A Capture Technique for Burrowing Owls

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Introduction

An effective capture technique for Burrowing Owls (*Athene cunicularia*) has been described by Martin (1971) and modified by Ferguson and Jorgensen (1981). This technique employs the use of a Havahart-type live trap inserted into the entrance of an owl's burrow. Disadvantages of this technique include trap expense and necessary modification of burrow entrances. Bloom (1987:113) has described the effective use of unbaited noose carpets for capturing Burrowing Owls. This technique is comparatively inexpensive and does not require burrow modification. This paper documents the efficacy of the noose carpet for capturing Burrowing Owls.

Methods and Materials

Burrowing Owls were captured on the campus of California State University, Bakersfield during 17 morning and evening trapping sessions in July, 1987. Owls were captured using noose carpets (Bloom 1987, Collister 1967). Carpets were constructed using rectangular, 1.3 cm mesh hardware cloth with carpet dimensions generally less than 15 x 20 cm. Approximately 20 monofilament nooses (2.7 kg test, with 4–7 cm diameters) were attached to each carpet. Carpets were weighted with drags (100–300 g), using a short (1.5 m) nylon line.

Noose carpets were placed on mounds proximal to burrow entrances. Carpet placements were facilitated by observing owl behavior and noting footprint patterns of mound surfaces. Carpets were pressed into the soil to a depth that would conceal the wire, but not cover nooses. Carpets were easily bent to conform to mound contours and burrow entrances.

Results and Discussion

Twenty-three owls (12 HY, 11 AHY) were captured in 17 trapping sessions. This effort represented 39 hours of field time for an average of 1.7 hours per bird captured. Ferguson and Jorgensen (1981) indicate that when effectively used the Havahart-type trap technique yielded an average capture rate of 0.4 birds per hour (2.5 hours/bird). Capture rate for the noose carpet technique was nearly 0.6 birds per hour (1.7 hours/bird). It should be noted that comparisons of the efficacy of the two techniques may be misleading, given numerous uncontrolled variables. It does appear, however, that the noose carpet is an effective device for capturing Burrowing Owls.

An advantage of the Havahart-type trap technique is that it does not require constant supervision. Traps can be set and then checked periodically during the day or night. Disadvantages of this technique include trap expense, cumbersome size and weight (for transport purposes), high profile, and requisite burrow modification for effective use.

The noose carpet is an inexpensive, compact, and light weight device that allows one to effectively capture owls without burrow modification. Its low profile makes it particularly attractive for use in suburban settings. The primary disadvantages are that this technique requires constant supervision and, with frequent use, nooses must be regularly redressed to maintain trap efficacy.

Recommendation

It is recommended that drags be brightly painted to increase trap visibility and facilitate trap retrieval when conditions call for using multiple carpets in crepuscular conditions.

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