

INTERVIEW WITH A RESEARCHER - 2014



RESEARCH FUNDED BY NATURE FOUNDATION SA

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RESEARCH PROJECT: PIKE FLOODPLAIN MONITORING, South Australia's second largest Murray River floodplain



Large numbers of Black Swans on Tanyacka Creek, Autumn 2014
Photo: Elizabeth Lescheid

What was the aim and purpose of your project?

This Project aims to collect a robust baseline data set for bird activity across the Pike floodplain prior to environmental watering. This data set can then be used to monitor changes in response to the eventual induced flooding. As a valuable indicator of ecosystem health, any changes to species and numbers of birds may provide valuable insights into the benefits and potential draw backs of environmental watering regimes. This could also be useful in adaptive management to help determine the timing and length of flooding so it occurs in a way most beneficial to the improvement of the ecosystem.

Summarise the results of your project.

109 species of birds have been recorded for the Pike floodplain through this study. This confirms that others have previously suggested: that the Pike floodplain maintains a relatively high level of ecological integrity in spite of years of degradation and ecosystem decline. Of this, 46 species are listed regionally and even nationally regarding conservation status. Therefore, this study adds impetus to works to preserve and improve the floodplain's ecosystem health as it may be important to the preservation of many South Australian birds.



Mallee ringneck parrots checking out nesting hollows, Autumn 2014
Photo: Elizabeth Lescheid

Although the species accumulation curve suggests adequate survey effort is being achieved for the Black Box sites, there is a need for further sampling to increase power of and confidence in the data set: richness data is still largely based on anecdotal observations; some species observed in 2010 were unrecorded in 2013-14; the endangered Black-eared Miner's presence remains undetermined; noteworthy changes in waterbird activity between Spring and Autumn surveys require further examination.

What is the most exciting thing about this work?

- 17 bird species were added to the list for the Pike floodplain during the Autumn 2014 surveys, bringing the total number observed during this study to 109.
- Almost 1/3 of the bird species observed have been observed anecdotally and not in official survey periods indicating more surveying is required to increase power of and confidence in the data set.
- The median number of bird species observed in the Black Box sites increased from 10 to 18 as a result of the Autumn 2014 surveys.
- Black Box species' relative abundance didn't change much between Spring 2013 and Autumn 2014 surveys but there were some noteworthy changes in waterbird numbers indicating seasonal factors play an important role in their presence and numbers. However, as water levels remained fairly constant between seasons, this was not the main contributor to the difference.
- There are no 46 listed bird species observed during the current study and some have been observed displaying breeding activity suggesting this floodplain may play an important role in their survival.

"I find it incredible that even though the Pike floodplain appears so degraded, it still has enough ecological function to support such a diverse range of bird species. I keep adding more bird species to the list and suspect that as I continue my survey work out there, even more will be added in future. I wonder what rare and/or threatened species I may eventually record. The value of this floodplain to birds on a local and even regional level is only just beginning to be understood. I feel even more supportive now for any works in place to try to conserve what remains and to improve the ecosystem health of what may be an important floodplain for South Australia's flora and fauna."



Black-tailed Native Hens in pig face, Spring 2013
Photo: Elizabeth Lescheid