A Drop-Net Trapping Technique for Greater Prairie Chickens

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In order to capture prairie chickens with the use of a drop-net it is necessary to first attract and concentrate the birds into the area covered by the net. This is accomplished by pre-baiting a selected spot in a feeding area already being used regularly by prairie chickens. It is desirable to observe the feeding habits of a flock of birds for several days before a baiting site is selected. Bait placed at random on a regular feeding ground will not necessarily attract and hold the birds.

It has been observed that a flock of prairie chickens will favor a specific small area located within a larger feeding area. Bait placed within this favored area is much more likely to attract and hold birds during optimum feeding periods than would a bait station placed at random in the general feeding area. Usually, when a flock of birds flies into the feeding area it will first come to ground on or near this favored feeding area. When the baiting site has been chosen the bait is placed in a pile not exceeding ten feet in diameter. The bait station is then observed during optimum feeding periods for use by the birds. It is sometimes necessary to replenish the bait every few days. One to two hundred pounds of grain is maintained and made available at each bait station.

It is desirable for each trapping crew to put out as many bait stations as possible within the general area. It is usually necessary to put out one

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bait station for each flock of chickens even though several flocks may be feeding regularly in a field no larger than forty acres. Occasionally, however, more than one flock can be attracted to a single bait station.

After a flock has begun to use a bait station regularly, the drop-net is erected directly over the baited area. The birds should be captured on the first occasion that a desirable number are observed under the net. Birds not captured by the first drop of the net will usually come back to the bait at the next regular feeding period, and can then be trapped.

Optimum trapping conditions occur during periods when there is a ground cover of ice or snow. However, it is possible to attract the birds to bait and trap them during periods of mild weather. The presence of abundant and available green plant foods in an area will greatly reduce the number of birds attracted to a bait station, because the prairie chicken at times will forsake available domestic grain and wild seeds for green vegetation.

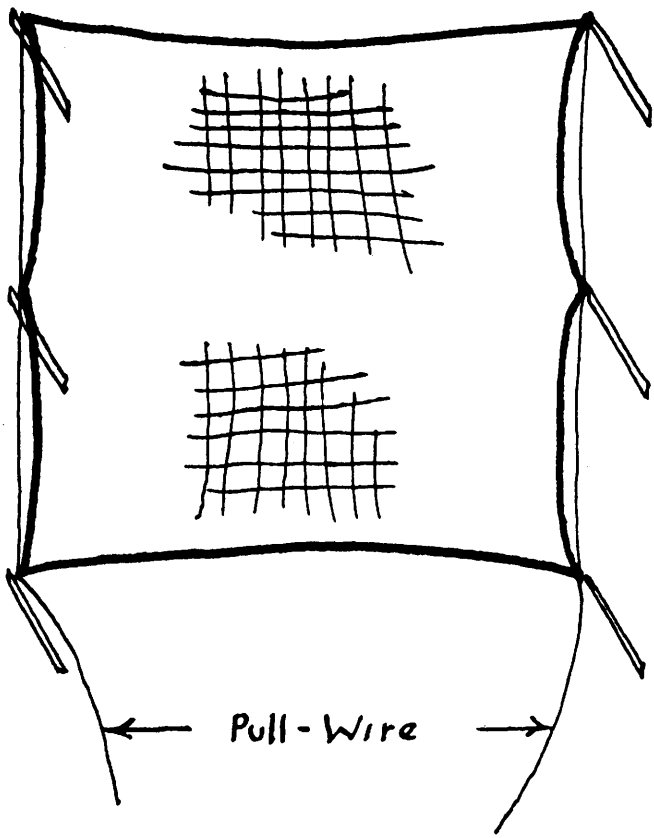
The nets used in developing a trapping technique suitable for capturing Great Prairie Chickens *(Tympanuchus cupido pinnatus)* were of two sizes, twenty-nine feet square and forty-four feet square. Both nets were constructed with a two-inch mesh of number 9 twisted cotton. The border of the net consisted of a one-inch strip of folded canvas sewed to the outermost cotton line.

The net was suspended four feet eight inches above the ground by steel "drive-in" fence posts. The forty-four foot net required four posts evenly spaced on each of two opposite sides for proper suspension, whereas the twenty-nine foot net required only three posts on each of two opposite sides. (See figure I.)

The net was attached to the trigger device by means of a three-inch diameter loop of soft malleable wire which was inserted into the space between two flanges attached to the top of the post. A "pull-pin" was then inserted through the hole in the first flange, through the wire loop, and then through the hole in the opposite flange (See figure II).

A wire was then attached in series to the pull-pins along each side of the net. The wires were connected at a distance of approximately seventy-five feet from the net thus forming a yoke to which was attached a "pull-wire" that extended to a place of concealment for the operator. (See figure I). To drop the net, the operator pulled the wire sharply, pulling the pins from the flanges simultaneously and permitting the net to fall to the ground.

When the net falls on a prairie chicken the head and neck of the bird extend through one mesh and the wings extend through adjacent meshes. The bird struggles violently for about one minute and then, if it is not disturbed by the operator, it will sit quietly. When the operator approaches the net the bird will again struggle violently until it is removed from the net. Superficial abrasions are sometimes suffered by the bird at the wing juncture, otherwise the bird is unharmed by the trapping operation and may be tagged and released for study purposes or may be placed in a transporting crate for movement to another area.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