content index
Governance, commitments and engagements			
Governance			
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
Stakeholder engagement			
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
Economic performance			
Economic performance			
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 report
Market presence			
EC6	Policy, practices, and proportion of spending on locally based suppliers at significant locations of operation.	Core	Wood products
Indirect economic impacts			
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
Environmental			
Materials			
EN1	Materials used by weight or volume.	Core	Wood products
Energy			
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
Biodiversity			
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
Emissions, effluent and waste			
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
Compliance			
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 Forest Practices Act
Transport			
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

GLOBAL REPORTING INITIATIVE CONTENT INDEX

GRI Ref.	Description	Core or additional	Location within this report
Social			
Employment			
LA1	Total workforce by employment type, employment contract and region.	Core	Wood products
Occupational health and safety			
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
Training and education			
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
Society			
Community			
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

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 safety, 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
 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