



Draft Action Plan to Address Dieback in K2C Region

K2C Forum – Tackling Dieback and Woodland Restoration

18 November 2016

Notes from Workshop session, facilitated by Tim Wong and Anna Van Dugteren, with additional notes from K2C Facilitator Lesley Peden. Compiled by Rainer Rehwinkel

Introduction

The following are notes from a workshop session following presentations by various speakers on the issue of dieback and woodland restoration in the K2C Region. These notes are designed to form the basis of an action plan for dieback in our region.

Speakers and their topics at the Forum, which was facilitated by Rainer Rehwinkel, outgoing Chair, K2C Executive Committee, included:

- Dr Cris Brack, ANU, Monaro Dieback
- Jacqui Stol, CSIRO, Introducing some key management principles for restoring woodlands
- Nicki Taws, Greening Australia, Monaro Tree Comeback - NSW Environmental Trust funding for action
- Lauren Van Dyke, Upper Snowy Landcare, Woodland Restoration following Dieback on the Monaro
- Dr Sue McIntyre, CSIRO, Restoration of Native Forbs in the Grassy Groundlayer
- Mike Thompson, NSW NPA, Update on the Great Eastern Ranges initiative
- Susannah Power, OEH, Mcleods Creek Nature Reserve Woodland Restoration Program
- John Briggs, ACT Parkcare Volunteer, North Watson Woodland Restoration
- Johannes Botha, ACT Government, ACT Red Gum Dieback Mapping Project (apologies tendered, talk presented by Dr Jasmyn Lynch, University of Canberra)
- Chris Allen, OEH, Dieback and Potential Implications for Koalas

Biographies for each of the presenters appear at the end of this document.

The following, in dotpoint form and under themed headings, is a summary of the discussion on tackling dieback in our region.

Mapping

- Infrared mapping with ground-truthing – regional (with the region to be defined).
- How can we use ALA / ALA data.
- Multi-criteria analysis to tease out causes/risks/priorities for interventions, etc.
- Mapping needs to be updated to show trends (e.g., ACT Government's Conservation Research Unit has some data mapped on weevil distribution in S ACT, and needs to re-map over time).
- Need to know the scope of effects, not just regionally, but between different species (e.g., *E. macrorrhyncha*).

Research

- Key Issue – we need to gather a list of all the different research that has currently been undertaken.
- Is this a cyclical event? – look at historical trends, utilising historical data and remote imagery (e.g. photos).
- What is the potential role of birds, acacias, shrubs, fire and/or truffles?
- Restoration objectives (guidance).
- Learn from other regions/incidences of dieback.
- Keep in mind we are not looking for 'the one cause' – cause and effect will be complex.
- Potential stress thresholds for *E. blakleyi* (and other species).
- Links between spread of *E. viminalis* dieback and weevils.
- Tease apart effects of Armillaria/Phytophthora/other causes.
- Integrate the results from monitoring.

Coordination/leadership

- Need dedicated resources to coordinate and disseminate (e.g., fund K2C).
- Forums already exist – e.g., K2C, or SE Local Land Services who are setting up local committees – we can work with these.
- Think big? Should we be linking into a national mapping effort?
- We should look for guidance on processes from similar large scale issues (e.g., wild dogs).
- Need one person/body to take responsibility of regional effects.
- Is there scope for a Dieback CRC?

Resource mobilisation

- Need to get beyond *ad hoc* funding.

Education/awareness/monitoring

- Recruit and support landholders to undertake mapping and monitoring - there are tools that already exist that we can use. This will be important to gain a more detailed understanding of what is going on at local levels (e.g., drawing upon landuse history).
- Develop Apps (add to ACT NatureMap or use ALA) for community/land-managers to map healthy/sick trees/recovering trees/landuse/fragmentation, etc.
- Time-lapses useful to help understand dieback (e.g., exist – Woodstock Nature Reserve in ACT).

Trials/Actions

- Collect seed of healthy trees in dieback affected sites to maximise the potential of local populations.
- Use mixed provenances to augment genetics (see Dr Linda Broadhurst's research).
- Plant seedlings of resulting collections (from both, above) in dieback affected areas
- ACT Offsets are doing a number of trials related to dieback – outcomes should be communicated/shared.
- Core samples to assess trends (some work done on this at ANU – showed decline on Monaro since 1992?).

Who else needs to join?

- Geoff Kay - ANU
- Justin Borovitz – ANU
- Rolf Oberprieter
- Entomologists (not specified)

Biographies of presenters at the K2C Forum

- Associate Professor Christopher Brack is at the Australian National University where he undertakes teaching and research roles in the Fenner School of Environment and Society. He has published a number of papers on the dieback issue on the Monaro, in collaboration with his student Catherine Ross, who was also present at the Forum.
- Jacqui Stol is a Senior Experimental Scientist in the Biodiversity, Ecosystem Knowledge and Services Program at CSIRO and has been working in vegetation ecology and biodiversity for over 20 years focusing on how native woodlands interact with grazing and agricultural systems and how best to manage to maintain and restore their biodiversity.

- Lauren Van Dyke is the Upper Snowy Landcare Dieback Project Manager since March 2015. This role involves working with land managers to establish native revegetation plots in the dieback zone of the Monaro. Lauren's project has also teamed up with Greening Australia Bush Connect project.
- Dr Sue McIntyre is a plant ecologist who has researched native vegetation management in agricultural landscapes in eastern Australia for 34 years, including 23 years with the CSIRO. Her publications include many aspects of ecosystem management, including weed ecology, landscape design, plant functional ecology, grassland dynamics, grazing responses and restoration ecology.
- Nicki Taws is a Project Manager with Greening Australia Capital Region. Nicki has a general interest in the conservation and restoration of woodlands and grassy ecosystems, and is currently managing the Monaro Tree Comeback project aiming to address the dieback of Manna Gums on the Monaro.
- John Briggs has worked with the OEH Ecosystems and Threatened Species Team at Queanbeyan for the past 21 years. John lives in north Canberra and for the past 18 years has spent some of his spare time as a ParkCare volunteer involved in efforts to restore a patch of Box-Gum woodland at north Watson. John will talk in his volunteer capacity about the challenges encountered in the restoration work and some lessons learnt.
- Susannah Power has worked as a ranger with the NSW National Parks and Wildlife Service since 2001. She is currently based in Queanbeyan and manages 7 reserves that primarily protect small remnants of endangered ecological communities, such as box-gum woodland, natural temperate grassland and tablelands snow gum woodland.
- Hannes Botha is a Senior Policy Officer in the Nature Conservation Policy Branch, in the Environment, Planning and Sustainable Development Directorate, ACT Government. He has worked in the spatial sciences and natural resources sector in Australia, Canada and South Africa.
- Chris Allen has been involved with koala conservation in SE NSW since 1990. He is a Senior Threatened Species Officer with OEH and the winner of the OEH Executive's Exceptional Performance Award 2016.

The following are emails of the participants of K2C Forum (either present, or on the invitation list):

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