

# Beetalyinna Nature Reserve—a Summer Refuge for Waterbirds

by Clifford Young

The Geraldton region of Western Australia is not renowned for its extensive wetland habitats and freshwater river systems. In fact, with few exceptions, the area is almost devoid of any such features. One of the exceptions lies in the middle reaches of the Greenough River. Here, upstream from the estuary, a few small freshwater pools resist the heat of summer and the pressure of surrounding agricultural development sufficiently each year to become a haven for wildlife, particularly birds.

However, until recently, none of these important habitats were protected from outside pressure or the threat of future development and the future for the river and its dependant wildlife looked shaky. With the creation of the Beetalyinna Nature Reserve late last year an important reprieve was gained for at least a section of the river and its fringing vegetation.

◀ A steep laterite cliff overlooks one of the summer pools on the Greenough River in the new nature reserve. (Photo D. Mell.)

The reserve covers a total area of 206 hectares of which 121 hectares are in a block of uncleared land (Reserve 2069) bounding a section of the river to the north, and the remaining nature reserve stretches south along both banks of the river for about four kilometres downstream.

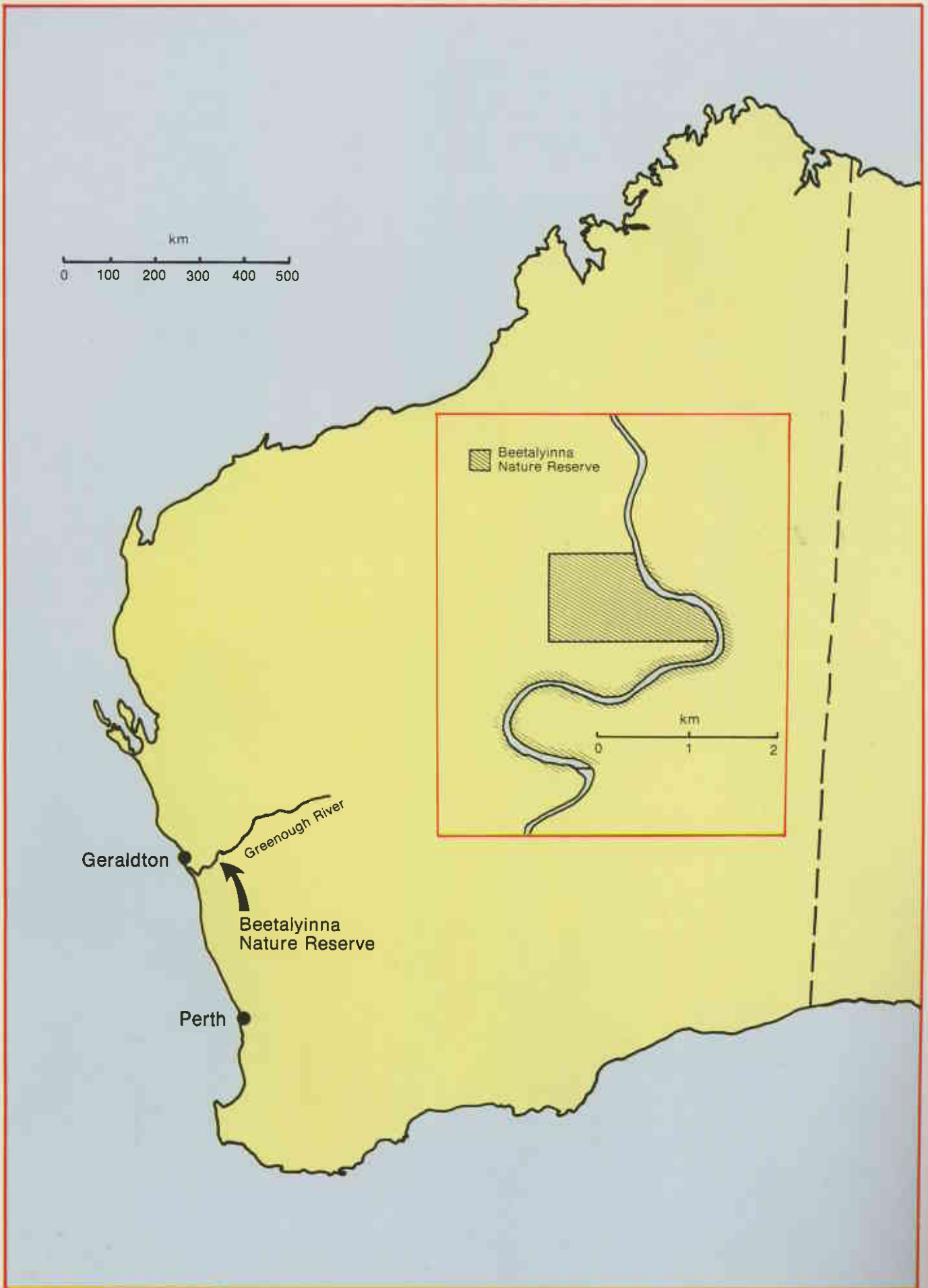
Reserve 2069 contains a large proportion of laterite breakaway as do some sections of the riverbank, particularly on the west bank. In fact, where the river flows through the breakaway, it is flanked in places by towering cliffs between 20-30m high.

The south-west corner of the reserve is low ground and is flat to the north where it meets a laterite breakaway approximately 15m high. The north-west corner contains many deep gullies with laterite walls. Apart from a fire about six years ago, there has been little disturbance to the reserve's vegetation. Grazing appears to have been minor and regeneration since the fire has been satisfactory.

The uplands support scrub and heath of *Casuarina*, *Grevillea* and *Banksia* with emergent mallee and patches of York Gum. Bordering the Greenough River and its pools are

▼ White-faced Heron (*Ardea novaehollandiae*) One of the many waterbirds recorded from Beetalyinna. (Photo copyright A. G. Wells.)





River Gum, York Gum, *Acacia*, *Melaleuca* and various rushes and sedges. This is in stark contrast to its surroundings as, with the exception of some breakaway country, all the adjoining land to be reserve has been cleared for agriculture.

During a survey of the reserve before it was gazetted last year, Wildlife Officer David Mell recorded 10 species of birds, two species of reptiles and many kangaroos and Euros on Reserve 2069. The birds recorded were the Common Bronzewing, Little Falcon, Pipits, Galahs, Grey Currawong, Crow, Western Shrike Thrush, Willy Wagtail, Splendid Wren and Singing Honeyeater. A further 20 bird species in addition to some of those already mentioned were observed along the river banks of the proposed new reserve. These included Maned Geese, Black Duck, White-eyed Duck, Coots, Little Grebes, Pelicans, Nankeen Night Herons, White-faced Herons, Darters, Little Pied Cormorants, Little Black Cormorants, Black-fronted Dotterels, Reed Warblers, Port Lincoln Parrots, Mudlarks, Mistletoe Birds, Silvereyes, White-plumed Honeyeaters, Weebills and Yellow-tailed Thornbills.

The importance of the permanent water holes and pools along this stretch of river is apparent on looking at the above list, as 12 of the 27 species of birds recorded during the survey are waterbirds.

David Mell also made an unexpected find along the riverbank when he reported seeing a large reptile, *Lophognathus longirostris*. Previously, reports of this reptile indicated it was confined to an area north of Kalbarri, making this sighting of considerable interest. This section of the Greenough River is now recognised as containing the southern-most known population of the animal.

An unidentified large green tree frog was also found in considerable numbers throughout the rushes and sedges bordering the river pools.



▲ A view of the scrub and heath vegetation near the southern boundary of the reserve. (Photo D. Mell.)



▲ In places, the pools remain large and deep throughout summer, providing secure havens for many species of wildlife. (Photo D. Mell.)

▼ The river narrows toward the southern end of the reserve and the density of the surrounding *Acacia* and *Melaleuca* increases. (Photo D. Mell.)





▲ *Banksia prionotes* is found throughout the reserve. Although most plants are below 2m in height, there is a small stand of plants near the centre of the reserve which exceed 3m. (Photo D. Mell.)

The pools themselves vary in size from small holes a few metres in diameter to deep pools that extend up to 1200m in length. However, most of the pools are between 100 and 600m in length separated by varying distances of dry river bed. This is, of course, the situation in summer only. During winter the whole river is usually flowing and, after heavy rain, is subject to flooding in some low-lying spaces.

In his recommendation that the area be reserved for wildlife, David Mell noted . . . "On its own merits, this reserve has the value to be set aside for the conservation of flora and fauna. It is basically a laterite breakaway reserve with a specific range of flora, marsupials and reptiles. If this reserve was to be developed, i.e. the sandy areas cleared and the vegetation on the gravel thinned to allow a growth of grasses and herbs to carry stock, there could be extensive problems.

"Apart from this reserve's flora and fauna, there is another important role for it to play. That is in a supportive role to the adjoining section of the Greenough River. Reserve 2069 not only provides an additional environment for some of the fauna living along the river but, simply by continuing to exist in its present natural form, it reduces the possibility of irrevocable damage to the river caused by erosion and increased levels of superphosphate.

"The river at this location contains several large and apparently permanent pools of water and it should be appreciated that in this region during summer, and after four years of drought, it is in the exception rather than the rule when water such as this remains in the water course.

Most other rivers and large sections of this river are simply dry river beds (on the surface) during this period.

"In a region where water can be very scarce, this section of the Greenough River should be considered outstanding simply because of the abundant pools. However, in addition to that, these same pools have attracted and can maintain a vast range of waterfowl, other birdlife and fauna including reptiles, frogs and marsupials.."

In response to David Mell's work and support from the Department of Fisheries and Wildlife, Beetalynna Nature Reserve was subsequently gazetted on September 4th, 1981 and vested in the Western Australian Wildlife Authority.



▲ The reserve harbours the southern-most known population of *Lophognathus longirostris*. (Photo R. E. Johnstone W.A. Museum.)