

FAUNA

WHAT'S THE BUSTARD'S STORY?

Mark Ziembicki

The Australian bustard, known commonly out bush as the plains or bush turkey, is a charismatic bird symbolic of Australia's outback. A strong flyer, it spends most of its time walking around on the ground where it also nests, but its claim to fame is that it's Australia's heaviest flying bird with some males reaching up to 15kg!

The bustard's preferred habitat is grasslands, low shrublands and open woodlands and it is often dependent on a mosaic of such habitats for breeding, feeding and shelter. Unfortunately, for a variety of reasons, including altered fire regimes, hunting, predation, pesticides and habitat alteration, the species has virtually disappeared from south-eastern Australia and numbers have declined dramatically in the south-west, inland and in parts of northern Australia.

An interesting aspect of the biology of bustards is what is known as their exploded lek mating system. Leks are areas where males come together to display and strut their stuff which females in turn visit to find mates – sort of like the local pub! The difference being that males are usually well separated from each other and are more spectacularly dressed than the ladies.

Generally, among lekking species it's the larger, more elaborate males that are more successful in the mating game. This has important implications for harvesting bustards, because if bigger birds, that is, the larger more successful males, are preferentially harvested then the breeding performance of the species as a whole may suffer.



Male in lek display
Photo: M. Ziembicki

Just as we have our preferred watering holes so too bustards may have preferred breeding or lekking sites. If this is the case then those areas are of vital importance for protecting the species.

To perform their elaborate displays they prefer open areas of good visibility so females can see them. Hence in the rangelands they may benefit to some extent by grazing and periodic fires, which opens up the country. Females then find nesting sites within

more sheltered, vegetated areas highlighting the need for a variety of habitats.

Bustards can be highly mobile, even nomadic, often tracking favourable conditions or resources across the landscape. For example, they may be attracted to fire, follow grasshopper plagues or move to where significant rainfall has fallen. Numbers often increase in southern regions, including the south-west, following unusually large rains, particularly if other regions are in drought. These sudden appearances in areas where they have not been seen for some time is a characteristic feature of nomadic (wandering) or irruptive species (i.e., species that undergo large population explosions in response to favourable climatic conditions).

These features present special problems for their conservation and management since there is no guarantee that traditional conservation reserves set aside for protecting native flora and fauna are large enough or will remain suitable to bustards through time. For this reason the protection of bustards and their habitat off reserves is of vital importance.

Little is known, however, of the dynamics of nomadic or irruptive species because of the few observers that exist over our sparsely inhabited continent and the difficulties of conducting research in remote areas over large scales.

For the past 3 years the bustard has been subject of a research project examining its habitat and conservation requirements. This work has included tracking bustards using satellites by attaching small, solar-powered GPS units to their backs.

Record Your Bustard Sightings!

Several *Land for Wildlife* members in the Great Southern have reported seeing bustards this year after an absence of 20 or more years.

If you have sighted these nomadic Priority 4 species please give Avril Baxter a call on

9881 9218 or

email: avrilb@calm.wa.gov.au

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Complementing this has been an assessment of bustard distribution patterns as reported by landholders across Australia by means of mail surveys. This has proved a successful and valuable source of information and highlights the vital role rangeland users and landholders can play to safeguard the future for bustards, and other similarly highly mobile species across their continental range.