REHABILITATION OF INJURED CURLEW SANDPIPER

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SUMMARY

A Curlew Sandpiper, *Calidris ferruginea,* was held in captivity while endeavours were made to splint and mend its broken wing. During the period, various methods of feeding were tried and different foods were given. Behaviour was watched and noted. Weights and measurements were taken and parasites sought. The bird was banded and released after nearly six weeks in captivity.

INTRODUCTION

On February 14, 1967, at the Laverton Saltworks, Victoria, a Curlew Sandpiper, *Calidris ferruginea,* was found with a broken right wing. It was able to flutter only and was easily captured. The cause of the accident was not known, but Saltworks employees state that they see a number of birds similarly injured. Probably these birds, during darkness, had flown into overhead wires or wire fences in the vicinity.

Recalling the work carried out by D. L. Serventy and others (1962), I took the bird home and endeavoured to bring it to the stage where it would have a chance of survival if released.

WING DAMAGE AND REPAIR

The bird had suffered compound fracture of both metacarpals and the end of one bone protruded. There was a small amount of fresh blood and swelling around the wound which appeared clean. As a temporary measure, the wing was taped in a closed position against the body. Next morning, the bird was mauled by a dog and for a while it limped badly or crouched quivering in a corner. By mid-afternoon, it appeared to be recovering and veterinary advice was sought. The wing was then splinted with balsa wood under telephoned veterinary advice and again strapped closed with durex tape.

After two weeks the splint was removed. Surprisingly enough, though the durex tape was quite firm, it adhered to itself rather than to the feathers and was easily peeled away. After removal of the splint, the bird at first made little or no effort to move the wing which drooped noticeably. On examination, the veterinary surgeon detected what could have been dislocation of the elbow joint. Shortly afterwards, the wing was flicked frequently and occasional flexing was observed. At first, flight was poor and very little altitude gained, finishing with the bird tumbling out of control to the floor.

Ten days after unsplinting, the bird was taken to a swamp and released but, so limited was its flight, it was recaptured and returned to its cage.

Thereafter, it appeared to be exercising and practising flying. Five weeks from date of capture, it was able to take off from the floor at the rear of the cage, fly up four feet to the wire at the front, turn and land safely back where it started. The alula was misplaced under the wing but it appeared able to compensate for this deformity.

HOUSING

On the first day, a large enamel dish was filled with garden sand, heaped higher in the centre and then filled with water. This was placed in the bath, food given and the bird left alone as much as possible. Next morning, as it was observed feeding and appeared healthy, the dish was moved to an outside cage five feet square by six feet high. In it were several bricks, garden cuttings and one large and one small dish of water. Uneaten food left on the sand was trampled into it so that it soon resembled the mud of its natural feeding sites. This became so noisome, it had to be replaced after one week. Feeding methods were altered with consequent lack of food spillage and the water-sand mixture remained unchanged until the bird's release.

FOOD

Meal worms were always eaten before other food and on one day, February 22, 90 worms of various size were fed to it throughout the day. As eight good-sized meal worms equal one gram, this represented approximately ten grams. The supply could not be maintained and the diet was supplemented, in order of preference, with steak (always eaten), lambs tongue, liver and fish (both taken in small quantity). Canned dog food and hard-boiled egg were not accepted. The supplementary food was frozen to permit it to be very finely sliced. The

overall daily intake was difficult to estimate, as often food not eaten by nightfall was gone by morning and was assumed to have been eaten by the bird. The minimum quantity eaten daily was ten grams.

When the mud became foetid, flies swarmed over it but investigation revealed no fly larvae. There were numerous small holes probed in the mud which may have been made by the bird feeding on the larvae. Several garden insects and spiders were also offered, but these were not taken immediately and it is probable they escaped.

METHOD OF FEEDING

Meal worms were taken from the mud, the drinking dish and a saucer with equal facility. They were picked up in the centre by the tip of the bill and shaken vigorously, then dipped in water, probably to remove the remains of the dry cereal in which they were bred. They were then drawn up the full length of the bill with an end hanging out each side, rapidly swung around end on and, still wriggling, were quickly swallowed. Often a worm was flicked away from the dish to land on the wooden floor. One worm slipped down through a crack which the bird stood watching as if expecting the worm to reappear. Thereafter, the bird would feed on the worms closest to it, watching any worm which fell on the floor. If one appeared to be wriggling away, it was swiftly retrieved. After eating liver, the bill was dipped in water though it was not clear whether this was a washing or drinking action.

DRINKING

The bird was seen to drink from both the water around the sand and from the fresh water in the small dish in which it apparently walked. At no time was the bird seen in the large dish. Feeding and drinking were interspersed.

PREENING

This was carried out with rapid probing motions of the bill. All the body feathers were ruffled and appeared to be opened up, followed by rapid shaking and associated rustling sounds. Head scratching also occurred, but whether this was direct or indirect was not noted. Eight days after capture, the bird appeared to be suffering discomfort near the vent. It kept dipping its bill in the water and then preening the area. I caught and examined it. Feathers at the rear of the vent were stuck together and hard. Some faeces were removed from the feathers, then the bird was dipped in the water and left to preen. This action appeared to overcome the difficulty and no further trouble ensued.

BEHAVIOUR

As far as possible, the bird was left alone and no attempt made to tame it. Gradually, it came to accept me and would feed while I was still in the cage only a few feet from it. At first, when I approached the cage, it remained in the back corner away from the feeding dish. It soon associated me with food and would walk to the sand and stand on it, feeding as soon as I placed food in the saucer. After the wing was unsplinted this behaviour changed. The bird would stand on a brick and then, obviously attempting to escape, fly towards the door as it was opened.

PLUMAGE, WEIGHTS AND MEASUREMENTS, PARASITES

This bird was in normal winter plumage and no change was observed during the period of captivity, though it became rather ruffled and untidy, losing the smooth appearance of the wild birds.

Unnecessary handling was avoided and the bird was weighed twice only. When the wing was unsplinted on the afternoon of February 29, after normal daily feeding, the weight was 47 grams. On the day of release, when no food was given, the weight was 44 grams. The difference could well have been accounted for by lack of food.

Measurements were culmen 34 mm; wing 125 mm; tarsus 31 mm. Mathews (1921) gives these as 39, 127 and 30 mm. respectively.

On the day of its release, it was dusted with Dri-Die 67 (silicon dioxide) and searched for parasites but without success.

BANDING

Before release, a C.S.I.R.O. monelmetal band, number 040-40836 was fitted on the right tibia and a pink plastic band on the left.

RELEASE

As its flight had improved, an attempt was made to release it on March 12, 26 days after its original capture. It was taken to a swamp frequented by other waders, but when released its flight was ineffectual and it was recaptured and returned to its cage.

The final release was made on March 24 at the Saltworks where it had been found 5½ weeks previously. It ran about 50 yards along the shore through low succulent vegetation until it mingled with a large feeding flock of the same species, which was undisturbed by its arrival. It walked into the water until its wings were almost submerged and then, looking very bedraggled, sought shelter underneath a bush and commenced preening.

It had been hoped that, in the small flock of over-wintering birds at the Saltworks, it may have been possible to sight this colour-banded bird, but, owing to a very mild autumn and winter, the flocks over-wintering were larger than usual. In mid-June, there were an estimated 1,000 Curlew Sandpipers in the area. No reports of sightings have been received to date, although Saltworks employees have been alerted.

CONCLUSION

It has been possible to keep an injured Curlew Sandpiper in captivity maintaining it in reasonably normal condition Feeding did not present a problem. Wing damage was repaired to the stage where the bird had a good chance of survival, though it is improbable that it would be capable of sustained migratory flight. Endeavours are being made to follow-up observations of this bird at its place of release.

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