

The good start of the counts in the three countries mentioned above and the need for a wider regional distribution of the counting sites gave us the courage to try to organize counts as a Wader Study Group Project elsewhere in Europe. If anyone would like to take part in the project and feels able to count the resting waders at a certain site (preferably inland site, but some coastal sites of inland-type habitats also desired for comparisons) (s)he should fill in the form included in this issue of the Wader Study Group Bulletin. We* will then provide them with counting forms etc. There is no fixed starting date for the counts in this year; if anyone likes to commence immediately (s)he should do so. The counting should be carried out on the weekends until 30 November. The starting date for the next year's season will be 2 March. We are intending to have close contacts to all people taking part in the project by regular circulars including the results of the counts.

We are hoping for your co-operation.

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* the co-ordinator for Great Britain will be A.J.Prater, Royal Society for the Protection of Birds, Scan House, 4-8 Church Street, Shoreham-by-Sea, Sussex, BN4 5DQ, with whom British volunteers should communicate.

PROJECTILES AGAIN

by G.H.Green

In December 1978 I reported on new developments in cannon net projectile design and recommended use of a straight metal rod in place of a variety of ropes, hawsers, hinged rods - a gamut of ramshackle contraptions which had been devised during the search to eliminate 'troubles with projectiles' (Green 1978). Since then we have used rods (type 8 in the previous note) on many occasions without any failures. Several other groups have changed to rods and everyone seems to find them superior to the older designs - indeed they have the added advantage of spreading the net more efficiently because they are heavier. The rod is 7/8inch (15 mm) diameter welded into a hole drilled into the end of the projectile. The end protruding from the barrel is fashioned into a circular loop which is welded into position. The net traces are attached to the loop either by threading the spliced trace loops through it or with a shackle. There has been a good deal of concern in the past about the strength and reliability of shackles but we seem to have overcome this problem by using shackles made from steel of the same diameter as the rod. Overall these measure about 4½" x 2½inch (approx 32 x 7 cm). Obviously such a large shackle requires a large loop on the end of the projectile rod - internal diameter about 1½inch (4.5 cm). The strength of this equipment probably contains very large safety margins and so far we have not experienced any failures - the shackles have not even bent!

We generally set the net laid over the barrels as described previously (Green 1978) and take care to arrange the shackles so that the curve of the D lies in the projectile loop and the net traces are round the shackle pin. The shackle is folded back towards the traces so the whole thing moves smoothly on firing. Incidentally a slow motion film shows that the projectiles cartwheel very soon after firing (within 2-3 projectile lengths of the barrel) and when the net setting method described is used the long rod moves more or less vertically about the point of balance.

The rods do sometimes get bent when they land on rock or if the heavy end penetrates soft sand or mud so that a 'whipping' effect occurs. We straighten them with a heavy hammer and I am told that mild steel rod of this size is very unlikely to show fatigue and fracture in these circumstances. Obviously if very severe bending occurs the metal may either require heating before being straightened or the rod replaced. If a bend occurs near the weld careful inspection of the weld should be made for signs of weakness - if in doubt replace the rod. Needless to say high-quality welding is essential.

Besides manufacturing our own equipment we have now built several sets of projectiles for other groups and we have also adapted old projectiles by cutting off the old ring, drilling a hole and welding a rod into place. Currently we can undertake these jobs for customers at the following prices:

New projectile to your size requirements (without shackles and O-rings).....	£10.00 each
Modification of old projectiles.....	£5.00 each
Supply of large shackles.....	£2.50 each
Supply of O-rings (one-piece - not glued).....	£0.40p each

Incidentally O rings are often lost because the grooves in which they lie are not deep enough. On the new projectiles we make these deeper than many people currently use so the O-ring requires little filing to make it fit the barrel. Old projectiles are often too difficult to manage for us to offer to deepen grooves - you could use a file!

These costs do not include carriage - people generally seem to manage to deliver and collect in some way and wader-people are often travelling about the country! We cannot enter into the complications of the export business but we are still happy to make the equipment for overseas buyers if they can make the arrangements and pay all the carriage costs etc.

Reference

Green,G.H. 1978. Troubles with projectiles. Wader Study Group Bulletin 24: 20-22

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(Mr J.M. McMeeking, The Whimbrels, Goverton, Bleasby, Nottingham NG14 7FN, England, has offered to assist with the export of projectiles for any overseas buyers who have problems in arranging this - Eds.)