

his studies of the mechanics of the wing and leg bones. At the Trust itself a representative collection is being built up which will be especially strong in skins of downy young. All this anatomical material, it might be mentioned, is only gathered as it becomes available through natural causes.

The gratitude of the Trust, it will have been seen, is increasingly due to financial support from outside bodies, the Nature Conservancy, the Nuffield Foundation and the Bristol, Clifton and West of England Zoological Society, and to the facilities afforded by Bristol University. But it must be emphasised that the Trust continues to bear more than half the cost of the research programme and that outside support is essentially on a *quid pro quo* basis. Continued support both indirectly by subscription and directly through the Duck Adoption scheme is thus very essential if the good work is to be maintained.

HOW TO MAKE AND USE DUCK TRAPS

By Major-General C. B. Wainwright, C.B.

Traps

I have proved two main types of trap: (i) 15 feet or 12 feet square, 6 feet high, with three funnels, and (ii) 6 feet square, 4 feet high, with one funnel. The designs of the traps are illustrated in Figures 1 and 2.

If the water level is constant so that the traps do not have to be moved, the four corner posts and the posts on each side of the funnels and the door can be driven into the ground, and no ground frame is required. As after a time the bottom will be lowered by constant trampling a moveable trap is best.

If the trap has to be moved a ground frame of 2 inch by 2 inch timber, on to which the vertical posts are bolted, must be used. The side members should be extended 1 foot at each end to act as skids. On large traps the front and back members should be extended about 8 inches at each side so that a rope can be looped round them for pulling.

Funnels

The outside is square and the top horizontal, the sides tapering to a point. The front funnel on the 12 feet trap is 3 feet \times 3 feet and extends 4 feet into the traps. The side funnels are 2 feet \times 2 feet and extend 3 feet 9 inches into the trap. On the 15-foot trap, the side funnels are 3 feet \times 3 feet. The tapered end of the funnel is cut as shown in Figure 3, the top of the opening 6–9 inches above the water level.

Skirt

Ducks will splash away the mud and get out under the sides of a trap unless there is a skirt. A strip of wire netting 2 feet wide is attached to the side and lies flat on the ground inside the trap all the way round. In the smaller traps 1 foot on the sides is sufficient, but 2 feet is best at the front and where one steps on entering the door. A skirt is necessary in a stationary trap, although it may be trodden into the mud. The bottom of the sides of the funnels should be laced on to the skirt.

Escape Door

It is essential to have a door reaching ground level which should be left open if the trap is not going to be visited for over 24 hours, so that small birds (or ducklings) can get out; otherwise they will die. It is quite useless simply to

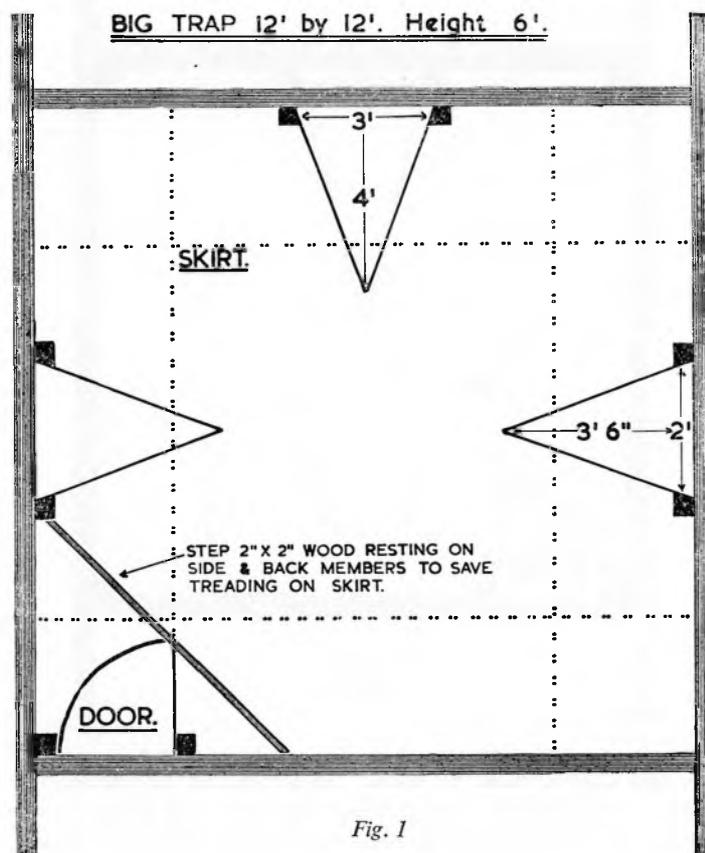
close the funnels: something, animal, bird, or elements, will certainly force them open sooner or later.

Netting

The best mesh for the wire netting for the whole trap is 1-inch mesh. A fairly heavy gauge is desirable, as it stands more wear and tear: round the lower part of the traps gauge 18 or heavier should be used.

Wood

Use about 2 inch \times 2 inch for bottom frame and 2 inch \times 1 inch for the rest. Do not paint or stain it.



Moving

As the water level changes, big traps can be moved down or up the shore by attaching a rope to the extension of the front or back members and pulling. The small traps can easily be pulled by one man.

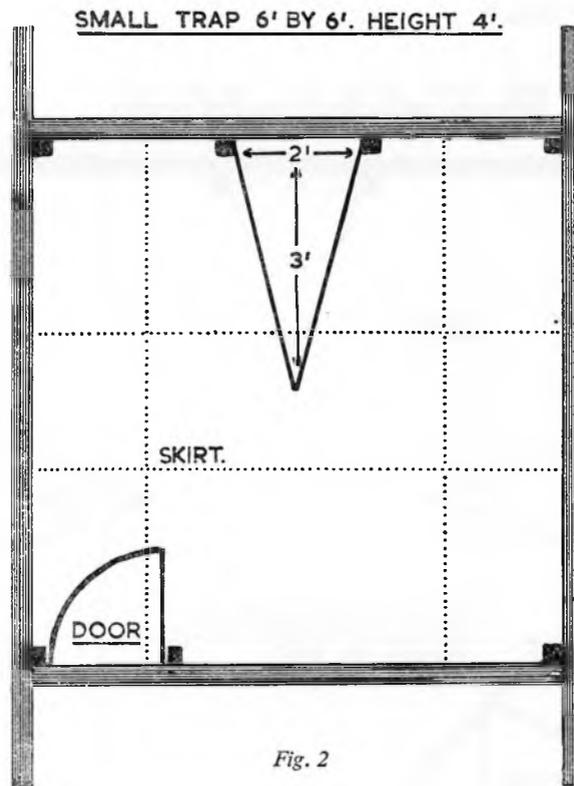
A big trap can be moved to another site on the same sheet of water by floating it on sealed empty drums attached to the bottom frame. Small traps can be carried in a boat.

If traps may have to be moved from one sheet of water to another, it is convenient to make the larger sizes in four sections, with the top a sheet of

netting laced together which can be taken off and rolled up. The funnels should be made detachable, so that the four sides can be carried flat on a trailer or other vehicle. Six feet traps can be carried assembled.

Siting

Traps should be placed so that the front is in 1 to $1\frac{1}{2}$ feet of water, with, if possible, the last foot at the back on dry land. It seems that ducks prefer traps in the open, not among reeds or other cover, which may hide some enemy.



Bait

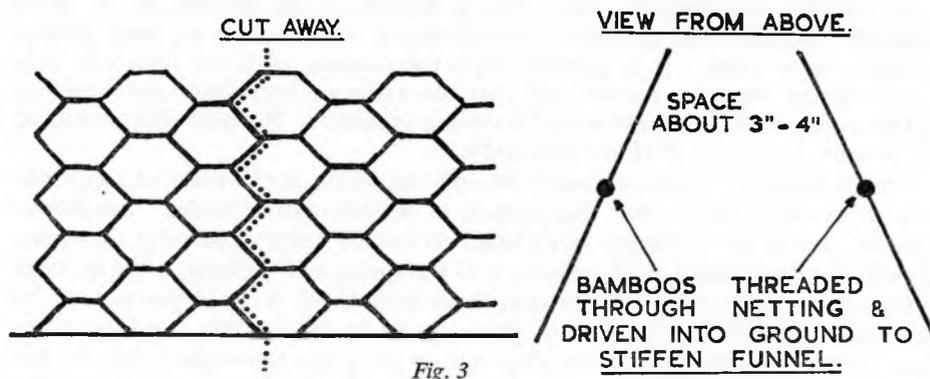
Small seeds and corn should be used. Some should be placed on dry land (a small island of turfs if necessary) inside the trap and some thrown into the water inside the trap; enough will float out to bring the ducks along. *Do not* throw a lot outside the trap; you want the ducks inside, not feeding outside.

Decoys

It is as well to ring and leave one or two birds in the trap. Do not keep the same decoy too long; if possible ring new ones every day and let the old ones go. Cock Teal seem the best decoys for all species; cock Mallard are pugnacious and therefore dangerous.

Visiting

If used on large sheets of water where ducks can remain undisturbed by your approach, traps may be visited in daylight, but on small waters used in daytime



they should only be visited in darkness. (At places like the pool at Mileham, described by P. L. Wayre at pp. 19-20, which ducks use for feeding at night but not in the daytime, day visiting is clearly preferable.)

Catching inside the trap

Take a supply of sacks with a wire hook attached to hang on the wire netting inside the trap and a string, also attached, with which to tie up the mouth. Catch up all the ducks inside the trap and put them into the sacks. Not more than four Mallard or six Teal should be put in one sack and Teal should never be mixed with bigger ducks. Ring those to be used as decoys and leave them in the trap. Tie up the sacks and take the other ducks away to a convenient place for ringing and recording.

Ringing

Good ringing cannot be done in discomfort. Take the sacks to a shed or some suitable shelter and ring the birds there. Ducks will remain quiet and in good condition for an hour or so in *dry* sacks which are *not too full*.

SUMMER RECOVERIES OF WIGEON, PINTAIL, SHOVELER AND TUFTED DUCK RINGED IN BRITAIN¹

By Hugh Boyd

IT has been generally accepted that only a small proportion of the ducks found in Britain in winter breed in this country and that most of the visitors come from Scandinavia, the Baltic countries and farther east. Recoveries of ringed ducks are of no great importance in establishing the limits of the breeding range and the passage routes of a species, which can be done more effectively by direct observation, but they do show how the British-wintering populations are distributed within the specific range. In this paper the summer recoveries of

¹ I am much indebted to Miss E. P. Leach, formerly Hon. Secretary, and to Mr R. Spencer, Secretary of the Bird Ringing Committee of the British Trust for Ornithology, for communicating the data from which this paper was compiled.