

DON'T FENCE ME IN

BirdLife Australia Conservation Manager, **Dr Jenny Lau**, examines the dangers to Emus and other wildlife posed by Western Australia's Barrier Fence in the state's south-west.



Western Australia's 1,170 kilometre State Barrier Fence runs from just north of Kalbarri around the perimeter of the agricultural district south into Ravensthorpe Shire. Widely known as the 'rabbit-proof fence' or the 'dog fence', it was built in the early 20th century to reduce the economic impact of 'pest' species such as dingoes and rabbits on wheat and sheep properties in south-western WA. Possibly less well known is that conflict between farmers and Emus was a major driver of the construction of the fence—a driver that continues to this day.

Emu migration

In Western Australia, Emus undertake annual migrations, moving south-west in winter and north-east in summer in most years. While Emus typically live as individuals or in small family groups, in years when rapid population growth is followed by low rainfall, increased contact with other individuals and groups can trigger spectacular mass movements.

The most recent major mass migration occurred in 1976 when more than 100,000 Emus gathered along the barrier. Sadly, large numbers of birds were shot or suffered lethal injuries on the fence. Subsequent mass migrations have involved fewer birds but Emus continue to die in this terrible fashion.

A new fence

During mass migrations, Emus can flatten crops and trample fences, leading to large economic losses for affected landholders. Landholders whose properties are not 'protected' by the fence have lobbied long and hard to have the fence extended.

The WA Government has now committed \$6.5 million towards the construction of a 490 kilometre extension of the fence in the Esperance region. Once completed, the State Barrier Fence will form a largely continuous barrier that runs through a number of distinct and important vegetation types from north of Geraldton to Cape Arid.

BirdLife Australia has many serious concerns about this proposal, including that the WA Government made a commitment to build the fence prior to the completion of appropriate socio-economic and environmental studies. Our major concerns, however, relate to the potential ecological impacts of the fence, particularly where it will cut through the Great Western Woodlands, separating 300,000 hectares of contiguous bush from the main woodland block.

Ecological impacts

The existing fence was built at a time when the ecological impacts of projects weren't understood or even considered. Today, we know that the fence may impact biodiversity in three main ways: by restricting Emu dispersal; limiting dingo populations; and subdividing populations of native species whose dispersal is limited by barriers.

Emus are known to be an important long-distance seed dispersal mechanism for many plant species. By restricting the flow of tens of thousands of Emus during migration years, the fence will impede this dispersal mechanism and many plant species may decline across large areas as isolated populations die out. Further, without long-distance dispersal, some

plant species will not be able to shift their distribution in response to climate change.

The fence is designed to prevent dingo re-establishment in the west and south. Recent research has shown that in areas where dingo populations are reduced, populations of foxes, cats and kangaroos increase. This leads to a decline in the small and medium-sized mammals that cats and foxes feed on, while some plant species decline as the result of increased grazing.

The fence may also fragment the distribution of native species, including small mammals and some reptiles. There are no studies as yet examining the barrier effect of the fence on non-target species so it is uncertain how many other species will suffer fragmentation.

BirdLife Australia believes that any decision to build the fence should be based on comprehensive socio-economic and environmental analyses of the current and future impacts of the fence. If there is a strong case for the fence to be built, it should be built on private land, avoiding the Great Western Woodlands.

At a time when landscape-scale conservation focuses on improving connectivity and creating wildlife corridors, and the Federal Government recently released its draft National Wildlife Corridor Plan, for the WA Government to consider a deliberate fragmentation of the world's largest remaining intact temperate woodland and the creation of a massive wildlife barrier is both puzzling and disturbing.

Top: This tragic photo shows the carcasses of Emus stopped in their tracks by the Barrier Fence. Photo by Graeme Chapman