

IN THE SUPREME COURT OF VICTORIA
AT MELBOURNE
COMMON LAW DIVISION

No. 8547 of 2009

BETWEEN

ENVIRONMENT EAST GIPPSLAND INC

and

VICFORESTS

Plaintiff

Defendant

AFFIDAVIT OF IAN STEWART FERGUSON

Date Sworn: 29 January 2010

Filed on behalf of the Defendant

**HWL Ebsworth Lawyers as agents for Komesaroff
Legal Pty Ltd**
Level 21, 570 Bourke Street
Melbourne VIC 3000

Solicitor Code: 179
DX: 564, Melbourne
Tel: (03) 8633 7500
Fax: 1300 365 323
Ref: JAK:RVH:182227

I, IAN STEWART FERGUSON of 79 Athelstan Road, Camberwell in the State of Victoria, Consultant and Emeritus Professor, make oath and say as follows:

1. I swear this affidavit from my own knowledge (except where I say otherwise).
2. I am a Professor Emeritus of Forest Science at the Department of Forest and Ecosystem Science, Melbourne School of Land and Environment at the University of Melbourne.
3. Now produced and shown to me and marked "ISF-1" is a true copy of my current *curriculum vitae*.
4. I have prepared a report for the purposes of this proceeding. Now produced and shown to me and marked "ISF-2" is a true copy of my report.



5. I have been provided with a copy of Form 44A – Expert’s Code of Conduct (**Expert’s Code of Conduct**) by HWL Ebsworth. I have read the Expert’s Code of Conduct and agree to be bound by it.

SWORN at *CAMBERWELL*)
on 29 January 2010)
Before me:)

[Signature]
.....

[Signature]
.....
Ian Stewart Ferguson

Carlos Alberto Gutierrez
Level 21, 570 Bourke Street, Melbourne
An Australian Legal Practitioner
(within the meaning of the
Legal Profession Act 2004)

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Defendant

CERTIFICATE IDENTIFYING EXHIBIT

Date of Document:

Filed on behalf of:

Prepared by:

HWL EBSWORTH LAWYERS as agent for
Komesaroff Legal Pty Ltd

Level 21, 570 Bourke Street

MELBOURNE VIC 3000

DX 564 MELBOURNE

29 January 2010

The Defendant

Solicitor's Code: 179

Telephone: (03) 8633 7500

Facsimile: 1300 365 323

Ref: JAK:RVH:182227

This is the exhibit marked "ISF-1" now produced and shown to IAN STEWART FERGUSON at the time of swearing his affidavit on 29 January 2010.

Before me: _____



Carlos Alberto Gutierrez
Level 21, 570 Bourke Street, Melbourne
An Australian Legal Practitioner
(within the meaning of the
Legal Profession Act 2004)

EXHIBIT "ISF-1"

Current curriculum vitae

CURRICULUM VITAE: IAN STEWART FERGUSON

PERSONAL DETAILS

Date and Place of Birth: 13th December 1935; Melbourne, Victoria.
Private Address: 79 Athelstan Road, Camberwell, Victoria 3124.
University Address: School of Forest and Ecosystem Science
The University of Melbourne, Parkville, Victoria, 3010.
Contacts: Phone (61 3) 9809 1864
Fax (61 3) 9809 0546
Email: iferguso@bigpond.net.au

EDUCATION

1953-55 University of Melbourne, B.Sc.(For) 1961.
1956-57 Australian Forestry School, Dip.For. 1958.
1962-63 Yale University, U.S.A. Master of Forestry 1963.
1063-65 Yale University, U.S.A. Doctor of Forestry 1967.

EMPLOYMENT

1958-65 Forests Department of W.A., Assistant Divisional Forest Officer
1965-66 Forests Department of W.A., Research Officer
1966-67 Forests Department of W.A., Inspector
1968-71 University of Melbourne, Senior Lecturer in Forest Management and Forest Economics
1971-78 Australian National University, Department of Forestry, Senior Lecturer
1973-74 Australian National University, Sub-Dean, Faculty of Science
1979-81 Australian National University, Department of Forestry, Reader
1981-2003 University of Melbourne
Foundation Professor of Forest Science, 1981-
Head, Forestry Section (1981-85, 1990-)
Deputy Dean, Faculty of Agriculture and Forestry 1984-86
Dean, Faculty of Agriculture and Forestry (1987-89)
Associate Dean (Students), Faculty of Agriculture and Forestry (1990)
Deputy Vice-President, Academic Board (1989)
Vice-President, Academic Board (1990)
Pro-Vice-Chancellor (1990-92)
President, Academic Board (1991-92)
Head, School of Forestry and Resource Conservation, 1994-97
Associate Dean (Budgets and Resources), Faculty of Agriculture, Forestry and Horticulture 1995-96
Head, School of Forestry, Institute of Land and Food Resources, 1998-01
2003- University of Melbourne, Professor Emeritus

AWARDS

1953-57 Commonwealth Forestry Scholarship
1962 Fulbright Travel Grant
1962-63 Yale University Scholarship
1963-65 Yale University Fellowship
1989 M.R. Jacobs Oration
1989 Fellow, Institute of Foresters of Australia
1989 Fellow, Royal Australian Institute of Parks and Recreation (now Parks and Leisure, Australia)
1992 Fellow, Australian Academy of Technological Sciences and Engineering
N. W. Jolly Medal: Institute of Foresters of Australia
2003 Centenary Medal, Commonwealth of Australia

- 2005 Erskine Visiting Fellow, University of Canterbury, N.Z. Sept-Nov 2005
- 2006 Fellow, Institute of Wood Science (U.K.)
- 2000 ANU Westoby Lecturer, Aug. 2009

GOVERNING BOARDS

- Director, CRC Forestry Ltd 2005
- Director, Tiaki Plantation Co (NZ) 2004-2008
- Chair and Independent Director, Taswood Growers, 1999-2005
- Director, Hancock Victorian Plantations Pty Ltd 1998-
- Dep Chair and Director, Forests and Wood Products Corporation, 2000-2003
- Director, Timber Training Centre Ltd, 2002-
- Director, Lignotek Pty Ltd 2001-2004
- Member, Council of University of Ballarat, 1994-98
- Chairman, Timber Promotions Council, Victoria 1994-2000
- President, Institute of Foresters of Australia, 1994-1999
- Director, School of Forestry, Creswick Ltd 1993-98
- Member, University of Melbourne Council 1988-92
- Member, Ormond College Council, 1991-93
- Director, Board of Directors, Graduate School of Management Ltd., 1991-92
- Member, Ballarat University College Council, 1990-1993
- Member, Board of the School of General Studies, ANU 1979-80

OVERSEAS EXPERIENCE

- 1964-65 Teaching Associate, Yale University.
- 1970 Freeport Indonesia Inc., West Irian, Sept-Oct 1970
- 1971 FAO, Savannah Forestry Research Station Nigeria, May-Jul 1971
- 1973 FAO, Savannah Forestry Research Station Nigeria, Jan-Mar 1973.
- 1975-76 Visiting Associate Professor, College of Forest Resources, University of Washington.
- 1980 NZ Forest Products Ltd Visiting Fellow, School of Forestry, University of Canterbury.
- 1980 AAUCS Course Advisor, UPM Malaysia, Jan-Feb 1980
- 1981 ADAB Feasibility Study Team to China, Apr-May 1981
- 1982 ADAB Feasibility Study Team Leader, Royal Forestry College, Phrae, Thailand, Aug-Sep 1982
- ACIAR/World Bank China Forest Development Project Study Team. Sep-Oct 1986
- ADAB Eucalypt Research Centre, China, Pre-feas. Study Team Leader. Nov 1986
- 1988 FAO/UNDP Fiji Forest Sector Project, Industry Structure Analysis.
- 1989 New Zealand Forest Industries Council and the Ministry of Forestry, Review of Forestry Research, Jun-Oct 1989
- 1990 Research Associate, University of California, Berkeley, Jan-Mar 1990
- 1991&2 External Assessor and Course Advisor, Faculty of Forestry, Universiti Pertanian Malaysian, Serdang, May 1991 & 2
- 1992 ITTO Resources for Sustainable Management, Yokohama, Japan, Jan-Mar, 1992
- 1992 Ministry of Science, Technology and Environment, Malaysia; IRPA Panel member
- 1993 Visiting Fellow, East-West Center, Hawaii, Jun-Oct 1993.
- Forestry Commission of Zimbabwe/World Bank; Review of Forestry Research in Zimbabwe, Jan-Feb 1993
- 1994 Indian Council for Forestry Research and Education; Chief Technical Adviser and Socio-economic research consultant, Oct-Nov 1994
- Indian Council for Forestry Research and Education; Chief Technical Adviser and Socio-economic research consultant, Jul 1995

- 1996 STRAP Forest Policy Consultant, UNDP, Hanoi, Jul 1995.
- 1997 FAO Consultant, South Pacific Islands Outlook project, Rome, May-Jul, 1997
 UNDP Consultant, Evaluation Mission for UNDP Forestry Research Program, China, Aug 1997
- ITTO Expert Panel on Project Appraisal (Chair), Apr, Aug, Oct 98
- AusAID Capacity Building and Training, Kerala KFRI & KFD, Sep-Oct, 98
- AusAID Capacity Building and Training, Kerala KFRI & KFD, April 01
- Project Director & Lead Consultant, Fiji Pine Review, Fiji Forests Dept, Jul-Sep 01
- ADB Consultant on ADB Forest Sector Strategy – Mar 02
- Visiting Lecturer, Chinese Academy of Forestry, Beijing, China, May 03
- 2004 ITTO Consultant UN-Forum on Forests: Workshop on Decentralisation, Mar-Apr 04
- 2004 IUCN Consultant on Ecosystem Approach to Sustainable Forest Management
- 2005-6 ITTO/CITES Consultant on EU Project to Improve Management of CITES –related Timber Species
- 2009 FAO Consultant, Workshop on Improving private sector investment, Khon Kaen, Thailand 5-7 Aug 2009

AUSTRALIAN CONSULTANCIES

- APM Forests Pty. Ltd., Victoria, June-Dec. 1973
- Industries Assistance Commission, ACT, April 1974-Feb. 1975
- Joint Committee on Prices, Parliament of Australia, Nov. 1974-July 1975
- Department of Industry and Commerce, ACT, Jan.-April 1976
- Trade Practices Commission, ACT, June-Sept. 1977
- Forests Section of ACT, Growth models, Nov. 1977-May 1979
- Board of Inquiry on Forestry Royalties and Charges, Tasmania, May-Oct. 1978
- Kapunda Development Co., NSW, April-June 1980
- Shedden Pacific Pty. Ltd., APPM Pulp Mill Project, Aug.-Oct. 1982
- Chairperson and Sole Member, Board of Inquiry into the Timber Industry in Victoria, 1984-85
- APPM, Market Pulp Price Projections, Sept. 1985
- SIROTECH, Machine Review Project, Sept. 1985
- Shedden Agribusiness Pty. Ltd., Review of Commission of Inquiry Material, May 1988
- Private Forestry Council of Tasmania, Review of Private Forestry, June-Oct. 1988
- Peat, Marwick, Mitchell and Co., Plantation Valuation, Sept. 1986
- Tasmanian Forestry Commission, Review of Financial Management, Feb 1987
- Department of Conservation Forests and Lands, Review of Resource Availability Estimates, June 1989
- New Zealand Forest Industries Council and the Ministry of Forestry, Review of Forestry Research, June-Oct 1989
- Turnbull and Partners Ltd, Corporatisation of Forestry Commission of N.S.W., Nov 1990-July 1991
- Department of Primary Industry and Energy, Dep Chair, National Plantations Advisory Committee, Dec 1990-Aug 1991
- Resource Assessment Commission, Forest and Timber Inquiry, Feb-May 1992.
- Victorian Department of Conservation and Natural Resources, Risk Management for Fire Protection Services in Victoria. Feb - July 1992.
- Victorian Department of Conservation and Natural Resources, Review of Commercial Accounts, June 1992 -June 1993, 1996-
- Queensland Forest Service, Review of Yield Regulation Models for Native Forests, May--Sep 1992
- Victorian Department of Conservation and Natural Resources, Mortality of Mountain Ash, Mar 1992 -May 1993.
- South Australian Auditor-General, Review of Growing Stock Models used in Valuation, April-May 1993

Carter, Holt, Harvey Ltd, New Zealand. Implications of price increases for sawn timber markets in Australia. June 1993

Department of Primary Industry (Forestry) South Australia, Review of the Level of Cut in the State Forests of South East region of South Australia, Jul-Aug 1995

South Australian Auditor-General, Review of Valuation Methods, June 1994-Mar 1996

State Forests of NSW, Chair of Performance Evaluation of Research Division, Sep-Dec 1995

Forests Review Steering Committee, Primary Industry South Australia (Forestry), Lead consultant and Member, Feb-Sept 1996

Forestry Tasmania, Chair of Research Review Committee, Mar - July 1996

Prime Minister and Cabinet, Forests Task Force, Scientific Advisory Committee, Mar, 1996

Prime Minister and Cabinet, Forests Task Force, Chair of Joint Scientific Advisory Committee, Commonwealth/Victoria, Apr- Jul 1996

Prime Minister and Cabinet, Forests Task Force, Chair of Expert Group on Ecologically Sustainable Forest Management for East Gippsland, April - September, 1996

Prime Minister and Cabinet, Forests Task Force; Chair, Expert Group on Ecologically Sustainable Forest Management for Tasmania, Sept-Dec, 1996

Queensland Department of Primary Industries, Forestry; Chair, External Review of Queensland, Forestry Research Institute. Apr-May, 1997

Prime Minister and Cabinet, Forests Task Force, Statewide Review of Ecologically Sustainable Forest Management for Victoria, May 1997

Prime Minister and Cabinet, Forests Task Force, Assessment of Ecologically Sustainable Forest Management for South West Region of W.A., Oct-Nov 1997

Unisuper, Due Diligence and Valuation of Victorian Plantations Corporation, Nov 1998

Ministerial Advisory Group on Karri and Tingle Management, W.A., Feb-Dec 1999

Victorian Dept of Premier and Cabinet, Carbon Sequestration. in Allen Consulting Group Greenhouse Emissions Trading project, Jan-Jul 2000

Auditor-General of SA, Valuation of State Plantations, Jan – Nov 2000

Minister for Forestry, NSW, Price Arbitration, Jan 2000- 2001

Conservation Commission, Calculating Sustained Yield for Forest Management Plan, Nov 2000- Bureau of Rural Sciences, Review of Forestry Group, Sept 2001

Govt of Tasmania, Review of Dark Red Myrtle Resource, Nov 2001-Mar 2002

Black Forest Timbers Pty Ltd and NRE, Review of Midlands Sustainable Yield, Dec 2001-Apr, 2002

ACFA/AFFA, Australian Standard for valuing commercial forests. Sept 2001-Jul 2002.

BRS, Wood availability from Australian plantations, Jun 2001- Aug 2002.

Conservation Commission of WA, Chair, Expert Panel on calculation of sustainable yield, Jun 2002-Nov 2003

Auditor-General of Victoria, Wildfire prevention and preparedness audit, Sept 2002-Jan 2003

Unisuper, Technical due diligence review, Tiaki project, Mar-May 2004

DSE Review of Land Stewardship & Biodiversity R&D, Apr-May 2006

Unisuper. Technical due diligence for CHH plantations project Sep 2006

VicForests, Subconsultant for Poyry Forest Industry, Forests NSW, July 2007.

NAFI, Subconsultant for Poyry Forest Industry, CEM review, July 2008

FWPA, Timber Standards Nov 07-July 08

DSE, Development of Fire Research Strategy, Feb-Jul 08

DSE, Strategic Seed Collection and Storage, Mar-Sep 09

VicForests, Expert witness on precautionary principle, Nov 09--

NATIONAL AND INTERNATIONAL COMMITTEES

Member, International Tropical Timber Organisation, Expert Panel on Project Appraisal, 1997-2001

Member, FAO Advisory Committee on Forestry Education, 1996-2000

Member, Commonwealth Wood and Paper Industry Council, 1996
Member, Commonwealth Scientific Advisory Group, Forests Task Force, 1995-96
Chair, Research Management Review Committee, CSIRO Division of Forest Products, May 1995
Review Panel for University of Canterbury, School of Forestry, Mar 1994.
National Plantations Advisory Committee, Dep. Chair, 1991.
Forestry and Forest Products Industry Council of the Australian Manufacturing Council, 1984-90
Vice President of Australian Branch and Council member, Commonwealth Forestry Association, 1992-95

PROFESSIONAL AND LEARNED SOCIETIES

Australian Academy of Technological Sciences and Engineering, Fellow 1992-
Australian Forest Growers
Australian Agricultural Economics Society
Institute of Foresters of Australia: Chairman, ANZIF Conference Organising
Committee 1979-80, Fellow 1989-, President 1995-99
Institute of Wood Science, Australian Branch: Chairman 1989-91, Fellow, 2006-
Parks and Leisure, Australia, Fellow 1989-
Scientific Associate of the Zoological Board of Victoria 1988-1995
Editorial Board, Forest Economics and Policy, Elsevier, 1999-
Editorial Board, Appita, 1999-2002
Accreditation Review Board, Standards Australia, 2003-

TEACHING EXPERIENCE

Forest economics, forest management, forest policy, environmental management systems,
forest recreation, biometrics, systems analysis

POST-GRADUATE SUPERVISION

About 40 postgraduates M For Sc and PhD

MAJOR RESEARCH GRANTS

Chief Investigator: "Economic evaluation of forest resource allocation and forest policy in
Australia", ARGC Grant commenced 1972.
Associate Supervisor: "Investigation of forest management strategies needed to meet future social
demands". Rural Credits Development Fund Grant commenced 1972.
Associate Investigator: "Land use with particular reference to recreation in Kosciusko National
Park: an ecological, sociological and economic analysis". ARGC Grant commenced May
1973.
Associate Investigator: "Economics of Tussock moth control". University of Washington/USDA
Project April-June 1972.
Chief Investigator: Social and economic benefits of national parks in the Latrobe Valley Region.
Aust. Nat. Park and Wildlife Service Grant through Victorian National Parks Service 1985.
Joint Chief Investigator: CSIRO/University of Melbourne Collaborative Research Grant,
International trade in forest products in the Oceanic Region 1986-88.
Joint Organiser: DITAC/NSF Workshop on "Integrating Research on Fire Hazards to Dwellings in
Forest Environments", June 1989.
Project Leader, Program 4, Education; Co-operative Research Centre for Hardwood Fibre and
Paper Science, 1992-7
Principal Investigator: ANWPS Evaluating Community Revegetation Projects, Jun 92 - Dec 1993.
Principal Investigator: ANWPS Save the Bush: Strategic Planning, May 1993-May 1994.
Principal Investigator: FWPRDC Evaluating environmental issues for wood production, Mar- Jun
1996
Principal Investigator: FWPRDC Indicators of employment, Montreal Process, Apr-Jul, 1998

BOOKS

- FERGUSON, I.S. (1985). *Report of the Board of Inquiry into the Timber Industry in Victoria*, 2 Vols. Victorian Govt. Printer, Melbourne.
- LEWIS N.B. and FERGUSON I.S. (1993). *Management of Radiata Pine*. Inkata, Butterfield-Heinemann, North Ryde, 423pp. ISBN 0 909605 79 3
- BURGMAN, M.A. and FERGUSON I.S. (1995). *Rainforest in Victoria - a review of the scientific basis of current and proposed protection measures*. Department of Conservation and Natural Resources, Forests Service Technical Reports 95-4, Melbourne, 87pp.
- FERGUSON, I.S. and HOUGHTON, K. (1996). *Valuation of forest assets*. Auditor-General of South Australia, Special Report, May 1996, Adelaide, 46pp
- FERGUSON, I.S (1996). *Sustainable Forest Management*, Oxford University Press, Melbourne, 162pp.
- NODA, N. and FERGUSON, I. (1997). Sustainable tree-growing in drought-prone areas of Kenya: a case study of Kwavonza, *School of Forestry and Resource Conservation, University of Melbourne, Bulletin 9*, 142pp ISBN 0 7325 1597 1
- TODD, C.R., LOANE, I.T., and FERGUSON, I.S.(1997). Potential impact of a farm forestry industry on the Goulburn regional economy. *School of Forestry and Resource Conservation, University of Melbourne, Bulletin 10*, 142pp ISBN 0 7325 1596 3
- FERGUSON, I, FOX, J., BAKER, T., STACKPOLE, D., and WILD, I, (2002). *Plantations of Australia: Wood availability 2001-2044*. Consultant's report for the National Forest Inventory, Bureau of Rural Science, Canberra, 108pp, ISBN 0 6432 47592
- FERGUSON, I. (Tech.Editor) (2004). *An Australian Standard for valuing commercial forests*. ACFA, Canberra in collaboration with AFFA, Canberra, pp 46. Available on www.australianconsultingforesters.org D4
- NAMBIAR, S. and FERGUSON I.(2005) (Eds) *New Forests: Wood Production and Environmental Services*. CSIRO Publications, Melbourne,. ISBN 0-643-06940-2
- LEECH, J. and FERGUSON, I. (Tech. Editors) (2007) *An Australian Standard for Valuing Forests. Version 2* . ACFA, Canberra in collaboration with FWPRDC, Melbourne, 60pp. Available on www.australianconsultingforesters.org, D4
- FERGUSON, Ian, (Editor), 2006. *Alf Leslie: the skeptical forest economist*. Ian Ferguson (publisher), DFES, Parkville, 334pp. Available on <http://repository.unimelb.edu.au/10187/2473> . ISBN 9780646475387 (pdf).

CHAPTERS IN BOOKS

- FERGUSON, I.S. and REILLY, J.J. (1976). The social discount rate and opportunity cost of capital in forestry projects, In *Evaluation of the Contribution of Forestry to Economic Development*, pp. 85-93 (Ed A.J. Grayson), *Forestry Commission of Great Britain, Bulletin No. 56*, HMSO, London.
- FERGUSON, I.S. (1979). International trade in wood products in the Asia-Far East Region, In *Forestry in National Development: Production Systems, Conservation, Trade and Aid*, 23 pp. (Eds K.R. Shepherd and H.V. Richter), Development Studies Centre Monograph 17, ANU, Canberra.
- FERGUSON, I.S. (1980). Collecting growth data, In *Planning, Performance and Evaluation of Growth and Yield Studies*, pp. 15-23 (Ed H.L. Wright), Commonwealth Forestry Institute Occas. Paper No. 20.
- FERGUSON, I.S. (1980). Growth functions for radiata pine plantations, In *Planning, Performance and Evaluation of Growth and Yield Studies*, pp. 25-45 (Ed H.L. Wright), Commonwealth Forestry Institute Occas. Paper No. 20.
- FERGUSON, I.S. and DARGAVEL, J.B. (1981). Chapter 21 Economic considerations, In *Eucalypts for Wood Production in Australia*, pp 363-74 (Eds W.E. Hillis and A.G. Brown), CSIRO, Melbourne.

- FERGUSON, I.S. and BATTEN, D.F. (1985). Australia: Recent trends in the international forest products trade. Chapter 2, In *International Trade In Forest Products*, pp 17-35 (Ed A. Nagy) A.B. Academic Publishers, Bicester, Oxon.
- FERGUSON, I.S. (1986). Problems and prospects in Victoria, Chapter 3, In *Prospects for Australian Hardwood Forests*, pp 27-46 (Eds J. Dargavel and G. Sheldon), Centre for Resource and Environmental Studies, ANU, Canberra.
- FERGUSON, I.S. (1990). Economics. Chapter 32, In *Growing Trees for Rural Australia* (Ed K. M. Cremer), Inkata Press, Melbourne .
- BIGSBY, H.R. and FERGUSON, I.S. (1990). Forests products trade in Australia. Chapter 3 , In *Prospects for Australian Plantations*. (Eds J. Dargavel and N. Semple) Centre for Resource and Environmental Studies, ANU, Canberra.
- DANIEL, T. and FERGUSON, I.S. (1991) Conclusion: research needs and bi-national strategies. Chapter 19, In *Integrating Research on Hazards in Fire-prone Environments. Proc. Joint U.S. - Australia Workshop Melbourne, 1989.*, (Eds T. Daniel and I.S. Ferguson) MAB Program, Washington, D.C. 128pp.
- FERGUSON, I.S. and DANIEL, T. (1991) Integrating research on hazards in fire-prone environments:overview. Chapter 1, In *Integrating Research on Hazards in Fire-prone Environments. Proc. Joint U.S. - Australia Workshop Melbourne, 1989.*, (Eds T. Daniel and I.S. Ferguson) MAB Program, Washington, D.C. 128pp.
- FERGUSON, I.S, WILSON, A.D. and CAMPBELL, C.A. (1991). Farm planning and land management Chapter 5, In *Dryland Farming: A Systems Approach*, (Eds V. Squires and P.Tow), Sydney Univ. Press, Sydney.
- FERGUSON, I.S. (1995). Economic evaluation of silviculture and genetic research. Invited paper, p463-8 in *Eucalypt plantations: improving yield and quality. Proceedings of CRCTHF-IUFRO Conference, Hobart, February 1995*. Co-operative Research Centre for Temperate Hardwood Forestry. Hobart.
- FERGUSON, I.S. (1995). The profitability of planting trees on farms for wood production. Invited paper. *Proceedings Outlook 95 Conference*, February 1995. Bureau of Agricultural and Resource Economics, Canberra, 9 pp.
- FERGUSON, I.S. (1997). Forestry and forest products research in Australia. p359-76 in T. Enters, C. T. S. Nair and Apichart Kaosa-ard (Eds), *Emerging Institutional Arrangements for Forestry Research. Forestry Research Support Programme for Asia and the Pacific*, FORSPA Publication No 20/1998. FAO, Bangkok. [Revised version of Ferguson (1995) published in Japanese]
- FERGUSON, I.S. and YOUL, R. (1997) Forestry at Creswick and the University, 1910. Chapter 7, In *Land and Food: Agricultural and Related education in the Victorian Colleges and the University of Melbourne* (Eds. L. Falvey and B. Bardsley), Institute of Land and Food Resources, University of Melbourne, Australia. ISBN 0 7325 1556 4
- FERGUSON, I.S. (1998). Valuing different forest uses. Invited paper. p357-65 in *Proceedings Outlook 98. Commodity Markets and Resource Management*, Volume 3, February 1998. Bureau of Agricultural and Resource Economics, Canberra
- FERGUSON, I.S. (1998) Climate change and challenges for the Pacific Islands. Invited paper, P 304-312 in H.T. Tang, S. Bulai and B. Masianini, (Eds) *Regional and Other Initiatives and the role of Forests in Mitigating the Impacts of Climate Change in Pacific Island Communities*, Proceedings of Heads of Forestry Meeting September 1998, Nadi, Fiji, Pacific Islands
- FERGUSON, I.S., DARGAVEL, J.B., CONLEY, K., PROCTOR, W., KANOWSKI, P. and BAHTI, U.N. (1999). Socio-economic indicators for sustainable forest management: issues and possible solutions. p20-39 in R. Prasad, S. Raghaven, B.R. Phukan and B. Joshi (Eds), *Proceedings of National Workshop on Evolving Criteria and Management for Sustainable Forest Management in India*, Indian Institute of Forest Management, Bhopal.

- FERGUSON, I.S. (1999) Economic and social aspects of sustainable forest management: research needs and priorities. p43-54 in A.G. Brown (Ed), *Hermon Slade International Workshop on Sustainable Forest Management*, The Crawford Fund, Volume 1, Melbourne
- VARMA, V., FERGUSON, I., and BREN, L. (1999) Decision support system for sustainable forest management. P 170-77 in L. Arvananitis (Ed), *Proceedings of First International Conference on Geospatial Information in Agriculture and Forestry*. ERIM International, Ann Arbor.
- VARMA, V., FERGUSON, I., and BREN, L. (1999) Aspiration based decision support system for sustainable forest land-use planning. P 311-8 in A. Yoshimoto A. and K. Yukatake (Eds), *FORESEA MIYAZAKI 1998: Forest Sector Analysis. Proceedings of International Symposium on Global Concerns for Forest Resource Utilisation, Sustainable Use and Management*, Kluwer Academic, Boston.
- FERGUSON, I. AND KUMAR, A. (2001). Property rights and participatory management *Proceedings KFRI Silver Jubilee Symposium*, 16pp
- FERGUSON, I.S. and C. CHANDRASEKHARAN (2004). Paths and pitfalls in decentralisation for sustainable forest management: experiences in the Asia-Pacific Region. Chapter 3 in C. J. Colfer and D. Capistrano (eds), *A new vision for the State and how it is working for the forests*. CIFOR, Jakarta, ISBN 1-84407-195-2.
- FERGUSON, I., 2005 Matching efficiency with fairness, pp6-7 in B. Collis (ed) *Forests for tomorrow*. FWPRDC, Melbourne. ISBN 1 920883 08 8
- FERGUSON, I. (2005). Australian forestry: beyond one tenure, one use. In J. Sayer and S. Maginnis (Eds) *Forests in Landscapes: Ecosystem Approaches to Sustainability*. Earthscan, London. ISBN 1-84407-205-3
- NAMBIAR, S. and FERGUSON, I. (2005) Introduction, Chapter 1 and Synthesis: new forests for new landscapes. Chapter 11 in S Nambiar and I Ferguson (eds) *New Forests: Wood Production and Environmental Services*. CSIRO Publications, Melbourne. ISBN 0-643-06940-2
- FERGUSON, I., (2005) Economic and policy implications. Chapter 10 in S Nambiar and I. Ferguson (2005) (Eds) *New Forests: Wood Production and Environmental Services*. CSIRO Publications, Melbourne. ISBN 0-643-06940-2
- FERGUSON, Ian, (2009) Institutional frameworks and organizational structures for future forest management. pp531-540 in R.N. Leslie (Ed), *The Future of Forests in Asia and the Pacific: Outlook for 2020*. RAP Publication 2009/03, FAO, Regional Office for Asia and the Pacific, ISBN 978-92-5-106205-0

REFEREED JOURNAL ARTICLES

- FERGUSON, I.S. and GREIG, P.J. (1972). What price recreation? *Australian Forestry* 36(2): 80-90.
- FERGUSON, I.S. (1972). Is there a future for timber in house construction? *Australian Forestry* 36(1):1-7.
- FERGUSON, I.S. (1972). Wood-chips and regional development. *Australian Forestry* 36(1): 15-23.
- FERGUSON, I.S. and McKIMM, R.J. (1972). Establishment techniques at Koetong plantation: a multivariate analysis and comparison. *Australian Forestry* 38(1):34-43.
- FERGUSON, I.S. (1973). Land-use planning: analysis and action. *Australian Forestry* 37(1): 3-14.
- FERGUSON, I.S. (1973). Forecasting the future for timber. *Australian Journal of Agricultural Economics* 17(3): 159-63.
- FERGUSON, I.S. and DARGAVEL, J.B. (1975). Forest use conflicts in Victoria. *Australian Forestry* 37(3): 215-24.

- FERGUSON, I.S., REILLY, J.J. and PARKES, E.D. (1975). The forestry potential productivity of farmlands in the Lower South Coast Region of New South Wales for radiata pine plantations. *Australian Forestry* 37(3): 233-44.
- FERGUSON, I.S. (1975). Measurement bias in plantation inventory. *Australian Forestry* 38(2): 81-86.
- FERGUSON, I.S. and REILLY, J.J. (1975). The economics of modifying eucalypt forests. *Australian Forestry*. 38(2): 134-43.
- FERGUSON, I.S. and LEECH, J.W. (1976). Stand dynamics and density in radiata pine plantations. *New Zealand Journal of Forestry Science* 6(3): 443-54.
- FERGUSON, I.S. (1976). Decentralization and the forest products and forest industries. *Australian Forest Industries Journal*. 40(12): 13-15.
- FERGUSON, I.S. (1976). International trade in wood products: recent developments and implications for Australian forest policy. *Australian Forestry*. 41(1): 6-18.
- FERGUSON, I.S. and LEECH, J.W. (1978). Generalized least squares estimation of yield function. *Forest Science*. 24(1): 27-42.
- FERGUSON, I.S., MILES, J.A. and LEECH, J.W. (1978). Program GLS - Generalized least squares for two-stage model development. *Forest Science* 24(1): 42.
- CAMPBELL, R.G., FERGUSON, I.S. and OPIE, J.E. (1979). Simulating the growth and yield of mountain ash stands: a deterministic model. *Australian Forest Research* 9(3): 189-202.
- FERGUSON, I.S. (1979). World and Australian trends in wood consumption. *APPITA* 33(5): 324-29.
- FERGUSON, I.S. and LLOYD, P.J. (1979). Non-tariff distortions of international trade in forest products. *UNASYLVA* 32:2-10.
- LEECH, J.W. and FERGUSON, I.S. (1979). Comparison of growth models for unthinned stands of radiata pine. *Australian Forest Research* 11:231-45.
- FERGUSON, I.S. and LEECH, J.W. (1980). Reply to remarks on "Generalized least squares estimation of yield function" by A.W. Davis and P.W. West. *Forest Science* 27(3): 589-91.
- FERGUSON, I.S. (1981). Selling wood from state-owned forests. *Australian Forestry* 45(4): 245-54.
- FERGUSON, I.S. and KEADY, E.J. (1984). Prediction of mortality in radiata pine plantations. *Australian Forest Research* 14(2): 99-104.
- FERGUSON, I.S. (1984). Plantation management in Australia. *New Zealand Journal of Forestry* 28(3): 327-38.
- WILSON, A.A.G. and FERGUSON, I.S. (1984). Fight or flee? A case study of the Mount Macedon bushfire. *Australian Forestry* 47(4): 230-36.
- FERGUSON, I.S., O'HARA, A.J., WOOD, G.B., and MILES, J.A. (1984). Calibrating dendrometers for estimating tree volumes. *Australian Forest Research* 14:253-63.
- FERGUSON, I.S. and BIGSBY, H.R. (1985). Australia and New Zealand: competitors or collaborators? An Australian perspective. *Australian Forestry* 48(3): 160-72.
- ADA, N.R., FERGUSON, I.S. and STODART, D.M. (1985). Modelling log truck breakdowns. *Australian Forest Research* 15:85-93.
- KANOWSKI, P.J., FERGUSON, I.S., WOOD, G.B., NIKLES, D.G. and MATHESON, A.C. (1986). Variation of stem and crown characteristics between selected families of hoop pine (*Auracaria cunninghamii* Ait ex D. Don). *Australian Forest Research* 15:449-61.
- WILSON, A.A.G. and FERGUSON, I.S. (1987). Predicting the probability of house survival during bushfires. *J. Environmental Management* 23:259-70.
- FERGUSON, I.S. (1987). Productivity of mechanised harvesting in pine thinning operations in the Albury supply zone. *Australian Forestry* 49(3): 166-71.
- FERGUSON, I.S., (1990). Green and gold forever? M.R.Jacobs Memorial Oration, 13th Biennial Conference, Institute of Foresters of Australia, *Australian Forestry* 52(4):253-6.
- FERGUSON, I.S. (1991). Can Australia afford not to log its native forests. *Search* 22(1)11-12.

- JOHNSON, S.E., FERGUSON, I.S. and LI, R. (1992). Evaluation of a stochastic diameter growth model for Mountain Ash. *Forest Science*, 37(6): 1671-81.
- REID, R. and I.S. FERGUSON (1992). Development and validation of a simple approach to modelling tree shading in agroforestry. *Agroforestry Systems* 20:243-252
- BURGMAN, M.A., INCOLL, W., ADES P.K., FERGUSON, I.S., FLETCHER T.D. and WOHLERS, (1994) A. Mortality models for mountain and alpine ash. *Forest Ecology and Management* 67:319-27.
- BURGMAN, M., CHURCH, R., FERGUSON, I., GIJLSBERS, R., LAU, A., LINDENMAYER, D., LOYN, R., MCCARTHY, M., AND VANDENBURG, W., (1994). Wildlife planning using FORPLAN: a review and examples from Victorian forests. *Australian Forestry* 57(3): 131-40
- FERGUSON, I.S. (1995). Forestry and forest products research in Australia. Invited paper, translated into Japanese by Y.Konohira. Shinrin-Kagakau No 13 (*Forest Science* No 13: *Journal of Japanese Forestry Society*) February, 1995, 10pp.
- FERGUSON, I.S. (1995) Forestry and nature conservation in Australia. Special issue: Forestry and nature conservation. Invited paper. *Commonwealth Forestry Review* 74(1): 80-83, 86-88
- FERGUSON, I.S. (1995) Timber production and streamflow benefits: a contrary analysis of options. *Australian Forestry* 58(3): 142-146
- FERGUSON, I.S. (1996). Australian forest services: institutions of change or changing institutions. Invited paper. *Commonwealth Forestry Review* 75(2): 136-41
- FERGUSON, I.S. and R.E. JOHNSTON (1999). Fibre supply models for the Australian and New Zealand paper industry. *Appita Journal* 52(3): 185- 191
- VARMA, V.K., FERGUSON, I., and I. WILD (2000). Decision support system for the sustainable forest management. *Forest Ecology and Management* 128 (2000) 49-55
- KUMAR, A., BREN, L. and FERGUSON, I. (2000). The use and management of common lands of the Aravalli, India. *International Forestry Review* 2(2):97-104
- FERGUSON, I., SPENCER, R., WOOD, M., FOX, J., BAKER, T., STACKPOLE, D., and WILD, I., (2003). The potential availability of plantation roundwood. *Australian Forestry* 66(1):30-36
- FERGUSON, I. and CHANDRASEKHARAN, C. (2004) Paths and pitfalls for decentralization. *Tropical Forest Update* 14(3):3-7
- FERGUSON, I., SPENCER, R., WOOD, M., and GERRAND, A. (2002). Australian demand and supply for plantation products. p29-39 in A. Gerrand (Comp.), *Prospects for Australian Plantations 2002*. Conference held in Canberra, August 2002, Bureau of Rural Sciences, Canberra.
- TUMANENG-DIETE, T., FERGUSON, I.S., and MACLAREN, D. (2005). Log export restrictions and trade policies in the Philippines: bane or blessing to sustainable forest management? *Forest Economics and Policy* 7(2005):187-198
- BULL, L. and FERGUSON, I., 2006. Factors influencing the success of wood product innovations in Australia and new Zealand. *Forest Policy and Economics* 8(7): 742-750
- FERGUSON, I. (2007). Integrating wood production with sustainable forest management: An Australian viewpoint . *Journal of Sustainable Forestry* 24(1):19-40
- FERGUSON, I. and LEECH, J., (2007). Forest valuation and the AASB 141 accounting standard. *Australian Forestry* 70(2):125-133
- FERGUSON, I., (2007). Collaboration between the Australian and New Zealand Institutes of Foresters. Invited editorial. *Australian Forestry* 70(2): 73-74
- NISKANEN, A., LUNNAN, A., OTA, I., BLATNER, K., HERBOHN, J., BULL, L., FERGUSON, I. and HICKEY, G.M. (2007). Policies affecting forestry entrepreneurship. *Small-scale Forestry* 6(3): 233-255
- FERGUSON, I., 2009. Fires, forests and futures: The ANU Westoby Lecture. *Australian Forestry* 72(4): 195-205

FERGUSON, I., 2010. Seed collection and storage facilities for Victorian Ash-type species. *Australian Forestry* 73, in press.

ROMBOUTS, J., FERGUSON, I. and LEECH, J., 2010. Campaign and Site effects in LiDAR prediction models for Site Quality assessment of radiata pine plantations in South Australia. *TRES:International Journal of Remote Sensing*, in press

CONFERENCE PAPERS

- FERGUSON, I.S. (1968). Mathematical programming and simulation in forest planning. Proc. Research Working Group 2: Mensuration and Management, Perth Conference, August 1968, 21 pp.
- FERGUSON, I.S. (1969). Silvicultural research and the role of models. Proc. Simulation Workshop, Research Working Groups 2 and 5, Melbourne, April 1969, 7 pp.
- FERGUSON, I.S. (1970). Planning forest production in Australia. Forestry Refresher Course, Forests Commission of Victoria, May 1970, 14 pp.
- FERGUSON, I.S. (1971). Objectives for the management of public forests. Proc. Symposium on Decision-Making in Forestry, Research Working Group No. 2, Canberra, July 1971, 11 pp.
- FERGUSON, I.S. (1974). Land-use conflicts: forest versus non-forest. Proc. Inst. of Forests of Australia Triennial Conference 1974, Vol. 2, pp 53-62.
- FERGUSON, I.S. and CARRON, L.T. (1974). Stand top height: some mensurational problems. Proc. Inst. of Foresters of Australia Triennial Conference, 1974, Vol. 1, pp. 467-87.
- BAUR, G.N., FERGUSON, I.S., et al. (1975). Multiple use of forest resources. Australian Government Publishing Service, Canberra, 58 pp.
- FERGUSON, I.S. and PARKES, E.D. (1974). Future forest policy: an analytical view. Proc. Inst. of Foresters of Australia Triennial Conference, 1974, Vol. 1, pp 488-511.
- FERGUSON, I.S. (1975). Market requirements for sawn timber. II. Forecasts based on econometric analysis, pp 39-42 In Report of Panel 6, Marketing, Forestry and Wood-Based Industries Development Conference. Australian Forestry Council, Canberra, 1974.
- FERGUSON, I.S. (1975). Multiple use planning: a review. Proc. of Conference on Multiple Use, Research Working Group No. 2, Caloundra, August 1975, 17 pp.
- FERGUSON, I.S., MILES, J.A. and LEECH, J.W. (1976). A linear programming matrix generator for forest planning models. Paper presented at Workshop on Developments in Forest Growth Models, Research Working Group 2, Melbourne, December 1976, 18 pp.
- FERGUSON, I.S. (1978). The role of forestry in rural development. Invited special paper. Proceedings 8th world Forestry Congress, Jakarta, Indonesia, October 1978, 11 pp.
- FERGUSON, I.S. (1987). Conservation and development: balance or battlefield, In Social and Economic Perspectives on Forestry and Agroforestry, Contributed papers to the Forestry Section 56th ANZAAS Conference, pp. 375-88 (Eds M. Roche and R. Hodder), New Zealand Forest Service, Palmerston North.
- FERGUSON, I.S. (1987). International cost competitiveness in Australia's forest industries: the challenge ahead, In Social and Economic Perspectives on Forestry and Agroforestry, Contributed Papers to the Forestry Section 56th ANZAAS Conference, pp. 17-35 (Eds M. Roche and R. Hodder), New Zealand Forest Service, Palmerston North.
- FERGUSON, I.S. (1989). The public finance squeeze: why are our park and recreation services hurting? Proc. National Workshop on Managing Public Lands in Times of Financial Stringency, Phillip Inst. of Technology, Bundoora, 7 pp.
- FERGUSON, I.S. (1989). Agroforestry as an economic venture in Australia. Invited theme paper In Proc. International Forestry Conf. for the Australian Bicentenary 1988, Australian Forest Development Institute, Albury, 9 pp.
- FERGUSON, I.S. (1990). Technical innovation in multiple use forestry. Invited theme paper, p 85-91 In Forestry: a Multiple Use Enterprise. Proc. 13th Commonwealth Forestry Conference, (Ed G.L. Tarlton) Forest Research Institute Rotorua.

- FERGUSON, I.S. (1991). Wood supply and adding value. Invited Conference Paper. Proceedings of Australia's Timber and Forest Products Conference, July 1991. Australian Investment Conferences, Sydney, 16pp
- FERGUSON, I.S. (1994). The economics of forestry: environmental, ecological or political. Keynote paper for Council of Political Economists, International, Sydney, Jan. 1994, 8pp
- FERGUSON, I.S. (1994). Tropical timber trade in the Asia Pacific Region and its value. Invited paper presented at Rainforests are our Business Conference, Sydney, 15-16 April 1994, 8pp.
- FERGUSON, I.S. (1998) Climate change and challenges for the Pacific Islands. Invited paper, Heads of Forestry Meeting Aug 1998, Nadi, Fiji, 12pp.
- FERGUSON, I., BREN, L., KUMAR, A., STEPHEN, P., VARMA, V., and VINDEN, P. (1999) Joint forest management: future directions and policy for research. Invited paper for National Conference on Joint Forest Management, Bhopal, India.
- FERGUSON, I., (2000) Structural change in the forest industries: implications for regional businesses. Invited paper for AusTimb2000, 5pp
- FERGUSON, I. (2000) Social responsibilities stemming from reductions in harvesting. Invited paper for APFC Policy Seminar on Efficacy of Removing Natural Forests from Timber Production as a Strategy for Conserving Forests, Noosaville, 13 May, 2003, 5pp
- FERGUSON, I.S. (2003). Getting outside the square. Invited paper for Forests and Timber, 2003 Conference, Sydney, Nov, 2003, 9pp.

CONTRACT REPORTS

- FERGUSON, I.S. (1972). Costing and economic aspects of plantation establishment in the Savanna Region of Nigeria. Savanna Forestry Research Station, Working Document FO:SF/NIR 16, FAO, Rome.
- FERGUSON, I.S. (1973). The economics of plantation forestry in the Savanna Region of Nigeria. Savanna Forestry Research Station, Project Working Document FO:SF/NIR 16, FAO, Samaru, July 1973.
- FERGUSON, I.S. and PARKES, E.D. (1975). International Trade in Forest Products: An Australian Perspective. Consultant's Report for Dept. of Industry and Commerce, Australian Government Publishing Service, Canberra, 95 pp.
- FERGUSON, I.S. and PARKES, E.D. (1976). International Trade in Forest Products: 2 Developments and Prospects. Consultant's Report for Dept. of Industry and Commerce, Australian Government Publishing Service, Canberra, 52 pp.
- CARTER, W.G., FERGUSON, I.S., et al. (1981). Eucalypt Afforestation Project at Dongmen State Forest Farm, People's Republic of China. Feasibility Study Report for ADAB, The Authors, Canberra, 116 pp.
- FERGUSON, I.S. (1988). Review of Private Forestry in Tasmania. The Private Forestry Council of Tasmania, Kings Meadow, Tasmania, 51 pp.
- FERGUSON, I.S. (1988). Development Options: Industry Structure. Paper for Fiji Forest Development Study, FIJ/86/004, FAO, 9pp.
- NATIONAL PLANTATIONS ADVISORY COMMITTEE (Dep. Chair I.S. FERGUSON) (1991). Integrating Forestry and Farming: Commercial Wood Production on Cleared Agricultural Land.. Department of Primary Industry and Energy, Canberra, 32pp and 3 Vols Append.
- FERGUSON, I.S. and J. MUNOS-REYES NAVARRO (1992). Resources needed by Producer Countries to achieve Sustainable Management by the Year 2000. Working Document for ITTO Expert Panel. ITTO, Yokohama, 26 pp.
- FERGUSON, I.S. and B. RIDDOUT, (1992). Risk Management for Fire Protection Services in Victoria: A Review of Methodology. The authors, mimeo, 29pp.
- FERGUSON, I.S. (1993). Review of Growing Stock Models used in Valuation. Confidential report for Auditor General, S.A. The author, mimeo, 20pp.
- FERGUSON, I.S. (1993). Review of Wood and Forests' Yield Regulation System. The author, mimeo, 45pp

- MILLAR, K., FERGUSON, I.S. and HAWKINS, H.S. (1994). Evaluation of community revegetation projects. The authors, mimeo, 106pp.
- FERGUSON, I.S., 1995. Economics of Bamboo. Consultancy Report for Indian Council for Forestry Research and Education, and FAO. ICFRE, September 1995, 17 pp
- FERGUSON, I., BREN, L., HATELEY, R., HERMESEC, B., LA FONTAINE, B. and P. VINDEN (1996) Environmental properties of timber. FWRDC, Melbourne, 80pp.
- FOREST REVIEW STEERING COMMITTEE (Lead consultant, I S Ferguson) (1996) Maximising the value of the State's South-east forest. Department of Premier and Cabinet, S.A., Adelaide.
- FERGUSON, I., 1996. Forestry Victoria: a critical review. Forests Service, DNRE, Melbourne.
- FERGUSON, I., CORK, S., LENNON, J., ., McCORMACK, R. and RAISON, J. (1996) Report on ecologically sustainable forest management. systems and processes. Commonwealth and Victorian Regional Forest Agreement Steering Committee, Melbourne, 284pp
- FERGUSON, I., BRADSHAW, J., CORK, S., EGLOFF, B., HILL, R., McCORMACK, R. and RAISON, J. (1997) Assessment of ecologically sustainable forest management systems and processes: Final report. Background Report Part G, Tasmania-Commonwealth Regional Forest Agreement. Public Land Use Commission, Hobart, 134pp
- FERGUSON, I. (1997) Report on Draft Statewide Assessment of Ecologically Sustainable Forest Management Systems and Processes in Victoria. Commissioned report for Joint Commonwealth and Victorian Regional Forest Agreement Steering Committee, May 1997, 4pp
- MARSHALL, H., FERGUSON, I. and WANG SHIJI (1997) Terminal Evaluation Mission Report: UNDP CPR/91/150 Enhancement of Forestry Programme, Peoples Republic of China. Commissioned report for UNDP, Beijing, 53 pp & Apps.
- FERGUSON, I., ADAMS, M., BROWN, M., CORK, S., EGLOFF, B., and WILKINSON, G. (1997) Assessment of ecologically sustainable forest management. in the South-West Forest Region of Western Australia. Report of the Independent Advisory Group. Commonwealth and Western Australian Regional Forest Agreement Steering Committee, Perth, 91pp
- BRACK, C., FERGUSON, I., HOWELL, C., LEECH, J., TICKLE, P. and WILD, I. (1998) The Development of an Effective Methodology to Capture Forest Type, Condition and Volume Data for Privately Managed Forests. Report of a Scoping Study for the Forest and Wood Products Research and Development Corporation, School of Forestry, University of Melbourne, Melbourne, 38pp
- DARGAVEL, J., CONLEY, K., PROCTOR, W., FERGUSON, I., AND BHATI U.N. (1998). Direct and indirect employment in the forest sector. Report for the Forest and Wood Products Research and Development Corporation, School of Forestry, University of Melbourne, Melbourne, 33pp
- FERGUSON, I.S., CRAIG, D., and JEFFERY, M. (1999) Options for an international arrangement on sustainable forest management. Consultancy Report for Agriculture, Fisheries and Forestry, Australia, 55pp
- FERGUSON, I., GARDNER, J., HOPPER, S., and J. YOUNG, (1999). Report to Minister for the Environment by Ministerial Advisory Group on Karri and Tingle Management, Department for the Environment. Perth, 67pp.
- FERGUSON, I.S. (2000) Topic Cycle 7, International Comparative Review. Sustainable Development, Environmental Impacts and the Land Development Process. Report for Arcadis Euroconsult for Government of Indonesia, World Bank Project and AusAID 'Indonesian Land Administration Project', 26pp Available on www.landpolicy.org/pub/index.htm
- FERGUSON, I.S. (2000) Chapter 6, Outlook to 2012: Carbon Sequestration. In Allen Consulting Group, 2000. Greenhouse Emissions Trading. Exec Summ, 15pp. Vol 1, Main Report, 232pp. Vol 2, Apps, 89pp. Report to Department of Premier and Cabinet, Melbourne. Available on www.greenhouse.vic.gov.au

- FERGUSON, I., ADAMS, M., BRADSHAW, J., DAVEY, S., MCCORMACK, R. and YOUNG, J. (2001) Calculating Sustained Yield for the Forest Management Plan (2004-2013): A Preliminary Review. Conservation Commission, Perth. 61pp
- FERGUSON, I. (2001) Capacity Building for Rehabilitation of Degraded Forests through a Landscape-level Participatory Action Programme (IATCP12), Component 6, Final Completion Report, Department of Forestry, Univ of Melbourne, Parkville, 32pp
- FERGUSON, I.S. (2001). Special review of price schedule and price system. Confidential Consultancy Report for Minister for Forestry. The author, Parkville, 16pp & Apps.
- FERGUSON, I., LESLIE, A., PENS, H., REID, R., AND P. SHEPHERD (2001). Review of Fiji pine industry: Final Report: 23 November 2001. Dept of Forestry, Univ. of Melbourne, Parkville, 31pp&Apps
- FERGUSON, I. (2002). Review of Forests and Vegetation Program. Report for Bureau of Rural Sciences The author, Parkville, 7pp
- FERGUSON, I. (2002). Review of Dark Red Myrtle Resource. Confidential report for Government of Tasmania, The author, Parkville, 7pp
- FERGUSON, I. (2002). Review of 2001 Midlands Sustainable Yield. Report for Black Forest Timbers Pty Ltd and NRE, The author, Parkville, 10pp.
- FERGUSON, I., ADAMS, M., BRADSHAW, J., DAVEY, S., MCCORMACK, R. AND YOUNG, J., 2003. Sustained Yield for the Forest Management Plan (2004-2013) STAGE 3 Report. Report for the Conservation Commission of Western Australia by the Independent Panel, June, 2003. (Conservation Commission, Perth), 58pp.
www.conservation.wa.gov.au/files/docs/125.pdf
- FERGUSON, I.S. (2004) Assessment of Illegal Logging and Other Unauthorized Exploitive Activities in Selected Large Tropical Forest Protected Areas. Successful Project Application to ITTO on behalf of ITTO and IUCN
- FERGUSON, I.S. (2006). Research and Development across the Land Stewardship and Biodiversity Group in the Department of Sustainability and Environment. Final Report 9 June 2006. Consultancy Report for the Land Stewardship and Biodiversity Group of the Department of Sustainability and Environment. The author, mimeo, 20pp.
- FERGUSON, I., MITCHELL, G.; and J. OLNEY (2006). 2006 Strategic Staffing Review, School of Forest and Ecosystem Science, University of Melbourne. Consultancy Report for School of Forest and Ecosystem Science, University of Melbourne, Sep. 2006. The authors, mimeo, 12pp.
- FERGUSON, I. (2006) Ensuring international trade in CITES-listed timber species is consistent with their sustainable management and conservation. Successful Grant Application to EU on behalf of ITTO and CITES, ITTO, Yokohama, 37pp.
- FERGUSON, I.S. (2007). Australia's Changing Wood Resource. Paper presented to 'Wood Science Course: Understanding Wood', 13-17 Feb, 2007, University of Melbourne. CD published by Gottstein Trust, Melbourne. 29pp
- FERGUSON, I.S. (2009). Australia's Changing Wood Resource. Paper presented to 'Wood Science Course: Understanding Wood', 16-20 Feb, 2009, University of Melbourne. CD published by Gottstein Trust, Melbourne. 30pp

28/01/10

IN THE SUPREME COURT OF VICTORIA
AT MELBOURNE
COMMON LAW DIVISION

No. 8547 of 2009

BETWEEN

ENVIRONMENT EAST GIPPSLAND INC

and

VICFORESTS

Plaintiff

Defendant


CERTIFICATE IDENTIFYING EXHIBIT

Date of Document:
Filed on behalf of:
Prepared by:
HWL EBSWORTH LAWYERS as agent for
Komesaroff Legal Pty Ltd
Level 21, 570 Bourke Street
MELBOURNE VIC 3000
DX 564 MELBOURNE

29 January 2010
The Defendant
Solicitor's Code: 179

Telephone: (03) 8633 7500
Facsimile: 1300 365 323
Ref: JAK:RVH:182227

This is the exhibit marked "ISF-2" now produced and shown to IAN STEWART FERGUSON at the time of swearing his affidavit on 29 January 2010.

Before me:-----


Carlos Alberto Gutierrez
Level 21, 570 Bourke Street, Melbourne
An Australian Legal Practitioner
(within the meaning of the
Legal Profession Act 2004)

EXHIBIT "ISF-2"

Report dated 28 January 2010

Expert Witness Report

On the Instructions of: HWL Ebsworth
Level 21, 570 Bourke St,
Melbourne, Victoria, 3000

Report Prepared By: Professor Ian Ferguson

Bachelor of Science of Forestry (Melb.); Master of Forestry, Doctor of Forestry
(Yale).
Fellow, Australian Academy of Technological Science and Engineering
Fellow, Institute of Foresters of Australia
Fellow, Parks and Leisure, Australia
Fellow, Institute of Wood Science (U.K.)
Registered Professional Forester

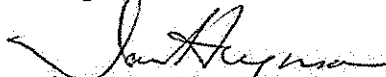
Curriculum vitae attached (Appendix 3).

Specialist Field: Forest management, economics and policy

I have read the Expert Witness Code of Conduct and agree to be bound by it.

I certify that I have made all the enquiries I believe to be desirable and appropriate, and that no matters of significance which I regard as relevant have, to my knowledge, been withheld from the Court.

Signed:



Ian Stewart Ferguson
Date: 28 January 2010

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Instructions

Copies of letters of instruction are attached in Appendix 1. Each question is also shown at the beginning of each section of my responses.

1. History and Background of the Regulatory Scheme

1. What is the history and background of the political and legislative scheme that regulates forestry in Victoria? In answering this question, please also provide comment on the proposed harvesting in the Brown Mountain Forestry Coupes in relation to broader Victorian forestry harvesting and conservation.

1.1 History of the Regulatory System

Following several reports and the recommendations of a Royal Commission established in 1897, the *Forests Act 1907 No. 2095 (Vic)* came into operation on 1 January 1908¹. A State Forestry Department was duly established and Minister for Forests appointed. The primary objective of the new Department at the political level was to place the remaining better quality forest in secure public ownership and so avoid the alienation and clearing of that forest for agriculture². Timber supply was a major underlying concern, especially to ensure that Victoria did not become too dependent on imports of timber from other states or overseas. While some people believed that forests ameliorated climate and attracted rain, and that water catchment should remain forested, very few advocated forest retention simply for wildlife habitat, aesthetic purposes or recreation.

In the decade that followed, the Department began to exercise greater control over the previously often indiscriminate cutting, improve fire protection, establish plantations and train professional foresters³.

The end of World War I saw a reappraisal of the administrative arrangements and the establishment of a Forests Commission, under the *Forests Act of 1918*, to manage the State Forestry department. In the period from 1918 to 1939, the new Commission had to provide employment for returned soldiers, then to expand the timber industry and utilization of native timbers, reserve further areas of forest from alienation and, during the recession, provide additional employment in forest improvement programs.

World War II and the Black Friday fires of 1939 brought much of this activity to a temporary halt, other than that needed for essential services.

Following World War II, post-war reconstruction resulted in a rapid increase in the demand for timber for housing and consequent expansion of the industry.

¹ Moulds, F.M., 1991. *The Dynamic Forest*. Lydenoch Press, Richmond, Chapters 1 & 2

² *Ibid.*

³ Carron, L.T., 1985. *A History of Forestry in Australia*. ANU Press, Canberra. p183

The timber industry in the Central Highlands gradually ebbed as the supply of timber from trees killed in the 1939 fires diminished. During this period, the Forests Commission sought to relocate the timber industry to East Gippsland to maintain the supply. The supply from trees killed in the 1939 fire ceased by about 1960.

As the economy improved in the 1950-60's and mobility increased through the ownership of automobiles, a growing awareness of the values of forests for purposes other than timber emerged. The Forests Commission understood the nature of the changes in public attitudes but was unable to keep up with them, given the political pressures exerted on it by industry. The concerns of the conservation movement were not just about the exclusion of harvesting from some areas of native forest, they were also about the manner in which harvesting operations and planning were carried out and their impact on the flora, fauna, water and other non-wood uses.

In the 1970s and early 1980s, the conservation movement gathered strength and industry and conservation views became increasingly polarized. By 1983, the newly elected Government led by John Cain faced an almost dysfunctional polarization between the timber industry and the conservation movement, and was itself torn by opposing interests.

In 1984, the Victorian Government appointed me Chairperson and sole Member of a Board of Inquiry into the Timber Industry in Victoria. The terms of reference can be summarized as follows:

To investigate and report on all aspects of the timber industry in Victoria and provide a long-term strategy for the development of Victoria's forest products industries consistent with the Government's social, economic and environmental policies and objectives.

The Inquiry had almost 500 submissions and public hearings were held in five locations over 24 days from August to October 1984. Some five reports on specific topics from independent experts were commissioned. All submissions, evidence at hearings, and reports were available to the public. Written comments were solicited from participants who had lodged initial submissions and further hearings were held on these. Many field inspections were held. The final reports were published and available to the public.

The Victorian Government accepted the recommendations of the Inquiry. The principal recommendations of relevance to this case were:

The objective for managing public forests should be to maximize the net social benefit to the community, an objective best translated into four operational principles:

The provision of wood and other market (i.e. commercial) goods should be:

- *Economically viable.*
- *Environmentally sensitive with respect to the provision of environmental services and non-market goods.*
- *Sustainable with respect to the interests of future generations.*
- *Assisted by public participation in the planning process.*

Regional management plans should be prepared and revised every five to ten years to set the overall framework of logging consistent with regional sustainable yield.

A Code of Forest Practices should be developed and revised every five to ten years to define the legally enforceable operational constraints needed to achieve appropriate sensitivity to environmental considerations.

Research and training should be increased to service the requirements of the new strategy.

Those recommendations were implemented by the Government, starting with the Timber Industry Strategy in 1986. Management plans were progressively developed, including one for East Gippsland. Regional sustainable yields were estimated and prescribed. A Code of Forest Practices was developed⁴. A successor to the Land Conservation Council, the Victorian Environmental Assessment Council⁵, was established in 2001 to conduct investigations requested by the Victorian Government relating to the protection and ecologically sustainable management of the environment and natural resources of public land.

In the period since the 1986 Timber Industry Strategy was implemented, further changes have taken place as a result of the interactions between the Commonwealth and State Governments, among other things. The following excerpt⁶ summarizes the reasons for and nature of these inter-governmental changes⁷, omitting small sections that are not relevant to Victoria:

⁴ The Code of Forest Practices for Timber Production, 1989 was prepared under Part 5 of the *Conservation, Forests and Lands Act, 1987*.

⁵ The Council was established under the *Victorian Environmental Assessment Council Act 2001*, refer www.veac.vic.gov.au

⁶ Ferguson, I., 2007. Integrating wood production with sustainable forest management: an Australian viewpoint. *Journal of Sustainable Forestry* 24(1):19-40

⁷ Reports or documents detailing the key Commonwealth/State changes include:

Ecologically Sustainable Development Working Group on Forest Use, 1991. *Final Report - Forest Use*. Australian Government Publishing Service, Canberra

Commonwealth of Australia, 1992, 1995. National Forest Policy Statement: A

NATIONAL FOREST POLICY STATEMENT

Australia is a Federation initially formed in 1901, now comprising 6 States and 2 Territories. Under the Constitution, land management, including forest management, was to be administered by the States. More recent administrative arrangements of the Commonwealth Government extend this devolution to the Territories. Until the 1970's this division of responsibilities was relatively simple and clear but as the conservation movement evolved, the responsibilities regarding forests have become much less clear. Major issues inevitably attracted the attention of the Commonwealth Parliament, increasingly so as the media became more national in orientation.

Over the past 30 years, the Commonwealth Government has increasingly become involved in forest issues, often taking a position in opposition to the views of the State Government concerned, especially when of the opposite political persuasion. Although the Commonwealth had no direct controls over forest management under the Constitution, it soon developed several forms of indirect control. By the early 1990's, it had become apparent that a joint Commonwealth-State forest policy framework was needed. A joint policy statement was negotiated between the Commonwealth and the States in 1992 and after further negotiation finally signed by the last State in 1995 (Commonwealth of Australia, 1992, 1995). The Statement rests on three main principles as the basis for sustainable forest management:

- *maintaining ecological processes,*
- *maintaining biological diversity, and*
- *managing for the full range of environmental, economic and social benefits.*

To summarise the Agreement in these terms does little justice to the breadth and depth of the framework and the changes involved. The Statement is an unusually comprehensive and far-sighted document, especially given the complexity of the Commonwealth-State relationships (Commonwealth of Australia, 1992; 1995).

new focus for Australia's forests. The author, Canberra.
DAFF, 2009. *Regional Forest Agreements*. (refer www.daff.gov.au)
JANIS, 1997. *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia*. A Report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Commonwealth of Australia, Canberra. 20pp.

Two provisions in this Statement deserve special mention because of the changes they were to institute:

- *Jointly agreed and legally binding codes of forest practice were to guide forest management where wood production or other commercial extractive uses were involved.*
- *Comprehensive and joint regional assessments were to be instituted in developing a national reserve system.*

While the process to implement the National Forest Policy Statement was being developed, a dispute between Commonwealth Ministers over the issuing of a woodchip export license led to a chaotic national protest in 1994 and the establishment of the Regional Forest Agreement process under the control of the Department of Prime Minister and Cabinet (McDonald, 1999; Zammit, 1999; Hollander 2004). These events accelerated the realisation of the various Governments that continuing political gamesmanship between the Commonwealth and State levels was counterproductive to rational resolution of the issues.

REGIONAL FOREST AGREEMENTS

Initially some eleven regions . . . were delineated. Victoria had 5, . . . These regions cover most of the 'tall forest' zone in Australia – those in which the wood production versus conservation or environmental debate had been greatest (Zammit, 1999).

. . . The Agreements focused mainly on publicly owned native forest that was directly owned by the State concerned and managed by either a forest agency (if wood production and extractive uses were permitted) or a park or watershed agency; or, in the case of Western Australia, an integrated agency.

The Regional Forest Agreement process commenced in 1997 and sought to achieve two main objectives that extended or amplified those set out in the National Forest Policy Statement, each being an attempt to assuage one of the two sides in what had become a highly polarised debate:

- 1. Establish a comprehensive, adequate and representative national reserve system.*
- 2. Provide greater certainty regarding the native forest resource available for wood production by integrating industry and conservation policy and by encouraging downstream processing of the native forest resource, and the export of unique Australian wood products.*

Following advice by a scientific advisory committee and negotiations by an intergovernmental committee (JANIS, 1997), the process was framed around the broad objective of achieving

representation of 15 per cent of the areas of the pre-1750 in native forest types as mapped at a 1:100,000 scale. This was somewhat arbitrary in extent but well in excess of the IUCN recommendation of 10 per cent. Special provisions were also made to reserve at least 60 per cent of remaining old growth forest (100 per cent in the case of rare species of types) and other special provisions were made for rare and threatened ecosystems or heterogeneous forest types. A substantial list of detailed criteria derived from the ecological literature was enumerated to guide the design of the reserves. Additionally, special provision was made for the protection of high quality wilderness and for the integration of management of reserve and 'off-reserve' forests.

The work of delineating the reserves was generally based firstly on a series of assessments for each region by committees of experts (largely if not fully independent of the managing agencies) of biodiversity, old growth, endangered species, and of wilderness, Australian Heritage, World Heritage and Indigenous Heritage values. Similarly, reports on the economic and social values were commissioned. Most reports were subject to public review and input, of which more will be said later. Steering Committees from the Commonwealth and State agencies responsible for forests and the environment negotiated the recommended boundaries and the final outcomes were formalised in an Agreement signed by the Prime Minister of the Commonwealth and Premier of the State concerned.

Comprehensive reviews of the planning and management processes underpinning forest management were commissioned by regional committees of independent experts, in pursuit of the better integration of conservation and wood production, under the rubric of ecologically sustainable forest management. These reviews were based on the ISO 14001 Environmental Management System framework but did not entail certification under that standard. This framework provided a comprehensive and consistent basis for review across some diverse regions and States, as well as initiating a possible progression to certification at a later date. The Commonwealth also has legislation that impacted on and sometimes overlapped that of the States, so the need for legislative review and co-ordination was considerable. For the planning and management processes, much attention was given to the adequacy of the data used, the manner in which the sustainable yields were calculated, timber sale systems, the details of the silvicultural and environmental provisions in the codes of practice and supporting policies and procedures, and the processes for review and improvement, including research and training. ... Following public input, recommendations for change were considered by the relevant Steering Committee and most were carried through into the final Agreements.

The creation of the national conservation reserve system meant that some of the timber resource in public ownership was withdrawn from that use. In return, the 20-year Agreements offered the hope of greater security of timber supply from the remaining areas of publicly owned native forest. Forest Industry Structural Assistance Packages were used to compensate affected companies and assist worker retraining and relocation. Commonwealth export controls, that had been a primary battleground for political influence by conservation and industry interests, were also abolished for those regions under Agreements. The Agreements were made subject to five-yearly reviews but the administrative arrangements were such that major alterations in tenure were unlikely (McDonald, 1999).

The Regional Forest Agreement for East Gippsland was signed in 1997 and is currently under review⁸. It introduced the Precautionary Principle formally into the application of Codes of Practice for Timber Production, 1996⁹. The Principle was later also adopted nationally in the Montreal Protocol¹⁰. Principles based on the criteria established under the Montreal Protocol were incorporated in the revised Code of Practice in 2007.

Following a major review of the estimates of sawlog resources completed in 2001, the Victorian Government made major reductions in the regional sustainable yields¹¹.

In 2004, the Victorian Government introduced a Sustainability Charter for Victoria's State Forests under the *Sustainable Forests (Timber) Act 2004*. The Sustainability Charter sets out objectives, consistent with the National Principles of Ecologically Sustainable Development, for both the sustainability of forests and the sustainability of the timber harvesting industry. The Charter commits the Department of Sustainability and Environment (DSE) and VicForests to support the objectives set out in the Charter. The Charter approach to regulating timber production from public forests involves the preparation of an Allocation Order to guide VicForests as to the resources available for harvesting, consistent with the sustainable yield. Subsequent wildfires have necessitated revision of these Allocation Orders and associated Timber Release Plans to allow salvage logging of fire-killed stands to proceed. This will have flow-on effects in later revisions of the sustainable

⁸ The process for review of the RFAs has recently been published (refer www.dse.vic.gov.au/dse/nrenfor.nsf)

⁹ DSE 2007: p78 Code of Forest Practice, Department of Sustainability and Environment, Melbourne. (refer www.dse.vic.gov.au)

¹⁰ Montreal Process Implementation Group, 1998. *A framework of regional (sub-national) level criteria and indicators of sustainable forest management in Australia*. Department of Primary Industries and Energy, Canberra. 108pp.

¹¹ Victorian Government, 2002. *Our Forests, Our Future Policy*, Department of Natural Resources and Environment, Melbourne, 29pp. (refer www.dse.vic.gov.au)

yield because of the significant losses of areas of mature and older regrowth stands.

The Victorian Government has just released a revised Timber Industry Strategy¹². The Strategy commits to providing greater certainty of access to public native forest resources and heralds some organisational and administrative changes but retains the framework of planning measures described above.

1.2 Proposed Harvesting in the Brown Mountain Forestry Coupes

The proposed harvesting of Brown Mountain forestry coupes rests on a sequence of principles, criteria, and regulatory methods.

1. National Principles of Ecologically Sustainable Development

Three principles underpin the National Strategy for Ecologically Sustainable Development - intergenerational equity, the precautionary approach and biodiversity conservation¹³. These set a framework for objectives for sustainable management of conservation reserves and those forests where timber production is permitted.

2. Regional Forestry Agreements

These agreements between the Commonwealth and State Governments established the National Conservation Reserve System, using a national framework of criteria to provide a broad and consistent framework for additions to the legally permanent conservation reserves, together with criteria and other requirements for integrating management of timber and non-timber values on State forests and between State forests and conservation reserves.

3. Allocation Orders and Timber Release Plans

The Allocation Order¹⁴ specifies the harvestable areas by five-year periods for the next fifteen years. The Timber Release Plans include the coupe details and maps showing location of coupes for harvesting timber in the next five years.

4. Code of Forest Practice

On those areas of State forests where timber harvesting is permitted, the Code of Practice¹⁵ prescribes local conservation and other reserves, such as stream buffers, wildlife corridors and special protection zones, that are not legally protected in the manner of national parks but *de facto* will mostly be permanent.

¹² Victorian Government, 2009. *2009 Victoria's Timber Industry Strategy*. Department of Primary Industries, Melbourne, 62 pp (Refer www.dse.vic.gov.au)

¹³ Refer www.environment.gov.au/esd/national/nsesd/index.html and www.environment.gov.au/esd/

¹⁴ Refer www.dse.vic.gov.au/DSE/nrenfor.nsf/

¹⁵ *Ibid*

These constitute 25 to 33 per cent of the area nominally available for timber harvesting.

The Code prescribes other conditions for harvesting in the forestry coupe, including the marking of the boundaries of the areas to be harvested, the identification and marking of hollow-bearing trees, and measures to ameliorate environmental damage due to harvesting operations.

5. Action Statements

Action Statements¹⁶ are brief management plans to supplement the Code, providing information on the species or issue, and on what has to be done to conserve rare and endangered species and maintain other biodiversity.

Forest practices often involve choices between commercial uses, such as timber, whose outcomes can generally be measured in market values, and non-commercial uses, such as conservation and the environment, that cannot be so readily measured, if at all. An appropriate balance has to be sought between competing uses¹⁷. The Precautionary Principle requires that the risk-weighted consequences of the options be assessed but does not itself indicate how this measurement should be addressed.

The hierarchy of planning measures is therefore important because it encompasses the multiplicity of values involved from national down through state, regional, landscape and coupe levels. To be consistent with the Precautionary Principle, this planning is accomplished by using expert opinion and stakeholder consultation in the preparation and revision of the Management Plan, Allocation Order, Timber Release Plans, the Code of Practice, and Action Statements.

Periodic revision enables new research findings to be incorporated in these documents, including the specific management requirements for rare and endangered species: such as the revision of the Action Statement for the Long-footed Potoroo in 2009. The planning and management of harvesting operations in a coupe involves a final, but far from the only, application of the Precautionary Principle.

1.3 Summary

A hierarchical process of planning¹⁸ requiring recognition of the Precautionary Principle at each level provides the framework and basis for harvesting of Brown Mountain Forestry Coupes and ensuring that biodiversity conservation is appropriately considered.

¹⁶ Refer www.dpi.vic.gov.au/DSE/nrenpa.nsf/

¹⁷ Ferguson, I.S., 1996. *Sustainable Forest Management*, Oxford University Press, Melbourne, 162pp.

¹⁸ A detailed description of the technical details and consultation provisions of the process is provided in the Affidavit of Lachlan Spencer dated 27 November 2009.

2. Appropriate Maintenance of Hollow-bearing Trees

2. Will the proposed harvesting in the Brown Mountain Forestry Coupes ensure that appropriate level of hollow-bearing trees is restored and maintained?

2.1 Maintenance of Hollow-bearing Trees

The proposed harvesting in the Brown Mountain Forestry Coupes is to be conducted according to 'the modified habitat tree prescriptions¹⁹, that set provisions to strengthen those in the 'Sooty Owl', 'Powerful Owl', and the 'Loss of hollow-bearing trees' Action Statements²⁰. DSE staff with appropriate expertise in biodiversity management will guide the identification of hollow-bearing habitat trees in those areas available for timber harvesting, in consultation with VicForests and harvesting contractors²¹. The commitment to remove harvesting debris and other fuels from within 20 m of the base of retained hollow-bearing trees is especially important to reduce the risks posed by fire, whether wildfire, prescribed burning or regeneration burning²².

These prescriptions are assisted to a significant degree by the increase of the width of stream-side buffer to 100m which will automatically reserve hollow-bearing trees within it, as well as providing habitat of old trees.

A very recent publication of research on hollow incidence in East Gippsland forests²³ indicates that the average number of trees over 75 cm diameter at breast height overbark is about 20 per ha and the average number of those with hollows is about 12 per ha and provides predictive models that will assist in location of hollow-bearing trees.

These measures should enable an average of at least five hollow-bearing trees per hectare to be retained on these coupes.

2.2 Summary

The measures agreed between VicForests and DSE provide substantial additional protection to those set out in the Action Statements and should ensure that appropriate levels of hollow-bearing trees are maintained.

¹⁹ Refer CM11 attached to Cameron Macdonald's first affidavit.

²⁰ DSE, 2001. Action Statement. No.117. Flora and Fauna Guarantee Act. Sooty Owl. *Tyto tenebricosa*. DSE, Melbourne.

DSE, 2004. Action Statement. No. 92. Flora and Fauna Guarantee Act. Powerful Owl. *Ninox strenua*. DSE, Melbourne.

DSE, 2003. Action Statement. No. 192. Flora and Fauna Guarantee Act. Loss of hollow-bearing trees from Victorian native forests and woodlands DSE, Melbourne. (Refer to www.dse.vic.gov.au)

²¹ Defense [72]

²² *Ibid*

²³ Fox, J. C., Hamilton, F. and S. Occhipinti, 2009. Tree hollow incidence in Victorian state forests. *Australian Forestry* 72(1):39-48

3. Meaning of the 'Precautionary Approach'

3. In the forestry and conservation context, what does the phrase 'precautionary approach' mean, if anything?

3.1 The Precautionary Approach

The precautionary approach is a reference to adherence to the Precautionary Principle incorporated in the Code of Practice, the Montreal Protocol, Ecologically Sustainable Development, and Sustainability Charter, which states:

When contemplating decisions that affect the environment, the precautionary principle requires careful evaluation of management options to wherever practical avoid serious or irreversible damage to the environment, and to properly assess the risk-weighted consequences of various options. When dealing with threats of serious or irreversible damage, lack of full certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The precautionary approach has quite a long history²⁴ but gained much credence from a seminal paper by Kenneth Arrow and Anthony Fisher²⁵ in which they proved that:

if the development involves some irreversible transformation of the environment, hence a loss in perpetuity of the benefits from preservation, and if information about the costs and benefits of both alternatives realized in one period results in a change in their expected values for the next, the answer is yes — net benefits from developing the area are reduced and, broadly speaking, less of the area should be developed.

The Principle extends that argument to encompass serious, not just irreversible damage, and hence the need to properly assess the risk-weighted consequences of various options to give the Principle operational content²⁶. Otherwise, it would be possible to claim that any serious damage was a sufficient reason to stop any development.

²⁴ See *Telstra Corporation Limited vs Hornsby Shire Council* [2006] NSWLEC 133 (24 March 2006) (refer www.austlii.edu.au/au/cases/nsw/NSWLEC/2006/133.html)

²⁵ Arrow, K. J. and A. C. Fisher, 1974, Environmental preservation, uncertainty and irreversibility. *The Quarterly Journal of Economics* 88(2):312-319

²⁶ See Peterson, D.C., 2006. Precaution: principles and practice in Australian environmental and natural resource management. Presidential Address to Australian Agricultural and Resource Economics Society Conference. *Australian Journal of Agricultural and Resource Economics* 50 (4): 469-489

To paraphrase Preston CJ²⁷, the application of the precautionary principle rests on (1) a threat of serious or irreversible environmental damage, and (2) scientific uncertainty as to the damage, but the measures taken should be proportionate

3.2 Summary

In the forestry and conservation context, the phrase 'precautionary approach' refers to the Precautionary Principle and rests on (1) a threat of serious or irreversible environmental damage, and (2) scientific uncertainty as to the damage. Given that those preconditions are met, the measures taken should be proportionate and hence the need for the assessment of the risk-weighted consequences of the options.

²⁷ *Telstra Corporation Limited vs Hornsby Shire Council* [2006] NSWLEC 133 (24 March 2006) (refer www.austlii.edu.au/au/cases/nsw/NSWLEC/2006/133.html)

4. Application of Precautionary Approach

4. In your opinion, has VicForests taken a precautionary approach in relation to its proposed harvesting in the Brown Mountain forestry Coupes?

The provisions of the planning process imbed the precautionary approach in the provision of formal conservation reserves (national parks etc), other reserves (buffer strips, Special Protection Zones, etc), the Forest Management Plan, Code of Practice and Action Statements.

4.1 Long-footed Potoroo

Action Statement for Long-footed Potoroo

The Action Statement for the Long-footed Potoroo was revised late in 2009, the revision being based on considerable research, survey and monitoring, some of which was sponsored by the Commonwealth's Recovery Plan required under its legislation.

The new Action Statement establishes a Core Protection Area totalling over 40,000ha, and comprising a network of primary habitat in Special Protection Zones in State forests and in conservation reserves. 'Additional Protected Areas' are Special Management Zones (SMZ) where Long-footed Potoroos have been recorded outside of the Core Protected Area. Specific prescriptions now apply to these SMZs in State forests²⁸:

1. Each Long-footed Potoroo (LFP) detection site outside the Core Protected Area will generate a Special Management Zone (SMZ) of approximately 150 ha.
2. As far as possible, SMZ boundaries will follow recognisable landscape features such as ridges, spurs and watercourses.
3. Within each SMZ, at least one third (~50 ha) will be protected from timber harvesting and new roading.
4. This will be known as Long-footed Potoroo Retained Habitat.
5. The LFP Retained Habitat will include the best LFP habitat in the SMZ, which will generally be in gullies and on lower, sheltered slopes.
6. The LFP Retained Habitat may include areas otherwise unavailable for timber harvesting due to restrictions under the Code of Practice for Timber Harvesting.
7. The SMZ will also have a general restriction of one third of the total area that can be harvested in any three-year period. If more than one coupe is to be harvested in an SMZ in the same year, the coupes must be separated by at least the equivalent of another coupe width.

²⁸ DSE, 2009. Action Statement. Flora and Fauna Guarantee Act . Long-footed Potoroo, *Potorous longipes*. Department of Sustainability and Environment, Melbourne, Appendix I. (refer www.dse.vic.gov.au/)

8. The SMZ, with the LFP Retained Habitat clearly delineated, will be shown as part of the Forest Management Area zoning scheme.

9. The SMZ will be designed by DSE, in consultation with VicForests, and approved by DSE.

10. If the ~150 ha area includes any part of an existing conservation reserve or Special Protection Zone (SPZ), these areas will retain their existing reservation or zoning status but will be considered for inclusion as part of the area of retained habitat. In such cases, the final area designated as SMZ may be correspondingly smaller.

Appendix 1 of the Action Statement for Long-footed Potoroo cited above is based on new terminology and provisions that, in my view, are confusing and undesirable, notwithstanding the merit of the underlying intent. It creates what is in effect a Special Protection Zone for LFP within a designated Special Management Zone but is called a LFP Retained Habitat. These definitions and terms are bound to create undesirable confusion for all concerned, not least in the public domain. In my view, Special Protection Zones and Special Management Zones should be mutually exclusive areas²⁹ and the introduction of new terms serving the same purpose should be avoided.

Notwithstanding these concerns over the terminology and provisions, the specific review that follows is based on the existing terminology of Appendix 1.

Delineation of boundaries

For coupes 15 and 19, the evidence suggests that an area in coupe 15 may be habitat to a Long-footed Potoroo. In my view, the preconditions for application of the Precautionary Principle may have been met and a LFP detection site would then need to be recognized under the existing Appendix 1 of the LFP Action Statement.

The *status quo* provisions of the Code of Practice involve the normal width of stream buffer of 20m. This does not meet the requirements of the Action Statement but is a benchmark boundary against which other options need to be assessed.

A sequence of interchanges took place between DSE and VicForests staff (Exhibits CM-39 to CM-48) in initial attempts to define and refine the LFP Retained Habitat and SMZ boundaries. Field delineation of the LFP Retained Habitat boundaries was ultimately proposed³⁰ but is yet to be carried out. In

²⁹ Appendix 1 could be rewritten to meet this requirement by changing 'LFP Retained Habitat' to 'Special Protection Zone', confining the term 'Special Management Zone' to that part of the 'Additional Protected Area' outside of the LFP Retained Habitat, and referring to the 'Special Management Zone and adjacent Special Protection Zone' wherever the existing term 'Special Management Zone' is used or implied.

³⁰ See Affidavit of Cameron Macdonald dated 27 November, 2009

my view, this is a very important step because an arbitrary 100 m (or 90 m) streamside boundary could include spurs of less desirable habitat and exclude gullies of more desirable habitat for the Long-footed Potoroo. Furthermore, topographic maps are not always reliable, making desktop identification of spurs and gullies, and hence boundaries of this type, hazardous.

The area of the LFP Retained Habitat would logically be extended north and south of the coupes as in proposed in Exhibit CM-45 and might also include parts of the gullies that extend westward from Brown Mountain Creek at the north and south of coupe 15. These gullies were the subject of an interchange (Exhibits CM-41 and CM-42) between DSE and VicForests in which adding 90 m buffers going west up these two gullies was proposed. The westward extent was the subject of some concern by VicForests (Exhibit CM-42), highlighting the need for a field delineation of an area that best satisfies the habitat requirements of the animal.

Once the LFP Retained Habitat is delineated in the field, further attention needs to be given to the SMZ boundaries. In Exhibit CM-45, DSE propose that the SMZ be defined by an area that includes, as it must under the Action Statement, the LFP Retained Habitat and extends to the west of it, covering the entire coupe 15, as shown in CM-45. However, it does not include coupe 19, other than that portion of proposed LFP Retained Habitat. The home range of a Long-footed Potoroo can be up to 131 ha³¹ so, given the location of the alleged sighting, this coupe could be within the home range of the animal. The omission of this coupe is therefore surprising, unless there are other characteristics that are not apparent in the evidence available to me.

The analysis of options that follows is therefore based on my own assessment of the likely and desirable boundaries. While field inspection and delineation of the notional 100m streamside boundary is needed, it is unlikely to make a material difference to the areas involved in the subsequent analysis and the further delineation of a SMZ for the Long-footed Potoroo only has implications for harvest scheduling³² that is likewise unlikely to make a material difference to the analysis.

Two options are considered:

Option #1.

For the purposes of analysis of Option #1, I shall assume the Special Management Zone for the Long-footed Potoroo includes all of coupe 19, as

³¹ Chick, R., Henry, S., Kambouris, P. and P. Tennant, 2006. The effects of timber harvesting on the Long-footed Potoroo (*Potorous longipes*). *Parks and Forests Report Series 06-1*. Department of Sustainability and Environment, Melbourne, 66pp.

³² See para 7 of Appendix 1 of the LFP Action Statement.

well as coupe 15, with LFP Retained Habitat notionally based on a 100 m streamside reservation described above but subject to field review.

The western boundary of the SMZ would run on the west side of coupe 15 linking with the northern boundary of the LFP Retained Habitat in Exhibit CM-45. The eastern boundary would follow the coupe boundaries that link with the eastern boundary of coupe 19, and the southern with the southern boundaries of coupes 15 and 19, other than a southern tail of LFP Retained Habitat. This would provide a total SMZ area of around 150 ha including LFP Retained Habitat of around 50 ha.

While the areas involved would need to be checked following field delineation, it seems unlikely that deferral of harvesting of one-third of the area under para 7 of Appendix 1 of the LFP Action Statement would be required. The same is true of the DSE proposal. In any event such a deferral would not make a material difference to my conclusions.

Under the existing Action Statement cited above, harvesting is permitted in the remainder of the SMZ outside the LFP Retained Habitat and is therefore not considered to constitute a serious or irreversible threat to the survival of the animal³³.

Option #2

Option #2 is to forego harvesting of both coupes 15 and 19 by designating them entirely as LFP Retained Habitat³⁴ but retaining the SMZ boundaries described in Option #1.

Risk-weighted consequences

Each of these options would provide an 'Additional Protected Area' to the existing 'Core Protection Area', in the terminology of the Action Statement for the Long-footed Potoroo. Consideration of the risk-weighted consequences will therefore be limited to these two options.

The remaining issue is to assess which option is commensurate with the other impacts in terms of the risk-weighted consequences involved.

Whichever option is chosen, the impacts involve foregoing volume for the foreseeable future that could otherwise have been harvested on the areas concerned - 'the foreseeable future' because the zoning will not be reversed

³³ See Chick *et al.* 2006. *Ibid* and a follow-up report for 2003-06 by Mitchell, A.K. and W.K. Elsner, 2006. Postscript to The effects of timber harvesting on the Long-footed Potoroo (*Potorous longipes*). Parks and Forests Report Series 06-1. Mimeo, Forest Stewardship and Biodiversity, DSE, Orbost, 2pp.

³⁴ While permissible under the existing Appendix 1 of the LFP Action Statement, a Special Management Zone that totally excludes harvesting is not consistent with the intent or general understanding of that designation and highlights the difficulties posed by the wording of Appendix 1.

while the species remains endangered. The losses of area and volume to the timber industry and dependent communities are therefore immediate and irreversible because of the species and log grades involved and the nature of the Allocation Order³⁵.

Option #1 involves foregoing about 40 ha of harvestable timber that lies between the 20 m riparian boundary and the proposed 100 m boundary³⁶. About 10 per percent of this area at the southern end was harvested in 1997-8 and a very small area above centre and to the west was harvested in 1990-91. In these cases, the loss would be of a future crop, 60 to 80 years hence, whereas the remainder is potentially harvestable timber, subject to scheduling of harvesting in Timber Release Plans.

No specific evidence is available as to the volume and financial impacts foregone for this entire LFP Retained Habitat beyond the normal 20 m buffer but given its location, the density of harvestable timber is likely to be greater than that on the slopes above. Allowing for past harvesting of about 10 per cent of the area, the overall harvestable timber and financial value is likely to be at least as much as that involved in Option #2 on the slopes above and for which evidence on the harvestable volumes and financial values has been given³⁷.

Option #2 involves foregoing harvesting on an additional area of about 40 ha. Taken together with the 100 m streamside reservation in Option 1, this option would also exceed the minimum size prescribed for LFP Retained Habitat. Evidence has been presented as to the volumes and financial impacts involved³⁸ in this additional reservation. It effectively doubles the loss of volume and the financial implications involved.

With due regard for the risk-weighted consequences, Option #1 meets the Precautionary Principle in making adequate provision to avoid serious or irreversible damage to the Long-footed Potoroo, and is, in my opinion, commensurate with the losses to the timber industry and dependent communities.

Option #2 avoids serious or irreversible damage to the Long-footed Potoroo but entails a major and certain additional impact on the timber industry and dependent communities that is disproportionate to the possible threat to the Long-footed Potoroo.

³⁵ Cameron Macdonald's affidavits of 31 August 2009 and 2 September 2009.

³⁶ Cameron Macdonald's affidavit of 31 August 2009, para 37 states that the total area within the 100m buffer is 50 ha. Deducing the 20m buffer from this leaves about 40 ha.

³⁷ *Ibid*

³⁸ *Ibid*

4.2 Orbost Spiny Crayfish

The Orbost Spiny Crayfish is not endangered but is listed as a threatened species under the Flora and Fauna Guarantee Act. It is an aquatic animal that is most unlikely to stray far from the riparian zone. The earlier DSE Survey³⁹ and the recent survey reported in the Expert Witness Report of McCormack⁴⁰ indicate that it is not present in these coupes. However, the McCormack report does identify the presence of an unnamed new species referred to as the Bonang taxon. This would be well protected by the 100m streamside reserve in the form of a Special Protection Zone⁴¹ extending at least 1 km to the north and south of the mid-point of the coupes on the creek⁴².

4.3 Sooty Owl, Powerful Owl, Spot-tailed Quoll and Large Brown Tree Frog

There is no evidence of owl nesting sites in the coupes nor of the presence of Spot-tailed Quolls or Large Brown Tree Frogs. The provisions of the East Gippsland Management Plan, together with the recent additions⁴³ to conservation reserves in this general area and the provisions of the Action Statements for these Owls, Spot-tailed Quolls and Gliders (see below) provide appropriate measures to meet the requirements of the Precautionary Principle and would be supplemented by the establishment of a Special Protection Zone co-incident with the LFP Retained Habitat proposed in Option #1.

No Action Statement is available for the Large Brown Tree Frog. It is listed as vulnerable under the category 'Data deficient' of the Flora and Fauna Guarantee Act. It is therefore not critically endangered or endangered but is facing a high risk of extinction in the medium term future. Given its preferred habitat is probably near water, a Special Protection Zone spanning all these species, co-incident with the LFP Retained Habitat in the proposed SMZ for LFP in Option 1, would provide ample protection and meet the requirements of the Precautionary Principle in the event that it did occur.

³⁹ DSE, 2009. Surveys for arboreal mammals, Long-footed Potoroo and Spiny Crayfish in proposed logging coupes 840-502-0015 and 840-502-0019, Brown Mountain Creek Catchment, Bodribb Forest Block, Errinundra Plateau. Department of Sustainability and Environment, Melbourne, 11pp.

⁴⁰ McCormack, R.B., 2009. Aquatic Biological Survey Report. Report prepared for Bleyer Lawyers. Australian Aquatic Biological Pty Ltd, Karuah, N.S.W.

⁴¹ This SPZ for the Orbost Spiny Crayfish would be co-incident with the LFP Retained Habitat in the SMZ for LFP, again illustrating the unsatisfactory nature of the terminology

⁴² Refer to Figure 1, 1: 15,000 map, labelled 'Brown Mountain Land Status and Harvesting History'.

⁴³ DSE, 2009. *Protecting East Gippsland's old growth and iconic forests*. Department of Sustainability and Environment, Melbourne, 20pp (refer www.dse.vic.gov.au)

4.4 Greater Glider and Yellow-bellied Glider

Neither species is on the endangered list, nor is either listed as threatened under the Flora and Fauna Guarantee Act, but the related loss of habitat in hollow-bearing trees is a potentially threatening process under the Flora and Fauna Guarantee Act. This relationship between predator (owls), prey (gliders) and habitat (trees) highlights the complexity of competing (owl/glider) and complementary (glider/ hollow-bearing tree) relationships.

An Action Statement has been prepared for the maintenance of habitat in Hollow-Bearing Trees for these species. Reference has been made in Section 2 of this report to this Action Statement to recent research⁴⁴ on the number of hollow-bearing trees, and specific undertakings to identify and protect those trees in these coupes. These address concerns identified by Bilney⁴⁵ in his Expert Witness Statement.

4.5 Concluding remarks

Reference must be made again to the hierarchy of planning processes and continuing revision and refinement involved in achieving an appropriate balance between biodiversity conservation and the timber industry. Victoria's publicly owned forests include about 3.5 million ha of nature conservation reserves and 3.2 million ha of State forests. However the area of State forests available for timber production in eastern Victoria is confined to about 450,000 ha, much of it in East Gippsland.

Publicly owned forest in East Gippsland covers about 1 million ha⁴⁶. Over 400,000 ha were in nature conservation reserves prior to 2006. In 2006, the Victorian Government added a further 45,000ha to the reserve system, much of it in the immediate vicinity of the Brown Mountain Forestry Coupes⁴⁷, to provide greater protection for endangered species and ecosystems, more diversity of forest and habitat types, and enhanced connectivity between parks and reserves⁴⁸. These additions also address concerns identified by Bilney⁴⁹ concerning owl populations and Belcher⁵⁰ concerning the Spot-tailed Quoll in a manner proportionate, in my view, to the threats involved. The

⁴⁴ Fox, J. C., Hamilton, F. and S. Occhipinti, 2009. Tree hollow incidence in Victorian state forests. *Australian Forestry* 72(1):39-48

⁴⁵ Bilney, R., 2009. Report on Sooty Owls and Powerful Owls for the Supreme Court proceeding number 8547 of 2009 – Environment East Gippsland v VicForests. The author, Bairnsdale.

⁴⁶ DNRE, 1995. *East Gippsland Forest Management Plan*, Department of Natural Resources and Environment, Melbourne. (refer www.dse.vic.gov.au)

⁴⁷ Refer to Figure 2, 1:100,000 map, labelled 'Orbost District Map'.

⁴⁸ DSE, 2009. *Protecting East Gippsland's old growth and iconic forests*. Department of Sustainability and Environment, Melbourne, 20pp (refer www.dse.vic.gov.au)

⁴⁹ Bilney, *ibid*

⁵⁰ Belcher, C., 2009. Expert Witness Report for the Spotted-tailed Quoll, *Dasyurus maculatus*. ECO Environmental Consultants, Peterborough, Vic.

process involved considerable consultation with stakeholders to delineate these improvements while continuing to support local communities and jobs in the timber industry.

4.6 Summary

In my view, VicForests has taken a precautionary approach in relation to proposed harvesting in the Brown Mountain Forestry Coupes. The field delineation of the LFP Retained Habitat and the SMZ boundaries represent refinements of an initial demarcation, which is clearly precautionary in approach. The likely Special Management Zone (Option #1) avoids serious or irreversible damage to the Long-footed Potoroo and similarly, the Special Protection Zone coincident with the LFP Retained Habitat in the SMZ of Option #1 provides appropriate protection for the other endangered and threatened species in question. This option is commensurate with the losses to the timber industry and dependent communities, whereas Option #2 involves disproportionate losses to the timber industry and communities.

5. Supplementary Instruction #1.

- 1. Assume that DSE considers that there has not been a verified detection of a Long-footed Potoroo within the Brown Mountain forestry coupes, and that it does not consider any further action is required under the relevant Action Statement. Does this change your opinions to the questions you have already been asked to answer.*

If there is not a detection of a Long-footed Potoroo in the Brown Mountain forestry coupes that is accepted as verified by DSE, the grounds for establishing the proposed Special Management Zone and LFP Retained Habitat in it are removed. However, a Special Protection Zone is still be established, based notionally on the 100 m streamside buffer but subject to field review of the detail of the boundary, as a precautionary measure in relation to this and the other species discussed in earlier sections.

6. Supplementary Instruction #2

2. Assume that the DSE declares a Special Management Zone and a core retained habitat for the Long-footed Potoroo in either of the forms discussed in Cameron Macdonald's affidavit sworn on 27 November 2009. Does this in any way change your opinions to the questions you have already been asked to answer?

The only change is to emphasize that I would much prefer field delineation of the boundaries to either of the fixed boundaries for the LFP Retained Habitat discussed in that affidavit. The topographic map (Figure 1, attached) suggests that there are places where the boundary might better be extended somewhat beyond 100 m (or 90m), and places where it might be reduced, in order to create a protection zone with as much preferred habitat as possible within the broad guideline of a 100 m streamside boundary. Topographic maps are not always absolutely reliable and, in any event, a field inspection to identify preferred habitat would be much preferable. In the course of that field delineation, the boundaries of the Special Management Zone would also need to be reviewed, enabling the issue I raised earlier regarding coupe 19 to be considered.

Our Ref: JAK:RVH:182227

30 October 2009

Private & Confidential
Professor Ian Ferguson
79 Athelstan Road
CAMBERWELL VIC 3124

Dear Professor Ferguson

**VicForests ats Environment East Gippsland Inc
Supreme Court of Victoria Proceeding No 8547 of 2009**

This letter is further to our letter to you dated 30 September 2009 (our earlier letter). Please find enclosed with this letter a copy of the defence filed on behalf of VicForests and dated 12 October 2009. This letter should be read together with our earlier letter.

The trial of this proceeding has been set for 1 March 2010 with an estimate of 8 – 10 sitting days. The trial will be heard before the Honourable Justice Osborn in the Supreme Court of Victoria at Sale and will not sit on Fridays.

Assumed facts

For the purpose of preparing your expert report, you should assume that the facts admitted and asserted in the defence are true and correct. Further, you should assume that the matters deposed to in the three affidavits of Cameron MacDonald are also true and correct.

It may be necessary for us to provide you with further assumed facts which, if necessary, we will do in writing.

Instructions

Please answer the questions listed in Schedule 1 to this letter. Please ensure that your report complies with the Expert's Code of Conduct enclosed in our earlier letter. Where the questions admit a "yes" or "no" answer, please also state fully the reasons you have reached that conclusion.

If you require further instructions, assumed facts or any clarification, please let us know.

We look forward to receipt of your report on or before 21 December 2009.

Yours faithfully
HWL Ebsworth

Jonathan Kramersh
Partner

Writer: Rebecca Howe | (03) 8633 7522 |
E-mail: rebecca.howe@hwlebsworth.com.au
Postal: PO Box 3 Collins Street West, Melbourne, Victoria 8007
Address: Level 21, 570 Bourke Street, Melbourne, Victoria 3000
Facsimile: 1300 365 323 (Australia) | +61 3 8615 4300 (International)
DX: DX 564 Melbourne

Brisbane
Melbourne
Norwest
Sydney

SCHEDULE 1

1. What is the history and background of the political and legislative scheme that regulates forestry in Victoria? In answering this question, please also provide comment on the proposed harvesting in the Brown Mountain Forestry Coupes in relation to broader Victorian forestry harvesting and conservation.
2. Will the proposed harvesting in the Brown Mountain Forestry Coupes ensure that that an appropriate level of hollow-bearing trees is restored and maintained?
3. In the forestry and conservation context, what does the phrase "precautionary approach" mean, if anything?
4. In your opinion, has VicForests taken a precautionary approach in relation to its proposed harvesting in the Brown Mountain Forestry Coupes?

Our Ref: JAK:RVH:182227

19 January 2010

Professor Ian Ferguson
Professor Emertius of Forest Science
79 Athelstan Road
CAMBERWELL VIC 3124

Legal Professional Privilege Applies

Dear Professor Ferguson

**VicForests ats Environment East Gippsland Inc | Supreme Court of Victoria
Proceeding No 8547 of 2009**

This letter is further to our letters to you dated 30 September 2009 and 30 October 2009.

Please find **enclosed** with this letter copies of:

1. exhibits to Cameron MacDonald's affidavit sworn on 27 November 2009;
2. exhibits to Lachlan Spencer's affidavit sworn on 27 November 2009; and
3. an outline of evidence expected to be given by Lee Alexander Miezis dated 22 December 2009.

Supplementary Instructions

1. Assume that the DSE considers that there has not been a verified detection of a Long-footed Potoroo within the Brown Mountain forestry coupes, and that it does not consider any further action is required under the relevant Action Statement. Does this in any way change your opinions to the questions you have already been asked to answer?
2. Assume that the DSE declares a Special Management Zone and a core retained habitat for the Long-footed Potoroo in either of the forms discussed in Cameron MacDonald's affidavit sworn on 27 November 2009. Does this in any way change your opinions to the questions you have already been asked to answer?

Yours faithfully
HWL Ebsworth

Jonathan Kramersh
Partner

Writer: Rebecca Howe | (03) 8633 7522 |
E-mail: rebecca.howe@hwlebsworth.com.au
Postal: PO Box 3 Collins Street West, Melbourne, Victoria 8007
Address: Level 21, 570 Bourke Street, Melbourne, Victoria 3000
Facsimile: 1300 365 323 (Australia) | +61 3 8615 4300 (International)
DX: DX 564 Melbourne

Enc

Brisbane
Melbourne
Norwest
Sydney

List of Documents Supplied

With letter of 20 September

1. Generally endorsed writ and summons
2. Affidavit of Vanessa Elizabeth Bleyer sworn 24 August 2009
3. Affidavit of Eliza Marie Poole sworn 24 August 2009
4. Affidavit of Andrew Stephen Lincoln sworn 24 August 2009
5. Affidavit of Jill Redwood sworn 28 August 2009
6. Affidavit of Vanessa Elizabeth Bleyer sworn 31 August 2009
7. Affidavit of Cameron MacDonald sworn 31 August 2009
8. Affidavit of Cameron MacDonald sworn 2 September 2009
9. Affidavit of Cameron MacDonald sworn 14 September 2009
10. Judgment of Forrest J dated 14 September 2009
11. Affidavit of Vanessa Elizabeth Bleyer sworn 17 September 2009
12. Statement of Claim dated 28 September 2009
13. Form 44A- Expert Witness Code of Conduct

With letter of 30 October 2009

14. Statement of Defense dated 12 October 2009

Email/ftp by Rebecca Howe of 16 December 2009

15. Colour map of Orbost Forest District
16. Colour map of Brown Mountain Land Status and Harvesting History'

With letter dated 19 January 2010

17. Affidavit of Cameron MacDonald sworn 27 November 2009
18. Affidavit of Lachlan Spencer sworn 27 November 2009
19. Outline of evidence expected to be given by Lee Alexander Mieziis dated 22 December 2009

Delivered by courier date unknown circa mid January 2010

20. Exhibits CM-20 to CM-26 Folder 1 of 2
21. Exhibits CM-27 to CM-55 Folder 2 of 2
22. Exhibits LRS 1 to LRS 11 Folder 1 of 2
23. Exhibits LRS 12 to LRS 52 Folder 2 of 2

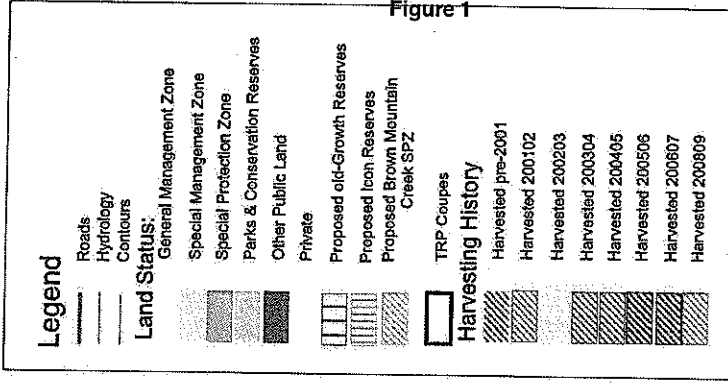
Email by Rebecca Howe dated 25 January 2010

24. Colour copy of map CM-47

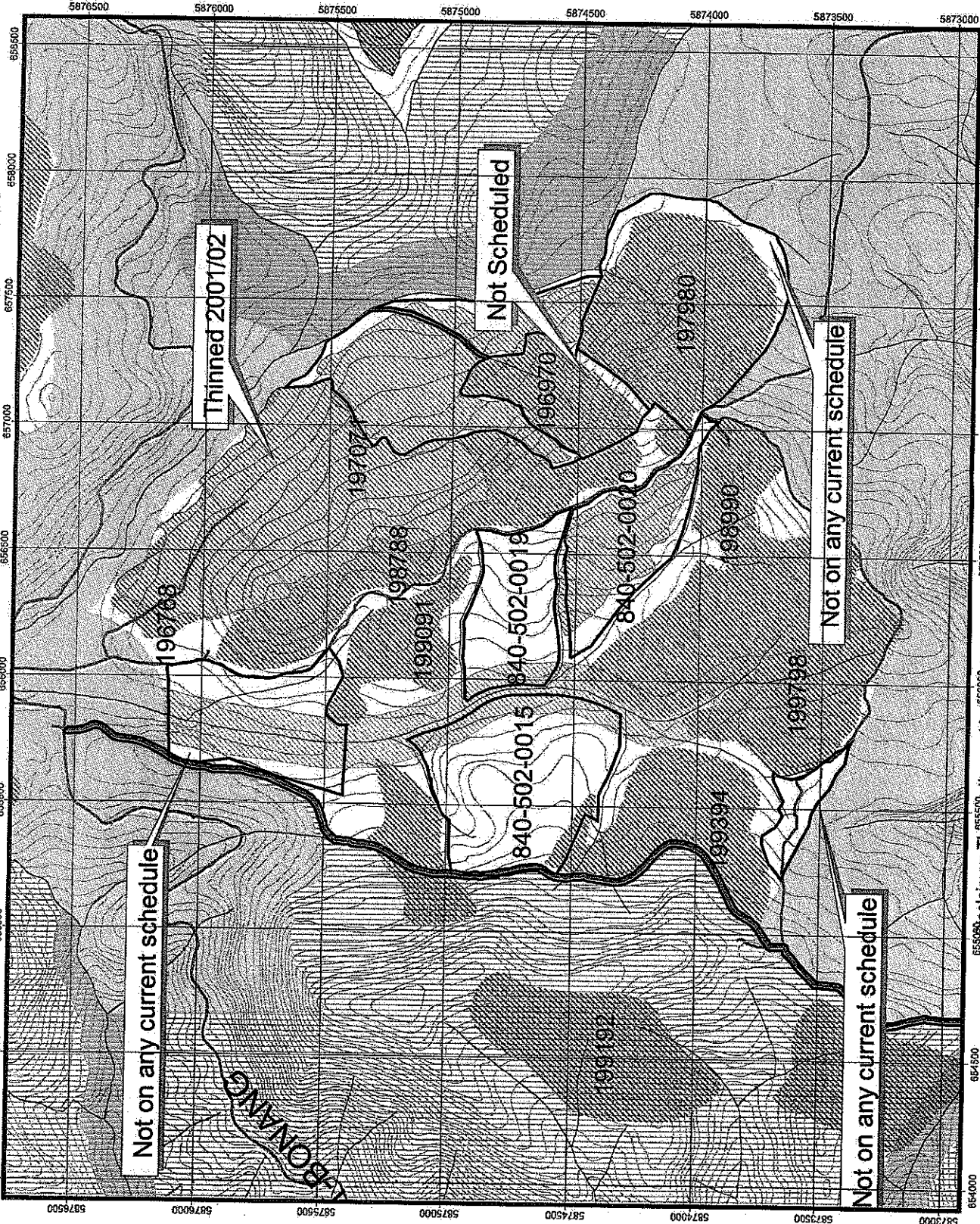
BROWN MOUNTAIN LAND STATUS AND HARVESTING HISTORY



Appendix 2:
Figure 1



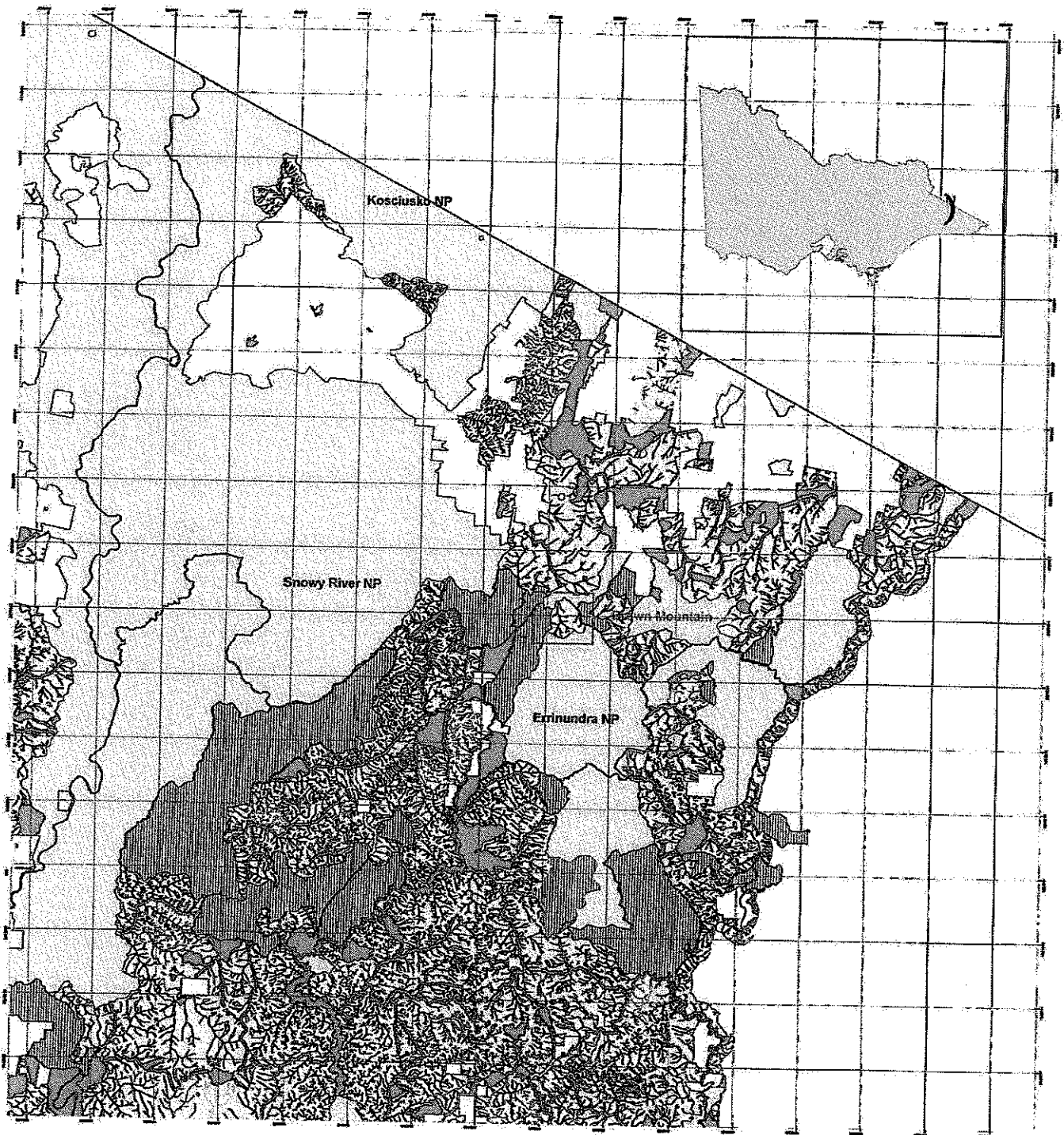
Scale: 1:15000
Date: 28/08/2009



Disclaimer: The location and boundaries of this coupe as marked on this plan are only approximate and are merely indicative. The precise boundary of the coupe will be marked on the ground by VicForests before harvesting, in accordance with the Utilisation Procedures.

Orbost District Map

Map Produced: 25th November 2009



LEGEND		
	Code of Forest Practices	Other Parks & Reserves
	Concomerath	OPR - Limited Timber Harvesting
	General Management Zone	Licensed/Licensed Practitioners
	OPR - Timber and Minor Forest Products	Proposed Parks
	OPR - Minor Forest Products	Conservation Parks and Reserves
	OPR - Other	Private Land
	OPR - Forest	Special Management Zones
	OPR - Other	Special Protection - River Fringe
	OPR - Other	Special Protection Zone
	OPR - Other	Wiley Bodies
	OPR - Other	2008 ALP election policy reserves
	Other Public Land	Council Boundary



Disclaimer: This map is generated from VicForests and Victorian Government data and may be of assistance to you. However, VicForests does not guarantee that the publication is without flaw of any kind and therefore disclaims all liability for error, loss or damage which may arise from reliance upon it.

Appendix 3

CURRICULUM VITAE: IAN STEWART FERGUSON

PERSONAL DETAILS

Date and Place of Birth: 13th December 1935; Melbourne, Victoria.
Private Address: 79 Athelstan Road, Camberwell, Victoria 3124.
University Address: School of Forest and Ecosystem Science
The University of Melbourne, Parkville, Victoria, 3010.
Contacts: Phone (61 3) 9809 1864
Fax (61 3) 9809 0546
Email: iferguso@bigpond.net.au

EDUCATION

1953-55 University of Melbourne, B.Sc.(For) 1961.
1956-57 Australian Forestry School, Dip.For. 1958.
1962-63 Yale University, U.S.A. Master of Forestry 1963.
1063-65 Yale University, U.S.A. Doctor of Forestry 1967.

EMPLOYMENT

1958-65 Forests Department of W.A., Assistant Divisional Forest Officer
1965-66 Forests Department of W.A., Research Officer
1966-67 Forests Department of W.A., Inspector
1968-71 University of Melbourne, Senior Lecturer in Forest Management and Forest Economics
1971-78 Australian National University, Department of Forestry, Senior Lecturer
1973-74 Australian National University, Sub-Dean, Faculty of Science
1979-81 Australian National University, Department of Forestry, Reader
1981-2003 University of Melbourne
Foundation Professor of Forest Science, 1981-
Head, Forestry Section (1981-85, 1990-)
Deputy Dean, Faculty of Agriculture and Forestry 1984-86
Dean, Faculty of Agriculture and Forestry (1987-89)
Associate Dean (Students), Faculty of Agriculture and Forestry(1990)
Deputy Vice-President, Academic Board (1989)
Vice-President, Academic Board (1990)
Pro-Vice-Chancellor (1990-92)
President, Academic Board (1991-92)
Head, School of Forestry and Resource Conservation, 1994-97
Associate Dean (Budgets and Resources), Faculty of Agriculture, Forestry and Horticulture 1995-96
Head, School of Forestry, Institute of Land and Food Resources, 1998-01
2003- University of Melbourne, Professor Emeritus

AWARDS

1953-57 Commonwealth Forestry Scholarship
1962 Fulbright Travel Grant
1962-63 Yale University Scholarship
1963-65 Yale University Fellowship
1989 M.R. Jacobs Oration
1989 Fellow, Institute of Foresters of Australia
1989 Fellow, Royal Australian Institute of Parks and Recreation (now Parks and Leisure, Australia)
1992 Fellow, Australian Academy of Technological Sciences and Engineering
N. W. Jolly Medal: Institute of Foresters of Australia
2003 Centenary Medal, Commonwealth of Australia

Appendix 3

- 2005 Erskine Visiting Fellow, University of Canterbury, N.Z. Sept-Nov 2005
2006 Fellow, Institute of Wood Science (U.K.)
2000 ANU Westoby Lecturer, Aug. 2009

GOVERNING BOARDS

- Director, CRC Forestry Ltd 2005
Director, Tiaki Plantation Co (NZ) 2004-2008
Chair and Independent Director, Taswood Growers, 1999-2005
Director, Hancock Victorian Plantations Pty Ltd 1998-
Dep Chair and Director, Forests and Wood Products Corporation, 2000-2003
Director, Timber Training Centre Ltd, 2002-
Director, Lignotek Pty Ltd 2001-2004
Member, Council of University of Ballarat, 1994-98
Chairman, Timber Promotions Council, Victoria 1994-2000
President, Institute of Foresters of Australia, 1994-1999
Director, School of Forestry, Creswick Ltd 1993-98
Member, University of Melbourne Council 1988-92
Member, Ormond College Council, 1991-93
Director, Board of Directors, Graduate School of Management Ltd., 1991-92
Member, Ballarat University College Council, 1990-1993
Member, Board of the School of General Studies, ANU 1979-80

OVERSEAS EXPERIENCE

- 1964-65 Teaching Associate, Yale University.
1970 Freeport Indonesia Inc., West Irian, Sept-Oct 1970
1971 FAO, Savannah Forestry Research Station Nigeria, May-Jul 1971
1973 FAO, Savannah Forestry Research Station Nigeria, Jan-Mar 1973.
1975-76 Visiting Associate Professor, College of Forest Resources, University of Washington.
1980 NZ Forest Products Ltd Visiting Fellow, School of Forestry, University of Canterbury.
1980 AAUCS Course Advisor, UPM Malaysia, Jan-Feb 1980
1981 ADAB Feasibility Study Team to China, Apr-May 1981
1982 ADAB Feasibility Study Team Leader, Royal Forestry College, Phrae, Thailand, Aug-Sep 1982
ACIAR/World Bank China Forest Development Project Study Team. Sep-Oct 1986
ADAB Eucalypt Research Centre, China, Pre-feas. Study Team Leader. Nov 1986
1988 FAO/UNDP Fiji Forest Sector Project, Industry Structure Analysis.
1989 New Zealand Forest Industries Council and the Ministry of Forestry, Review of Forestry Research, Jun-Oct 1989
1990 Research Associate, University of California, Berkeley, Jan-Mar 1990
1991&2 External Assessor and Course Advisor, Faculty of Forestry, Universiti Pertanian Malaysian, Serdang, May 1991 & 2
1992 ITTO Resources for Sustainable Management, Yokohama, Japan, Jan-Mar, 1992
1992 Ministry of Science, Technology and Environment, Malaysia; IRPA Panel member
1993 Visiting Fellow, East-West Center, Hawaii, Jun-Oct 1993.
Forestry Commission of Zimbabwe/World Bank; Review of Forestry Research in Zimbabwe, Jan-Feb 1993
1994 Indian Council for Forestry Research and Education; Chief Technical Adviser and Socio-economic research consultant, Oct-Nov 1994
Indian Council for Forestry Research and Education; Chief Technical Adviser and Socio-economic research consultant, Jul 1995

Appendix 3

- 1996 STRAP Forest Policy Consultant, UNDP, Hanoi, Jul 1995.
1997 FAO Consultant, South Pacific Islands Outlook project, Rome, May-Jul, 1997
UNDP Consultant, Evaluation Mission for UNDP Forestry Research Program,
China, Aug 1997
ITTO Expert Panel on Project Appraisal (Chair), Apr, Aug, Oct 98
AusAID Capacity Building and Training, Kerala KFRI & KFD, Sep-Oct, 98
AusAID Capacity Building and Training, Kerala KFRI & KFD, April 01
Project Director & Lead Consultant, Fiji Pine Review, Fiji Forests Dept, Jul-Sep 01
ADB Consultant on ADB Forest Sector Strategy – Mar 02
Visiting Lecturer, Chinese Academy of Forestry, Beijing, China, May 03
2004 ITTO Consultant UN-Forum on Forests: Workshop on Decentralisation, Mar-Apr 04
2004 IUCN Consultant on Ecosystem Approach to Sustainable Forest Management
2005-6 ITTO/CITES Consultant on EU Project to Improve Management of CITES –related
Timber Species
2009 FAO Consultant, Workshop on Improving private sector investment, Khon Kaen,
Thailand 5-7 Aug 2009

AUSTRALIAN CONSULTANCIES

- APM Forests Pty. Ltd., Victoria, June-Dec. 1973
Industries Assistance Commission, ACT, April 1974-Feb. 1975
Joint Committee on Prices, Parliament of Australia, Nov. 1974-July 1975
Department of Industry and Commerce, ACT, Jan.-April 1976
Trade Practices Commission, ACT, June-Sept. 1977
Forests Section of ACT, Growth models, Nov. 1977-May 1979
Board of Inquiry on Forestry Royalties and Charges, Tasmania, May-Oct. 1978
Kapunda Development Co., NSW, April-June 1980
Shedden Pacific Pty. Ltd., APPM Pulp Mill Project, Aug.-Oct. 1982
Chairperson and Sole Member, Board of Inquiry into the Timber Industry in Victoria, 1984-85
APPM, Market Pulp Price Projections, Sept. 1985
SIROTECH, Machine Review Project, Sept. 1985
Shedden Agribusiness Pty. Ltd., Review of Commission of Inquiry Material, May 1988
Private Forestry Council of Tasmania, Review of Private Forestry, June-Oct. 1988
Peat, Marwick, Mitchell and Co., Plantation Valuation, Sept. 1986
Tasmanian Forestry Commission, Review of Financial Management, Feb 1987
Department of Conservation Forests and Lands, Review of Resource Availability Estimates, June
1989
New Zealand Forest Industries Council and the Ministry of Forestry, Review of Forestry Research,
June-Oct 1989
Turnbull and Partners Ltd, Corporatisation of Forestry Commission of N.S.W., Nov 1990-July 1991
Department of Primary Industry and Energy, Dep Chair, National Plantations Advisory Committee,
Dec 1990-Aug 1991
Resource Assessment Commission, Forest and Timber Inquiry, Feb-May 1992.
Victorian Department of Conservation and Natural Resources, Risk Management for Fire
Protection Services in Victoria. Feb - July 1992.
Victorian Department of Conservation and Natural Resources, Review of Commercial Accounts,
June 1992 -June 1993, 1996-
Queensland Forest Service, Review of Yield Regulation Models for Native Forests, May--Sep 1992
Victorian Department of Conservation and Natural Resources, Mortality of Mountain Ash, Mar
1992 -May 1993.
South Australian Auditor-General, Review of Growing Stock Models used in Valuation, April-
May 1993

Appendix 3

- Carter, Holt, Harvey Ltd, New Zealand. Implications of price increases for sawn timber markets in Australia. June 1993
- Department of Primary Industry (Forestry) South Australia, Review of the Level of Cut in the State Forests of South East region of South Australia, Jul-Aug 1995
- South Australian Auditor-General, Review of Valuation Methods, June 1994-Mar 1996
- State Forests of NSW, Chair of Performance Evaluation of Research Division, Sep-Dec 1995
- Forests Review Steering Committee, Primary Industry South Australia (Forestry), Lead consultant and Member, Feb-Sept 1996
- Forestry Tasmania, Chair of Research Review Committee, Mar - July 1996
- Prime Minister and Cabinet, Forests Task Force, Scientific Advisory Committee, Mar, 1996
- Prime Minister and Cabinet, Forests Task Force, Chair of Joint Scientific Advisory Committee, Commonwealth/Victoria, Apr- Jul 1996
- Prime Minister and Cabinet, Forests Task Force, Chair of Expert Group on Ecologically Sustainable Forest Management for East Gippsland, April - September, 1996
- Prime Minister and Cabinet, Forests Task Force; Chair, Expert Group on Ecologically Sustainable Forest Management for Tasmania, Sept-Dec, 1996
- Queensland Department of Primary Industries, Forestry; Chair, External Review of Queensland, Forestry Research Institute. Apr-May, 1997
- Prime Minister and Cabinet, Forests Task Force, Statewide Review of Ecologically Sustainable Forest Management for Victoria, May 1997
- Prime Minister and Cabinet, Forests Task Force, Assessment of Ecologically Sustainable Forest Management for South West Region of W.A., Oct-Nov 1997
- Unisuper, Due Diligence and Valuation of Victorian Plantations Corporation, Nov 1998
- Ministerial Advisory Group on Karri and Tingle Management, W.A., Feb-Dec 1999
- Victorian Dept of Premier and Cabinet, Carbon Sequestration. in Allen Consulting Group Greenhouse Emissions Trading project, Jan-Jul 2000
- Auditor-General of SA, Valuation of State Plantations, Jan - Nov 2000
- Minister for Forestry, NSW, Price Arbitration, Jan 2000- 2001
- Conservation Commission, Calculating Sustained Yield for Forest Management Plan, Nov 2000- Bureau of Rural Sciences, Review of Forestry Group, Sept 2001
- Govt of Tasmania, Review of Dark Red Myrtle Resource, Nov 2001-Mar 2002
- Black Forest Timbers Pty Ltd and NRE, Review of Midlands Sustainable Yield, Dec 2001-Apr, 2002
- ACFA/AFFA, Australian Standard for valuing commercial forests. Sept 2001-Jul 2002.
- BRS, Wood availability from Australian plantations, Jun 2001- Aug 2002.
- Conservation Commission of WA, Chair, Expert Panel on calculation of sustainable yield, Jun 2002-Nov 2003
- Auditor-General of Victoria, Wildfire prevention and preparedness audit, Sept 2002-Jan 2003
- Unisuper, Technical due diligence review, Tiaki project, Mar-May 2004
- DSE Review of Land Stewardship & Biodiversity R&D, Apr-May 2006
- Unisuper. Technical due diligence for CHH plantations project Sep 2006
- VicForests, Subconsultant for Poyry Forest Industry, Forests NSW, July 2007.
- NAFI, Subconsultant for Poyry Forest Industry, CEM review, July 2008
- FWPA, Timber Standards Nov 07-July 08
- DSE, Development of Fire Research Strategy, Feb-Jul 08
- DSE, Strategic Seed Collection and Storage, Mar-Sep 09
- VicForests, Expert witness on precautionary principle, Nov 09--
- NATIONAL AND INTERNATIONAL COMMITTEES**
- Member, International Tropical Timber Organisation, Expert Panel on Project Appraisal, 1997-2001
- Member, FAO Advisory Committee on Forestry Education, 1996-2000

Appendix 3

Member, Commonwealth Wood and Paper Industry Council, 1996
Member, Commonwealth Scientific Advisory Group, Forests Task Force, 1995-96
Chair, Research Management Review Committee, CSIRO Division of Forest Products, May 1995
Review Panel for University of Canterbury, School of Forestry, Mar 1994.
National Plantations Advisory Committee, Dep. Chair, 1991.
Forestry and Forest Products Industry Council of the Australian Manufacturing Council, 1984-90
Vice President of Australian Branch and Council member, Commonwealth Forestry Association, 1992-95

PROFESSIONAL AND LEARNED SOCIETIES

Australian Academy of Technological Sciences and Engineering, Fellow 1992-
Australian Forest Growers
Australian Agricultural Economics Society
Institute of Foresters of Australia: Chairman, ANZIF Conference Organising
Committee 1979-80, Fellow 1989-, President 1995-99
Institute of Wood Science, Australian Branch: Chairman 1989-91, Fellow, 2006-
Parks and Leisure, Australia, Fellow 1989-
Scientific Associate of the Zoological Board of Victoria 1988-1995
Editorial Board, Forest Economics and Policy, Elsevier, 1999-
Editorial Board, Appita, 1999-2002
Accreditation Review Board, Standards Australia, 2003-

TEACHING EXPERIENCE

Forest economics, forest management, forest policy, environmental management systems,
forest recreation, biometrics, systems analysis

POST-GRADUATE SUPERVISION

About 40 postgraduates M For Sc and PhD

MAJOR RESEARCH GRANTS

Chief Investigator: "Economic evaluation of forest resource allocation and forest policy in
Australia", ARGC Grant commenced 1972.
Associate Supervisor: "Investigation of forest management strategies needed to meet future social
demands". Rural Credits Development Fund Grant commenced 1972.
Associate Investigator: "Land use with particular reference to recreation in Kosciusko National
Park: an ecological, sociological and economic analysis". ARGC Grant commenced May
1973.
Associate Investigator: "Economics of Tussock moth control". University of Washington/USDA
Project April-June 1972.
Chief Investigator: Social and economic benefits of national parks in the Latrobe Valley Region.
Aust. Nat. Park and Wildlife Service Grant through Victorian National Parks Service 1985.
Joint Chief Investigator: CSIRO/University of Melbourne Collaborative Research Grant,
International trade in forest products in the Oceanic Region 1986-88.
Joint Organiser: DFTAC/NSF Workshop on "Integrating Research on Fire Hazards to Dwellings in
Forest Environments", June 1989.
Project Leader, Program 4, Education; Co-operative Research Centre for Hardwood Fibre and
Paper Science, 1992-7
Principal Investigator: ANWPS Evaluating Community Revegetation Projects, Jun 92 - Dec 1993.
Principal Investigator: ANWPS Save the Bush: Strategic Planning, May 1993-May 1994.
Principal Investigator: FWPRDC Evaluating environmental issues for wood production, Mar- Jun
1996
Principal Investigator: FWPRDC Indicators of employment, Montreal Process, Apr-Jul, 1998

Appendix 3

BOOKS

- FERGUSON, I.S. (1985). *Report of the Board of Inquiry into the Timber Industry in Victoria*, 2 Vols. Victorian Govt. Printer, Melbourne.
- LEWIS N.B. and FERGUSON I.S. (1993). *Management of Radiata Pine*. Inkata, Butterfield-Heinemann, North Ryde, 423pp. ISBN 0 909605 79 3
- BURGMAN, M.A. and FERGUSON I.S. (1995). *Rainforest in Victoria - a review of the scientific basis of current and proposed protection measures*. Department of Conservation and Natural Resources, Forests Service Technical Reports 95-4, Melbourne, 87pp.
- FERGUSON, I.S. and HOUGHTON, K. (1996). *Valuation of forest assets*. Auditor-General of South Australia, Special Report, May 1996, Adelaide, 46pp
- FERGUSON, I.S. (1996). *Sustainable Forest Management*, Oxford University Press, Melbourne, 162pp.
- NODA, N. and FERGUSON, I. (1997). Sustainable tree-growing in drought-prone areas of Kenya: a case study of Kwavonza, *School of Forestry and Resource Conservation, University of Melbourne, Bulletin 9*, 142pp ISBN 0 7325 1597 1
- TODD, C.R., LOANE, I.T., and FERGUSON, I.S. (1997). Potential impact of a farm forestry industry on the Goulburn regional economy. *School of Forestry and Resource Conservation, University of Melbourne, Bulletin 10*, 142pp ISBN 0 7325 1596 3
- FERGUSON, I., FOX, J., BAKER, T., STACKPOLE, D., and WILD, I. (2002). *Plantations of Australia: Wood availability 2001-2044*. Consultant's report for the National Forest Inventory, Bureau of Rural Science, Canberra, 108pp, ISBN 0 6432 47592
- FERGUSON, I. (Tech.Editor) (2004). *An Australian Standard for valuing commercial forests*. ACFA, Canberra in collaboration with AFFA, Canberra, pp 46. Available on www.australianconsultingforesters.org D4
- NAMBIAR, S. and FERGUSON I. (2005) (Eds) *New Forests: Wood Production and Environmental Services*. CSIRO Publications, Melbourne, ISBN 0-643-06940-2
- LEECH, J. and FERGUSON, I. (Tech. Editors) (2007) *An Australian Standard for Valuing Forests. Version 2*. ACFA, Canberra in collaboration with FWPRDC, Melbourne, 60pp. Available on www.australianconsultingforesters.org, D4
- FERGUSON, Ian, (Editor), 2006. *Alf Leslie: the skeptical forest economist*. Ian Ferguson (publisher), DFES, Parkville, 334pp. Available on <http://repository.unimelb.edu.au/10187/2473> . ISBN 9780646475387 (pdf).

CHAPTERS IN BOOKS

- FERGUSON, I.S. and REILLY, J.J. (1976). The social discount rate and opportunity cost of capital in forestry projects, In *Evaluation of the Contribution of Forestry to Economic Development*, pp. 85-93 (Ed A.J. Grayson), *Forestry Commission of Great Britain, Bulletin No. 56*, HMSO, London.
- FERGUSON, I.S. (1979). International trade in wood products in the Asia-Far East Region, In *Forestry in National Development: Production Systems, Conservation, Trade and Aid*, 23 pp. (Eds K.R. Shepherd and H.V. Richter), Development Studies Centre Monograph 17, ANU, Canberra.
- FERGUSON, I.S. (1980). Collecting growth data, In *Planning, Performance and Evaluation of Growth and Yield Studies*, pp. 15-23 (Ed H.L. Wright), Commonwealth Forestry Institute Occas. Paper No. 20.
- FERGUSON, I.S. (1980). Growth functions for radiata pine plantations, In *Planning, Performance and Evaluation of Growth and Yield Studies*, pp. 25-45 (Ed H.L. Wright), Commonwealth Forestry Institute Occas. Paper No. 20.
- FERGUSON, I.S. and DARGAVEL, J.B. (1981). Chapter 21 Economic considerations, In *Eucalypts for Wood Production in Australia*, pp 363-74 (Eds W.E. Hillis and A.G. Brown), CSIRO, Melbourne.

Appendix 3

- FERGUSON, I.S. and BATTEN, D.F. (1985). Australia: Recent trends in the international forest products trade. Chapter 2, In *International Trade In Forest Products*, pp 17-35 (Ed A. Nagy) A.B. Academic Publishers, Bicester, Oxon.
- FERGUSON, I.S. (1986). Problems and prospects in Victoria, Chapter 3, In *Prospects for Australian Hardwood Forests*, pp 27-46 (Eds J. Dargavel and G. Sheldon), Centre for Resource and Environmental Studies, ANU, Canberra.
- FERGUSON, I.S. (1990). Economics. Chapter 32, In *Growing Trees for Rural Australia* (Ed K. M.Cremer), Inkata Press, Melbourne .
- BIGSBY, H.R. and FERGUSON, I.S. (1990). Forests products trade in Australia. Chapter 3 , In *Prospects for Australian Plantations*. (Eds J. Dargavel and N. Semple) Centre for Resource and Environmental Studies, ANU, Canberra.
- DANIEL, T. and FERGUSON, I.S. (1991) Conclusion: research needs and bi-national strategies. Chapter 19, In *Integrating Research on Hazards in Fire-prone Environments. Proc. Joint U.S. - Australia Workshop Melbourne, 1989.*, (Eds T. Daniel and I.S. Ferguson) MAB Program, Washington, D.C. 128pp.
- FERGUSON, I.S. and DANIEL, T. (1991) Integrating research on hazards in fire-prone environments:overview. Chapter 1, In *Integrating Research on Hazards in Fire-prone Environments. Proc. Joint U.S. – Australia Workshop Melbourne, 1989.*, (Eds T. Daniel and I.S. Ferguson) MAB Program, Washington, D.C. 128pp.
- FERGUSON, I.S, WILSON, A.D. and CAMPBELL, C.A. (1991). Farm planning and land management Chapter 5, In *Dryland Farming: A Systems Approach*, (Eds V. Squires and P.Tow), Sydney Univ. Press, Sydney.
- FERGUSON, I.S. (1995). Economic evaluation of silviculture and genetic research. Invited paper, p463-8 in *Eucalypt plantations: improving yield and quality. Proceedings of CRCTHF-IUFRO Conference, Hobart, February 1995*. Co-operative Research Centre for Temperate Hardwood Forestry. Hobart.
- FERGUSON, I.S. (1995). The profitability of planting trees on farms for wood production. Invited paper. *Proceedings Outlook 95 Conference*, February 1995. Bureau of Agricultural and Resource Economics, Canberra, 9 pp.
- FERGUSON, I.S. (1997). Forestry and forest products research in Australia. p359-76 in T. Enters, C. T. S. Nair and Apichart Kaosa-ard (Eds), *Emerging Institutional Arrangements for Forestry Research. Forestry Research Support Programme for Asia and the Pacific*, FORSPA Publication No 20/1998. FAO, Bangkok. [Revised version of Ferguson (1995) published in Japanese]
- FERGUSON, I.S. and YOUL, R. (1997) Forestry at Creswick and the University, 1910. Chapter 7, In *Land and Food: Agricultural and Related education in the Victorian Colleges and the University of Melbourne* (Eds. L. Falvey and B. Bardsley), Institute of Land and Food Resources, University of Melbourne, Australia. ISBN 0 7325 1556 4
- FERGUSON, I.S. (1998). Valuing different forest uses. Invited paper. p357-65 in *Proceedings Outlook 98. Commodity Markets and Resource Management*, Volume 3, February 1998. Bureau of Agricultural and Resource Economics, Canberra
- FERGUSON, I.S. (1998) Climate change and challenges for the Pacific Islands. Invited paper, P 304-312 in H.T. Tang, S. Bulai and B. Masianini, (Eds) *Regional and Other Initiatives and the role of Forests in Mitigating the Impacts of Climate Change in Pacific Island Communities*, Proceedings of Heads of Forestry Meeting September 1998, Nadi, Fiji, Pacific Islands
- FERGUSON, I.S., DARGAVEL, J.B., CONLEY, K., PROCTOR, W., KANOWSKI, P. and BAHTI, U.N. (1999). Socio-economic indicators for sustainable forest management: issues and possible solutions. p20-39 in R. Prasad, S. Raghaven, B.R. Phukan and B. Joshi (Eds), *Proceedings of National Workshop on Evolving Criteria and Management for Sustainable Forest Management in India*, Indian Institute of Forest Management, Bhopal.

Appendix 3

- FERGUSON, I.S. (1999) Economic and social aspects of sustainable forest management: research needs and priorities. p43-54 in A.G. Brown (Ed), *Hermon Slade International Workshop on Sustainable Forest Management*, The Crawford Fund, Volume 1, Melbourne
- VARMA, V., FERGUSON, I., and BREN, L. (1999) Decision support system for sustainable forest management. P 170-77 in L. Arvananitis (Ed), *Proceedings of First International Conference on Geospatial Information in Agriculture and Forestry*. ERIM International, Ann Arbor.
- VARMA, V., FERGUSON, I., and BREN, L. (1999) Aspiration based decision support system for sustainable forest land-use planning. P 311-8 in A. Yoshimoto A. and K. Yukatake (Eds), *FORESEA MIYAZAKI 1998: Forest Sector Analysis. Proceedings of International Symposium on Global Concerns for Forest Resource Utilisation, Sustainable Use and Management*, Kluwer Academic, Boston.
- FERGUSON, I. AND KUMAR, A. (2001). Property rights and participatory management
Proceedings KFRI Silver Jubilee Symposium, 16pp
- FERGUSON, I.S. and C. CHANDRASEKHARAN (2004). Paths and pitfalls in decentralisation for sustainable forest management: experiences in the Asia-Pacific Region. Chapter 3 in C. J. Colfer and D. Capistrano (eds), *A new vision for the State and how it is working for the forests*. CIFOR, Jakarta, .ISBN 1-84407-195-2.
- FERGUSON, I., 2005 Matching efficiency with fairness, pp6-7 in B. Collis (ed) *Forests for tomorrow*. FWPRDC, Melbourne. ISBN 1 920883 08 8
- FERGUSON, I. (2005). Australian forestry: beyond one tenure, one use. In J. Sayer and S. Maginnis (Eds) *Forests in Landscapes: Ecosystem Approaches to Sustainability*. Earthscan, London. ISBN 1-84407-205-3
- NAMBIAR, S. and FERGUSON, I. (2005) Introduction, Chapter 1 and Synthesis: new forests for new landscapes. Chapter 11 in S Nambiar and I Ferguson (eds) *New Forests: Wood Production and Environmental Services*. CSIRO Publications, Melbourne. ISBN 0-643-06940-2
- FERGUSON, I., (2005) Economic and policy implications. Chapter 10 in S Nambiar and I. Ferguson (2005) (Eds) *New Forests: Wood Production and Environmental Services*. CSIRO Publications, Melbourne. ISBN 0-643-06940-2
- FERGUSON, Ian, (2009) Institutional frameworks and organizational structures for future forest management. pp531-540 in R.N. Leslie (Ed), *The Future of Forests in Asia and the Pacific: Outlook for 2020*. RAP Publication 2009/03, FAO, Regional Office for Asia and the Pacific, ISBN 978-92-5-106205-0

REFEREED JOURNAL ARTICLES

- FERGUSON, I.S. and GREIG, P.J. (1972). What price recreation? *Australian Forestry* 36(2): 80-90.
- FERGUSON, I.S. (1972). Is there a future for timber in house construction? *Australian Forestry* 36(1):1-7.
- FERGUSON, I.S. (1972). Wood-chips and regional development. *Australian Forestry* 36(1): 15-23.
- FERGUSON, I.S. and McKIMM, R.J. (1972). Establishment techniques at Koetong plantation: a multivariate analysis and comparison. *Australian Forestry* 38(1):34-43.
- FERGUSON, I.S. (1973). Land-use planning: analysis and action. *Australian Forestry* 37(1): 3-14.
- FERGUSON, I.S. (1973). Forecasting the future for timber. *Australian Journal of Agricultural Economics* 17(3): 159-63.
- FERGUSON, I.S. and DARGAVEL, J.B. (1975). Forest use conflicts in Victoria. *Australian Forestry* 37(3): 215-24.

Appendix 3

- FERGUSON, I.S., REILLY, J.J. and PARKES, E.D. (1975). The forestry potential productivity of farmlands in the Lower South Coast Region of New South Wales for radiata pine plantations. *Australian Forestry* 37(3): 233-44.
- FERGUSON, I.S. (1975). Measurement bias in plantation inventory. *Australian Forestry* 38(2): 81-86.
- FERGUSON, I.S. and REILLY, J.J. (1975). The economics of modifying eucalypt forests. *Australian Forestry*. 38(2): 134-43.
- FERGUSON, I.S. and LEECH, J.W. (1976). Stand dynamics and density in radiata pine plantations. *New Zealand Journal of Forestry Science* 6(3): 443-54.
- FERGUSON, I.S. (1976). Decentralization and the forest products and forest industries. *Australian Forest Industries Journal*. 40(12): 13-15.
- FERGUSON, I.S. (1976). International trade in wood products: recent developments and implications for Australian forest policy. *Australian Forestry*. 41(1): 6-18.
- FERGUSON, I.S. and LEECH, J.W. (1978). Generalized least squares estimation of yield function. *Forest Science*. 24(1): 27-42.
- FERGUSON, I.S., MILES, J.A. and LEECH, J.W. (1978). Program GLS - Generalized least squares for two-stage model development. *Forest Science* 24(1): 42.
- CAMPBELL, R.G., FERGUSON, I.S. and OPIE, J.E. (1979). Simulating the growth and yield of mountain ash stands: a deterministic model. *Australian Forest Research* 9(3): 189-202.
- FERGUSON, I.S. (1979). World and Australian trends in wood consumption. *APPITA* 33(5): 324-29.
- FERGUSON, I.S. and LLOYD, P.J. (1979). Non-tariff distortions of international trade in forest products. *UNASYLVA* 32:2-10.
- LEECH, J.W. and FERGUSON, I.S. (1979). Comparison of growth models for unthinned stands of radiata pine. *Australian Forest Research* 11:231-45.
- FERGUSON, I.S. and LEECH, J.W. (1980). Reply to remarks on "Generalized least squares estimation of yield function" by A.W. Davis and P.W. West. *Forest Science* 27(3): 589-91.
- FERGUSON, I.S. (1981). Selling wood from state-owned forests. *Australian Forestry* 45(4): 245-54.
- FERGUSON, I.S. and KEADY, E.J. (1984). Prediction of mortality in radiata pine plantations. *Australian Forest Research* 14(2): 99-104.
- FERGUSON, I.S. (1984). Plantation management in Australia. *New Zealand Journal of Forestry* 28(3): 327-38.
- WILSON, A.A.G. and FERGUSON, I.S. (1984). Fight or flee? A case study of the Mount Macedon bushfire. *Australian Forestry* 47(4): 230-36.
- FERGUSON, I.S., O'HARA, A.J., WOOD, G.B., and MILES, J.A. (1984). Calibrating dendrometers for estimating tree volumes. *Australian Forest Research* 14:253-63.
- FERGUSON, I.S. and BIGSBY, H.R. (1985). Australia and New Zealand: competitors or collaborators? An Australian perspective. *Australian Forestry* 48(3): 160-72.
- ADA, N.R., FERGUSON, I.S. and STODART, D.M. (1985). Modelling log truck breakdowns. *Australian Forest Research* 15:85-93.
- KANOWSKI, P.J., FERGUSON, I.S., WOOD, G.B., NIKLES, D.G. and MATHESON, A.C. (1986). Variation of stem and crown characteristics between selected families of hoop pine (*Auracaria cunninghamii* Ait ex D. Don). *Australian Forest Research* 15:449-61.
- WILSON, A.A.G. and FERGUSON, I.S. (1987). Predicting the probability of house survival during bushfires. *J. Environmental Management* 23:259-70.
- FERGUSON, I.S. (1987). Productivity of mechanised harvesting in pine thinning operations in the Albury supply zone. *Australian Forestry* 49(3): 166-71.
- FERGUSON, I.S., (1990). Green and gold forever? M.R.Jacobs Memorial Oration, 13th Biennial Conference, Institute of Foresters of Australia, *Australian Forestry* 52(4):253-6.
- FERGUSON, I.S. (1991). Can Australia afford not to log its native forests. *Search* 22(1):11-12.

Appendix 3

- JOHNSON, S.E., FERGUSON, I.S. and LI, R. (1992). Evaluation of a stochastic diameter growth model for Mountain Ash. *Forest Science*, 37(6): 1671-81.
- REID, R. and I.S. FERGUSON (1992). Development and validation of a simple approach to modelling tree shading in agroforestry. *Agroforestry Systems* 20:243-252
- BURGMAN, M.A., INCOLL, W., ADES P.K., FERGUSON, I.S., FLETCHER T.D. and WOHLERS,(1994) A. Mortality models for mountain and alpine ash. *Forest Ecology and Management* 67:319-27.
- BURGMAN, M., CHURCH, R., FERGUSON, I., GIJSBERS, R., LAU, A., LINDENMAYER, D., LOYN, R., MCCARTHY, M., AND VANDENBURG, W., (1994). Wildlife planning using FORPLAN: a review and examples from Victorian forests. *Australian Forestry* 57(3): 131-40
- FERGUSON, I.S. (1995). Forestry and forest products research in Australia. Invited paper, translated into Japanese by Y.Konohira. Shinrin-Kagakau No 13 (*Forest Science* No 13: *Journal of Japanese Forestry Society*) February, 1995, 10pp.
- FERGUSON, I.S. (1995) Forestry and nature conservation in Australia. Special issue: Forestry and nature conservation. Invited paper. *Commonwealth Forestry Review* 74(1): 80-83, 86-88
- FERGUSON, I.S. (1995) Timber production and streamflow benefits: a contrary analysis of options. *Australian Forestry* 58(3): 142-146
- FERGUSON, I.S. (1996). Australian forest services: institutions of change or changing institutions. Invited paper. *Commonwealth Forestry Review* 75(2): 136-41
- FERGUSON, I.S. and R.E. JOHNSTON (1999). Fibre supply models for the Australian and New Zealand paper industry. *Appita Journal* 52(3): 185- 191
- VARMA, V.K., FERGUSON, I., and I. WILD (2000). Decision support system for the sustainable forest management. *Forest Ecology and Management* 128 (2000) 49-55
- KUMAR, A., BREN, L. and FERGUSON, I. (2000). The use and management of common lands of the Aravalli, India. *International Forestry Review* 2(2):97-104
- FERGUSON, I., SPENCER, R., WOOD, M., FOX, J., BAKER, T., STACKPOLE, D., and WILD, I., (2003). The potential availability of plantation roundwood. *Australian Forestry* 66(1):30-36
- FERGUSON, I. and CHANDRASEKHARAN, C. (2004) Paths and pitfalls for decentralization. *Tropical Forest Update* 14(3):3-7
- FERGUSON, I., SPENCER, R., WOOD, M., and GERRAND, A. (2002). Australian demand and supply for plantation products. p29-39 in A. Gerrand (Comp.), *Prospects for Australian Plantations 2002*. Conference held in Canberra, August 2002, Bureau of Rural Sciences, Canberra.
- TUMANENG-DIETE, T., FERGUSON, I.S., and MACLAREN, D. (2005). Log export restrictions and trade policies in the Philippines: bane or blessing to sustainable forest management? *Forest Economics and Policy* 7(2005):187-198
- BULL, L. and FERGUSON, I., 2006. Factors influencing the success of wood product innovations in Australia and new Zealand. *Forest Policy and Economics* 8(7): 742-750
- FERGUSON, I. (2007). Integrating wood production with sustainable forest management: An Australian viewpoint . *Journal of Sustainable Forestry* 24(1):19-40
- FERGUSON, I. and LEECH, J., (2007). Forest valuation and the AASB 141 accounting standard. *Australian Forestry* 70(2):125-133
- FERGUSON, I., (2007). Collaboration between the Australian and New Zealand Institutes of Foresters. Invited editorial. *Australian Forestry* 70(2): 73-74
- NISKANEN, A., LUNNAN, A., OTA, I., BLATNER, K., HERBOHN, J., BULL, L., FERGUSON, I. and HICKEY, G.M. (2007). Policies affecting forestry entrepreneurship. *Small-scale Forestry* 6(3): 233-255
- FERGUSON, I., 2009. Fires, forests and futures: The ANU Westoby Lecture. *Australian Forestry* 72(4): 195-205

Appendix 3

FERGUSON, I., 2010. Seed collection and storage facilities for Victorian Ash-type species. *Australian Forestry* 73, in press.

ROMBOUTS, J., FERGUSON, I. and LEECH, J., 2010. Campaign and Site effects in LiDAR prediction models for Site Quality assessment of radiata pine plantations in South Australia. *TRES:International Journal of Remote Sensing*, in press

CONFERENCE PAPERS

FERGUSON, I.S. (1968). Mathematical programming and simulation in forest planning. Proc. Research Working Group 2: Mensuration and Management, Perth Conference, August 1968, 21 pp.

FERGUSON, I.S. (1969). Silvicultural research and the role of models. Proc. Simulation Workshop, Research Working Groups 2 and 5, Melbourne, April 1969, 7 pp.

FERGUSON, I.S. (1970). Planning forest production in Australia. Forestry Refresher Course, Forests Commission of Victoria, May 1970, 14 pp.

FERGUSON, I.S. (1971). Objectives for the management of public forests. Proc. Symposium on Decision-Making in Forestry, Research Working Group No. 2, Canberra, July 1971, 11 pp.

FERGUSON, I.S. (1974). Land-use conflicts: forest versus non-forest. Proc. Inst. of Forests of Australia Triennial Conference 1974, Vol. 2, pp 53-62.

FERGUSON, I.S. and CARRON, L.T. (1974). Stand top height: some mensurational problems. Proc. Inst. of Foresters of Australia Triennial Conference, 1974, Vol. 1, pp. 467-87.

BAUR, G.N., FERGUSON, I.S., et al. (1975). Multiple use of forest resources. Australian Government Publishing Service, Canberra, 58 pp.

FERGUSON, I.S. and PARKES, E.D. (1974). Future forest policy: an analytical view. Proc. Inst. of Foresters of Australia Triennial Conference, 1974, Vol. 1, pp 488-511.

FERGUSON, I.S. (1975). Market requirements for sawn timber. II. Forecasts based on econometric analysis, pp 39-42 In Report of Panel 6, Marketing, Forestry and Wood-Based Industries Development Conference. Australian Forestry Council, Canberra, 1974.

FERGUSON, I.S. (1975). Multiple use planning: a review. Proc. of Conference on Multiple Use, Research Working Group No. 2, Caloundra, August 1975, 17 pp.

FERGUSON, I.S., MILES, J.A. and LEECH, J.W. (1976). A linear programming matrix generator for forest planning models. Paper presented at Workshop on Developments in Forest Growth Models, Research Working Group 2, Melbourne, December 1976, 18 pp.

FERGUSON, I.S. (1978). The role of forestry in rural development. Invited special paper. Proceedings 8th world Forestry Congress, Jakarta, Indonesia, October 1978, 11 pp.

FERGUSON, I.S. (1987). Conservation and development: balance or battlefield, In Social and Economic Perspectives on Forestry and Agroforestry, Contributed papers to the Forestry Section 56th ANZAAS Conference, pp. 375-88 (Eds M. Roche and R. Hodder), New Zealand Forest Service, Palmerston North.

FERGUSON, I.S. (1987). International cost competitiveness in Australia's forest industries: the challenge ahead, In Social and Economic Perspectives on Forestry and Agroforestry, Contributed Papers to the Forestry Section 56th ANZAAS Conference, pp. 17-35 (Eds M. Roche and R. Hodder), New Zealand Forest Service, Palmerston North.

FERGUSON, I.S. (1989). The public finance squeeze: why are our park and recreation services hurting? Proc. National Workshop on Managing Public Lands in Times of Financial Stringency, Phillip Inst. of Technology, Bundoora, 7 pp.

FERGUSON, I.S. (1989). Agroforestry as an economic venture in Australia. Invited theme paper In Proc. International Forestry Conf. for the Australian Bicentenary 1988, Australian Forest Development Institute, Albury, 9 pp.

FERGUSON, I.S. (1990). Technical innovation in multiple use forestry. Invited theme paper, p 85-91 In Forestry: a Multiple Use Enterprise. Proc. 13th Commonwealth Forestry Conference, (Ed G.L. Tarlton) Forest Research Institute Rotorua.

Appendix 3

- FERGUSON, I.S. (1991). Wood supply and adding value. Invited Conference Paper. Proceedings of Australia's Timber and Forest Products Conference, July 1991. Australian Investment Conferences, Sydney, 16pp
- FERGUSON, I.S. (1994). The economics of forestry: environmental, ecological or political. Keynote paper for Council of Political Economists, International, Sydney, Jan. 1994, 8pp
- FERGUSON, I.S. (1994). Tropical timber trade in the Asia Pacific Region and its value. Invited paper presented at Rainforests are our Business Conference, Sydney, 15-16 April 1994, 8pp.
- FERGUSON, I.S. (1998) Climate change and challenges for the Pacific Islands. Invited paper, Heads of Forestry Meeting Aug 1998, Nadi, Fiji, 12pp.
- FERGUSON, I., BREN, L., KUMAR, A., STEPHEN, P., VARMA, V., and VINDEN, P. (1999) Joint forest management: future directions and policy for research. Invited paper for National Conference on Joint Forest Management, Bhopal, India.
- FERGUSON, I., (2000) Structural change in the forest industries: implications for regional businesses. Invited paper for AusTimb2000, 5pp
- FERGUSON, I. (2000) Social responsibilities stemming from reductions in harvesting. Invited paper for APFC Policy Seminar on Efficacy of Removing Natural Forests from Timber Production as a Strategy for Conserving Forests, Noosaville, 13 May, 2003, 5pp
- FERGUSON, I.S. (2003). Getting outside the square. Invited paper for Forests and Timber, 2003 Conference, Sydney, Nov, 2003, 9pp.

CONTRACT REPORTS

- FERGUSON, I.S. (1972). Costing and economic aspects of plantation establishment in the Savanna Region of Nigeria. Savanna Forestry Research Station, Working Document FO:SF/NIR 16, FAO, Rome.
- FERGUSON, I.S. (1973). The economics of plantation forestry in the Savanna Region of Nigeria. Savanna Forestry Research Station, Project Working Document FO:SF/NIR 16, FAO, Samaru, July 1973.
- FERGUSON, I.S. and PARKES, E.D. (1975). International Trade in Forest Products: An Australian Perspective. Consultant's Report for Dept. of Industry and Commerce, Australian Government Publishing Service, Canberra, 95 pp.
- FERGUSON, I.S. and PARKES, E.D. (1976). International Trade in Forest Products: 2 Developments and Prospects. Consultant's Report for Dept. of Industry and Commerce, Australian Government Publishing Service, Canberra, 52 pp.
- CARTER, W.G., FERGUSON, I.S., et al. (1981). Eucalypt Afforestation Project at Dongmen State Forest Farm, People's Republic of China. Feasibility Study Report for ADAB, The Authors, Canberra, 116 pp.
- FERGUSON, I.S. (1988). Review of Private Forestry in Tasmania. The Private Forestry Council of Tasmania, Kings Meadow, Tasmania, 51 pp.
- FERGUSON, I.S. (1988). Development Options: Industry Structure. Paper for Fiji Forest Development Study, FIJ/86/004, FAO, 9pp.
- NATIONAL PLANTATIONS ADVISORY COMMITTEE (Dep. Chair I.S. FERGUSON) (1991). Integrating Forestry and Farming: Commercial Wood Production on Cleared Agricultural Land.. Department of Primary Industry and Energy, Canberra, 32pp and 3 Vols Append.
- FERGUSON, I.S. and J. MUNOS-REYES NAVARRO (1992). Resources needed by Producer Countries to achieve Sustainable Management by the Year 2000. Working Document for ITTO Expert Panel. ITTO, Yokohama, 26 pp.
- FERGUSON, I.S. and B. RIDDOUT, (1992). Risk Management for Fire Protection Services in Victoria: A Review of Methodology. The authors, mimeo, 29pp.
- FERGUSON, I.S. (1993). Review of Growing Stock Models used in Valuation. Confidential report for Auditor General, S.A. The author, mimeo, 20pp.
- FERGUSON, I.S. (1993). Review of Wood and Forests' Yield Regulation System. The author, mimeo, 45pp

Appendix 3

- MILLAR, K., FERGUSON, I.S. and HAWKINS, H.S. (1994). Evaluation of community revegetation projects. The authors, mimeo, 106pp.
- FERGUSON, I.S., 1995. Economics of Bamboo. Consultancy Report for Indian Council for Forestry Research and Education, and FAO. ICFRE, September 1995, 17 pp
- FERGUSON, I., BREN, L., HATELEY, R., HERMESEC, B., LA FONTAINE, B. and P. VINDEN (1996). Environmental properties of timber. FWRDC, Melbourne, 80pp.
- FOREST REVIEW STEERING COMMITTEE (Lead consultant, I S Ferguson) (1996) Maximising the value of the State's South-east forest. Department of Premier and Cabinet, S.A., Adelaide.
- FERGUSON, I., 1996. Forestry Victoria: a critical review. Forests Service, DNRE, Melbourne.
- FERGUSON, I., CORK, S., LENNON, J., McCORMACK, R. and RAISON, J. (1996) Report on ecologically sustainable forest management systems and processes. Commonwealth and Victorian Regional Forest Agreement Steering Committee, Melbourne, 284pp
- FERGUSON, I., BRADSHAW, J., CORK, S., EGLOFF, B., HILL, R., McCORMACK, R. and RAISON, J. (1997) Assessment of ecologically sustainable forest management systems and processes: Final report. Background Report Part G, Tasmania-Commonwealth Regional Forest Agreement. Public Land Use Commission, Hobart, 134pp
- FERGUSON, I. (1997) Report on Draft Statewide Assessment of Ecologically Sustainable Forest Management Systems and Processes in Victoria. Commissioned report for Joint Commonwealth and Victorian Regional Forest Agreement Steering Committee, May 1997, 4pp
- MARSHALL, H., FERGUSON, I. and WANG SHIJI (1997) Terminal Evaluation Mission Report: UNDP CPR/91/150 Enhancement of Forestry Programme, Peoples Republic of China. Commissioned report for UNDP, Beijing, 53 pp & Apps.
- FERGUSON, I., ADAMS, M., BROWN, M., CORK, S., EGLOFF, B., and WILKINSON, G. (1997) Assessment of ecologically sustainable forest management in the South-West Forest Region of Western Australia. Report of the Independent Advisory Group. Commonwealth and Western Australian Regional Forest Agreement Steering Committee, Perth, 91pp
- BRACK, C., FERGUSON, I., HOWELL, C., LEECH, J., TICKLE, P. and WILD, I. (1998) The Development of an Effective Methodology to Capture Forest Type, Condition and Volume Data for Privately Managed Forests. Report of a Scoping Study for the Forest and Wood Products Research and Development Corporation, School of Forestry, University of Melbourne, Melbourne, 38pp
- DARGAVEL, J., CONLEY, K., PROCTOR, W., FERGUSON, I., AND BHATI U.N. (1998). Direct and indirect employment in the forest sector. Report for the Forest and Wood Products Research and Development Corporation, School of Forestry, University of Melbourne, Melbourne, 33pp
- FERGUSON, I.S., CRAIG, D., and JEFFERY, M. (1999) Options for an international arrangement on sustainable forest management. Consultancy Report for Agriculture, Fisheries and Forestry, Australia, 55pp
- FERGUSON, I., GARDNER, J., HOPPER, S., and J. YOUNG, (1999). Report to Minister for the Environment by Ministerial Advisory Group on Karri and Tingle Management, Department for the Environment. Perth, 67pp.
- FERGUSON, I.S. (2000) Topic Cycle 7, International Comparative Review. Sustainable Development, Environmental Impacts and the Land Development Process. Report for Arcadis Euroconsult for Government of Indonesia, World Bank Project and AusAID 'Indonesian Land Administration Project', 26pp Available on www.landpolicy.org/pub/index.htm
- FERGUSON, I.S. (2000) Chapter 6, Outlook to 2012: Carbon Sequestration. In Allen Consulting Group, 2000. Greenhouse Emissions Trading. Exec Summ, 15pp. Vol 1, Main Report, 232pp. Vol 2, Apps, 89pp. Report to Department of Premier and Cabinet, Melbourne. Available on www.greenhouse.vic.gov.au

Appendix 3

- FERGUSON, I., ADAMS, M., BRADSHAW, J., DAVEY, S., MCCORMACK, R. and YOUNG, J. (2001) Calculating Sustained Yield for the Forest Management Plan (2004-2013): A Preliminary Review. Conservation Commission, Perth. 61pp
- FERGUSON, I. (2001) Capacity Building for Rehabilitation of Degraded Forests through a Landscape-level Participatory Action Programme (IATCP12), Component 6, Final Completion Report, Department of Forestry, Univ of Melbourne, Parkville, 32pp
- FERGUSON, I.S. (2001). Special review of price schedule and price system. Confidential Consultancy Report for Minister for Forestry. The author, Parkville, 16pp & Apps.
- FERGUSON, I., LESLIE, A., PENS, H., REID, R., AND P. SHEPHERD (2001). Review of Fiji pine industry: Final Report: 23 November 2001. Dept of Forestry, Univ. of Melbourne, Parkville, 31pp&Apps
- FERGUSON, I. (2002). Review of Forests and Vegetation Program. Report for Bureau of Rural Sciences The author, Parkville, 7pp
- FERGUSON, I. (2002). Review of Dark Red Myrtle Resource. Confidential report for Government of Tasmania, The author, Parkville, 7pp
- FERGUSON, I. (2002). Review of 2001 Midlands Sustainable Yield. Report for Black Forest Timbers Pty Ltd and NRE, The author, Parkville, 10pp.
- FERGUSON, I., ADAMS, M., BRADSHAW, J., DAVEY, S., MCCORMACK, R. AND YOUNG, J., 2003. Sustained Yield for the Forest Management Plan (2004-2013) STAGE 3 Report. Report for the Conservation Commission of Western Australia by the Independent Panel, June, 2003. (Conservation Commission, Perth), 58pp.
www.conservation.wa.gov.au/files/docs/125.pdf
- FERGUSON, I.S. (2004) Assessment of Illegal Logging and Other Unauthorized Exploitive Activities in Selected Large Tropical Forest Protected Areas. Successful Project Application to ITTO on behalf of ITTO and IUCN
- FERGUSON, I.S. (2006). Research and Development across the Land Stewardship and Biodiversity Group in the Department of Sustainability and Environment. Final Report 9 June 2006. Consultancy Report for the Land Stewardship and Biodiversity Group of the Department of Sustainability and Environment. The author, mimeo, 20pp.
- FERGUSON, I., MITCHELL, G.; and J. OLNEY (2006). 2006 Strategic Staffing Review, School of Forest and Ecosystem Science, University of Melbourne. Consultancy Report for School of Forest and Ecosystem Science, University of Melbourne, Sep. 2006. The authors, mimeo, 12pp.
- FERGUSON, I. (2006) Ensuring international trade in CITES-listed timber species is consistent with their sustainable management and conservation. Successful Grant Application to EU on behalf of ITTO and CITES, ITTO, Yokohama, 37pp.
- FERGUSON, I.S. (2007). Australia's Changing Wood Resource. Paper presented to 'Wood Science Course: Understanding Wood', 13-17 Feb, 2007, University of Melbourne. CD published by Gottstein Trust, Melbourne. 29pp
- FERGUSON, I.S. (2009). Australia's Changing Wood Resource. Paper presented to 'Wood Science Course: Understanding Wood', 16-20 Feb, 2009, University of Melbourne. CD published by Gottstein Trust, Melbourne. 30pp

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