### Curlew, cramp and keeping cages

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Citation: Bainbridge, I. 1976. Curlew, cramp and keeping cages. Wader Study Group Bull. 16: 6-8.

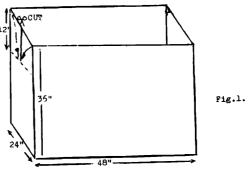
The increased success in recent years of catching such waders as Curlew *Numenius arquata* and godwits, both in mist nets, and in larger numbers in cannon nets, has focused attention on the problem of leg cramp which can occur in these birds.

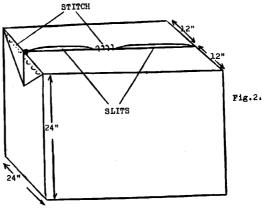
The reason for cramp is unknown, although it seems likely to be caused by the confinement of the birds in a space too small or too low to allow them to stand upright – such as a large bird bag, sack, or even a standard sized cannon net keeping cage. Obviously if the birds are caught by mist netting on saltings, a sack has to be used to transport the birds back to the base, but the use of high keeping cages can solve the problems of keeping them for longer periods, as is necessary with larger catches.

This newly designed keeping cage, which has been in operation on the Wash this autumn, appears to eliminate or at least greatly lessen the problems of cramp in long-legged waders. It is made from a standard hopsack (72 inches × 36 inches), slit lengthways to give a piece of material 144 inches × 36 inches. The ends are sewn together to form a circle of material 36 inches high. This forms the rectangle of the keeping cage – sides 48 inches, ends 24 inches. A 12 inch-cut is made down to the mid point of each end of the cage and the top 12 inches of each side are then folded over, as shown in Figure 1. This forms the roof, which is stitched down at the sides, and in the middle if necessary, to give either one or two slit entrances of the standard keeping cage types (Figure 2). The cage is held up by four 30 inch-poles, one at each corner, which may need to be guyed.

If preferred one or two partitions may be sewn into the cage, although for Curlew this is thought to be unnecessary as they do not fight. Up to 25 can be held safely in a keeping cage.

At the [1975] Wader Study Group AGM it was recom-





mended that anyone likely to catch Curlew in any numbers should be properly equipped with these higher cages, in order to avoid the cramp problems that have caused concern to Curlew ringers for so long.

## Leg paralysis in captured waders

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Citation: Green, G.H. 1978. Leg paralysis in captured waders. Wader Study Group Bull. 24: 24.

A recent note by J. van Heerden (108 Pretorius Street, Hatfield, Pretoria 0083, South Africa), 'Leg paralysis in birds' *Ostrich* 48: 118–119, 1977, is of interest to wader ringers. He describes leg paralysis following excessive chasing, over-exertion, unnecessary disturbance, excessive handling, fear and shock which may lead to death and he calls the whole syndrome 'stress myopathy' or 'over straining dis-

ease'. Wader ringers may well have experienced problems with long legged waders 'going off their legs' after capture and the species most seriously affected in UK is the Curlew *Numenius arquata* but similar problems occasionally arise with Bar-tailed Godwits *Limosa lapponica*, Whimbrels *Numenius phaeopus* and even Redshanks *Tringa totanus*. Curlews may be affected very quickly so that netted birds



may be unable to stand very soon after capture and some may die although there are no obvious injuries. In view of van Heerden's paper they may well be suffering from stress myopathy caused by the birds straining their leg muscles by pushing against the net in which they are captured: a leg motion entirely different from their usual movements. This once again lends emphasis to the view that captured Curlews must be dealt with quickly and released again as soon as possible after capture. Whenever possible they should be taken from mist nets immediately they are caught.

Van Heerden also mentions leg paralysis and death in long legged Flamingos *Phoenicopterus ruber*, *P. roseus* and *P. minor* which had been chased, were exhausted on capture and then transported with their legs in a folded position. Histological lesions were found in the leg muscles which suggested that their blood supply had been impaired when the legs were 'folded' thus leading to muscle death and leg paralysis. It seems likely that waders which are unable to stand after being confined in a low roofed keeping cage may be suffering from a similar condition. It is always noticeable that small waders run about in keeping cages which are 30–35 cm high whereas taller species are quiescent and crouch on folded legs. They may be unable to walk after quite short periods in this position although not all individuals are affected. To alleviate this problem Bainbridge (*Bulletin* 16:

6–8) described a tall hessian cage about 90 cm high which reduced the incidence of leg cramp in captured Curlews. It can be concluded that if capture of Curlews is expected his advice should be followed; if capture is unexpected the birds should be released again as rapidly as possible and this may require special efforts on the part of the ringer.

Birds with leg paralysis may recover. In the short term wader ringers could try suspending the birds in a sling so that the feet are on the ground in a normal position – the suspended bird being kept in a tall, darkened and undisturbed place. It is better to try this than do nothing. In the long term specialist treatment may be required – vitamin injections, forced feeding, quiet and solitude for perhaps ten days and minimal handling. This requires the co-operation of people used to keeping birds in captivity and probably a vet. This may be beyond the resources of most ringers who must therefore aim at prevention by working rapidly and the use of tall cages.

Finally a personal observation – captured waders occasionally suffer from wing strain, or wing droop and cannot fly when they are released. Providing they have no obvious injuries such birds should be left in peace on undisturbed coast where they can feed. They will probably recover. Once released they should not be chased or harassed in any way.

If anyone has any further observations on these matters we should be pleased to hear from them.

# The "cramp, stress myopathy, over-straining" syndrome in captured large waders

Recent developments and rising interest in catching Curlews Numenius arquata in Britain has once again high-lighted this problem. In the following note Derek Stanyard reports on recent experiences. Discussion at the WSG autumn [1978] meeting added further information – including the observation that not everyone read all of Bulletin 24 where a review of a paper from South Africa (van Heerden 1977) contained many of the comments which were later put forward as unique observations at the meeting! We suggest that inter-

ested readers and prospective Curlew catchers refer back to that note (Green 1978) before reading on.

Undoubtedly Curlew trapping presents special problems and every would-be catcher must be prepared to make special arrangements when their capture in planned. A design for a suitable keeping cage is given after Derek Stanyard's note followed by guidelines which we hope will be helpful to Curlew catchers.

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## Further notes on Curlew cramp and keeping cages

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Citation: Stanyard, D.J. 1979. Further notes on Curlew cramp and keeping cages. *Wader Study Group Bull.* 27: 19–21.

### Introduction

The recent increase in catching large waders, particularly Curlew *Numenius arquata*, has high-lighted the problem referred to by British ringers as 'the cramp condition'. Various people have theorised on its possible causes but so

far there are no definite conclusions apart from van Heerden's (1977) report. With one Curlew study in progress and further ones planned by west coast groups it is appropriate for the Wader Study Group to discuss the problem and draw on past experiences to set out guidelines for future activities.

