A Walk-Through Snare Design
For The Live Capture Of Alligators.

Traditionally, alligators have been live captured using a spotlight and pole snare (Chabreck 1963), baited trip snare (Murphy et al.), tredel trail trap (Mazzotti and Bradt 1988), harpoon (Woodward and David 1993), and weighted treble hook (Rhodes and Wilkinson 1994).

A simplified version of the Mazzotti tredel trail trap was developed for the live-capture of alligators during alligator mark-resight studies conducted in South Carolina (1993-94), and later implemented to capture nesting female alligators at Lake Apopka and Lake Woodruff, Florida.

Materials
A walk-through trap consists of two approximately 3cm (1.25 inch) x 3cm x 80cm (32 inches) wooden stakes with a 1.25cm (.50 inch) wide x 1.6cm (5/8 inch) deep V-shaped groove routed longitudinally along the center of one side of each stake. A 2.0 cm (.75 inch) notch across one end (top) of the stake joins the V-groove. A .32cm (7/8 inch) hole was drilled through the V-groove from the side of the stake .32cm from the edge at the center of the stake. Two additional holes were drilled 10cm (4 inches) on either side of the center hole. Sufficient space behind each hole was allowed in the groove to accommodate a #2 snare cable. The bottom of the stakes were pointed to ease installation into ground (Figure 1).

Trap Placement
Traps were placed on recently used trails. Two stakes were driven approximately 10cm (4 inches) deep on either side of an active trail. Top (ends with cut through notch) of the stakes touched at approximately 60 degrees above the trail, V-grooves facing each other. A #2-182cm (72 inch) snare was looped to a diameter sufficient for the head of an intended alligator to pass through, but not its legs. The loop was positioned in both V-grooves and secured in place with a fragile green twig or grass stem passed through holes in each stake. The snare lock was positioned near the apex of the 60 degree angle. The end of the snare was secured sufficiently to insure the snare would draw tight when gently pulled. A rope secured to the end of the snare was tied to hold the alligator (Figure 1).

The snare was adjusted for different size alligators by adjusting the diameter of the snare loop and its distance from the ground. For example, a larger diameter loop positioned about 10 cm above the ground for larger alligators and smaller diameter positions near the ground for smaller alligators.

Results and Discussion
Interpretation of field sign of alligator activity was important to the success of the walk-through capture method. Capture was most successful when alligator movements were predictable. Traps were placed at basking haulouts, levee crossovers, trails leading between guard holes and open water, and
At nests.

In May 1994, forty-seven alligators ≥ 1.22m were captured in South Carolina during a seven day period for mark-resight studies. Three capture methods were employed: baited trip snare, weighted treble hook, and walk-through snare. Twelve (25.5%) alligators 1.91 to 3.73m were captured in walk-thru snares. Daily trapping success for this method was 19%. In late June and early July 1994, fifteen female alligators were captured at nest sites on Lakes Apopka and Woodruff, Florida during eight nights of trapping. The number of traps per night was not recorded, however sets/night varied from 5 to 18 and trap success was estimated at about 10%.

Trap specifications are approximate and may be varied considerably. Earlier designs were constructed from reeds tied together with thread across an active trail which supported the snare loop. Our design evolved because potential trap locations lacked suitable vegetation for on site trap construction.

LITERATURE CITED

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Walk-Through Snare Design
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Top view of stake

.32 cm hole for twig

Stake
3 cm x 3 cm x 80 cm

Notch

Snare Cable

9 cm or less

Figure 1

Anchored gently enough to draw tight but release after capture