

An Improved Grave's Tree Trap

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The Grave's Tree Trap is an operator triggered trap which is mounted on a tree trunk. It is used to capture bark foraging birds such as creepers, chickadees, nuthatches, titmice and woodpeckers. A detailed description of this trap is available in Anon, 1976, N.A. Bird Banding Manual Vol. 1, 2A-14, USDI, Fish and Wildlife Service.

To capture a bird using this trap the operator pulls a trip-cord which pulls the trap doors shut. This door closing method has several inherent problems. If the trip-cord is held taut, the trap doors will not stay open. However, if enough slack is left in the cord to keep the trap doors open, other problems are encountered. First, a highly visible arm movement is required to pull the cord tight enough to close the doors. Also, as the trip cord tightens it makes an audible sound. Both of these disturbances are noticed by a bird in the trap. The lag time between these disturbances and closing of the trap doors often allows the bird enough time to escape. Some birds are injured by the closing trap door. Second, if the slackened trip cord becomes tangled in the underbrush, it cannot be used to close the trap doors effectively. Finally, a light breeze is enough to blow the trap doors shut.

These problems can be eliminated by changing the door-closing method. If two break-back rodent traps are added to the Grave's Tree trap as shown in Figure 1, they apply a spring tension which holds the doors shut. To set the trap for bird capture, the operator pulls a trip-cord to open the doors. The trip-cord tension is easily maintained by hooking the operator's end to a nail some distance from the trap. When a bird enters the trap, the trip-cord can be released with a small movement of the fingers. The spring-loaded doors close quickly and the bird does not usually respond with movement until after the doors slam shut. During two winters of trapping Downy Woodpeckers no trap injuries were recorded and trapping success was 100% for birds completely entering the modified trap.

Use the following procedure to modify the Grave's Tree trap. Remove all parts of the break-back trap from the wooden back except the spring mechanism. With the spring mechanism held in the trap-set position, hold the break-back trap against the front of the Grave's Tree trap such that the spring will close the trap doors when released. Drill two holes through the break-back trap into the Grave's Tree trap wooden frame. Use screws to connect the break-back trap to the Grave's Tree trap.

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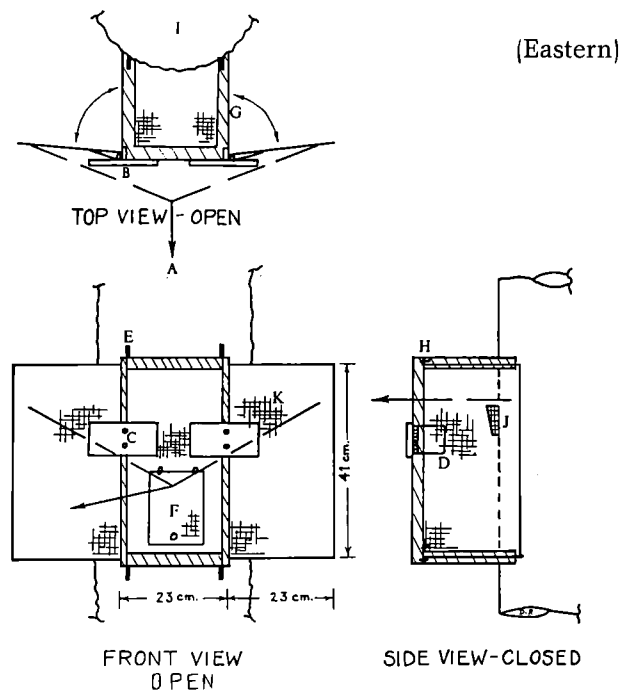


Figure 1. Improved Grave's Tree Trap. This trap has two hinged doors controlled by a trip-cord and two spring devices: A—trip-cord, B—modified break-back trap (two each), C—two screws mounting the break-back trap to the wooden frame, D—position of break-back trap spring when trap door is closed, E—metal corner angles to attach trap to tree (four each), F—hinged removal door, G—2.5 × 2.5 cm wood strips, H—staple and hinge-pin for door, I—tree, J—suet basket, K—1.25 cm hardware cloth. Figure modified from Anon. 1976. N.A. Bird Banding Manual. Vol. 1, Appendix A, 2A-14. USDI. Fish and Wildlife Service.