

Royal Society of Queensland seminar 13 June 2014 Qld Museum Theatre

Geoff Edwards has asked me to talk about the potential for observations by people like myself, to inform scientists and policy. Geoff has also asked me to discuss some of the obstacles that individuals outside traditional processes face in achieving uptake.

I am a good case study for all the issues Geoff wants discussed.

Back in the mid 1990s, Canberra asked NSW Ag Dept to apply for funding at the same time that they funded my ideas. They asked us to work together and combine our knowledge.

As part of this process, scientists educated me and I educated them. I helped the scientists join the dots and they helped me join the dots.

Dr Greg McKeon likes the process – he said science often starts with lay people. We make the observations but don't understand what we have observed. Then scientists add rigour to the observations. As part of the process, scientists often discover issues they were not aware of.

The poster on the board supported a paper CSIRO wrote with me for the 1999 International Rangelands Congress where I was invited to speak. The paper was based on the final report of my project which was called, "Who Does Drought Visit and When."

Now the first obstacle that individuals face in trying to get ideas into mainstream thinking. Thanks to former Chief Scientist of Queensland, Joe Baker, who recommended me, I now get an invitation every year to speak in China. Unfortunately I never go because I represent no process, which means my costs would not be covered.

Hold up book and handout page on carbon flows

This is the eventual outcome of the project that started in the mid 1990s.

A lifetime on the land making observations and asking scientists to explain what I have observed, resulted in this book.

This is what happens when scientists and lay people share knowledge and work as a team to come up with new understandings. A cattle producer at Gladstone told me only recently, that he read this book and increased his calving rate from 50% to 85%, wasn't stressed by the recent dry and nutrients are now not running off his paddocks onto the Reef.

This book was one of two books made compulsory reading for a course at the Colorado State University in America. However it is having zero effect on policy and extension in Queensland.

Hold up GLM WORKSHOP NOTES.

This is what the Queensland Government and Meat and Livestock Australia relies on for extension to rural producers. Not only is there no discussion of carbon flows in the 205 pages of this workshop manual, the word carbon does not even appear once.

It is not for lack of trying, that I have not been able to rectify this oversight.

The Gladstone cattle producer has informed me that extension people involved with protecting the Reef, refuse to show any interest when he wants to discuss the content of my book with them.

The original reason this manual does not have the word carbon in it, is because of reductionist science. The generic problem of reductionist science is that it keeps everybody thinking too narrowly. You all know of it as working in silos.

It is only when you are thinking big picture with land management, that the central role of carbon flows for landscape function, becomes obvious. As a rural producer I had to think big picture because of the type of business I ran. It came naturally to me to unite all the knowledge that the specialised scientists had.

The current reason this manual does not mention the word carbon, is because of the politics that surrounds the word carbon. I know from discussion with others that the problem lies at the top. Extension people and policy people have told me they are encouraged to not explain land management in terms of carbon processes.

This is an area where independent organisations like yours, could fill the void by directing research into areas avoided by government.

There is a need for research in this area of carbon flows. We need to better understand the direct outcomes of management and how current outcomes are influenced by feedback loops. To date, research has been directed towards long term carbon, not carbon flows.

Given I live in Australia, I should not be relying on research done in South Africa, to quantify the first phase of carbon flows in the landscape.

To end on a positive note, if I had been part of traditional processes, then I would not have been allowed to investigate the areas I have. Also I would not be allowed to raise the issues I have today.

Now that my partnership with generous scientists has broadened our understanding of landscape function, how are we going to get this thinking into mainstream processes?

THANK YOU

Alan Lauder 13 June 2014