

# WALKING ON WATER

*Walking on water is just one of the jacana's many unusual behaviours.* Text and Photos by Michael Snedic

AUSTRALIA IS HOME to one of the world's eight jacana species—the Comb-crested Jacana—also known as the Lily-trotter, Lotusbird, Jesusbird or Christbird, the latter typically irreverent Australian names for a bird that appears to 'walk on water'.

The jacana is found throughout coastal and near-coastal northern and eastern Australia, from about Derby in the west to Sydney in the east. I have observed it at numerous locations including wetlands near Byron Bay, New South Wales; the Nerang River and Beaudesert, south-east Queensland; and Yellow Water, Kakadu National Park, Northern Territory. It uses a variety of habitats, including lakes, lagoons, swamps, dams, ponds, rivers and reservoirs. One common denominator seems to be the abundance of floating aquatic vegetation, including water-lilies (*Nymphaea* spp.), water-weeds, reeds and grasses.

Striding from floating plant to floating plant, the jacana searches for aquatic invertebrates and plants (and their seeds) to eat, rarely coming to shore. Birders that have observed the species would no doubt have noticed that it resembles a rail—continuously flicking its tail up and down and bobbing its head in a backward and forward motion. When alarmed, it freezes and the broken pattern of its plumage can make it quite difficult to see. Generally though, with its long, skinny legs and bright red, fleshy comb, it is quite visible.

The jacana will swim and even dive to escape a predator and can fly surprisingly swiftly. Many times I've wondered how it manages to fly at all with those long, clumsy looking legs and toes dangling wildly behind!

Both sexes are identical in plumage, which is brighter and more intense during the breeding season. The female, however, is larger than the male (24–27cm in length compared to 20–21cm).

## Emancipated mums

One winter I spent days sitting in an aluminium boat with my friend and fellow tour guide/wildlife photographer, Glen Threlfo, in Yellow Water. Watching these birds communicate was fascinating, especially when you consider their unusual breeding system. The female often courts a male, mates, lays eggs, then moves on to another male. The male is required to build the nest, incubate the clutch and tend to the chicks single-handedly. This role reversal is different to most other species of birds.

There doesn't appear to be any hostility from males towards a female travelling from territory to territory. However, females are quite territorial and antagonistic towards each other. On one memorable occasion a particular female was dominant amongst the various males, and had presumably laid clutches for them. Generally, she stayed calmly among the males, but when a younger rival female arrived on the scene, feathers really did fly! The ferocity of the attack was stunning: she chattered and chased the intruder well away from the territory with such intensity that it was hard to believe she was only a petite individual.

Polyandry (many husbands) is quite rare and it has been suggested that it has evolved in jacanas because of the high rate of egg loss, but this may well be the result of single male parenthood rather than the cause. In general, polyandry occurs where breeding resources are scarce across the landscape but clumped in rich pockets—such as in a lagoon—giving females the opportunity to move easily from one male to the next, and a single parent the resources at hand to raise a family.

## Diligent dads

The nest is generally quite a flimsy affair—nothing more than a clump of rotting aquatic plants and their roots, pulled

together to form a weak platform. Some females even lay their clutch on nothing more than a lily leaf.

Over a period of a week or so, Glen and I managed to find quite a number of nests in the lagoons of Yellow Water and most of those were poorly built. With the weight of the incubating male, the eggs can be more in the water than out. To my amazement, all nests with eggs survived quite well.

On a few occasions I observed a male clumsily trying to rotate the eggs. In the process, some landed in the water and he rolled the floating eggs back towards him, using his bill to eventually return them to the nest. If predators approached, the male often trampled the large leaf the nest was sitting on, pushing the eggs into the water.

This behaviour helped hide the eggs, while the male moved off to create a diversion. Occasionally, he even scooped the eggs up under his wings and moved them to a new nest.

Generally there are three to four eggs in a clutch, which the male incubates for around 28 days, leaving only to feed, see off nearby rivals or deter predators. At Yellow Water one morning, as the sun rose over the misty wetland, we noticed a male behaving in an excited manner. On closer inspection, I realised there was a chick in his nest. We observed for what seemed an eternity, until the male casually stood up and walked away, scouring the surrounding vegetation for insects. Since he was feeding and seemed unalarmed at our presence, we took the opportunity to move a little closer for a better look and a few quick photographs. As we approached, we noticed that a second chick was hatching—a special sight indeed. Newly hatched chicks are completely covered with fine down. They are amazingly well camouflaged. The combination of white, light brown and black, makes them difficult to see amongst the aquatic plants.

## Tiny snorklers

To protect the chicks, males employ a variety of distraction techniques. These include feigning injury or running wildly

*Main Picture:* Paperbark swamp with waterlilies at Yellow Water, Kakadu National Park, Northern Territory: ideal jacana habitat. *Above:* The Comb-crested Jacana's extremely long toes help it to spread its body weight over a larger area. The comb changes colour, brightening during the breeding season and when taking on rivals. Here a male tends its hatching chicks. *Below:* Typically, jacanas lay four highly polished eggs that varying from pale or yellow brown to brownish-red, decorated with a network of fine lines.

away from the nest, calling loudly and madly flapping the wings. One of my favourite birding sights is a male 'rounding up' his brood. At our approach or any other danger, the male calls his chicks to settle beneath his wings, securing them there before carrying them to safety, tiny sets of legs dangling below each wing. If he feels that we are too close, he drops the chicks into the water, one by one, usually within a few metres of each other. The only way I can find them is to sit quietly in the boat, binoculars poised, searching for their tiny bills protruding above the surface of the water. They can 'snorkel' like that for up to half an hour.

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