SINGLE SHELF WADER NETTING

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Waders are one of the trickiest of smaller birds to catch. They combine rapid flight, with very sharp eyes and a tendency to feed or roost in flat open spaces where there is no background to make mist-nets invisible. Only when they are feeding in overgrown marshes or streams can they be caught during daylight. Dusk, dark or dawn are usually prerequisites for successful catches.

Since there are very few wader ringers in southern Africa, who often operate on their own, the easiest catching methods are required. Traps may be used, but these are only of use in non-tidal conditions and are very prone to predation. Large 2 shelf wader nets have often been used but these tend to damage the birds' wings unless the birds are extracted quickly. 3 or 4 shelf mist-nets may also be used but these always required extensive guying and several helpers. A large spread is very expensive. From experiments made in the past I have found that over 50% of the birds are caught in the bottom shelf anyway. Thus we are left with the single shelf net. These are easy to set up and take down, easy to move around at night and the poles do not need guying. Also one can get a greater horizontal coverage of an area at less cost. I find that, where appropriate, I can operate up to 25 nets on my own quite comfortably. For poles I use 6'6" and 8' solid 5/8" aluminium rods, these being light and easily bent straight again if damaged.

Unfortunately there is no simple way of catching waders. One has to take into consideration water-levels (or tides), the state of the moon, the time of the year, the species one wishes to catch and the type of area in which you are operating - whether it be a dam or pan, or sewage works, salt-works, a marsh, a stream or river, the open coast, estuary or tidal lagoon. Some birds feed extensively at night in tidal conditions whilst others do not; some only feed

when there is a moon (usually between $\frac{1}{4}$ and $\frac{3}{4}$ phases) whilst others will only feed on moonless nights prior to departing nortwards on migration. However, I do not intend to go into the feeding habits of each species individually but just to give some indication of techniques used in catching waders in various habitats. I would like to raise, one point about palaearctic waders; often one will see a fabulous looking day-time feeding area for, say, Ruff but it is worth determining whether they remain there at night. Many palaearctic waders roost well away from their feeding areas, especially in coastal and near-costal regions. The Ruff nearly always roosts away from its main feeding area in any locality and should be tracked to its roost in the evening.

Another point to remember is that waders only fly low over water at night - over land they usually rise quite high to ensure avoidance of any obstacles therefore one should nearly always net <u>over water</u> except under conditions to be mentioned. Also one must ensure that the nets are drawn taut between the poles and that there is sufficient bag left in the net to hold the birds. The other important general point is that the nets must be at least 2' above the water at night otherwise casualties will occur if a couple of heavier waders or several small waders go into one net and drag it down to the water.

The following are a few simple procedures that may be used in different habitats.

a) <u>DAMS</u> The best places are usually where the river flows into the dam, silt being deposited thus forming mud-banks or marshes. If the mud-banks are long and narrow, set the nets right across the ends and as far out into the water as the length of your poles will permit. If netting a straight shore then set nets at right angles to the shore, with only about 10' or so covering the exposed mud. If many pools have been left on the mud-flat then nets may be placed across these, preferably facing into the breeze if there is one. However, usually only small local plovers will use these pools at night. If small mud islands occur offshore net across from the shore, and intervening water to about half a net's length from the outer extremity of the island.

b) <u>PANS</u> These are usually fairly shallow places thus leaving one with a huge area to attempt to net. Watch for the main feeding zones and roosting preferences. Often low mud-banks occur offshore - follow procedure mentioned in (a). Otherwise net at right-angles to shore along length and parallel to, but offshore from the favoured feeding zones at the ends. Each pan differs so it is purely a matter of experimentation.

c) <u>SEWAGE-WORKS</u> These vary considerably and most are unsuitable for netting because of concrete settling tanks now generally in use. The best places are usually along the narrow divides between ponds or if the ponds are very shallow, with exposed mud and plant life, then across the pond at favoured feeding spots.

d) SALT-WORKS These are usually vast places so one must watch for the roosting areas. Net along the pond divides, especially the narrow, low ones. If the divides are partially flooded to an inch or two then the birds will prefer to roost at these points. It will be necessary to disturb the birds at night so that they will move back to their favoured roosting spots - this may be done on dark or moonlit nights though dark nights are usually better for roost netting.

e) MARSHES One can box-net any patches of exposed mud in a marsh as birds will move in from any angle. These places are particularly good for snipe and some of the larger local plovers. This type of locality can be netted during the day - I find it best from first light in the morning till about 10.00 hours. Much less stuff is caught at dusk and very little at night, even on moonlit nights.

f) STREAMS Streams, whether rocky, gravelly, sandy or muddy, can usually be netted best during the day and provided there is sufficient background for the nets quite good catches can be made. Just set nets from bank to bank across favoured feeding areas making sure that there is no open water against which the nets can be seen by the low flying wader.

g) OPEN BEACHES Very difficult to net because of continuous changing tidal conditions and large waves suddenly taking your nets and poles off to sea (as happened to me on Dassen Island). However, where conditions are suitable, and often where there are large piles of decomposing wrack available, net along the waters edge parallel to the beach. Nets set across beaches can catch small plovers at night but catches are small.

h) RIVERS Usually net across sand or mud-banks or shallows at night. If there is a background of sedges etc. then some birds can be caught during the day.

i) ESTUARIES AND TIDAL LAGOONS It is often difficult to find suitable netting sites and then one has to tie in with the tide and moon unless the roosting area has been discovered. Again, roosting areas may be flooded out during very high tides. In an estuary it is best to find long mud or sand banks that are only shallowly inundated at normal high tides and which are favoured feeding areas. Use 8' poles as the height of the full tide may be variable and nets should be at least 2' preferably 3', above high water level. Set nets across the mud banks at either ends and at right angles to the bank over suitable mud flats and shallow water along the sides where the banks are wider. Stagger the lines of nets to suit different conditions. It must be remembered that it is in estuaries that most of the larger waders such as Whimbrel, Bar-tailed Godwit and Grey Plover are caught therefore the nets must be placed at a greater height above the water.

The above also applies to tidal lagoons where these conditions apply but one must take into consideration roosting areas there, whether on salt-marsh or sand-bars and these must be netted accordingly. On salt marsh it is best to set lines of nets facing into the wind as birds prefer to land into the wind. Where the roost is on a sand spit one can net along its length and closest to the waters edge in the direction from which most birds come.

In these roosting areas it is best to set your nets after dark or in the evening if the tide is going out or still well out. Generally speaking for roost areas it is best to set nets after dark on moonless nights though on moonlit nights this is not so important.

Again each person's local condition may vary somewhat and experimentation has to be made to find the most suitable method. A method that may be ideal under certain weather or moon or tide conditions may not always be successful on others, thus one has to be one move ahead of the birds all the time - stimulating netting at least!