

TRAPPING TURKEYS IN FLORIDA WITH THE CANNON NET

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ABSTRACT

After two years of minor experimental use, the cannon net trap was made operational for routine turkey trapping in Florida. In 1963, 1964 and 1965, 934 turkeys were captured with the equipment and procedures described in this paper. A list of major equipment, its current cost, and sources of supply are included.

INTRODUCTION

During the past two decades restoration of the wild turkey has become an important phase of game management in most of the 39 states originally inhabited by the species (Mosby and Handley 1943).

Many areas once inhabited by wild turkeys can no longer support them, but many areas remain barren only because they lack breeding stock. And some areas are becoming reforested suitably for turkeys after years of farming or other use. The problem of acquiring enough turkeys to stock these areas has been troublesome. In an effort to obtain turkeys for release quickly, many states tried pen-raised birds. The efforts were unsuccessful (Burget not dated, Preston 1959, Hardy 1959, Johnson 1959 and Sickels 1959). Finally it became apparent that restocking could be done only with wild-trapped turkeys.

In early trapping attempts the pole trap was the most widely used. The many variations of this trap were very similar in their working (Wheeler 1948). The traps did provide a few turkeys and the success which resulted brought increased demands for more wild-trapped turkeys. This has stimulated efforts to improve trapping methods.

Herbert H. Dill and William H. Thornsby (1950) developed the cannon projected net for duck and goose trapping and mentioned its potential for trapping turkeys. Drop nets and cannon nets have been used successfully in Oklahoma (Ellis 1960) for capturing turkeys. Ellis (1960) reports on the use of the drop net. He mentions the cannon net as having advantages over the drop net but does not describe the cannon net. During the six-year period prior to 1961, 250 turkeys were trapped in Missouri with the cannon net (Lewis 1961). In seven trapping programs during a four-year period in West Virginia 323 turkeys were captured with the cannon net (Bailey 1959). Texas has reported the successful use of the cannon net since 1963 (Uzzell, P. B. 1965, personal communication).

A survey of the literature on the subject reveals several articles on the use of the cannon net with waterfowl (Dill and Thornsby 1950, Turner 1956, Marguardt 1960) but I cannot find a description of the equipment used and adaptation of the technique for catching turkeys.

The purposes of this paper are to describe the development of the cannon net method in Florida and to provide information about the availability, cost, and use of the equipment and supplies which we use.

Florida's turkey trapping program began in 1949. From 1949 to 1959, 1,656 turkeys were trapped mostly with drop door traps. Unsuccessful experimentation was carried on with a type of drop net and a cannon net, but no record of the early trials can be found. In 1960 experimentation with the cannon net was resumed.

During the 1960 trapping season two attempts were made to trap turkeys with the cannon net. Two turkeys were caught. In 1961 several more attempts were made with only slightly better results. Only 26 turkeys were caught that year, but useful experience was

gained. At first, we were using a 30-foot by 60-foot tarred fish net. The combination of a heavy net and high firing elevation angle gave the turkeys sufficient time to escape under the leading edge of the net. The cannons were homemade and had to be hand loaded with black powder. Often the charges failed to fire. At this time we decided to use what we call a "double net"—two nets fired at each other. These nets of No. 6 nylon twine were 30 by 60 feet and placed parallel to each other 45 feet apart. To project each net we used three Dill cannon assemblies, fired by a hand-loaded 12-gauge shell made by Thornsbury at Swan Lake Refuge, Missouri. The firing elevation of one series of cannons was slightly higher than the other. The double net took twice as much work to assemble and move, but did eliminate turkey escapes from under the leading edge of the net. During trapping periods in 1962 and 1963, 309 turkeys were caught with the double cannon net, although turkeys were reluctant to walk between double nets even after dummy nets had been present for several days. After the 1963 trapping season we decided to try a larger single net and lower the firing angle of the cannons. Two 60 by 50-foot nylon nets were purchased and put into operation singly. Turkeys showed practically no fear of a single net when a dummy net had been set up a few days in advance. These nets worked beautifully with very few turkeys ever escaping the net.

During the trapping seasons of 1964 and 1965 a crew of four trained turkey trappers caught 1,060 turkeys on Lykes Fisheating Creek Refuge, using a combination of drop door traps, cannon nets, and drugs. The cannon net accounted for 625, the drop door traps accounted for 227, and the drug, used experimentally, accounted for 208 turkeys.

PRE-TRAPPING PREPARATIONS

For every man working in the trapping operation, ten to fifteen good trap sites were selected in areas which are known to be used daily by turkeys. A clearing large enough to spread the net with projectiles attached is necessary. A clear area with short grass is preferred, but a clear sandy area will do. It is important that the area be free of loose debris, which may foul the net, or standing grass and weeds that tend to hold the net high enough for the turkeys to escape. It is best to build the blinds before the pre-baiting operation is started. Blinds should be about 50 feet from the net to allow good vision of the whole net. Blinds may be made of native vegetation or artificial material (Fig. 1).

Dummy nets and cannons were placed at the trap sites and baiting started two to three weeks before trapping began. The dummy nets were old fish nets approximately the same length as the real net. Width of the dummy net is not important as long as there is a clearly visible length of rolled up netting on the ground. The dummy net was usually gathered and tied at 10 to 15-foot intervals in order to make it easier to handle. Dummy cannons were placed where the real cannons would be on trap-day. The dummy cannons were made from light tubing, the approximate size of real cannons. We used 2.7 inch rocket tubes discarded by the Air Force.

Proper baiting at the proper time is the key to having turkeys available to trap with the least expenditure of time.

The area around the net was usually baited generously until signs of turkey usage were noted. Bait was strung away from the net in directions consistent with best used travel ways of the turkeys. As soon as turkeys began using the trap site, bait was confined to a string 12 to 18 inches wide, approximately 36 inches in front of the net, and 15 to 20 feet on either side of the middle cannon (Fig. 2). It has been found that small amounts of bait will entice the turkeys to be prompt and early in coming. Too much bait allows the bait to be available throughout the day causing turkeys to become erratic in their appearance. Too little bait can cause the turkeys to desert the feeding spot. Decisions as to how much bait to put out were made for each area according to the amount of usage by other birds and animals. Baiting just before daylight proved to be good practice to ensure that bait was available

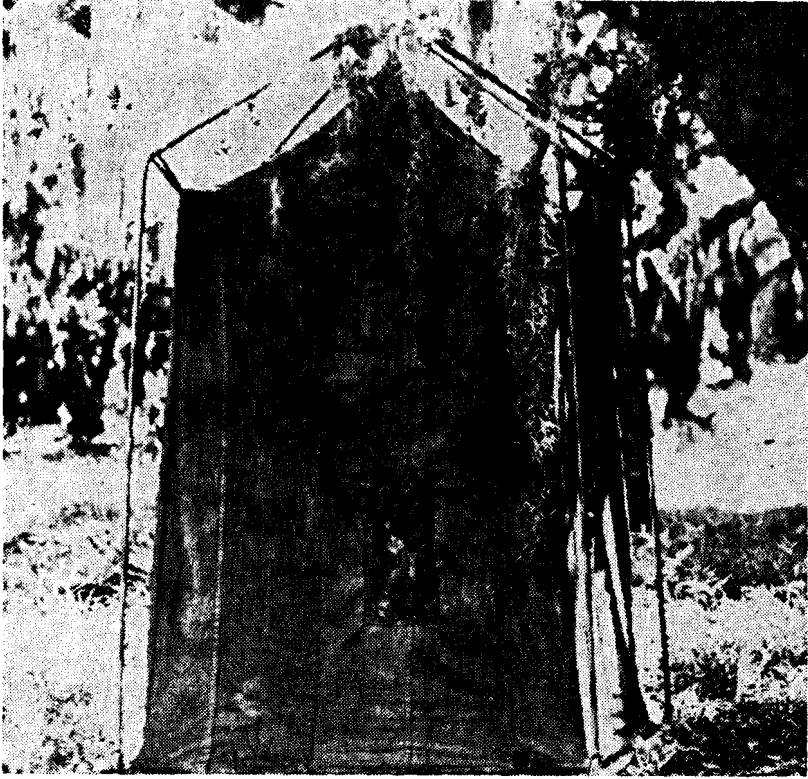


Figure 1. Turkey blind made from cabana type tent with camouflage netting for viewing.

early each morning. When this was done, we could usually trap at sunrise or very soon after.

Several baits, such as scratch feed, horse and mule feed, sunflower seed, standard bird mixtures, and corn have been tried. We have found corn to be the best. Normally whole yellow corn is used with cracked corn or occasionally mixed with scratch feed. The morning the net is to be fired, scratch feed is used to encourage longer feeding time in an effort to provide more time for a larger number of turkeys to arrive at the net.

Usually a group of turkeys is ready to trap in about five days after they first visit the bait site (Fig. 3). By baiting in several widely separated places, a choice of sites can be made for trapping each day. If only one net is used, this means it must be set one day and fired the following day. However, putting out an operational net may alarm the turkeys to the extent that they may not appear on schedule the following morning. The best method has been for each man to have two operational nets; setting and firing each net alternately. By careful attention to this method, a catch of turkeys may be brought in each trapping day.

SETTING THE NET

Regardless of when a net was to be fired, it was moved into position when an adequate number of turkeys were using the trap-site. The dummy net was rolled up and the real net placed in the exact place of the dummy net. The trailing edge of the net was staked down with steel stakes at each end, in the middle, and between the middle and ends. This kept turkeys from running out from under the trailing edge.

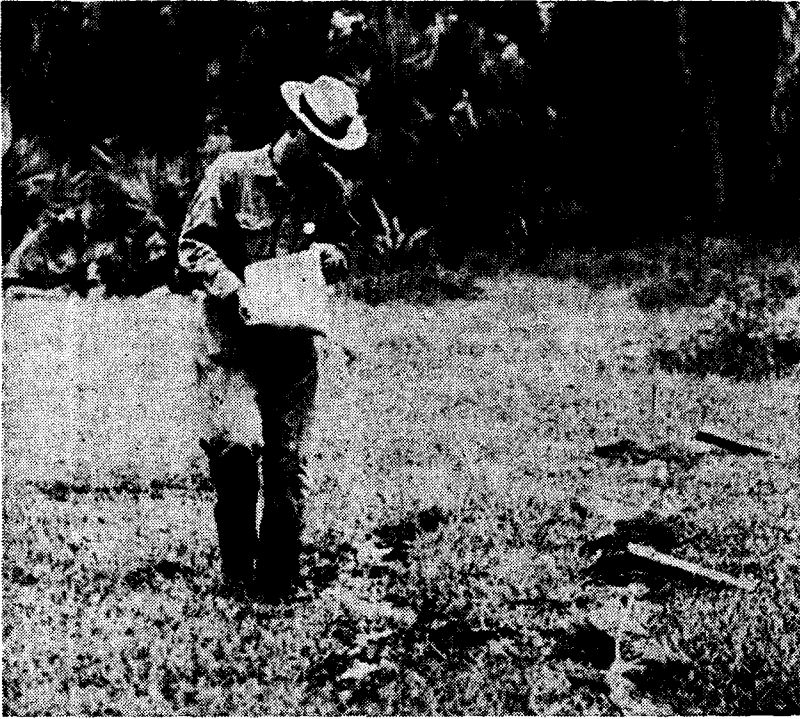


Figure 2. Baiting turkeys close to net is important to making a good catch.



Figure 3. When turkeys are readily feeding in front of net as in above picture they are ready to be trapped.

The net was fan-folded in a long thin pile about 12 to 18 inches wide on top of the trailing edge. Stretching the net out caused twigs and small bits of debris to be caught in the net as it was pulled in. Standing over the net with feet at trailing edge, we usually grasp the leading edge and gather the net into one hand, cleaning the net until the trailing edge is reached, then carefully lay the net on top of the trailing edge. This was normally done about every 10 feet. Unless the net was extremely tangled, this job could be done very quickly with practice. Next, the electric cord for firing was placed along the trailing edge of the net, out of sight, and lead to the blind. Leaves, grass, or sand was used to hide the wire. Next, the cannons were placed in position at the ends and middle of the net. Cannon bases must be set in the ground firmly so that the cannon will be at a 17-degree angle with the ground. Projectiles were lubricated with graphite and placed in the cannon barrels. O-rings on the projectiles were replaced each year and kept clean and free of burnt powder and dirt. Lead ropes on projectiles were attached to the lead loops on the leading edge of the net and placed in such a manner so as not to tangle with the net when fired. As a precaution to keep the leading edge ends of the net from folding to the middle of the net, tie-down ropes were attached to the leading edge and run forward from the net at a 45-degree angle, approximately 30 feet, and staked down. When staked at the proper angle, the tie-down rope will check the unfurling of the net with a minimum amount of kick back. (Turkeys have escaped from nets not equipped with tie-down ropes and a few have been killed by the projectiles jerking back into the net.) With these preparations, the net was ready except for the powder charges.

The charges were placed in the cannon and connected to the wire, or left disconnected until the following morning. It takes only a few minutes to do the job, but it may be safer to wait, especially if meddlesome people are around. When turkeys had been feeding regularly at the site before the net was set, no further baiting was done that day if firing was to take place the following morning. If firing was not scheduled for the following morning, bait was left after the net was set or preferably before daybreak the next morning.

FIRING THE NET

The morning the net was to be fired the trapper arrived at the site before daybreak. If he had been in the habit of baiting the site before daybreak, he drove directly to the net, loaded the cannons, checked and baited the net, and stored his gear in the blind. After removing and hiding his vehicle he returned to his blind by the time the sky was lighting up. If the turkeys had been baited properly, and he was lucky, he had turkeys on the site shortly after daylight and occasionally before sunrise.

Knowing just when to fire the net requires knowledge and experience. All that can be said is to relate some of our experiences with turkey trapping in Florida. Many trap sites will have several bunches of turkeys using them. In winter, old gobblers flock together and young gobblers and hens stay apart in flocks of all hens, all young gobblers, or some combination. Trap sites used by hens and gobblers are usually visited first by a group of old gobblers ranging from eight to 12 in number. When old gobblers appeared first, they were usually caught quickly. If not, when another group of turkeys approached, the old gobblers would usually not tolerate them on the same bait line. The turkeys running and fighting each other would make a clean cannon shot nearly impossible.

Regardless of sex it is hard to get the whole flock on the bait line simultaneously. In most cases, it was easier to trap one bunch at a time and reset the net for the next day. In this way as many as 46 turkeys have been trapped from one trap site during a winter season.

After firing the net over turkeys, the trapper hurried to the net and secured the turkeys in the net, so they would not injure or defeather themselves. To secure the turkey in the net, the trapper would pick up the turkey by placing his hands over the wings. After twisting both turkey and net, he laid the turkey back on the ground. After all the

turkeys were secured by this method, he would bring a vehicle to the net site and leave it running. The noise of the vehicle warns off any approaching turkeys and prevents them from being startled by walking up on a spread net full of turkeys. The trapper removed the turkeys from the net and placed them in boxes on the vehicle. After the turkeys were in boxes, the net could be reset or picked up. The projectiles are much easier to load if wiped clean and loaded into the cannons immediately.

If the net is removed to another area and the trap site is to be maintained, a dummy net and cannons were put out.

The turkeys were removed to a central location for banding and preparation for shipment or release.

CARE OF EQUIPMENT

Cannons should be cleaned prior to the trapping season so that projectiles slide smoothly into the barrel. A rust preventive paint helps protect and camouflage them. During trapping, if projectiles become difficult to load into the barrels, it is time to give them another cleaning. If barrels are in bad condition, an automobile cylinder hone attached to an electric drill will clean them very well.

Projectile ropes become frayed and worn with use. They should be checked often to see that they are strong and securely attached. Nets should be checked after firing for torn places or holes made by rodents.

The electric wire should be checked thoroughly each time it is picked up to make sure rodents have not chewed the wire apart. This can be done by running a hand along the wire while picking it up. Nets should be stored in a dry, cool place, secure from rats. The cannons and projectiles can be cleaned and set in a barrel of crude oil to prevent rust inside the barrels. Before the next trapping season, they can be taken out, cleaned, and painted on the outside with a rust preventive paint.

MATERIALS

Materials and their approximate current cost for the operation of one cannon net setup are (Fig. 4):



Figure 4. All the materials needed for trapping with a cannon net are shown above. Trapper is holding the CTI 1100 plastic net cartridge.

ITEM	COST
Dill Cannon Assembly (3 cannons and bases)	\$17.50 ea. \$ 52.50
150 foot electric cord @ .04¢ per ft.	6.00
1 6v dry cell battery	4.50
7 3/4 x 18 inches steel stakes @ \$1.25 ea.	8.75
Net cartridges @ \$.65 ea.	
50 x 60 foot nylon net	180.00
(a) Twine, size No. 6 nylon. Breaking strength 30 pounds.	
(b) Edge and Lead Ropes, size 1/4" dia. nylon rope. Breaking strength 1,500 pounds	
2 1/4 inches x 30 ft. nylon tie down ropes @ .04¢ per foot.	2.40
Automobile cylinder hone (for cleaning cannons)	13.95

The Dill cannon assembly can be purchased from Aberdeen Iron Works and probably from other manufacturers. The net may be purchased from most marine suppliers. We buy ours from the Marine Supply Co., St. Augustine, Florida.

The net cartridges may be purchased from Central Technology Inc., Harris, Illinois. Two cartridges are made—the CTI 1100 and the CTI 1400. The CTI 1100 contains 110 grains of black powder and the CTI 1400 contains 140 grains of black powder. A cartridge with smokeless powder is being tested but is not operational at this time.

Other materials listed may be purchased at local hardware stores.

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