

Ecology of Raccoons Within Cape Lookout National Seashore, North Carolina, and the Efficacy of Raccoon Removal as a Management Tool for Protecting Rare, Threatened, and Endangered Species.



- **The Challenge:** Raccoons (*Procyon lotor*) are a significant predator of nesting shorebirds and sea turtles on the islands of Cape Lookout National Seashore (CLNS), a unit of the National Park Service (NPS) on the Outer Banks of North Carolina. Several beach-nesting species are federally threatened, endangered, or of high conservation concern, and NPS managers are considering direct removal of raccoons to reduce predation. Local managers need to know if reducing the size of the raccoon population will promote increased productivity of nesting species and help meet species recovery goals. The NPS also wants to know how often and how many raccoons they can remove and still meet and maintain a viable raccoon population.



- **The Science:** Raccoons at Cape Lookout are isolated from the mainland where they have become habituated to the visiting public. Research has focused on estimating the size and density of the raccoon population and understanding their role as a predator, and evaluating the effects of direct removal on both predator and prey.



- **The Future:** This work has been a collaborative effort between the USGS and NPS. Approximately 50% of the raccoon population has been removed from the island and productivity of nesting prey species has increased. Structured Decision Making has been used to develop science-based models to guide future management including removal efforts.