

Conference Proceedings – Speaker Transcript

Supporting and communicating applied subtropical fire research

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[Link to slides](#)

Hi everybody, thank you for having me here today. I'd just like to say how inspired I am to see the number of Indigenous fire projects at this conference. I don't think I've seen such a high number before and it's really fantastic.

I'm here to talk about the research student program that is coordinated and funded by the South East Queensland Fire and Biodiversity Consortium of which I am the manager. As an introduction, for those of you who don't know us, we're based in Brisbane and we work within the south east Queensland bioregion. We were established in 1998 which makes us 17 years old today, and we were previously coordinated by Penny Watson and Cuong Tran who are both in the audience today. We are non-government and not-for-profit and our broad aim is to translate science into practice for improved fire management and biodiversity conservation in south east Queensland. I'd like to recognise our sponsors (slide 3), in particular SEQ Catchments who are our host organisation.

We have very limited staff time and resources as many of you would appreciate. I am funded two and a half days a week and we have a coordinator, Craig Welden who is funded for four days. So we need to be very particular and focused about where we put our time and energy for the best outcomes for our networks and our sponsors. We have three priority areas, firstly education and engagement which includes our workshops and training, our biannual forum and working with landholders and land managers. Then applied research which includes the scholarship program whereby we try to give a voice for fire research in southern Queensland and finally representation and response which includes legislation, policy review matters and so forth.

Bringing the focus to the scholarship program. Early on we recognised that we don't have a dedicated fire ecologist within the university sector or southern Queensland, but we do have a number of academics who work with fire and supervise students on fire projects. We really wanted to support those people and strengthen those networks, so it was suggested a scholarship program was a good way to do that. The program has been running for three years now and obviously the aim is to provide financial support and assistance to these students. The research is in applied fire ecology and fire management in the south east Queensland Bioregion, which extends beyond the catchment area. The program is open to honours, masters and PhD students and the value is between three and four thousand dollars. We launch it in October and it closes in mid-December. I'd also like to thank Fireland Consultancy as they have provided an additional funding for us in the past two years, which we are grateful for.

We try to announce the successful recipient at our autumn forum. For those of you that have attended before you'll know how great the forums are, they're essentially a mini-conference that we run every six months. We try to promote the successful students and their work as much as we can and equally they give back to us by providing a new newsletter article, presenting at our forums and attending our research working group. We try to disseminate the results of their work through our networks because that's our aim.

Moving to the work of our recent students, the first recipient was Diana Virkki. She undertook her PhD at Griffith University. Di recognised early on, as we all know, that fire management guidelines and recommended regimes are often built on plant life history traits with limited fauna information. Di wanted to try and fill this gap by assessing how reptiles & small mammals respond to spatio-temporal fire mosaics across the landscape in a south east Queensland eucalypt forest. Di made use of long-term research plots at Bauple State Forest near Gympie and undertook reptile & small mammal surveys, bio-condition vegetation and habitat surveys and looked at fire history. Di handed in her thesis last year and did very well. A couple of key findings from her research were that: reptile abundance and species richness were best explained by the total number of fires and fire type; and correlates of reptile parameters were much stronger with fire than vegetation structure, which is perhaps to do with the uniformity of the habitat.

For the 2013-14 scholarship we had two recipients, both of them honours students from Sunshine Coast University. Ross Waldron was looking at assessing changes in woody understorey composition and comparing eucalypt regeneration in prescribed versus wildfire areas. He received First Class Honours for that work and also worked at Bauple State Forest. Overall, his research suggests that a single wildfire, after a period of fire exclusion, can substantially change the vegetation structure of forest, but has less impact on species composition 7 years post-fire.

The second student for that year, Brett Parker, wanted to use remote sensing techniques to identify and quantify spatial patterns of fire severity over 23 years in south east Queensland heath & woodland. He also received First Class Honours for his work. Interestingly, Brett found that burnt area intervals were less than the ecological thresholds in 75% of the heathland area he studied.

This year's recipient, Martin Elliott, another honours student from the University of the Sunshine Coast, is looking at the hypothesis that the composition of *cerambycid* beetles is affected by fire regimes through changes in habitats. What he really would like to do is to identify whether this group of beetles could be a better bioindicator than ants. He is currently undertaking his field work with the results to come. The research site at Bauple State Forest has an excellent recorded fire history to work with and therefore we try to look after it (see map slide 17).

We're really pleased with the success of the program, we've had great support, the calibre of the students going through is very good and the outcomes of their research have been excellent. We look forward to supporting this into the future. It's really important to keep supporting this research work, strengthening the relationships between these students and their supervisors and giving them as much voice as we can to get this information back out to the land managers and the people doing the work on the ground, which is sometimes where we fall down as we move forward in what we're achieving.

Questions from the audience

Q - Where does the funding actually come from?

SL – Slide 3 has the full list of sponsors. These include twelve of our local Councils, Queensland Fire and Emergency Service, Queensland Rural Fire Service, Queensland Parks and Wildlife Service, Powerlink Queensland and SEQ Catchments.

Comment – I would like to support the last comment that you made, that getting the research back to the land managers and the community is a key thing we need to work together on. Coming from Council a lot of the research coming from Universities is really helpful for us in terms of our bushfire management and it's important to make sure this gets passed on.

SL – I think that's what we all try to do and it's very difficult and if you're working in the field as a land manager it's very difficult to balance all the demands on your time. So, what we try to do at the Consortium is we have a research newsletter that I put out once a year, with others contributing also. We write summaries of research papers and include it in the newsletter and we also provide a summary of the research that is going on in south east Queensland. Whilst that may not be as much as some of the other states it's still getting what's happening out there to our audience because it's time consuming reading scientific papers and if you're not in that field sometimes it's hard to interpret what those results really mean for you on the ground. For those of you who are interested, if you go to our website you can go to the contacts page, click on the box, sign up and then you'll receive our e-news once a week. Then we have a formal newsletter that comes out twice a year and the yearly research newsletter as well. We're not just publishing Queensland research, we also review papers by others such as Ross Bradstock, Alan York, Penny Watson and others who are here today.