

Technical reports

Please submit an electronic copy of your Word document and any Excel files of any graphs/tables etc that are incorporated in the main text.

Avoid copying uneditable objects, such as jpegs, into draft technical reports. Please copy Excel tables into the document as word objects so that these can be edited in Word later if need be.

Compress all photos to minimal size (click on picture – edit picture – compress).

Text

Sub-heading 1 (ie “Abstract” sub-heading, “Introduction” sub-heading) in **Century Gothic lower-case 12-point bold** centred (put an upper case letter on the first word only).

Sub-heading 2 in *Century Gothic lower-case 12-point italics* left justified (put an upper case letter on the first word only).

Sub-heading 3 in *Century Gothic lower-case 10-point italics* left justified (put an upper case letter on the first word only).

Body text in Times New Roman 12-point font, left-right justified, single line spacing.

Styles

For all text, please use English Australian or UK spelling, not English US spelling (ie *organisation* not *organization*; *fertiliser* not *fertilizer*).

Words such as coordinator should not have a dash (ie not “co-ordinator”).

Per cent should be written not presented as a symbol (%)

°C should not have a space between it and the number (ie 10°C).

m, mm, kg, cm, l, mmol etc should have a space before the number (ie 10 kg)

Page numbers should appear at the bottom right hand side of the page, including page 1 in Century Gothic 10pt example: 1 (THEY ARE TO BE INSERTED INTO THE DOCUMENT UPON CONVERSION TO PDF, NOT IN WORD DOCUMENT)

PhD, masters and honours (no capital letters) for general reference to these types of postgraduate degrees; capitals for direct reference to individual awards.

Dates and times

23 February 2004 (not “the 23rd February” or February 23rd, 2004). There is no need to put the year if the year is included on the cover page. ie when referring to a workshop that was held in May 2007 in the Annual Report 2006-07, just write “May” not “May 2007”. The year is implied because May falls within the reporting period. If referring to a workshop that was held in May 2006, say “May 2006” because this falls outside of the reporting period.

Dates can be shortened to “23 Feb 04” - Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec.

Use 1991-96 (for dates within the same decade) or 1996-2005 for different decades.

8:15am, noon, 12:45pm.

Numbers

Use words for numbers up to nine, use numerals for 10 and above.

One, two, three, four, five, six, seven, eight, nine, 10, 11, 12, 20, 100.

100,000

1,000,000.

\$1.50

AUD\$10,000 (to differentiate from other currencies)

\$1 million

\$1 m

2 kg

Punctuation and grammar

CRCs (plural)

CRC’s (possessive)

Spelling

Programme in all instances except when referring to a computer program.

ie Research Programme One

Titles

Dr, Prof., Mr, Ms, Mrs, Miss. No full stop is required after Dr because the last letter (“r”) of the abbreviated version (“Dr”) is also the last letter of the full version (“Doctor”). Do use a full stop after the “f” in “Prof.”.

Personal names

When using initials for people’s given names, unpunctuated, unspaced presentation of initials is now the norm - e.g. AR Griffin; Brad M Potts.

north-east Tasmania (descriptive names that are not proper titles are not capitalised)

South-East Asia

(names that designate a group of nations geographically or politically are always capitalised)

Titles and subtitles on a page do not need capital letters on each of the words in the title. The use of **bold** will normally indicate that it is a title.

Things you can do to make your writing more easily understood

The following points are not asking you to “dumb down” your work – rather, this is a language issue. Using language that your audience can relate to will allow them to understand your main messages more easily. This is especially important if your target audience are not scientists (ie industry, public, media).

You will have many opportunities to choose synonyms that do not distort the meaning of what you have to say. Here are some examples:

<i>Scientific word</i>	<i>Everyday word</i>
Fauna	Animals
Utilise	Use
Adjacent to	Next to
Senescence	Ageing

When referring to an animal or plant, please refer to it by its common name (ie spotted gum) and then its Latin name (ie *Corymbia citriodora*).

Graphs, tables and figures

Table headings appear before the tables themselves, with the table number in **Century Gothic 10-point bold** font and explanatory text in Times New Roman 10-point font. Left right justify heading. Here is an example:

Table 1. External stem characteristics of the trees sampled from the 200 sph treatment and unthinned control at Goulds Country, May 2006. Bold *p*-values indicate significant treatment differences using *t*-test at $p < 0.05$.

Variable	200 sph sample trees	200 sph pruned plot means	Unthinned control sample trees	Control plot means	<i>P</i> -value (sample trees)
Mean height (m)	29.9	29.3	23.8	21.9	0.030
Height to first green branch (m)	11.9	11.8	12.1	12.8	0.909
Live crown ratio	0.60	0.60	0.48	0.41	0.045
DBHob (cm)	41.9	44.1	29.3	24.1	0.039
Height:DBH ratio (m cm ⁻¹)	0.74	0.67	0.86	0.95	0.136
Competition index (Heygi 1974)	0.82		1.22		0.266
Mean bark thickness (mm)	12.7		11.7 ^a		0.403
Taper 0.2-6.0 m (cm ² cm ⁻¹)	1.4		1.2 ^a		0.528
Taper 1.0-6.0 m (cm ² cm ⁻¹)	0.8		0.6 ^a		0.473
Mean stem volume (m ³)	1.50		0.92 ^a		0.100

^aExcludes the two suppressed trees in the unthinned control.

Table content is in Arial 9-point font (increase or reduce font size if needed to make table fit on page). Centre headings and numerical values.

Tables should be arranged with regard to the proportions of the printed page (1 column 8.5 cm width, 2 columns 17.5 cm width). Include in the headnote, any information relevant to the table as a whole, and where applicable, the levels of probability attached to statistics in the body of the table. Use *, **, *** only to define probability levels. Use footnotes only to refer to specific items in the body of the table; use ^A and ^B etc. for footnotes. Insert **horizontal rules above and below** the column headings and across the **bottom** of the table; **do not** use vertical rules. The first letter only of headings of rows and columns should be capitalised. Include the symbols for the units of measurement in parentheses below the column heading. Each table must be referred to in the text.

If a situation occurs whereby these table properties cannot be kept to please choose an alternative that follows these guidelines as closely as possible (ie do not drastically change table format).

Figure headings occur after the figures themselves and are in the same fonts as tables, ie figure number in **Century Gothic 10-point bold** font and explanatory text in Times New Roman 10-point font, left right justified. See example.

Where text appears in figures, **please** use text Arial **no smaller than 9-point font**. Axis labels (ie x and y should be in **bold**). If x or y axis labels are too long to use this font size, a key/legend system at the right hand side of the graph is suggested.

Graphs should not have any border boxes around them, only in cases where software packages do not allow for this to be changed.

Graphs should not have any background shadow/grey area.

References in *Australian Journal of Botany* style.

Examples

Book chapter:

Menzel R, Backhaus W (1991) Colour vision in insects. In 'Vision and visual dysfunction. Vol. 6.' (Ed. P Gouras) pp. 262–293. (Macmillan Press Ltd: London)

Maheshwari JK (1962) Cleistogamy in angiosperms. In 'Proceedings of the summer school of botany'. (Eds B Maheshwari, M Johri, IK Vasil) pp. 145–155. (Darjeeling Ministry of Scientific Research and Cultural Affairs: New Delhi)

Book:

Auld BA, Medd RW (1992) 'Weeds: an illustrated botanical guide to the weeds of Australia.' (Inkata Press: Melbourne)

Journal article:

Chittka L, Shmida A, Troje N, Menzel R (1994) Ultraviolet as a component of flower reflections, and the colour perception of Hymenoptera. *Vision Research* **34**, 1489–1508. doi: 10.1016/0042-6989(94)90151-1

Refereed conference proceedings:

Schirmer J (2006) Plantations and social conflict: exploring the differences between small-scale and large-scale plantation forestry. In 'Small-scale forestry and rural development: the intersection of ecosystems, economics and society'. Proceedings of IUFRO 3.08 Conference. (Galway-Mayo Institute of Technology: COFORD, Dublin) 18-23 June 2006.

Reports:

Dixon KW, Tieu A, Jefferson L, Turner S, Merritt D (2002) Application of multiple treatments on deeply dormant species. In 'Dormancy mechanisms in Australian native species'. Final report. pp. 236–267. (Australian Centre for Mining Environmental Research: Brisbane, Qld)

Bailey ET (1961) 'Plant collecting expedition to Central Chile 1958–59.' Divisional report 21/61 to CSIRO Division of Plant Industry. (CSIRO Division of Plant Industry: Canberra)

Theses:

Rice AD (2005) The larval parasitoid guild of *Chrysophtharta agricola* (Coleoptera: Chrysomelidae): host-parasitoid ecological and developmental interactions. PhD, School of Agricultural Science, University of Tasmania, Hobart, Tasmania

Wiggins N (2005) Effects of plant secondary chemistry on foraging behaviour of mammalian herbivores. PhD, School of Plant Science, University of Tasmania, Hobart, Tasmania

Yvonne O (2005) Gene flow from *Eucalyptus globulus* plantations. BSc(Honours) Thesis, University of Tasmania

Software:

Colwell RK (2004) EstimateS: Statistical Estimation of Species Richness and Shared Species from Samples, Version 7.0.

McCune B, Mefford MJ (1999) PC-ORD. Multivariate Analysis of Ecological Data, Version 4.17. (MjM Software Design: Gleneden Beach, Oregon, USA)

Acronyms, abbreviations and contractions

When using acronyms, the first time used, the phrase should be spelled out in full, followed by the acronym in brackets. For example; University of Tasmania (UTas); New South Wales (NSW). Any subsequent referrals can then use just the acronym.

Commonly used acronym formats used by the CRC for Forestry:

AFG	Australian Forest Growers
AGM	Annual General Meeting
ALS	Airborne laser scan
ANU	Australian National University
APVMA	Australian Pesticides and Veterinary Medicines Authority
ARC	Australian Research Council
C&U	The Commercialisation and Utilisation Programme of the CRC for Forestry. See also “S2”.
CA	Commonwealth Agreement
CABALA	A linked carbon, water and nitrogen computer model of forest growth for silvicultural decision support
CASR	Collaboration and Structural Reform Fund
CERF	Commonwealth Environment Research Facilities Programme
CIPMC	Commercialisation & IP Management Committee
CRC	The Cooperative Research Centre for Forestry
CRC for Forestry	(our working name)
CRC Forestry Limited	(our registered business name)
CRC Programme	The CRC Programme, which is part of the Commonwealth Government Department of Education, Science and Training.
CRCA	The Cooperative Research Centres Association
CRC-SPF	The Cooperative Research Centre for Sustainable Production Forestry, which ceased operation on 30 June 2005.
CRES	Centre for Resource and Environmental Studies
CSIRO	The Commonwealth Scientific and Industrial Research Organisation (Australia)
DArT	Diversity arrays technology (a generic genotyping technology)
DED	Department of Economic Development (Tasmania)
DEST	The Australian Government Department of Education Science and Training
DPIW	Department of Primary Industries and Water (Tasmania)
DSE	Department of Sustainability and Environment (Victoria)
DSS	Decision support system
ESA	Ecological Society of Australia

FABI	Forestry and Agricultural Biotechnology Institute, University of Pretoria
FEA	Forest Enterprises Australia Ltd
FFIC	Forests and Forest Industry Council of Tasmania
FIAT	Forest Industries Association of Tasmania
FORTHREATS	European network on emerging diseases and invasive species threats to European forest ecosystems. For more information on this project please refer to http://www.ulb.ac.be/sciences/lubies/forthreats.html
FPA	Forest Practices Authority (Tasmania)
FPC WA	Forest Products Commission Western Australia
FT	Forestry Tasmania
FWPA	Forest and Wood Products Australia Limited (formerly Forest and Wood Products Research and Development Corporation)
FWPRDC	formerly Forest and Wood Products Research and Development Corporation (now Forest and Wood Products Australia Limited)
GL	Gunns Ltd
Green Hills	<i>not</i> Greenhills
GSP	Great Southern Plantations, a partner to the CRC for Forestry, changed its name to Great Southern Limited in 2006.
Gunns	Gunns Limited
Hansol	Hansol P I Pty Ltd
HVP	Hancock Victorian Plantations Pty Ltd
IEGN	International <i>Eucalyptus</i> Genome Network
IP	Intellectual Property
IPMG	Industry Pest Management Group
ISSN	International standard serial number
ITC	Integrated Tree Cropping Limited
IUFRO	International Union of Forest Research Organisations
LiDAR	Light detection and ranging
LTER	Long term ecological research. There is an LTER site located at Warra in southern Tasmania.
MC	Management Committee
MLD	Mycosphaerella leaf disease
Murdoch	Murdoch University
NIRS	Near infrared scanning
NRM	Natural Resource Management
NS	Norske Skog Paper Mills (Australia) Ltd
NSW DPI	New South Wales Department of Primary Industries
Oji	Oji Paper Company Limited
PA	Participants' Agreement
PCC	Programme Coordinating Committee
PFT	Private Forests Tasmania

PSC	Project Steering Committee
RP1, RP2, RP3, RP4 RP1.1, RP1.2, S1, S2 etc	The research programmes and projects of the CRC (see appendix for full list, plus note below on presentation of project and subproject names)
SCU	Southern Cross University
SEFE	South East Fibre Exports Pty Ltd
SMEs	Small to medium enterprises. A small business employs up to 20 people. Medium businesses employ between 20 and 200 people (source: DEST contact officer, 2006)
SPC	Strategic Policy Committee
STBA	Southern Tree Breeding Association
TASVEG	Tasmanian Vegetation Map
TC	Timbercorp Ltd
TCFA	Tasmanian Community Forest Agreement
TIAR	Tasmanian Institute of Agricultural Research
UniMelb	University of Melbourne
UTas	University of Tasmania
WAPRes	WA Plantation Resources Ltd

Appendix 4 to the Annual Report to the Commonwealth Government: Structure of the CRC

Although CRC for Forestry project agreements do not extend to the sub-project level, subprojects have been given a complementary numbering system and these are presented below as a reference.

- Research Programme One** **Managing and Monitoring for Growth and Health**
- Research Project 1.1 Monitoring and measuring
 - Subproject 1.1.1 Site evaluation
 - Subproject 1.1.2 Monitoring of forest condition with multi-spectral and hyper-spectral remote-sensing
 - Subproject 1.1.3 Improved forest inventory using high resolution airborne remote sensing
 - Research Project 1.2 Managing and sustaining**
 - Subproject 1.2.1 Sustaining site resources
 - Subproject 1.2.2 Measuring and managing forest health
 - Research Project 1.3 Modelling and information integration**
 - Subproject 1.3.1 Modelling weed impacts on plantations
 - Subproject 1.3.2 Information integration
 - Research Project 1.4 Growth/yield modelling and risk assessment for subtropical hardwood species**
- Research Programme Two** **High Value Wood Resources**
(does not include subprojects)
- Research Project 2.1 Breeding for high value wood products (also known as “Breeding”)**
 - Research Project 2.2 Silviculture for high-value solid and engineered wood products (also known as “Silviculture”), including Research Project 2.5 (subtropical plantations).**
 - Research Project 2.3 Impact of silviculture interventions on wood quality into plantation estate management (also known as “Wood quality & processing”)**
 - Research Project 2.4 Incorporating wood quality into plantation estate management (also known as “Wood quality & management”)**
- Research Programme Three** **Harvesting and Operations**
- Research Project 3.1 Harvesting and operations**
- Research Programme Four** **Trees in the Landscape**
- Research Project 4.1 Water quality and quantity (also known as “Water”)**

- Subproject 4.1.1 Integrating forestry and agriculture for productivity and environmental benefits in medium to low rainfall zones.
- Subproject 4.1.2 Impacts of forest harvesting and re-establishment on stream yield and water quality.
- Subproject 4.1.3 Impacts of forest management on stream yield, water quality and hydrological processes in the riparian zone.
- Subproject 4.1.4 Impacts of forest harvesting and management on stream health.
- Subproject 4.1.5 Commercial forestry in the riparian zone.

Research Project 4.2 Biodiversity

Theme: Monitoring and management of biodiversity in forestry landscapes

- Subproject 4.2.1 Biodiversity benefits of alternatives to clearfelling
- Subproject 4.2.2 Biodiversity outcomes from plantation expansion into agricultural and native forest landscapes
- Subproject 4.2.3 Biodiversity value of coarse wood debris
- Subproject 4.2.4 Tools for monitoring and assessing biodiversity
- Subproject 4.2.5 Management of forest species of high conservation significance, including threatened species

Theme: Gene pool management

- Subproject 4.2.6 Management of the risk of gene flow from eucalypt plantations
- Subproject 4.2.7 Management of genetic resources

Theme: Sustainable management of key pests

- Subproject 4.2.8 Integrated management of browsing mammals
- Subproject 4.2.9 Lethal trap trees
- Subproject 4.2.10 Improving *Mycosphaerella* resistance in deployment populations of *Eucalyptus globulus*.

Research Project 4.3 Communities and landscape design (also known as “Communities”)

- Subproject 4.3.1 Socio-economic costs and benefits of different types of commercial forestry
- Subproject 4.3.2 Community attitudes towards commercial forestry, and how these change
- Subproject 4.3.3 Feasible and effective strategies for the forest industry to engage local communities
- Subproject 4.3.4 Participatory modelling guidelines and tools to inform stakeholder dialogue about trade-offs between production, water, biodiversity, visual amenity and other community requirements.

Research Project 4.4 Industry pest management group (also known as “IPMG”; allied with Project 4.2 Biodiversity).

Research Project 4.5 Socio-economic impacts of land use change in the Green Triangle and Central Victoria (also known as “Land Use Change”)

Subproject 4.5.1 Attitudes and values survey.

Subproject 4.5.2 Quantify and analyse land use, industry and socio-economic change in the region using independent data.

Subproject 4.5.3 Understand shifts in the landholder population.

Support Programme One	Education and Knowledge Transfer
Support Programme Two	Commercialisation and Utilisation
Support Programme Three	Administration

Presentation of projects and subprojects: name using the numbering system, then explain in parentheses. Examples:

Staff from projects 1.2 (“Managing and sustaining”) and 1.3 (“Modelling and information integration”) participated in a joint field trip with staff from project 1.4 (“Subtropical modelling”) on Melville Island in April.
- (2006-07 Annual Report to the Commonwealth Government, page 15)

A second project funded by the economics group within the Victorian Government Department of Sustainability and Environment (DSE), aimed at continuing development of models for water use and growth dynamics, will contribute directly to the Project 4.1 (“Water”) aims of integrated catchment modelling...
- (2006-07 Annual Report to the Commonwealth Government, page 26)

Dr Neary visited subproject 4.1.5 (“commercial forestry in the riparian zone”), providing expert advice to this research group and insight into his other hydrology work in the United States.
- (2006-07 Annual Report to the Commonwealth Government, page 27)

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