A Snare for Capturing Nesting Belted Kingfishers

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The Belted Kingfisher (Ceryle alcyon) occupies riparian L habitats across the North American continent. However, kingfishers are infrequently banded. Approximately 1140 Belted Kingfishers were banded between 1973 and 1980, ranging from 99 to 220 birds banded on an annual basis (BBL: Number Encounters records). Except while nesting, kingfishers are solitary birds. This species usually burrow deep into sand banks to nest making it nearly impossible to extract young. The adults are exceedingly suspicious of mist nets or other obstacles placed in front of or in burrow entrances. The difficulty in capturing these birds by conventional methods is apparently the reason why this species is not pursued more dilligently by banders. This note describes a simple snare device useful in capturing breeding kingfishers. With modifications it may be applied to other bank burrowing species as well.

Equipment

74 cm (29.5 in) of 10 lb. test monofilament fish-line; 3.2 cm (1.25 in) stovepipe wire; 1 aluminum tent stake; 1 needle-nose pliers; 1 fingernail clippers; 1 wire-cutting pliers.

Snare Assembly

Figure 1 may be useful in following the directions for constructing the snare (below). (1) Make a knot (A) about 7.5 cm (3.0 in) from one end of the monofilament strand. This knot is important because it will prevent the snare from enclosing tightly around the bird's neck, which could strangle it. (2) Looping the same end back on itself, tie the monofilament about 2.25 cm (0.9 in) from the end to the strand above Knot A thus making the slip noose. (3) Near the opposite end construct a loop and tie this off. This will hold the tent stake which will anchor the snare to the embankment. (4) Approximately 20.7 cm (8.25 in) from Knot A crease the monofilament by either applying pressure with a fingernail or by biting (take care not to sever) it. (5) Using the tip of a needle-nose pliers fashion an anchor pin by constructing a 0.3 cm (0.125 in) eyelet out of the stovepipe wire, and trim the shaft to 1.5 cm (0.5 in) length. Feed the snare assembly through the eyelet with the stake loop end. The knots need not be fancy. If properly constructed the snare should look similar to Figure 1B. Trim the excess monofilament off, especially from the noose end.

Placement of Snare in Burrow

After determining that a burrow is active remove any rootlets or other debris from the burrow entrance. Open the noose to the crease and place the anchor pin next to the crease. After making certain that the snare stays open hold the assembly by the pin with one hand and place it about 20-25 cm (8-10 in) into the burrow, pushing the anchor pin's shaft into the side wall flush with the eyelet. Run the line out the burrow so it is taught, but so that it does not disturb the snare. With the tent stake fed through the tent stake loop, hammer it into the sand bank to one side of the entrance. Any exposed part of the stake can be covered with moist sand. The monofilament line does not need to be hidden. Make sure that a verticle bank profile is maintained for 0.5 m (1.5 ft) below the tent stake or the captured bird will free itself!

Retreat to some hidden place nearby and await the return of an adult carrying food. If successful, the kingfisher will come out and dangle below the burrow entrance within 10 sec. of entering.

Results

In 8 trials attempted in June 1984, I was able to capture 5 adults 6 times. At one nest both adults were captured within 45 min. One of the unsuccessful attempts netted a fish the adult was carrying!

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