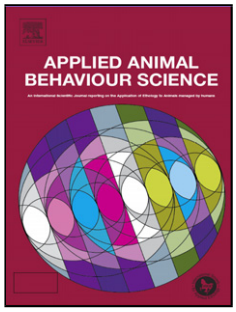

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Pen trial of estrogen-induced conditioned food aversion to eggs in raccoons (*Procyon lotor*)

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Highlights

- Oral estrogen (17 α-ethinyl estradiol) induced an egg aversion in caged raccoons.
- This aversion significantly reduced egg consumption by the raccoons (*Procyon lotor*).
- Estrogen did not affect the appetites of the raccoons for food and water.
- Estrogen produced no obvious changes in the behavior or demeanor of the raccoons.
- Estrogen produced no apparent health effects except in a pregnant female that died.

Abstract

Aversive conditioning is a promising but unproven non-lethal approach to reducing mammalian depredation on the eggs of ground-nesting birds, terrapins and sea turtles. This research tested the efficacy of oral estrogen concealed in a bland carrier as an aversive agent for wild-caught raccoons (*Procyon lotor*) under controlled conditions. Nine treatment group raccoons were given six estrogen-injected eggs every other day during a 14-day treatment phase, and then given a combination of two estrogen-injected eggs, two fresh eggs, and two carrier-only injected eggs every other day during a 14-day challenge phase. Nine control group animals received six carrier-only injected eggs every other day during the treatment phase, and then two fresh eggs and four carrier-only injected eggs every other day during the challenge phase. All treatment animals exhibited a conditioned food aversion (CFA) after 1-8 egg feedings (15–116