



Discovery of First Breeding Attempt of Glossy Ibis in New Zealand

On New Year's Day, 2015, Mary Thompson, Peter Schweigman and Sue Galloway saw a Glossy Ibis (*Plegadis falcinellus*) sitting on a nest. The nest was in dead willows with the Royal Spoonbill colony at Wainono Lagoon, South Canterbury (44° 41.57' S, 171° 9.41' E). This is the first recorded breeding attempt of Glossy Ibis in New Zealand.

The Discovery

Wainono is a 300-hectare shallow brackish coastal lagoon 25 km north of the Waitaki River. The main reason for our expedition to Wainono Lagoon was to check out the Royal Spoonbill nesting colony that we had discovered last season. We paddled our canoe 1.5 km across the lagoon, landed well away from the colony and approached it from the landward side to about 50 m away in order to not disturb the birds. Gratifyingly, the main spoonbill colony was still thriving with more active nests than the 2013/14 season.

The dramatic highlight of the day was discovering a Glossy Ibis sitting on a nest. There were also two other Glossy Ibises roosting in the trees within a few metres of the nest. All three were adults resplendent in breeding plumage. Through the telescope we could see the beautiful rich chestnut red colours on head, neck and body and the green/purple iridescence of the black wings. The bill was pale grey/brown and there was a distinct white border between head feathers and the side of face. The two non-sitting ibises flew off shortly after we arrived and did not return while we were there.

The nest was near the edge of the spoonbill colony although within a metre of several occupied spoonbill nests in a dead willow overhanging the Hook River where it enters at the northwest corner of the lagoon. The nest was about 3 m above the water and was a tight construction of twigs, estimated to be about 50 cm wide and deep. It was smaller and more compact compared to the wider, more open, tangled platform of the spoonbill nests.

The ibis was most likely incubating eggs as several times, during the two hours we were observing, the bird stood up and changed sitting position and looked into the nest and appeared to use its bill to "adjust eggs" before re-sitting. We did not want to disturb the birds by trying to check for eggs or chicks. We managed to take some images, albeit of low quality, through the telescope to document this discovery.

Sue Galloway and Mary Thompson made a return trip on January 22nd, 2015 to see if any chicks had successfully hatched. The Glossy Ibis was still sitting on the nest. Two other Glossy Ibises flew off together soon after we arrived at 10.30 am. Throughout the day the sitting bird often stood up, turned around, looked in the nest and settled down again. We did not see any evidence of chicks in the nest although very young chicks would not have been visible from our viewing point. We remained for the whole day, observing the nest from about 50 m away.

Just as we were packing up to leave the two Glossy Ibises that had been away all day flew in at 5.40 pm, circled around several times and landed in the willow very near to our sitting ibis on the nest. The two that returned were the same size and smaller than the sitting bird. This suggests it was the male who had sat all day (this agrees with documented observations) and the other two were females, which are documented to be noticeably smaller. One came down to the nest and opened its wings and poked its bill about briefly (maybe a greeting display) and then flew off to a nearby branch to roost and preen. Both 'returnees' spent some time preening near the nest. Then at 6.30 pm, the sitting bird stood up, preened, sat down, stood up and walked off the nest. The other bird moved down to the nest, appeared a bit restless but sat down – changeover had occurred. The one that had sat all



▲ Glossy Ibis sitting on nest, 1st January, 2015. (Photo by Mary Thompson).



▣ Peter Schweigman and Mary Thompson (Otago Branch, Birds NZ) overlooking the willows in which the Glossy Ibis nest (arrow) was discovered on 1st January, 2015. (Photo by Sue Galloway.)

day spent the next 30 minutes preening. We left at 7 pm, so don't know whether this bird eventually took off to feed, but we presume so. It (he) had certainly sat faithfully all day (at least 7½ hours) and the 'new' sitter seemed to have settled down to the task. So it seems they still felt incubating was worthwhile.

From reading about the breeding biology of glossy ibis, where incubation is documented to be 20–23 days, then if eggs had been laid before 1st January, we would have expected hatching to have occurred as we were there 22 days later. However if the chicks were very young they would not have been seen from our vantage point. And it is possible that they had not yet hatched if the eggs had not all been laid by 1st January. Alternatively the eggs may be infertile or a second replacement clutch may have been laid recently. At time of writing this we had not yet undertaken another trip to see if any chicks had successfully hatched or fledged (which is documented to occur at 25–28 days). Nevertheless, we think this first breeding attempt by Glossy Ibis is a significant discovery even if the outcome is unsuccessful this time. We will have to wait another year to see if these and more ibises return to Wainono and establish a breeding colony there.

The Context

The Glossy Ibis is widespread around the world and a vagrant to New Zealand, presumably from south-eastern Australia. Small numbers have been regularly and widely reported for over 100 years, with occasional irruptions such as in 1953/1954 when 14 were seen together in Manawatu, 18 at Dillons Point, Marlborough and 24 at Invercargill Estuary, although these numbers were not maintained. Since the 1970s small numbers have been seen regularly, but mostly in ones (eg. Travis Wetlands, Christchurch), twos (eg. Foxton, Little Waihi) and four this summer (Dillons Point Wetland). The continued presence of Glossy Ibis raised the enticing possibility that breeding might occur in New Zealand, but with such small numbers in any one location it seemed unlikely. Nevertheless, with only three ibises present at Wainono, a pair has built a nest and presumably laid eggs and incubated them.

A number of factors may have combined to make this site conducive to breeding, including the following:

- Glossy Ibis have visited the area previously; the 1999–2014 Atlas has one record of Glossy Ibis at Wainono, and we saw two adults in breeding plumage at the Spoonbill colony in Dec 2013. In 1994, four were seen at All Day Bay, 60 km away. Intriguingly, the first record of Glossy Ibis in New Zealand

was in 1902 at Washdyke, Timaru, 35 km north of Wainono, so birds may have been in the area unnoticed for many years since then.

- Their association with a successful Royal Spoonbill colony (now 30 active nests raising at least 40 young, with some pairs still sitting or with young chicks on the nest at 22nd January 2015) may be a key factor. Elsewhere Glossy Ibises are often found nesting with other water birds such as shags, herons and spoonbills, and at Wainono this is also the case.
- The area around Wainono Lagoon has features that match well with described typical breeding habitat, with nest sites in tall dense reeds or low trees over water in fresh to brackish wetlands.
- The adjacent irrigated dairy paddocks as well as soft muddy verges of the lagoon would be productive feeding areas (food includes invertebrates, worms, crustaceans and small fish).
- The site is not easily accessible to human disturbance.
- In eastern Australia there is a notable movement of Glossy Ibis from summer breeding sites in southern Australia to northern areas in winter. This type of movement may happen in New Zealand too. The two ibises seen last season may have migrated north in winter with the Royal Spoonbills and encountered another ibis, also in northern wintering grounds, and these three birds then returned with the Spoonbills to Wainono. In Australia Glossy Ibises wander nomadically and do not necessarily use regular nesting sites. It will be interesting to see if the Glossy Ibises return to breed at Wainono next season and establish a breeding colony.

MARY THOMPSON



▣ General view of part of the Royal Spoonbill colony and the Glossy Ibis nest (arrow). (Photo by Mary Thompson).