display and behaviour patterns, nesting and all factors of such nature are mentioned throughout the paper.

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Notes on the Whip-bird at Tintenbar, N.S.W.

By W. STEWART McCOLL, Sydney, N.S.W.

An interesting observation was made of a Whip-bird during the latter end of autumn, 1953. I am not certain of the exact date, having lost my written notes while travelling through the country, but having come upon a feature of this bird's life entirely new to me and probably to many others,

I decided that it was worth recording.

The event to be described took place in the north-east corner of New South Wales. In the locality was a tidal creek which flows away to the Richmond River. The country on both sides of the creek is subject to yearly flooding and is, generally speaking, mostly morass. Tea-tree, swamp oak, and, in places, mangroves grow in patches in the area. Following the creek is a low bank about 25 yards in width, covered with scrub and trees. At the edge of the creek the mangroves are numerous, as is also red tea-tree and other indigenous trees. Among the brush is found several creepers including the more common Smilax australis. Another small tree not frequently met with in that country but always found growing along the tidal creeks of the north is the wild hibiscus (Hibiscus tiliaceus). The leaves of this tree reach a diameter of up to six inches and are almost round. Of course, many of the leaves are much smaller. However, this story deals with the leaves of this particular tree.

The country generally is not now considered good Whipbird brush, but in earlier days it must have been one of the greatest habitats in Australia of the Eastern Whip-bird. The big brush is mostly gone now, just a few winding gullies revealing what great scrub once existed. The whole country

was once known as the 'Tintenbar Scrubs'.

This particular day I was sitting in the scrub with a friend, after fishing in Emigrant Creek, when suddenly a Whip-bird darted through the tea-tree and vines and perched

about six yards away. It then hopped into a particularly thick corner of brush where a red tea-tree had been uprooted a year or more ago and was still alive. The head of this fallen tree had been arched with the fall and formed a canopy over clear, well-grassed ground. This piece of open ground would measure about six feet by three. The grass was short and the roof of the canopy would be about two feet from the grass. The front of the canopy was open, but the walls had been formed of tea-tree brush with creepers growing in them, well laced. About this setting were many fallen leaves of the wild hibiscus and a few of the *Smilax* creeper.

The bird perched for a time, cautiously surveying the surroundings, then fluttered down to the ground outside the canopy and quickly picked up a hibiscus leaf in its bill and threw it with some force in towards the grassed floor of the canopy. It kept repeating this action for some time until many leaves of hibiscus had been thrown into the 'arena' from many points of the compass. It then passed in through the 'wall' and began to pull those leaves which had not been thrown right in clear of the wall, and place them in a rough circle on the floor of the canopy. Few of the leaves had been thrown right in in the first instance. All the leaves placed on the floor were turned upside down. It could now be clearly seen that a number of leaves had been placed in a circle perhaps a day or two before the present observation, and that this piece of construction was being added to. All the leaves used were highly coloured.

The ring made by the bird was about 20 inches on the inside from leaves to leaves in the circle. Many coloured hibiscus leaves had been left lying about the enclosure.

Suddenly the bird saw us and it flew off into high scrub. But although we interested ourselves in seeing more of this building it appeared that the bird did not add more to it, although at times a number of Whip-birds were seen in the vicinity. This is the first time I have ever seen 'building' by a Whip-bird, nor have I been able to find any other bushman who has witnessed it.

Banded Plover as a Wader.—The Banded Plover (Zonifer tricolor) is generally far less dependent upon the presence of water than is the Spur-winged Plover (Lobibyx novæhollandiæ). Although sometimes seen feeding on grassy land close to water, it has rarely been reported behaving as a true wader. During last winter I saw the species bathing in shallow water at the edge of dams on several occasions at Sutherlands.

On July 12, 1955, several birds were wading and feeding in a lagoon near Robertstown, South Australia. Several pairs of Banded Plovers were wading and feeding in shallow water of a lagoon at Craigie's Plain, Hundred of Brownlow, South Australia, on August 28, 1955.—E. F. BOEHM, Sutherlands, S.A., 26/9/55.