



2022

Council
Retreat

WILDLIFE

GOAL

*Maintain a functioning, natural ecosystem
on Kiawah Island in perpetuity*

OVERALL STRATEGY

- ▶ Focus on keystone and indicator species
- ▶ **Keystone species** – vital for ecosystem health, can change habitat
 - ▶ Bobcats
 - ▶ Alligators
 - ▶ White-tailed deer
- ▶ **Indicator species** – used to monitor environmental changes, assess the efficacy of management, and provide warning signals for impending ecological shifts
 - ▶ Migratory Songbirds
 - ▶ Marsh Sparrows
 - ▶ Painted Buntings
 - ▶ Wilson's Plovers



OBJECTIVES

1. **Return bobcat numbers to historic levels**
2. **Maintain deer population at historic, acceptable densities (60-80 deer/square mile)**
3. **Increase use of native plants in landscaping (80% native)**
4. **Eliminate invasive, non-native plants**
5. **Protect native habitat from sea level rise impacts**

BOBCATS

- ▶ **Keystone species – Vital to ecosystem. Provide natural control of deer and rodent populations**
- ▶ Rapid decline in bobcat numbers beginning in 2017 due primarily to second-generation anticoagulants (SGAs)
- ▶ Population has stabilized and started to increase
 - ▶ Decline in adult mortality rates
 - ▶ Successful kitten production in 2021



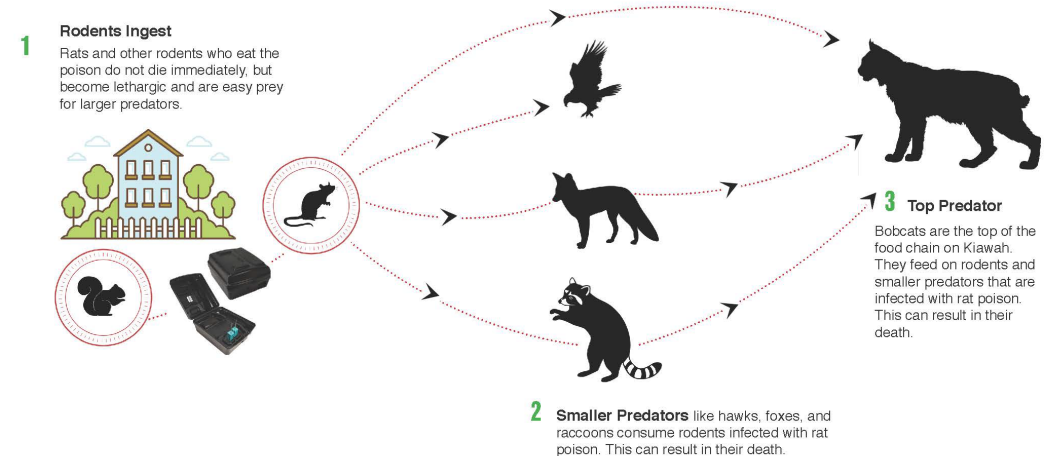
SGA IMPACTS TO KIAWAH WILDLIFE

- ▶ Biologists began testing bobcats and other wildlife in October 2019 for anticoagulant exposure
- ▶ 64 animals tested to date (73% exposure rate)
 - Bobcats 7/7 (100%)
 - Raccoons 23/37 (62%)
 - Opossums 12/15 (80%)
 - Screech Owl 1/1 (100%)
 - Cooper's Hawk 1/1 (100%)
 - Alligators 2/2 (100%)
 - Roof Rat 1/1 (100%)
- ▶ 13 additional samples pending



Rat Poison & Wildlife

Local residents may inadvertently be poisoning our wildlife by using anticoagulant rodenticides (rat poison).



CHECK THE LABEL!

Avoid using the following
anticoagulant rodenticides:

Brodifacoum Difenacoum
Bromadiolone Difethialone

INITIATIVES

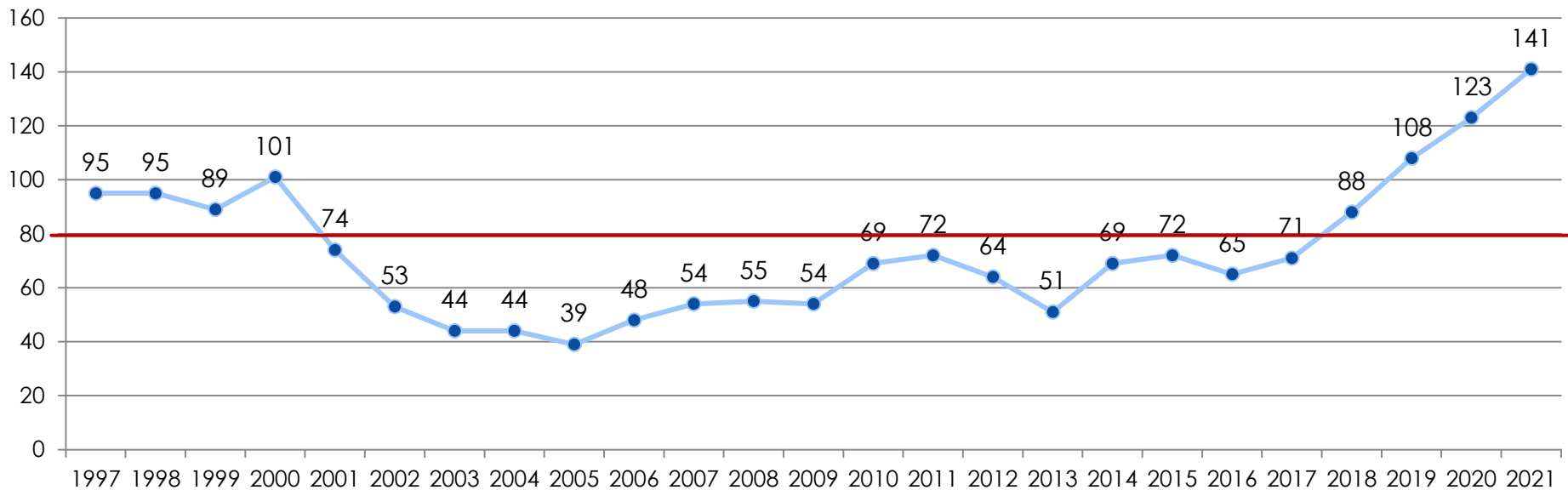
- ▶ Support current Clemson research study over next 4 years
 - ▶ \$50k committed in FY 21-22
 - ▶ Additional funding needed for next 3 fiscal years
- ▶ Continue and expand Bobcat Guardian program and outreach efforts
 - ▶ Business License portal
 - ▶ Regime/Property Owner education (DPR)



WHITE-TAILED DEER

- ▶ **Keystone species – Environmental impacts**
- ▶ **Public safety concerns**
- ▶ Rapid increase in deer population beginning in 2018

Kiawah Island Late Summer/Fall Deer Density



INITIATIVES

- ▶ Continue biannual spotlight surveys (Fall/Winter)
- ▶ Deer Management Plan approved by Town Council in April 2020
 - ▶ Sharpshooting
 - ▶ State permit and tags (Sept 15-March 1)
 - ▶ Meat donated to charity
 - ▶ 100 deer removed in February 2021
 - ▶ Annual harvest until population goal is achieved



NATIVE PLANTS

- ▶ Sustain pollinators vital for fruit production and provide high-quality food and shelter for 10 to 15 times as many species of wildlife as non-native plants.
- ▶ Reduced use of fertilizers and pesticides
- ▶ Provide essential watershed protection, helping natural aquifers recharge, serving to filter water naturally flowing into rivers and estuaries, lessening erosion and flooding.
- ▶ Resistant to saltwater intrusion from flooding and storm surge



NON-NATIVE PLANTS

- ▶ Many provide no wildlife value (other than cover)
- ▶ Require more fertilizers and pesticides
- ▶ Susceptible to climate changes (saltwater intrusion)
- ▶ Several are very invasive, destroying native habitats
 - ▶ Chinese Tallow Tree
 - ▶ Giant Reed (Phragmites)



INITIATIVES

- ▶ Reinvigorate and expand Grow Native Program
 - ▶ Town Hall Nature Trail
 - ▶ Events, Promotions
- ▶ 80% native plants in all landscaping projects on Kiawah
 - ▶ ARB, KICA, Club, Resort, Town
- ▶ Eliminate Chinese Tallow and Phragmites
 - ▶ Continue control programs (\$30k per year)

