

CURRICULUM VITAE

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EDUCATIONAL HISTORY

- (1) Primary and secondary school in Queensland, Australia
- (3) QDA (Queensland Dipl. Agriculture) at Qld Agricultural College, Lawes (Gatton) 1956.
- (4) B.Agr.Sc. Queensland University, 1963, with major in plant breeding, botany and genetics.
- (5) M.Sc. Forestry Department, Australian National University, Canberra 1971.
- (6) Ph.D. Forest science. Forestry Department, Australian National University 1976

HONORARY ACADEMIC APPOINTMENTS

- (1) Adjunct Associate Professor, School of Tropical Biology, James Cook University, Queensland (1999-2006)
- (2) Adjunct Associate Professor (1994-99) Adelaide University, Botany Department.
- (3) Honorary Research Fellow, CSIRO Division of Wildlife and Ecology (1994-99).
- (4) Research Fellow, Conservation International. (1999 to 2000).
- (5) Senior Associate Scientist, Center for International Forestry Research (CIFOR) (1998 to 2002)

EMPLOYMENT HISTORY

- (1) 25.08.57. Assistant Agricultural Officer, Extension. Department of Agriculture, Stock and Fisheries, Papua New Guinea Public Service.
- (2) 14.02.61. Agricultural Officer PNG
- (3) 30.11.64. Botanist PNG Dept of Forests
- (4) 18.05.66. Ecologist PNG Dept of Forests
- (5) 01.02.67. Forest Officer PNG Dept of Forests.
- (6) 28.12.72. Experimental Officer, Woodland Ecology Unit, Commonwealth Scientific and Industrial research organization (CSIRO) Divison of Land Use Research, Canberra. Australia.
- (7) 1977. Senior Research Scientist CSIRO, LUR

- (8) 1981 – 1986 Principal Research Scientist CSIRO, LUR
- (9) 1986 - 1994. Principal Research Scientist, CSIRO Division of Forest Research and later at the Tropical Forest Research Centre, Atherton (CSIRO Division of Wildlife and Ecology).
- (10) 1994-01/04/98 Principal Research Scientist at CIFOR (Center for International Forestry Research, Bogor, Indonesia). Project leader, Forest Ecosystem Management.
- (11) 05/1998 to 06/2002: Senior Associate Scientist (consultant) for CIFOR.
- (12) CEO, Center for Biodiversity Management, (Australia) (September 1999 ongoing)

LEARNED SOCIETIES

- Member, and Past President*, Ecological Society of Australia (1974-current)
- Fellow*: Explorer's Club of New York (1981)
- Member*: (Chairman, Canberra), Australian Systematic Botany Society (1980-93)
- Member*: American Institute of Biological Sciences (2000-ongoing)
- Member*: British Ecological Society (1999-ongoing)
- Member*: International Association for Vegetation Science (2010 ongoing)

INTERNATIONAL ADVISORY AND REVIEW PANELS

2007. Appointed to Roster of Experts (biodiversity) on the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility (GEF).

APPLIED RESEARCH

My research is focused on readily transferable, cost-efficient methods of rapid resource appraisal as a means of better understanding linkages between biodiversity and environment. By means of a standardized field data collection protocol (the VegClass system) that includes a novel method of vegetation classification based on plant functional types, I have documented a network of more than 2,000 global, ecoregional study sites in key agroecological zones in the Amazon Basin, Indomalesia, Humid Tropical East and West Africa, North and South America and the Southwest Pacific. More recent field studies include central Europe, circumboreal Fennoscandia and the Russian Far East. These globally distributed sites have provided the basis for numerous published comparative studies on the impact of land use on biodiversity and ‘best-bet’ scenarios for sustainable management. As part of this process I have developed new rapid assessment and spatial modelling procedures for designing biodiversity offsets and mitigation feasibility in two key mining sites in Australia and Indomalesia. Part of my research mission is to provide ready public access to the global VegClass data set currently supplied to several international databases. Much of the methodology that I have developed, including the gradient-based, rapid survey (‘gradsect’) system for rapid resource appraisal is now implemented by many agencies worldwide, notably The World Bank, GEF, IUCN, WWF, US-NPS, UNEP-CBD, FAO and teaching institutions. Ongoing research aims at replicating sites in poorly studied regions to provide better informed models for forecasting the impact of environmental change on biodiversity.

INTERNATIONAL COMMITTEES (1998 TO PRESENT)

Member, Global Steering Group, ICRAF, global ecoregional project on Alternatives to Slash and Burn.; CBM representative as ASB consortium member 2000 ongoing; Member, Coordinating Committee, Global Monitoring Network for Biodiversity, Conservation International 1999-2001. Member, Advisory Committee, Global Litter Invertebrate Decomposition Experiment (GLIDE) 2003-5. Other numerous advisory committees in CSIRO and CIFOR (see consultancy reports)

PAPERS PRESENTED AT WORKSHOPS, INTERNATIONAL SYMPOSIA AND OVERSEAS INSTITUTIONS

More than 100 papers and keynote addresses presented at international symposia and institutional meetings including numerous papers, mostly on biodiversity and forest ecosystem management and mainly in Australia (CSIRO, various universities) Europe and USA (IGBP, BAHC, EU, MEA, Cornell Univ., World Bank, UNDP, USAID, ESA, Smithsonian Institution); UK (Oxford & Cambridge Univ., Natural History Museum, Institute of Terrestrial Ecology; Millennium Ecosystem Assessment). In addition I have delivered many presentations at research and training institutions in South-East Asia (Indonesia, Thailand, Vietnam, Philippines), mainland Asia (Bhutan, India) and East Africa (Mozambique) and the Russian Far East (Vladivostok, IBSS, FEBRAS).

PRESENTATIONS AT INTERNATIONAL MEETINGS 2009

- Gillison A.N. (2009). *Exploiting linkages between soil quality, biodiversity and agricultural production*. UN-DESA. High-Level Intersessional Meeting of the Commission on Sustainable Development. *African Agriculture in the 21st Century: Meeting the Challenges, Making a Sustainable Green Revolution* 9-10 February 2009 Windhoek, Namibia.
- Gillison A.N. (2009). *Biodiversity and conservation – a continuing study*. Desert Training and Research Centre, Gobabeb, Namibia. 14 Feb. 2009.
- Gillison A.N. (2009). *Assessing biodiversity – some contemporary pathways*. National Botanical Research Institute, Windhoek, Namibia. 20 Feb. 2009.
- Gillison, A.N. (2009). *A Dynamic Information Framework in Bhutan (DrukDIF) for sustainable biodiversity management*. Workshop on preparation for DrukDIF (Government of Bhutan, NSSC; DANIDA and World Bank). (Thimphu, 27 March 2009).
- Gillison, A.N. (2009). *A Dynamic Information Framework for Bhutan (DrukDIF) and the National Biodiversity Commission (NBC)*. (Serbithang, Thimphu, 1 April 2009).
- Gillison, A.N. (2009). *Agro-bio-climatic models: Towards a generic Land Management Typology*. UN-DESA expert group meeting on “Sustainable land management and agricultural practices in Africa: Bridging the gap between research and farmers”. (16 April 2009) Gothenburg, Sweden.

PUBLICATION LIST

Pre-1990

- Gillison, A.N. (1969). Plant succession in an irregularly fired grassland - Doma Peaks Region, Papua. *J. Ecol.* 57, 415-28.
- Gillison, A.N. (1970). Structure and floristics of a montane grassland forest transition, Doma Peaks Region, Papua. *Blumea* 18, 72-86.
- Gillison, A.N. (1970). Dynamics of biotically induced grassland/ forest transitions in Papua New Guinea. Unpubl. M.Sc. Thesis, Dept Forestry, Australian National University, Canberra.
- Gillison, A.N. (1972). The tractable grasslands of Papua New Guinea. In: M. Ward (ed.) *'Change and Development in Rural Melanesia'*. Proceedings of the Fifth Waigani Seminar, pp. 161-72. University of Papua New Guinea and the Australian National University, Port Moresby.
- Gillison, A.N. (1975). Phytogeographical relationships of the northern islands of the New Hebrides. *Phil. Trans. R. Soc. Lond. B.* 272, 385-90.
- Gillison, A.N. (1976). Taxonomy and autecology of the grey box *Eucalyptus moluccana* Roxb. (*s. lat.*), Myrtaceae. Ph.D. Thesis, Forestry Dept, Australian National University, Canberra.
- Gillison, A.N. (1976). Report on the conservation of vegetation on Christmas Island, Indian Ocean. In *'Christmas Island Environment and Conservation'*, 25pp. Report from the Environment Reconnaissance team, (Department of Administration Services, Canberra.)
- Gillison A.N. (1976). A review of problems and techniques in restoring the tropical forest ecosystem once it has been altered. *Report on Symposium on Ecological Effects of Increasing Human Activities on Tropical and Subtropical Forest Ecosystems*. University of Papua New Guinea. 28 April-1 May 1975. Australian UNESCO committee for Man and the Biosphere. Publ. No. 3, pp. 51-71. (Aust. Govt Publ. Service, Canberra)
- Gillison, A.N. (1978). Minimum spanning ordination - a graphic-analytical technique for three-dimensional ordination display. *Australian Journal of Ecology* 3: 233-8.
- Gillison, A. N. 1980. The management of mangrove forest systems in Micronesia. Preliminary report for CSIRO Division of Land Use Research. Institute of Earth Resources, Canberra, Australia.
- Gillison, A.N. (1981). Towards a functional vegetation classification. In: A.N. Gillison and D.J. Anderson (eds.) *'Vegetation Classification in Australia'*, pp. 30-41. CSIRO and Aust. Natl University Press, Canberra.
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- Gillison, A.N. (1983). Tropical savannas of Australia and the South-west Pacific. In: F. Bourlière (ed.) *'Tropical Savannas'*, In: D.W. Goodall (ed.-in-chief) *'Ecosystems of the World'* 13, 183-243. (Elsevier, Amsterdam).
- Gillison, A.N. (1984). The 'dry' rainforests of Terra Australis. In: G.L. Werren and A.P. Kershaw (eds.) *'Australian National Rainforest Study Report to the World Wildlife Fund (Australia)'* Vol. 1. pp. 213-30. Proc. workshop on the past,

- present and future of Australian rainforests, Griffith University, December 1983, Geography Department, Monash University, for the Australian Conservation Foundation.
- Gillison, A.N. (1984). Gradient oriented sampling for resource surveys - the gradsect method. In: K.R. Myers, C.R. Margules and I. Musto (eds.) *'Survey Methods for Nature Conservation'* pp. 349-74. Proc. Workshop held at Adelaide Univ. 31 Aug. to 31 Sept. 1983. (CSIRO (Aust.) Division of Water and Land Resources, Canberra).
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- Gillison, A.N. (1985). Rainforests: Definition and Ecological Context. Australian National University, Centre For Resource and Environmental Studies, Working Paper 1985/2 pp.1-5.
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- Gillison, A.N. (1995). Contributor In: N.E. Stork and M.J. Samways (eds): Section 7: Inventorying and Monitoring. (7.2.4. Baseline data). pp. 480-481. In: V. H.

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- Gillison, A.N. (2000b). Summary and overview. In: A.N. Gillison (Coord.) Above-ground Biodiversity assessment Working Group Summary Report 1996-99 Impact of different land uses on biodiversity. pp.19-24. Alternatives to Slash and Burn project. ICRAF, Nairobi.
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- Gillison, A.N. (2000d). VegClass software package for data entry and analysis for vegetation survey. CD-ROM Center for International Forestry Research, (CIFOR), Bogor, Indonesia.
- Gillison, A.N. (2000e). Intermediate agroforests and late fallow systems as optimal strategies for sustainable management of biodiversity and profitability in tropical forests. Paper presented at workshop, *Cultivating (in) tropical forests. The evolution and sustainability of intermediate systems between extractivism and plantations*. CIFOR-FORESASIA, 28 June-1 July 2000, Lofoten, Norway.
- Gillison, A.N. et al, (1998). Overview report of the ASB Intensive biodiversity baseline study Nov.-Dec. 1997. Ca. 65 pp. 12 Tables, 5 Annexes and 4 Maps CIFOR Working Paper
- Gillison, A.N. and Boyle, T.J. (1995). Contributors In: K. Miller, M.H. Alegretti, N.Johnson and B. Jonsson eds: Section 13: Measures for conservation of biodiversity and sustainable use of its components.(13.3.3 Managing biodiversity in forestry) pp. 952-960. In: V. H. Heywood and R.T. Watson (eds.) *Global Biodiversity Assessment*. Cambridge University Press.
- Gillison, A.N. and Carpenter, G. (1997). A generic plant functional attribute set and grammar for dynamic vegetation description and analysis. *Functional Ecology* 11, 775-783.
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- Gillison, A.N., Liswanti, N. and Arief-Rachman, I. (1997). Rapid Ecological Assessment in HPH Pt Serestra II and HPH Pt Bina Samaktha. Pre-implementation, Integrated Conservation and Development Project, Kerinci Seblat National Park. World Wildlife Fund for Nature, Indonesia Program. In: Final Report, Rapid Ecological Assessment in HPH Pt Serestra II and HPH Pt Bina Samaktha. Pre-implementation, Integrated Conservation and Development

- Project, Kerinci Seblat National Park. World Wildlife Fund for Nature, Indonesia Program. Bappenas, The World Bank.
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2001-2010

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2011-2012

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INTERNATIONAL CONSULTING AND RESEARCH SITES

Australia, extensive (including Christmas Island (Indian Ocean), Australian Sub-Antarctic Territory, Lord Howe and Norfolk islands); New Zealand, SW Pacific (Nauru, Papua New Guinea, Vanuatu, New Caledonia, Solomon Islands, Fiji, W. Samoa, American Samoa, Tonga, Micronesia: Guam, (FSM) (Marianas, Ponape, Yap, Truk, Belau); French Polynesia – (Papeete, Moorea); India- (Assam, Arunachal Pradesh), Bhutan, Nepal, Indonesia - (Borneo, Java, Sulawesi, Maluku, Sumatra, W. Papua (Biak)), Thailand, Vietnam, Malaysia (Sabah), Philippines; Argentina, Bolivia, Brazil – (Eastern, Southern and Western Amazon basin), Chile (incl. Easter island), Colombia, Costa Rica, French Guyana, Guyana, Martinique, Mexico (Veracruz, Yucatan), Panama, Perú, Venezuela; Estonia, Iceland, Finland, Norway, Sweden; Austria, Germany, Switzerland, UK (England, Scotland), Spain (incl. Canary Is.), Georgia (Central Caucasus Mts); Burkina Faso, Cameroon, Kenya, South Africa, Madagascar, Malawi, Mali, Moçambique, Namibia, Tanzania, Uganda, United Arab Emirates; Canada (Ontario, British Columbia), USA (N.E.) including Hawaii and E. Samoa; South Korea, Outer Mongolia, Russia (Far East, Vladivostok, Kamchatka).

LANGUAGE PROFICIENCY

English, mother tongue; limited conversational French and Spanish; fluent in South West Pacific creole languages (NeoMelanesian pidgin, Bislama (Vanuatu), including Hiri Motu (Papua); conversational Bahasa Indonesia.