Dangerous Ideas in Zoology: Plenary session 3

Following the third and fourth sessions of the forum (the forum venue was evacuated due to bushfire smoke moving across Sydney and we combined the two sessions into one) we held a question and answer session facilitated by Paul Willis. The presentations covered by this plenary session were:

- Dumb and dumber about science; when will we learn? (Pauline Ross, University of Western Sydney)
- Give up hunting for archaeological evidence of planning: you won't find anything (Natalie Rogers, University of NSW)
- Value of anecdotal reports and implications of results of amateur zoological researchers (Gary Opit, NFA)
- Maybe it's conservation management that's killing our wildlife (Guy Ballard, Peter Fleming, Piers Thomas and Catie Gowen)
- Rabies is coming. What will happen to fauna conservation when Australians are afraid of wildlife? (Jessica Sparkes, University of New England, Guy Ballard and Peter Fleming)
- Spotted-tailed quolls aren't threatened by 1080 baiting: they depend on it (Trent Forge, UNE, G. Koertner, G., Ballard, P. Fleming and K. Vernes)
- The saga of hybrid speciation: are we barking up the wrong tree? (Brad Purcell, University of Western Sydney)
- Man* is the apex animal: anthropocentrism as a dionysian sword (Peter Fleming, and Guy Ballard, DPI)
- Controlling the quick brown fox while avoiding the dog (lazy or otherwise) (Andrew Murray, Victoria)
- A monument to predator xenophobia: why the world's longest fence must fall (Euan Ritchie, Deakin University and Corey Bradshaw, University of Adelaide)

The following is a transcript of the plenary session edited for readability.

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PAUL WILLIS: Lots of dangerous ideas for everyone to play with today. We didn't have a plenary after the previous session and I want to go back to the beginning of that session and pick up on some points with Pauline Ross about scientific literacy. At the Royal Institution, we're all about science engagement, science communication. We keep butting up against this thing with science literacy and you may be familiar with the work of CPAS down at ANU, the Centre for the Public Awareness of Science. They used to be the Centre for the Public Understanding of Science, but CPUS for some reason wasn't an acronym they wanted to stick with.

Rob Lambert, you know, is chief among them saying, "Look, so what about scientific literacy? For a start we can't actually accurately define it. The surveys that the Academy of Science has put up are about content only. They're really good for generating trivia masters rather than people who actually understand science." We need an emphasis on the methodologies of science if we want to consider ourselves scientifically different. It's a really complicated concept to nail down, and then you need to ask the question, "Why bother? Why do we need a scientifically literate population?" Most of us, I would venture, in this room are not necessarily highly skilled

in economics or how the economy works, and yet we all function perfectly well in the economy of the wider society. So, yes, make the case. Why should we worry about scientific literacy?

PAULINE ROSS (University of Western Sydney): I'll set a scenario. I'm a member of society. I'm not necessarily a scientist in this scenario and I'm not feeling too well. I've done a lot of coughing. I'm sort of breathless up the street, and my doctor tells me that I should go for a test. I get an x-ray. There's an opacity on my lung. I go and get a biopsy for that. The doctor is not too sure - and neither is the radiographer - what is this opacity on my lung. The biopsy comes back negative. I breathe a sigh of relief. I don't have lung cancer, and I go on with my normal life, and I'm dead within 12 months because what I got back then was a false negative, and I didn't quite understand that there was any uncertainty associated with these results. I thought everything was black and white.

So I suppose are we performing so well economically? I'd like to know a little bit more. Maybe I could sell my house for auction and didn't work last week. If I had a bit better economic understanding, I might be better off. If I had a bit better understanding about complexity and uncertainty, and not so much black and white, maybe that person would still be alive, but I'm afraid they're dead in their grave now and have been so for the last three years.

PAUL WILLIS: Let me draw a little bit further on that. In that case, that person would be no better off knowing that the length of the year is 365.25 days, that humans and dinosaurs did and still do live together, which is something we probably can't even agree with in this room of scientists. I mean, the whole push for scientific literacy