

R E S U M E

WENDY HAWES

21 Gordon Street
PO Box 626
INVERELL NSW 2360

Tel: 0267 224 997

Mob: 0408 224 997

Email: theenvirofactor@hotmail.com

PERSONAL DETAILS

DRIVERS LICENCE:	Current Class C Gold
NSW SCIENTIFIC LICENCE:	SL 100544
OH&S GENERAL INDUCTION for Construction Work (Green Card)	CG100620760SEQ1
FIRST AID CERTIFICATE	ID 612436

EDUCATIONAL RECORD

1969-1974:	WARILLA HIGH SCHOOL - Higher School Certificate
1975-1977:	UNIVERSITY OF NEW ENGLAND - Bachelor of Science (Major in zoology and ecology)
1978-1979:	UNIVERSITY OF NEW ENGLAND - Master of Science (Prelim)
1988:	INVERELL COLLEGE OF TAFE - Computer Studies 1
1989:	INVERELL COLLEGE OF TAFE - Text Editing
2008:	UNE PARTNERSHIPS – Certificate IV in Training and Assessment

CURRENT MEMBERSHIPS

The Envirofactor Pty Ltd – Director (2004-current)

Accredited Expert: Biodiversity and Threatened Species - NSW *Native Vegetation Regulation 2005*

Northern Tablelands Bushfire Management Committee (Nature Conservation Council rep) - RFS (1999-current)

Goonoowigall Conservation Area Consultative Group – OEH (2005-2011)

Border Rivers Community Consultative Advisory Committee (Scientific rep) – OEH (2009)

National Parks and Wildlife Northern Tablelands Region Advisory Committee (NCC/NPA rep) – OEH (2010-current)

Ecological Society of Australia

Australian Conservation Foundation

Birds Australia

Gould League

Australian Network for Plant Conservation

Professionals Australia

TECHNICAL REPORTS

- Hawes W** (1979) Preliminary Study of the Ecology and Behaviour of the Blue Bonnet Parrot (*Psephotus haematogaster haematorrhous*) Master of Science (Preliminary) Thesis. University of New England.
- Hawes W** (1992) *Rehabilitation of Degraded North West Croplands with Perennial Grasses*. Department of Conservation and Land Management.
- Hawes W** (1992) Flora and Fauna Survey *In Boobera Lagoon - Environmental Audit*. Department of Land and Water Conservation.
- Hawes W** (1994) Wildlife as a Natural Resource *In 2000 and beyond.....Keeping the Land in Trust*. Macintyre Development Unit 2000. Nornews Ltd, NSW.
- Hawes W**, Boschma D and Rose A (1995) *Report on the Current Land Condition of the former "Moree Common"*. Department of Conservation and Land Management.
- Hawes W**, O'Keefe P and J Kewley (2000) *Acacia sp. "Myall Creek" (Miller s.n. 25 May 2000). Site Inspection and Sample Collection*. Department of Land and Water Conservation.
- Hawes W** (2001) *Vegetation Inspection Report for Copeton Borrow Pit Area*. Report to the NSW Department of Land & Water Conservation.
- Hawes W** (2008) *Draft National Recovery Plan - White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland. A critically endangered ecological community*. Department of Environment and Climate Change.
- Hawes W** (2013) *Grey box grassy woodland and derived native grassland of south-eastern Australia. An endangered ecological community*. Background and Technical Issues Report to the Department of Sustainability, Environment, Water, Population and Communities.

SCIENTIFIC CONTRIBUTIONS

- Blakers M, Davies S J J F and Reilly P N (1984) *The Atlas of Australian Birds*. Royal Australasian Ornithologists Union. Melbourne University Press.
- Department of Land and Water Conservation (1999) *Interim Guidelines - for targeted and general flora and fauna surveys under the Native Vegetation Conservation Act 1997*. Centre for Natural Resources NSW Dept of Land and Water Conservation, Parramatta.
- Department of Land and Water Conservation (2000) *Guidelines for Mapping Native Vegetation*. Centre for Natural Resources, Parramatta.
- Department of Land and Water Conservation (undated) *Collecting field information for assessment of clearing applications under the NVC Act 1997*. Departmental document.
- Ede AJ and **W Hawes** (1998) *Guidelines for Native Vegetation Assessment and Reporting – Barwon Region*. Dept of Land and Water Conservation. Departmental document.
- Ede AJ and **W Hawes** (2004) *Draft Guidelines for the Environmental Assessment of Existing and New Structures/Developments under Part 8 of Water Act 1912 – Barwon Region*. Dept Infrastructure Planning and Natural Resources. Departmental document.
- Gray E, Ede AJ and **W Hawes** (2000) *Assessment Notes and Short Reporting Guidelines – Barwon Region*. Department of Land and Water Conservation. Departmental document (Update of 1998 document).
- Miller W, Ede A, Hutchings P, McGufficke B, Steenbeeke G eds (2013) *Managing and Conserving Native Vegetation*. Information for land managers in the Border Rivers - Gwydir catchments Border Rivers-Gwydir Catchment Management Authority
- Nadolny C *et al* (2003) *Grassy Vegetation in North-western NSW and Guidelines for its Management for Conservation*. Armidale Tree Group, Armidale, NSW.
- Nadolny C, Hunter JT and **W Hawes** (2010) *Native Grassy Vegetation in the Border-Rivers-Gwydir Catchment: diversity, distribution, use and management*. A report to the Border Rivers-Gwydir Catchment Management Authority.
- Oliver I and D Parkes (2003) *A Prototype Toolkit for Scoring the Biodiversity Benefits (and Disbenefits) of Land use change*. Vers 5.1. Centre for Natural Resources. Department of Sustainable Natural Resources, Parramatta.

SCIENTIFIC CONTRIBUTIONS (continued)

- Oliver I, Ede A, **Hawes W** and A Grieve (2005) The NSW Environmental Services Scheme: Results for the biodiversity benefits index, lessons learned, and the way forward. *Ecological Management & Restoration*. **6** 197-205.
- Turner K and PL Smith (1996) *Guidelines for assessing the significance of native vegetation removal on threatened species, populations, or ecological communities, or their habitats*. Dept of Land and Water Conservation publication.
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FLORA AND FAUNA SURVEY EXPERIENCE

- 2013 Rapid Flora Assessment for OEH Central West Native Vegetation Mapping Program– John Hunter Fauna Survey of ‘Dunburra’, Armidale – Alex Dudley
- 2012 Fauna Survey of Additions to Mehi National Park - (NSW NPWS) - The Envirofactor (TE)
Baseline Flora and Fauna Survey of Ross Hill Reserve, Inverell - TE
- 2011 Rapid Flora Assessment for Hunter Valley Native Vegetation Mapping – Australian Museum
Fauna Survey – “5 Corners” (S Handy) - TE & Faunagraph
Targetted Survey for Threatened Flora Species – Fisher Lane, Inverell (PowerServe Pty Ltd) - TE
- 2010 Oversight of tree removal; identification, capture & relocation of displaced fauna - Copeton Dam (Thomas & Coffey Pty Ltd) - TE
Targetted Survey for Threatened Flora Species – Tuttle’s Lane, Glen Innes (PowerServe Pty Ltd) - TE
- 2009 Split Rock Dam Stage 1 Upgrade Flora and Fauna Survey (NSW State Water Corporation) - TE
- 2008 TSR Flora and Bird Surveys for Identification of HCV sites (Lachlan CMA and Forbes/Young RLPBs) - North West Ecological Services (NWES) & TE
Copeton Dam Upgrade Flora and Fauna Survey (NSW State Water Corporation) -TE
- 2007 Border Rivers-Gwydir High Conservation Vegetation Mapping – Vegetation typing (DECCW) - TE
- 2006 Dept Environment and Climate Change - “5 Corners” Fauna Survey(S Handy) – NWES & TE
- 2005 Biodiversity Conservation in the NSW Sheep-Wheat Belt Project - Flora and Bird Surveys (Dept of Environment and Conservation) – TE
Bat Survey - Hillgrove Derelict Mine Project (NSW Dept of Lands) – TE
- 2003 & 2004 Habitat Manipulation in Grassy Woodlands Project - Reptile Survey (Centre for Natural Resources (CNR))
- 2002 & 2003 Nandewar Regional Biodiversity Fauna Assessment Survey (NSW National Parks & Wildlife Service)
- 2002 Threatened Flora Survey “Balaclava” Glen Innes – Dept of Land & Water Conservation (DLWC)
“Minbalup” Community Biodiversity Survey (Fauna Survey) – NWES and Greening Australia
- 2001 Vegetation Condition Rating Project and Reptile Survey – (CNR)
Flora and Fauna Survey, Peery National Park – Australian Museum, Australian Herpetological Society, Birds Australia
Bat Survey – Ironbark Nature Reserve – NWES
- 2000 King Conrad Mine Fauna Survey – NWES and DLWC
Fauna Survey, Sturt National Park – Australian Museum, Australian Herpetological Society, NWES
- 1998 Threatened Flora Survey “Fairview” Walgett– DLWC
Threatened Flora Survey “Fairlands” Boggabilla - DLWC
- 1996 Pilliga Fauna Survey – DLWC Ecologists in conjunction with Harry Parnaby (Australian Museum)
Gwydir Wetlands Fauna Survey – NWES & DLWC
- 1992 Environmental Audit Boobera Lagoon (Flora and Fauna Survey) – DLWC

RELEVANT TRAINING

Department of Natural Resources	Aboriginal Sites Identification Aerial Photo Interpretation Four Wheel Drive Training Introduction to Arcview Laboratory Techniques and Safety Risk Management Assessment Soil Data System Sponsorship Workshop Train the Trainer Vegetation Management Legal Enforcement Workshop Wetland Plant Identification
WorkCover	OHS General Induction for Construction Work in NSW
Farming For The Future	Facilitation Training
State Forests	Frog and Bat Identification and Survey Skills
University of New England	Identification of Western Grasses Tree and Shrub Identification

EXPERIENCE IN TRAINING and EDUCATION

The Envirofactor (2004-present)

- Delivery of the native vegetation identification and management component of Box-Gum Woodland Commonwealth Stewardship Program field days @ Cumnock, Warialda and Gunnedah – Central West CMA
- Development of a Biodiversity Education Package for secondary teachers for 9 school excursion sites across the Border Rivers-Gwydir Catchment – Border Rivers Gwydir (BRG) CMA
- Delivery of the biodiversity component of school education days @ Lake Inverell (2010, 2011 & 2012) - BRG CMA
- Delivery of native vegetation identification and monitoring workshop for Central West, Namoi and BRG CMA staff – Multiple Ecological Communities Commonwealth Stewardship Program - Central West CMA
- Development and delivery of High Conservation Value Roadside Vegetation Workshops and an Education Package for local government staff and LHPA rangers - BRG CMA
- Deliver presentations, workshops and walks on biodiversity, habitat and nocturnal fauna to landholders, community groups and schools for 5 Corners VCA (2009, 2010, 2011, 2012, 2013) and GWYMAC Landcare (2012, 2013)
- Deliver presentation and provide in-field technical advice regarding weeds in north-west NSW for the Grassy Box Woodland CMN Weeds Tour
- Development and delivery of Threatened Species and Biodiversity Workshops and an Education Package for staff and landholders– Border Rivers-Gwydir CMA

NSW Dept Natural Resources – Ecologist 1995-2006

- Involved in delivering of training courses to external agency staff eg “*Ecology Workshop for Fire Control Officers*” (Rural Fire Service, NPWS, TAFE, DLWC) and “*Grass Identification for Rural Lands Protection Officers*” (DLWC and Rural Lands Protection Board).
- Deliver presentations at regional conferences including: “*Box-Gum Woodland – Ecological Significance*” at Grassy Box Woodland Conference – Grassy Box Woodland Conservation Management Network @ Lake Keepit and “*Legislation – what you need to know when designing a rehab project*” – Australian Network for Plant Conservation conference, Armidale.
- Deliver presentations on “*NSW Native Vegetation Policy*” to UNE students as part of their course work (2005 and 2007)
- Development and delivery of “*Grass Identification*” Workshops to landholders in Gunnedah, Pilliga, Moree, Gwydir Wetlands and Warialda areas.

EXPERIENCE IN TRAINING and EDUCATION (continued)

- Development and delivery of environmental assessment training courses to departmental staff with no botanical or ecological background (eg Water Licensing Officers, 3A Licensing Officers, Catchment Managers and River Planners).
- Educative presentations to Catchment Management Boards and Regional Vegetation Management Committees, eg *"Biodiversity in the Gwydir Catchment"* to the Gwydir CMB, *"Ecology and Planning Considerations"* to the Tenterfield RVMC and *"The NVC Act Assessment Process"* to the Inverell/Yallaroi RVMC.
- Development and delivery of training courses for departmental Vegetation Management Officers involved in assessing native vegetation clearing and native forestry proposals under SEPP46 and NVC Act, ie "Native Vegetation Conservation Act Assessment & Reporting".

DLWC Education Officer (1990–1995)

- Responsible for the development and delivery of environmental education packages to meet the needs of a wide range of client groups (primary, secondary and tertiary students as well as teachers, landholders, landcare and community groups).
- Co-ordinator (3 years) of the North West Schools Landcare Competition

NSW Dept Land & Water Conservation (DLWC) - Acting Property Management Planner 1995 (6 Months)

- Responsible for the maintenance of the Farming for the Future program including delivery of property planning workshops to landholders.

TAFE Teacher (1988-1989) – educating community groups including the local Aboriginal land council members in *"Meeting Procedures"*.

Volunteer Adult Literacy teacher (1983) – teaching adult numeracy and literacy.

Community Youth Support Scheme Project Officer (1978-1983) - running craft workshops and teaching life skills to unemployed youth (16–25 years).

EMPLOYMENT HISTORY

THE ENVIROFACTOR PTY LTD

APR 2004 - PRESENT

DIRECTOR/TERRESTRIAL ECOLOGIST

Design & undertake floral/ fauna surveys & threatened species assessments for research, urban and rural infrastructure development to meet legislative requirements under state & federal planning legislation. Examples include:

- *Bushfire and Fauna Assessment - Biodiversity Strategy for four areas: Arding, Kentucky, West Invergowrie and Rocky River (Uralla Shire Council)*
- *Flora and Fauna Impact Assessments – Keepit Dam Upgrade Offsets – Installation of fishways at Mollee & Gunidgera Weirs & Removal of Weeta Weir on the Namoi R (NSW Dept Primary Industries [Fisheries])*
- *Fauna Habitat Assessment – Proposed Mining Exploration (Elsmore Resources Ltd)*
- *Flora and Fauna Impact Assessment – Cattle Feedlot on Gunyerwarildi, NSW*
- *Review of Environmental Factors for Copeton Dam Security Upgrade (including Installation of an Auxiliary Spillway, Infrastructure Relocation, Powerline Installation) and Split Rock Dam Security Upgrade – (NSW State Water Corporation)*
- *Review of Environmental Factors – Boomi, Boronga, Welbondonga, Euraba & Dolgelly Artesian Water Supply Projects, Kensington Artesian Water Supply Project, Cryon Water Management Project, Tholoo Joint Water Supply Scheme, Three B Water Supply Scheme, Dumble Water Supply Scheme, Bangate Private Scheme, Langboyd & Old Gnomery Water Supply Schemes – (Office of Water)*
- *Identification of High Conservation Value vegetation within the Lachlan CMA area – Grassy Box woodland Conservation Management Network*
- *Flora and Fauna Impact Assessment – Proposed Concrete Batching Plant @ Tamworth (Boral)*
- *Flora and Fauna Impact Assessments - Gwydir Highway Rehabilitation (Inverness), Spencer's Gully Bridge and Sawpit Gully Bridge Construction & Road Realignment, Guyra Road Realignment, Mackie Lane Widening (Inverell Shire Council)*
- *Flora and Fauna Impact Assessments for Rural Subdivisions at Sandy Hollow, Scone, Merriwa & Muswellbrook (private clients)*

EMPLOYMENT HISTORY (continued)

- *Flora and Fauna Impact Assessments - Ecotourism development at Murrurundi – (private client)*
- *Statement of Environmental Effects for Rural Subdivisions @ Inverell and Armidale (private clients)*
- *Flora and Fauna Impact Assessment for Telstra Cable Installation @ Croppa Creek, Lowana & Copeton – (Telstra)*

Critical expert review of:

- *Flora Survey and Analysis Report of Box Gum Woodland regarding a mining development @ Muswellbrook (DEWHA)*
- *Environmental Impact Assessment - proposed expansion of a Boggabri Coal mine, the proposed Aston Coal mine and Tarrawonga mine development (Maule's Creek Community Council)*
- *Environmental Impact Assessment - Dumaresq to Lismore Transmission Line (Upper Dumaresq Action Group)*

Expert advice for legislative compliance

- *Assessment of the presence of the endangered ecological community, Weeping Myall Woodlands at Warren NSW (DEWHA)*
- *Assessment of the presence of the endangered ecological community, Weeping Myall Woodlands at Quambone NSW (DSEWPaC)*

Develop the Draft National Recovery Plan for the Critically Endangered Ecological Community – White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland (DECCW)**Develop the Background and Issues Paper for the EPBC listed Endangered Ecological Community - Grey Box (Eucalyptus microcarpa) grassy woodlands and derived native grasslands (DSEWPaC)****Develop and/or deliver environmental education packages/workshops:**

- *Kids on Country field days @ 'Bassendean' Tingha – Border Rivers Gwydir (BRG) CMA*
- *Development of DVD series on History of Box Gum Grassy Woodland – Grassy Box Woodland Conservation Management Network*
- *Native vegetation identification and management component of Box-Gum Woodland Commonwealth Stewardship Program field days @ Cumnock, Warialda and Gunnedah – Central West CMA*
- *Biodiversity Education Package for 10 school excursion sites across the Border Rivers-Gwydir Catchment – BRG CMA*
- *School education days @ Lake Inverell (2010, 2011 & 2012) - BRG CMA*
- *School education day @ Ross hill Reserve (2013) – GWYMAC Landcare*
- *Native vegetation identification and monitoring for Central West, Namoi and BRG CMA staff – Multiple Ecological Communities Commonwealth Stewardship Program - Central West CMA*
- *High Conservation Value Roadside Vegetation Workshops and an Education Package for local government staff and LHPA rangers - BRG CMA*
- *Presentations on biodiversity, habitat and nocturnal fauna to community groups for 5 Corners VCA*
- *Presentation and in-field technical advice for the North West Grassy Box Woodland CMN Weeds Tour*
- *Threatened Species and Biodiversity Workshops and an Education Package for staff and landholders– Border Rivers-Gwydir CMA*

Provide specialist ecological advice for the preparation and development of:

- *A threatened ecological community nomination under Commonwealth EPBC Act for Maules Creek Catchment Groundwater Dependent Ecosystem (Maules Creek Community Council)*
- *Commonwealth and State Scientific Committees' – Threatened Ecological Community listings including: Box Gum Woodland, Myall Woodland Coolibah/Black Box Woodland, Inland Grey Box Woodland and Native Grasslands*

EMPLOYMENT HISTORY (continued)

- Commonwealth Stewardship Program – Multiple Ecological Community Identification and Monitoring Package

Project management, costing, account maintenance, OH&S risk assessments/safe work practices, equipment maintenance, data collection, analysis, interpretation and reporting. Client and government agency liaison.

**DEPARTMENT OF NATURAL RESOURCES
Inverell Resource Centre (IRC)**

OCT 1992 – JUNE 2006

TERRESTRIAL ECOLOGIST

Provide specialist ecological advice on vegetation management, biodiversity, habitat assessment and threatened species to:

- Departmental staff including Vegetation Management, Compliance and Water Licensing Officers administering State Environmental Planning Policy No 46 (SEPP 46), Native Vegetation Conservation Act 1997 (NVC Act), Water Act 1912 and Water Management Act 2000
- Local Government, Private Consultants, Community Groups and Landholders.

Act as an expert witness in departmental compliance actions in respect to environmental harm and biodiversity issues, as well as, prepare remediation plans for areas illegally cleared.

Provide specialist ecological advice for the preparation and development of:

- Commonwealth and State Scientific Committees' - Endangered Ecological Community listings
- Natural Resources Commission statewide biodiversity & vegetation targets
- DNR Director General's requirements for EIS, SEEs and REFs
- Catchment Management Authority (CMA) targets/plans- Vegetation Benchmarks for Property Vegetation Plan Developer (PVP Developer)
- Consultant Briefs for Flora and Fauna surveys
- Plans of Management for public and private land eg Boobera Lagoon Management Plan, Moree Common, Goonowigall Bushland, Inverell Bushfire Management Plan
- Property Agreements.

Critical review of flora, fauna and threatened species components of EIS', SEEs and REFs for departmental comment.

Assist in the development of:

- Decision support systems - Biodiversity Benefits Index, Terrestrial & Aquatic Threatened Species database, PVP Developer
- Staff assessment guidelines – see Scientific Contributions
- Flora and fauna survey guidelines.

Develop & deliver workshops, education material & presentations on native vegetation management and biodiversity for:

- Departmental staff – Vegetation Management Officers, Water Licensing Staff, Compliance Staff
- NGOs – Grassy Box Woodland Conservation Management Network, Australian Network for Plant Conservation, UNE, "5 Corners" Voluntary Conservation Area
- Landholders
- Other agency staff – CMA Community Support Officers, Rural Fire Control Officers, Rural Lands Protection Board Rangers

Design and conduct flora and fauna surveys, OH&S risk assessments, implementation of safe working practices, staff recruitment & management. Data collection, analysis and reporting.

EMPLOYMENT HISTORY (continued)

MAR 1995 (6 Months)

ACTING PROPERTY MANAGEMENT PLANNER - MOREE

Responsible for the maintenance of the Farming for the Future program. Liaison with landcare groups. Organising & delivery of property planning workshops.

AUG 1990 - AUG 1995

EDUCATION OFFICER – BARWON

Liaison with educators and community groups regarding their environmental education needs. Develop and deliver specific education programs for schools, tertiary institutions and community groups. Organise functions focusing on the environment & education for specific events (eg Landcare Month, World Environment Day, Water Week). Responsible for the resources, operation & financial allocations associated with the IRC Environmental Education Centre. Team leader of the Northwest Schools Landcare Competition coordination committee. Organise outside sponsorship to fund specific events.

AUG 1989 - SEPT 1992

TECHNICAL ASSISTANT - BARWON

Assist with the implementation, maintenance, sampling and recording data of field trails. Collection and preparation of samples and undertaking laboratory (physical and chemical) soil tests for conservation earthworks and research programs. Assist in the operation and maintenance of equipment and stores for use in the laboratory and field. Assist in soil survey. Undertake data entry, analysis and interpretation. Report and submission writing.

1988 - 1989

INVERELL COLLEGE OF TAFE

TEACHER: (Casual) Design and deliver an outreach course, "Meeting Procedures", for indigenous community groups

1984-1987

**J.C. HAWKINS (BVSc)
Inverell**

VETERINARY ASSISTANT: Office administration, accounts, client liaison, surgical assistant, records maintenance and hospital/office cleaning.

1978-1983

**COMMUNITY YOUTH SUPPORT SCHEME
Coonamble and Inverell**

PROJECT OFFICER: Co-ordinating activities for young unemployed people (16-25 years). Liaison with employers and community organisations. Counselling and conflict resolution. Submission writing for government funding.
