

Ecological Consultants Association of NSW Annual Conference 2018

Friday 27th July at Whitesands Function Centre, Shoal Bay Country Club,
Shoal Bay

Program

The Brave New World – New Legislation, Methods and Technology

8:30 - 9:00	REGISTRATION	Tea and coffee available
	TOPIC OF PRESENTER	PRESENTER
9:00 – 9.05	Conference Welcome	Belinda Pellow
9.05 - 9.15	Welcome to Country	Neville Lilley Worimi Elder
	SESSION 1 – New Legislation	Chair: Danny Wotherspoon
9.15 – 9.40	Implementing the Biodiversity Conservation Act 2016	Jane Gibbs Director Ecosystem Assessment and Planning Regional Operations Group NSW Office of Environment and Heritage
<p>Abstract: The Biodiversity Conservation Act 2016 commenced on 25 August 2017. It represents a modernisation of the biodiversity assessment framework and updates ecological assessment requirements and standards, including the introduction of a new accredited persons scheme for those applying the new assessment framework. This presentation will discuss the progress made in implementing the Biodiversity Conservation Act 2016 since its commencement focussing on the role of the Office of Environment and Heritage.</p>		
9.40 – 10.05	Local Land Services Act	Kristian Holz Group Director Sustainable Land Management Office, Local Land Services
<p>Abstract: The Local Land Services Act, as amended by the Local Land Services Amendment Act 2016 (LLSA Act), provides a new regulatory framework for the management of native vegetation in NSW. The new Land Management (Native Vegetation) Code supports landholders to manage their land to ensure more productive farming methods and systems, while responding to environmental risks. Some clearing under the Land Management Code will require land to be set aside, which will be listed in a new public register. Management of some native vegetation may be carried out without approval for the purposes of allowable activities. Higher impact clearing will require approval from a new Native Vegetation Panel, and landholders will be required to assess and offset the biodiversity impacts of approved clearing.</p>		
10.05-10.30	Biosecurity Act - 2015 – Overview and Responsibilities	Sydney Lisle Biosecurity and Food Safety Invasive Species Program, Department of Primary Industry
<p>Abstract: Biosecurity is the protection of the economy, environment and community from the negative impacts of pests and diseases, weeds and contaminants. NSW biosecurity legislation operates under the principle that biosecurity is a shared responsibility between government, industry and communities. Preceding 2008 there were a number of major biosecurity events worldwide (mad cow disease, foot & mouth disease etc.) that raised questions about Australia's biosecurity capability. The Australian Government commissioned an independent panel to comprehensively review our Biosecurity and quarantine systems. The panel presented its report – One Biosecurity: a working partnership (the Beale review) – at the end of 2008. In general terms this report recommended adopting a partnership approach across government, industry and the community, reforming biosecurity legislation towards all jurisdictions having complementary legislation and adopting a scientific, risk-based approach. New South Wales was the second jurisdiction to implement new legislation with the Biosecurity Act 2015 (the Act) coming into force July 1 2017. The Act has a number of objects, the principle one being;</p>		

Ecological Consultants Association of NSW Annual Conference 2018

(1) The primary object of this Act is to provide a framework for the prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter, dealing with biosecurity matter, carriers and potential carriers, and other activities that involve biosecurity matter, carriers or potential carriers.

The Act wholly repeals 10 biosecurity related NSW Acts, including subordinate statutes, and partly repeals four others. The subjects of these acts, weeds, pest animals, diseases etc., now fall under the catch all classification of Biosecurity Matter

Responsibilities

The Act introduces a range of new roles and responsibilities, the principle one being the General Biosecurity Duty; Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised.

Environmental consultants, or their clients, are almost certainly likely to have a General Biosecurity Duty.

There are other duties and obligations that must be complied with, for example;

- Mandatory Measures specified in the regulations.
- Prohibited Matter (dealing with) specified in Schedules in the Act
- Prohibited Matter (notify presence)
- Biosecurity Orders
- Biosecurity Zones

Ecological consultants are persons who are likely to, at some time, be dealing with biosecurity matter or advising clients that may be dealing with biosecurity matter. It is important that consultants become familiar with the legislation and its application. It is probable that the General Biosecurity Duty applies.

Ecological consultants move from place to place as part of their business. In doing this it is conceivable that they could transfer biosecurity matter from place to place as contaminants on clothing, equipment, vehicles and in samples; it is also conceivable that their clients operations will do so. This is dealing with biosecurity matter.

Ecological consultants are professionals and experts in their fields who not only deal with the environment but with a wide range of statutes and legislation. Lack of knowledge is unlikely to be successful as an excuse; the actual risk or species does not need to be known, only that a biosecurity risk is likely to be posed by their actions.

Actions taken should be commensurate to the risk posed and must be reasonably practicable.

Many properties now have Biosecurity Plans and may have specific requirements (such as wash down) before people, vehicles and equipment can be taken onto the land. Most will have signs requesting the landholder be contacted before entering. These requests should be adhered to.

Manage the Risks. Come clean – Go clean

10.30-10.55	Biodiversity reforms and offsets	Nari Sahukar EDO – Senior Policy and Law Reform Solicitor
--------------------	----------------------------------	---

Abstract: This presentation will review NSW offsetting requirements from an independent community legal centre perspective.

What are the benefits? What are the risks? What are we aiming for?

And how can offsets be strengthened to achieve these outcomes?

10:55 –11.20	MORNING TEA	
---------------------	--------------------	--

	SESSION 2 – STUDENT PRESENTATIONS	Chair: John Travers
--	--	----------------------------

11.20 –11.40	Reducing barrier effects for Eastern Pygmy Possums in the peri-urban environment	Cassie Thompson University of Sydney
---------------------	--	--

Abstract: Habitat connectivity is important in fragmented landscapes for the long-term viability of populations, particularly for threatened species. However, the importance of connectivity for urban-sensitive species has been poorly studied. Urban-sensitive species are those that are unable to persist or are restricted to isolated, remnant vegetation patches in peri-urban areas.

In peri-urban Sydney, the extensive road network may create a barrier between occupied patches for urban-sensitive species. As small mammals have been shown to have road crossing inhibitions, my research focuses on the urban-sensitive and threatened Eastern Pygmy Possum. It aims to determine if barrier effects are currently influencing the movement and viability of local Eastern Pygmy Possum populations.

My research also aims to test measures to increase the permeability of the landscape. This includes the installation of purpose-built crossing structures for urban-sensitive small mammals, and management actions aimed at improving the long-term viability of the local Eastern Pygmy Possum population in the peri-urban environment.

My presentation will include my research plan and early results of my study, including the distribution and genetic analysis of the Eastern Pygmy Possum population in relation to roads in peri-urban Sydney.

Ecological Consultants Association of NSW Annual Conference 2018

11.40 –12.00	<i>Compliance with habitat maintenance fire interval prescriptions in Land Management Zones?</i>	Jane Williamson Australian Catholic University
<p>Abstract: Prescribed burning is used to limit wildfire extent and intensity but can also have conservation objectives. Such ecological burning can create mosaics of vegetation of differing successional stages based on time since last fire. Managers are required to maintain percentages of the landscape within, above and below recommended ecological intervals (OEH, 2013). Fires are recorded and analysed to determine if these key performance indicators are met however, there is currently no analysis of distribution of fire intervals within each formation beyond whether KPIs are being met, and the level of error in the database is relatively unknown. Error is inherent in spatial data and the level of uncertainty in any dataset due to reporting bias and inconsistencies needs to be considered by fire researchers using the data for analyses of historic fire trends and for predicting and modelling future fire behaviour and occurrence.</p> <p>My study uses a case study approach to determine the quality and completeness of fire records in NSW and assesses the temporal and spatial limitations of the data. I then quantify the temporal distribution of fires within each vegetation formation in NSW by analysing RFS and OEH fire history data. I compare known fire history with recommended fire intervals for each vegetation formation and have recorded where these fires occur across the fire interval timeline and in relation to threshold guidelines. In this talk I will present data on the distribution of fire interval occurrence for selected vegetation formations. I will explore whether current management is resulting in an evenly spread set of times for each vegetation formation and look at trends within formations and regions. This study provides insight into timing of prescribed burns and feeds into work looking at effects of these guidelines on fauna habitat attributes.</p>		
12.00- 12.20	<i>Ecology of Invasive Rodents on Islands: Does marine-subsidised overabundance impact a restoring plant community?</i>	Annabel Ellis University of Sydney
<p>Abstract: The <i>Rattus</i> genus is one of the most prolific invasive groups, with the black rat (<i>R. rattus</i>), brown rat (<i>R. norvegicus</i>) and Pacific rat (<i>R. exulans</i>) having been introduced to an estimated 85% of the world's island archipelagos. Islands are at particular risk to the impacts of invasive rodents due to their high biodiversity, large numbers of endemic species and insular dispersal. Our project focuses on a population of invasive black rats on islands in Lake Illawarra, Wollongong, that contain an endangered ecological community, the Illawarra Sub-tropical Rainforest. We investigated the effect of an overabundant rat population, being supported by marine subsidies, on the restoring island community, in particular, on pioneer rainforest species. First, we conducted a mark-recapture survey of the population to calculate the density. Then, through stable isotope analysis (SIA) we investigated the diet of the rats and whether marine food sources are subsidising their diet and driving an exaggerated population density, as predicted by the island syndrome hypothesis. Finally, we conducted two manipulative experiments exploring the impact of rats on the seeds and seedlings of two pioneer rainforest species, <i>Hibiscus heterophyllus</i> and <i>Acacia maidenii</i>, to investigate if the rat population is limiting rainforest recruitment and restoration. In my presentation, I will be discussing the results and implications of this research.</p>		
12.20 – 1.15	ANNUAL GENERAL MEETING	
1.15– 2.00	LUNCH	
SESSION 3 – New Methods		Chair: Isaac Mamott
2.00 – 2.25	<i>Local Government/Consent Authority</i>	Robbie Economos and Martin Fallding Environmental Planners, Lake Macquarie City Council
<p>Abstract: Legislative changes relating to biodiversity and vegetation have had significant implications for local government policy and administration. The presentation reviews issues facing local government as confusion, uncertainty and change continue. Policy gaps and responses to the changes are identified, although it will take many years for the full effect of the changes to become evident. As local government comes to terms with the legislation, ecological consultants can expect further evolution of policy and practice, both local and state.</p>		
2.25 – 2.50	<i>NSW Land category maps – what do they mean for Ecological Consultants?</i>	Jeremy Black Director of the Native Vegetation Information Science Branch, OEH.
<p>Abstract: In response to the 2014 Independent Review of Biodiversity Legislation in NSW (Byron et al) the NSW government amended the Local Land Services Act 2013 and introduced the new Biodiversity Conservation Act 2016 both of which commenced on 25th August 2017. To support this new legislative framework, OEH has produced two new state-wide spatial information products. The Native Vegetation Regulatory (NVR) map and the Biodiversity Values (BV) map. These two maps variously categorise land but are used in different ways.</p>		

Ecological Consultants Association of NSW Annual Conference 2018

This presentation will describe the scientific methods and the processes used in the production and maintenance of the two maps and discuss how the maps may relate to work undertaken by ecological consultants in NSW.

2.50 – 3.15

BAM – where does fauna fit in to the requirements of the new biodiversity Act

Nathan Garvey
EMM

Abstract: *The Biodiversity Conservation Act commenced operation in 2016, with full implementation at the end of 2018. What does this mean for the assessment of impacts to fauna species in NSW? Under the new Act, the biodiversity assessment method sets out prescriptions for the assessment and offsetting of impacts to fauna (and flora), including such factors as what species require consideration, survey requirements for candidate species, measures to avoid and minimise impacts, offsetting requirements and offset rules. In this presentation we will explore some of these requirements, how they are implemented in a practical sense and discuss some of the benefits and risks of the new framework with a focus on fauna.*

3.15 – 3.40

Accredited Persons under the BAM – Conflict of Interest and Managing Compliance

Tara Kennedy
Greencap / Muddy Boots Environmental Training

Abstract: *At its broadest level, conflict of interest may apply where a professional is in a position (be it actual or perceived) to exploit their professional capacity for their own benefit. Conflict of interest has long been an issue to formally manage for individuals and corporations in the banking, finance and legal sectors. Particularly over the last five years, it has continued to expand formally to other professionals, including those providing environmental services. For example, the NSW Biodiversity Conservation Act 2016 requires that those ecologists who take on the formal 'Accredited Person' role comply with a Code of Conduct. The Code requires that an Accredited Person must not act where there is an actual, perceived or potential conflict of interest. By including this requirement, Accredited Persons are obliged to:*

- *Understand the difference between actual, perceived or potential conflicts of interest.*
- *Identify when conflicts of interests may arise.*
- *Have systems in place to manage conflict of interest.*
- *Educate clients regarding their conflict of interest obligation.*

3.40 – 4.10

AFTERNOON TEA

SESSION 4 – New Technologies

Chair: Elizabeth Ashby

4.10 – 4.35

REMAP: An online remote sensing application for land cover classification and monitoring

David Keith
UNSW

4.35 – 5.00

Drones their application in the consulting industry

Justin McCann
PhD Candidate
Centre for Ecosystem Science, UNSW

Abstract: *Using drones in ecology research enables easy collection of aerial photograph data and 3D models. At the Centre for Ecosystem Science we use drones to count waterbirds and monitor vegetation change and we have been developing methods to use 3D datasets generated from drone imagery. In this talk I will use these examples to discuss the challenge of generating a viable and informative product from drone data.*

5.00 – 5.05

Summary and Close

Belinda Pellow
(ECA President; Director AMBS)