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Thinking like a Banded Stilt

Libby Robin

Australia's climate and culture are interwoven in many surprising ways. Europeans coming to terms with this land have to put aside expectations and learn anew. We live in a land which is 70% arid or semi-arid – whilst only 28% of the world's land mass is 'desert' - and there is no arid land in Britain.

Our expectations of seasons, regular and reliable rainfall and annual cycles are deeply challenged by our vast arid centre. If we take a bird of the arid inland – and examine the cultural expectations that inhibited our discovery of its lifecycles, we find clues as to how we might think differently and manage our arid lands more sustainably.

Banded Stilts are relatively common waterbirds, familiar to anyone who has had a holiday at Rottnest Island near Perth. They are also regulars on the South Australian coast and occasionally turn up further east. But they 'go missing' from time to time. Not at any regular time, but suddenly the whole large colony - which can be thousands of birds - is 'up and off'.

Where do they go? Where do they breed? This was a critical question for the 'oologists' (scientific egg collectors) of the early twentieth century. The Western Australian Museum curator Ludwig Glauert lamented that: 'information concerning the 'winter migration' was of the vaguest possible character'. He was intrigued that such a well-known bird could 'keep its [nesting] secret so successfully'.

The very wet year of 1930 proved significant in solving the Banded Stilt mystery. Mrs B. E. Cannon, a Wheatbelt farmer, wrote to Glauert about a huge rookery of breeding birds near her home. She sent a blown egg and three photographs, asking the name of the bird. There were 'thousands of them on a sandy spit running out into Lake Grace'. A parcel of 23 unblown eggs followed. Glauert and his ornithological friend, Clee Jenkins, realised they had discovered where Banded Stilts breed.

Before 1930 was out, the idea that Banded Stilts bred in 'winter' was challenged by finds at Lake Callabonna, in South Australia's north east. Neil McGilp and Matt Morgan, long time stalwarts of the South Australian Ornithological Association, heard reports from Mr R. McKay, manager of Moolawatana station, of a rookery of nesting birds on an island in the lake. On 11 January 1931, they followed his tedious directions and waded out 'three-quarters of a mile' through 'two feet of water and six inches of mud'. To their amazement and delight, their efforts were rewarded with 'a densely packed mass of Banded Stilts' – about 54,000 of them – which took to the air 'with a whirr of wings, raising quite a dust as they did so, and revealing thousands of eggs on the bare ground'. There was no protection from the merciless heat (recorded at 104°F in the shade (=40°C)) or the hot wind, the only vegetation being 'a few samphire bushes'. McGilp and Morgan commented: 'It seems somewhat extraordinary that the second discovery should have so soon followed the first, after the nesting of these birds remaining a mystery for so many years.'

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The Banded Stilt is the only waterbird to depend almost entirely on the Australian arid zone for its breeding habitat. Its breeding grounds are variable, depending on the availability of food - brine shrimp in ephemeral salt lakes. They don't breed at all for several years, then a wet year will bring on an explosion of nesting. The calendar year is meaningless to this bird – its breeding season is simply 'after rain'. Immediately after. They move quickly to rain in inland Australia, even if the sky is clear blue at Rottnest.

Banded Stilts' nests were hard to find because they defied expectations shaped elsewhere. Nesting is not annual, not seasonal or affected by daylength, not in regular places or even regulated by the flowering or seeding of particular plants. Out on the samphire-lined saltlakes, the food is rich, but underwater – and invisible when there is no water in the lake, which is most of the time. Cultural preconceptions shape the understandings of fauna and place in subtle ways.

If however, we try to think like a Banded Stilt, we might revisit some of our other cultural preconceptions. Arid zone biologists are increasingly infiltrating the concept of 'variability' into discussions of rangelands management, in an echo of uncertainty and chaos in the physics of the new millennium. Banded Stilts are a species that can teach us much about living with uncertainty, how to take opportunities as they arise, but not to expect regularity.

Lack of regularity challenges all fiscal models built around annual cycles. The global economy is annual, based in seasonal agricultural regularity. Seasons shape the world's fiscal thinking and practice. It is much easier to make international treaties to protect migratory birds on regular annual flights along international 'flyways' than to manage rangelands within a single nation for unpredictable, non-annual seasons.

The Banded Stilt brings a view on Australia's place in the economic world - from the inside out.

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Libby Robin is speaking at a conference on Climate and Culture in Australia at the Shine Dome, Australian Academy of Science on 25-27 September 2002. See http://ozhistory.info/weather or ring 02 6125 5016 to register.