# Wildlife Mortality Monitoring & Reporting

Rachel Rainbolt, Conservation Officer



#### Brief History of Wildlife Mortality Reporting on Sanibel

- Wildlife Advisory Committee (1984 2008)
  - "Animal Roadkill Survey" from 1988 1989
- Sanibel Captiva Conservation Foundation (SCCF)
  - ▶ Reptile and Amphibian Survey from 2002 present
- Sanibel Resident Doris Hardy
  - ► Eastern Screech Owl Survey from 2012 2022
- Department of Natural Resources
  - ▶ Wildlife Mortality Report from late 2021 present
  - ▶ Natural Resources, Public Works, SCCF, CROW, DDNWR, General Public









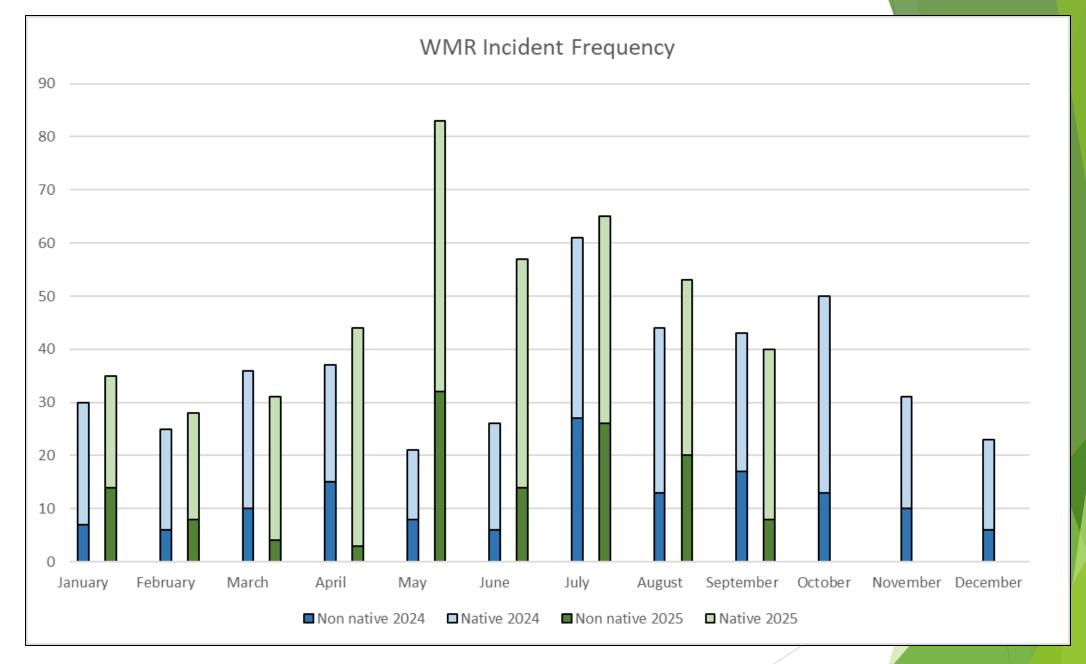


## Wildlife Mortality Report Key Findings



- ▶ 1,600 Total Incidents
  - ▶ 1,159 (January 2022 December 2024)
  - ▶ 441 (January 2025 September 2025)
- Represents 90 different species since start of WMR









## Wildlife Mortality Report Key Findings



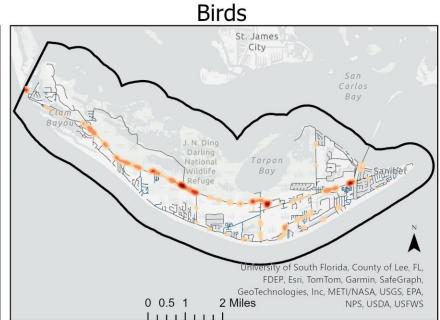
► GPS data points were used to generate heat map. Image was made in partnership with City, SCCF and Unity Environmental University.



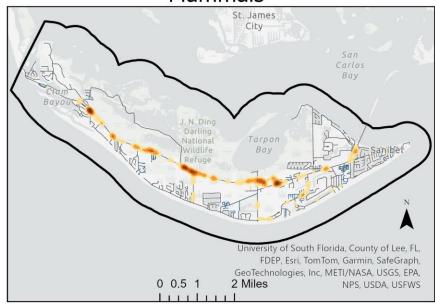
- Most Frequent Species:
  Eastern Screech Owl (60YTD)
- Road with Most Incidents:
  Sanibel Captiva Road (147YTD)



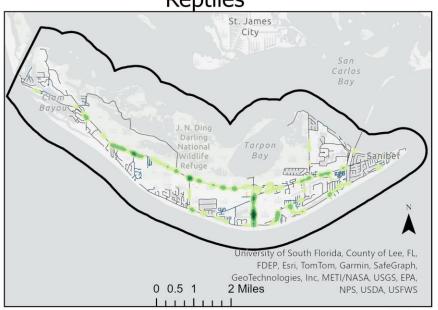
# Amphibians St. James City Darling National Wildlife Refuge University of South Florida, County of Lee, FL, FDEP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, 0 0.5 1 2 Miles NPS, USDA, USFWS



#### Mammals



#### Reptiles









# Staff Recommendations for Wildlife Signage

- Based on the WMR, staff recommends deployment of wildlife crossing signage at the following locations:
  - Sanibel Captiva Road (near Tarpon Bay Road 4-way stop)
  - Sanibel Captiva Road (near Rabbit Road intersection)
  - Sanibel Captiva Road (near Wulfert Road/Wildlife Drive access)
  - ► Tarpon Bay Road (near entrance to Bailey Tract)
- Staff would also recommend further discussion on traffic calming strategies at the following location:
  - Sanibel Captiva Road (Legion Curve)











# "Low Flying Owls" Wildlife Signage

- Pair of signs that were placed on either side of MM5 and MM7 following citizen-led initiative by resident Doris Hardy.
  - April 2015 City Council approves installation of (2) lighted owl signs
  - June 2015 Lighted owl signs installed
  - ► November 2018 Lighted signs removed for repair
  - January 2019 Signs replaced without lighting (per City Council direction)
  - March 2019 City Council votes to replace signs with amended verbiage and no lighting
  - July 2019 Replacement signs (amended verbiage, no lighting) installed
- Signs were damaged from Hurricane lan and have yet to be reinstalled.



# "Please" "Slow" "Down" "For Us" Wildlife Signage

- Series of 4 multilingual signs with different animals located on Sanibel Captiva Road (near Tarpon Bay) and another on Sanibel Captiva Road (near Blind Pass).
- Sign size was 3x4 and each animal had reflective eyes for nighttime visibility (compared to lights on low flying owl signage).
- ▶ They were removed in 2013 due to being "at the end of their useful life".







# "Gopher Tortoise Crossing" Wildlife Signage

- Gopher tortoise crossing signage has been historically used on Sanibel and is still in use today.
- Based on historical placement, current site conditions, and population density, residents will contact Natural Resources to request signage.
- City staff then schedules meeting with residents to evaluate signage location and installation schedule.









## Benefits of Wildlife Mortality Monitoring & Reporting

- Wildlife Conservation and Biodiversity Monitoring
- ► Transportation & Infrastructure Planning
- Public Safety & Welfare
- Scientific Research & Education



City Staff Striped Skunk Sighting - Dec 2024

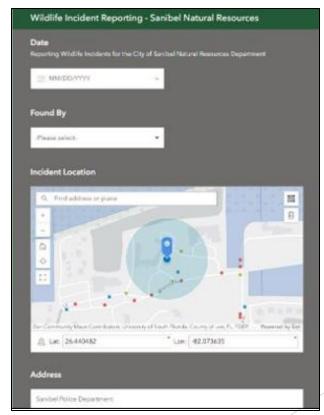


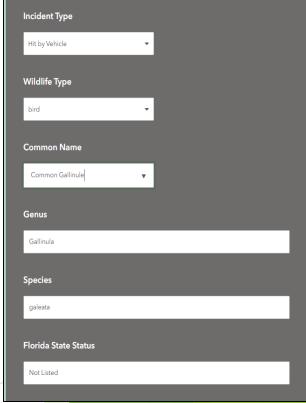
Florida Softshell Turtle - Post Hurricane Ian



#### Wildlife Mortality Report Surveying Tool & Dashboard

- As of October 2025, the WMR data points were fully integrated into ESRI Survey123, a GIS-enabled platform created by the locally owned Hammerhead Technology firm.
- The platform is designed to make data collection simple and intuitive, especially for field workers, and integrates the collected data with the rest of the City's preexisting license with ArcGIS.
  - Public dashboard can be generated to communicate the data with clear visual displays in an open, user-friendly format.







## Questions?

Demonstration of Survey123 Application



