

# Seasonal and Daily Activity Patterns of Argentine Black and White Tegus in South Florida

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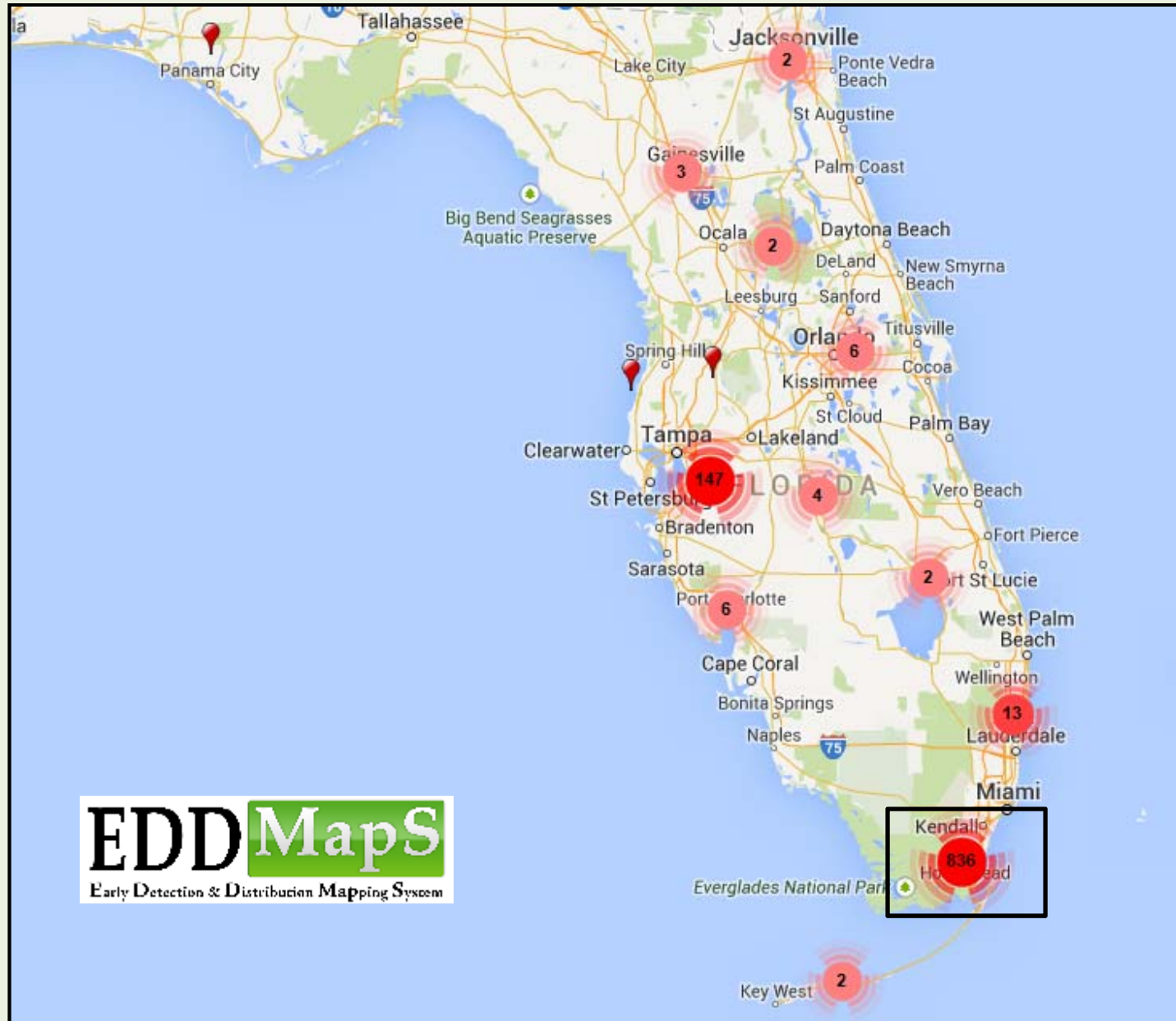
# Introduction

- *Tupinambis merrianae*
- Native Range - Brazil, Paraguay, Uruguay, and northern Argentina
- Largest and most temperate species of tegu
- Omnivorous, habitat generalist, and active forager
- High fecundity
- Hunted for skins and meat



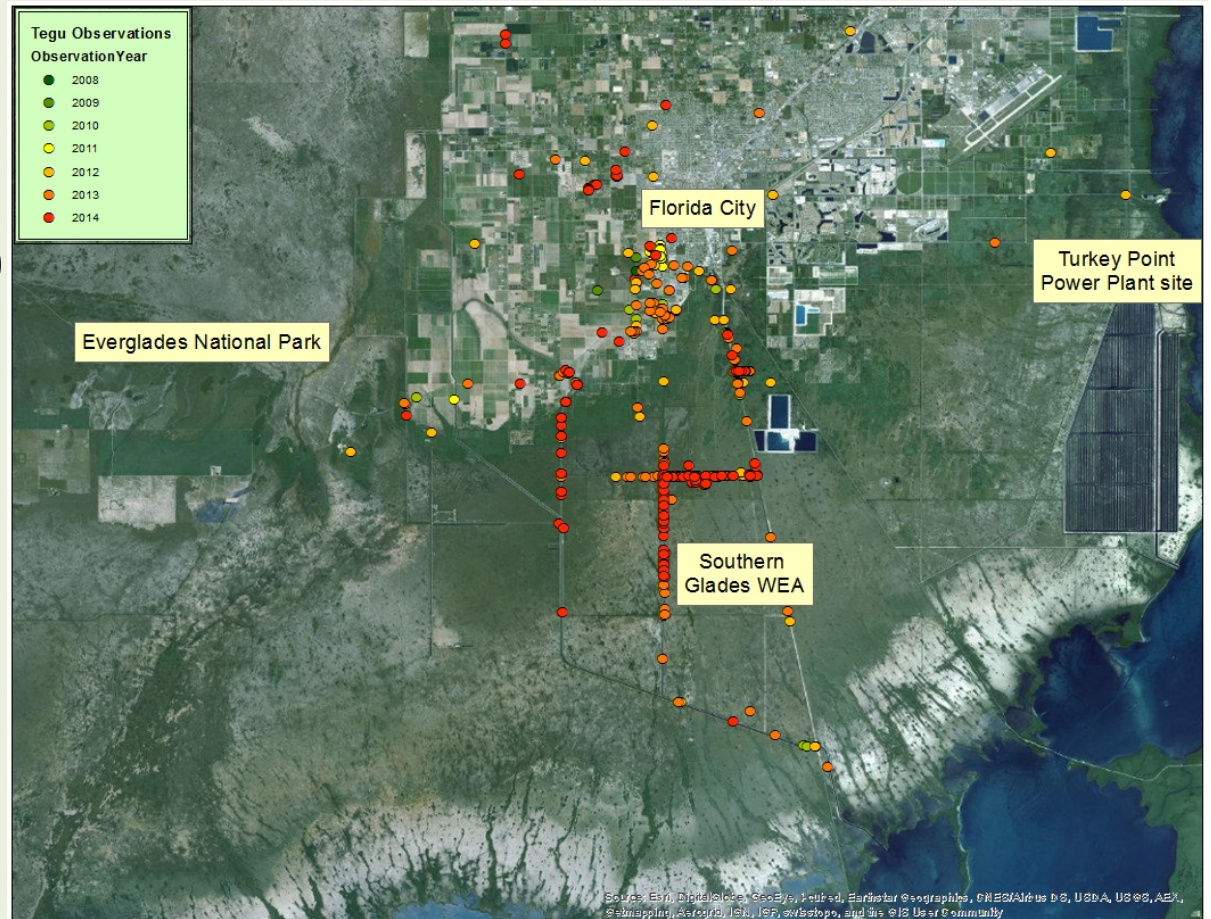
Photos by Dustin Smith, Zoo Miami

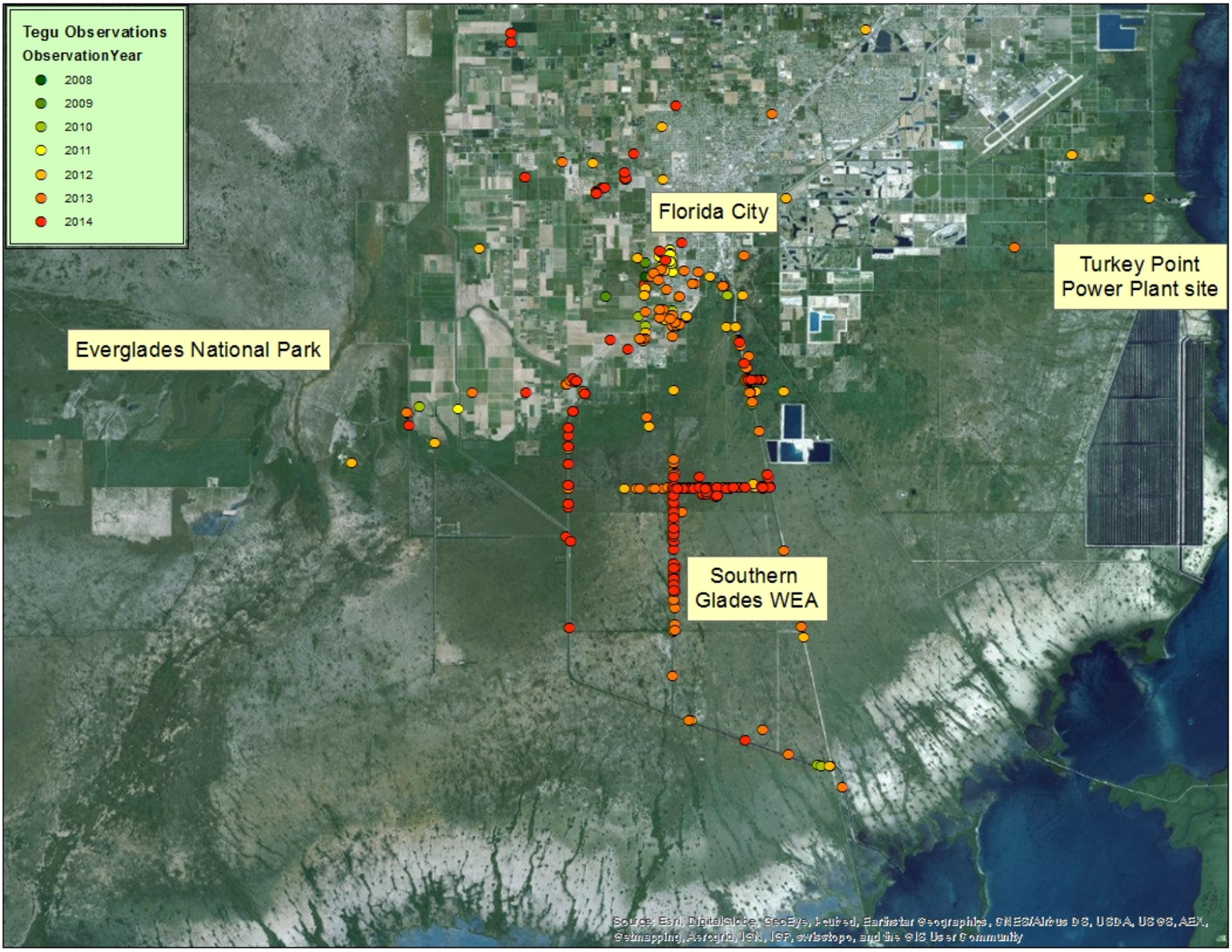
# Tegus in Florida



# Tegus in South Florida

- **First observation-2008**
- **Trapping initiated-2009**
- **Subsequent studies**
  - Telemetry
  - Diet analyses
  - Camera traps
  - Burrow scoping





**Tegu Observations**

**ObservationYear**

- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014

Everglades National Park

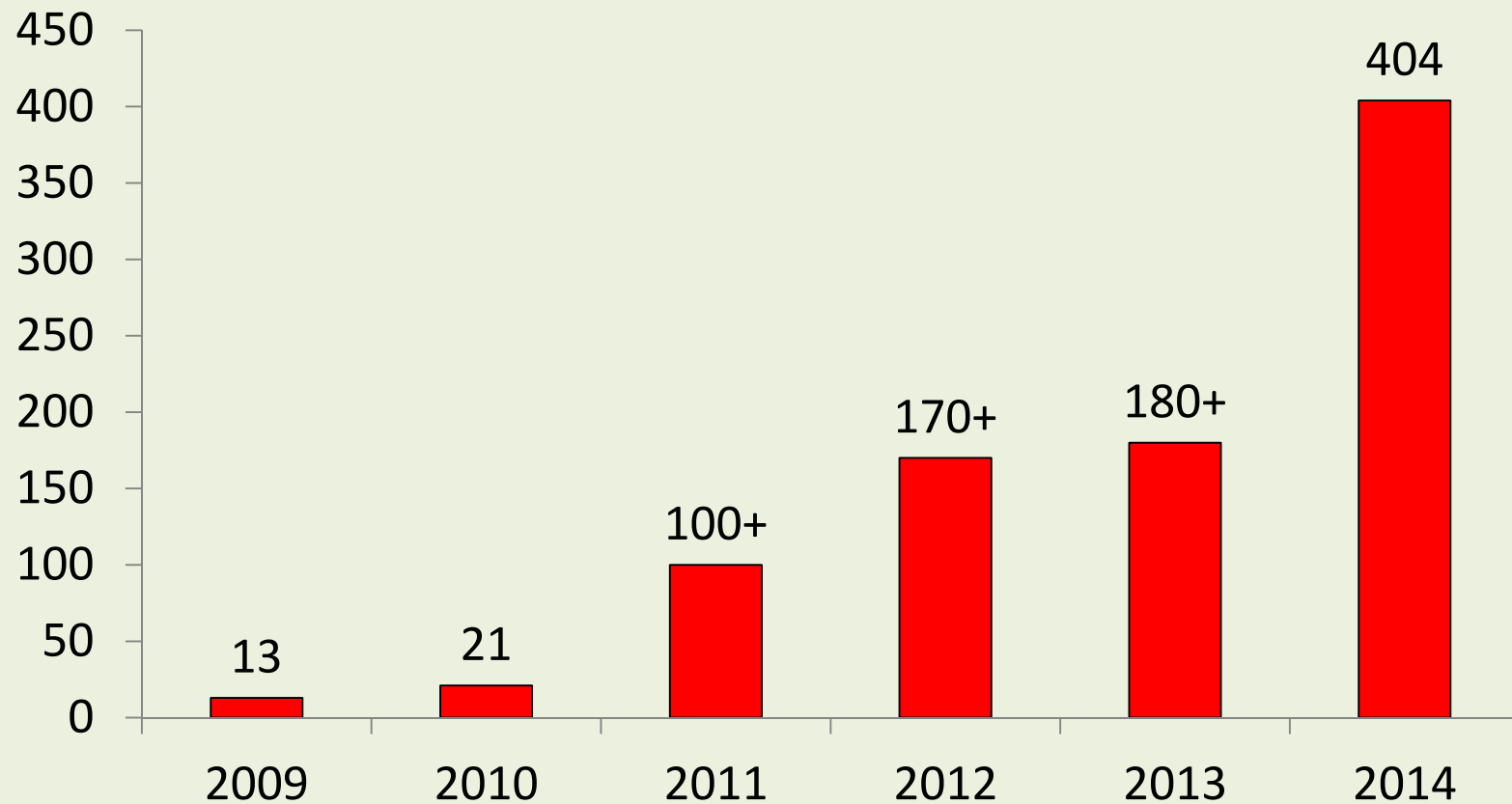
Florida City

Turkey Point  
Power Plant site

Southern  
Glades WEA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroX, Swmapping, AeroGRID, IGN, IGP, swbstopo, and the GIS User Community

# Tegus removed by year\*



\*Does not include private trappers

# Objectives-2014

- Continue to determine population demographics
- Measure removal efficacy
- Determine seasonal activity patterns specific to South Florida
- Evaluate spatial and temporal occurrence

# Study Area



South of Florida City, East and West of US1



424<sup>th</sup> Street, South of Florida City, East of US1



# Methods

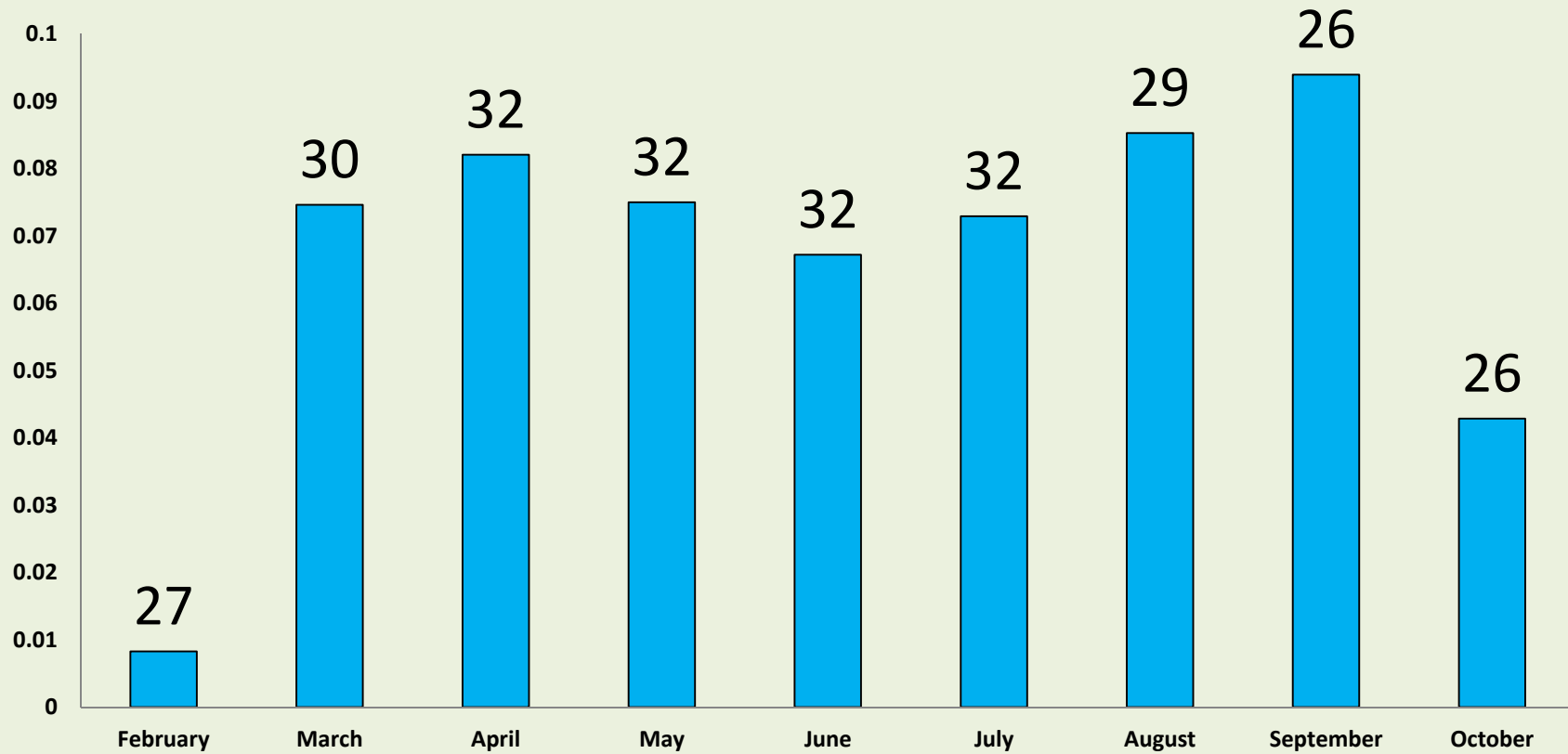
- **Live trap removal**
  - 33 live traps baited w/ eggs
  - February-October
- **Camera trap monitoring**
  - Occupancy
  - Periphery and dispersal
- **Radio-telemetry**
  - Females only
  - Linear habitat movement



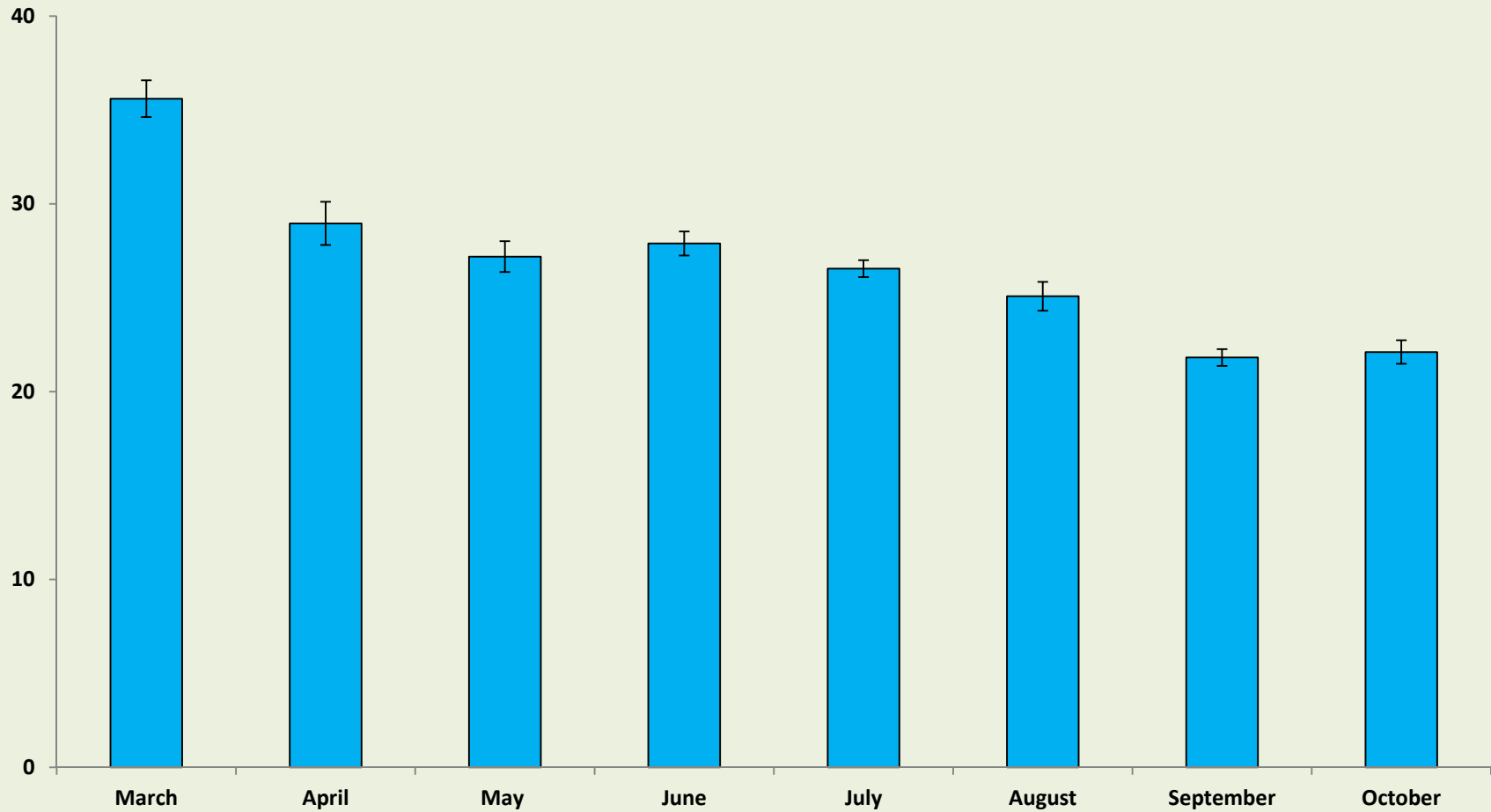
# Results

## 2014 monthly tegu CPUE

Tegus/Trap Day



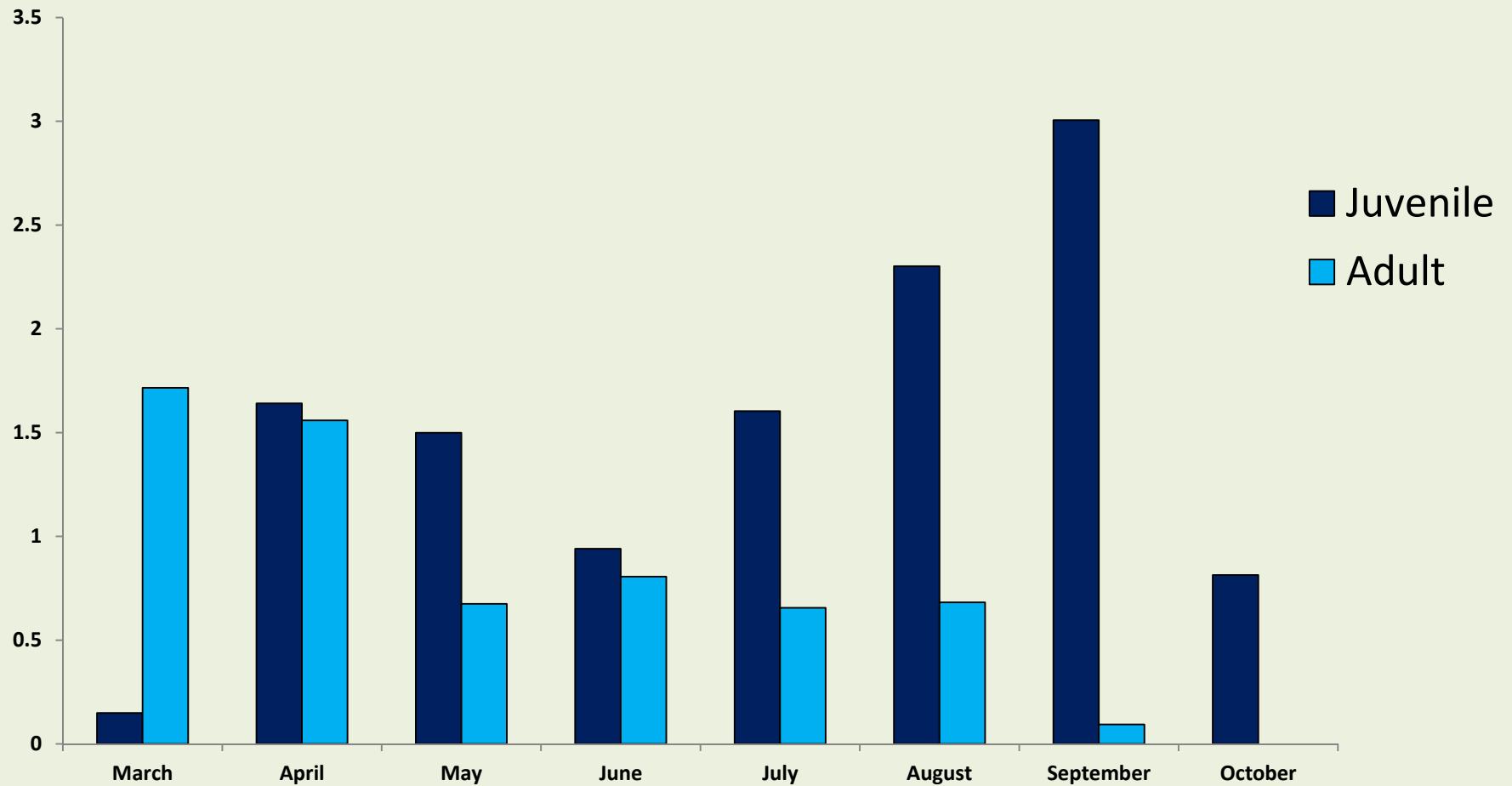
# 2014 mean SVL(cm) by month



\*Mean tegu size decreased throughout trapping period

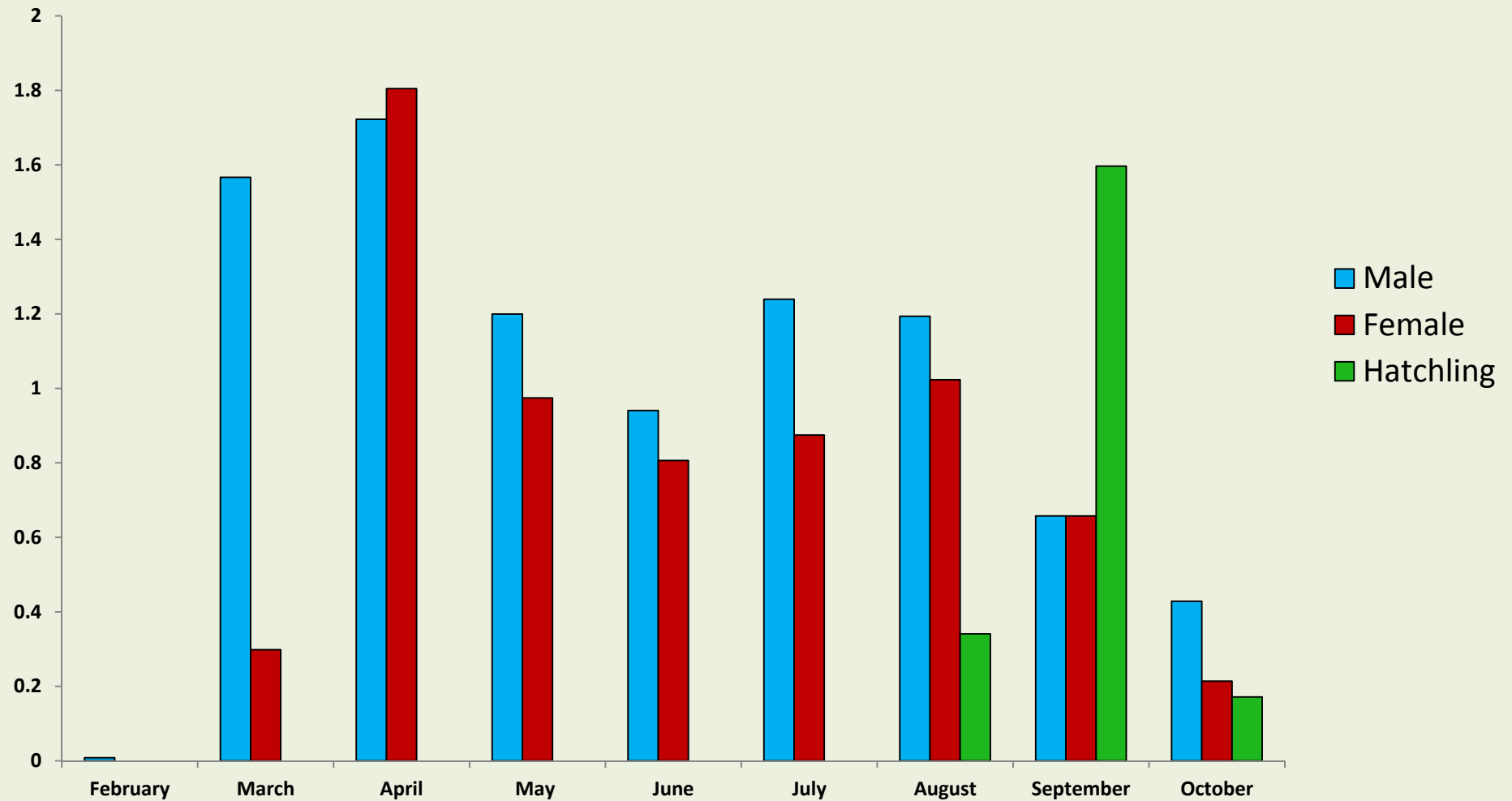
# 2014 size class by month

Tegus /Trap day

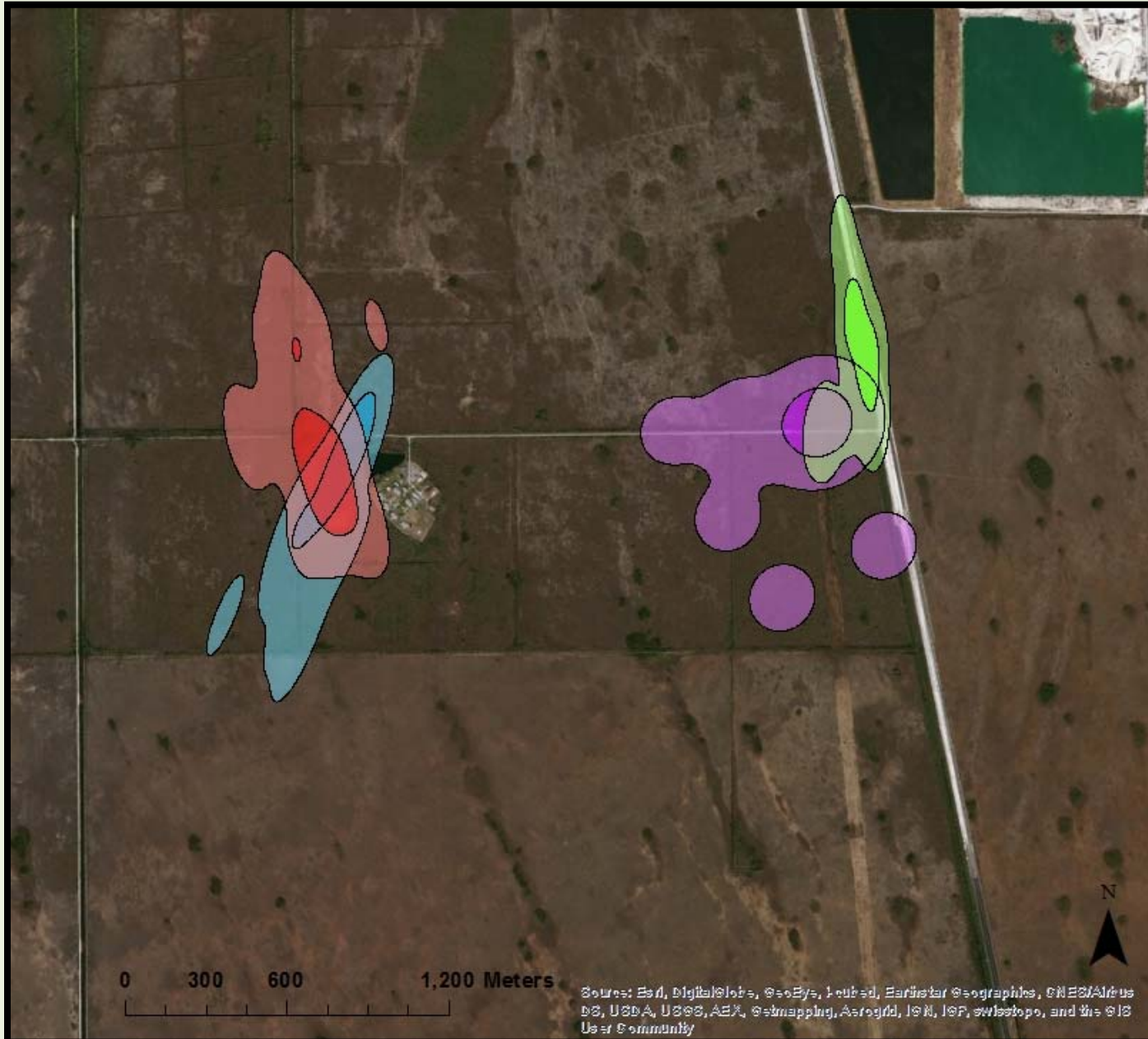


# 2014 tegu sexes by month

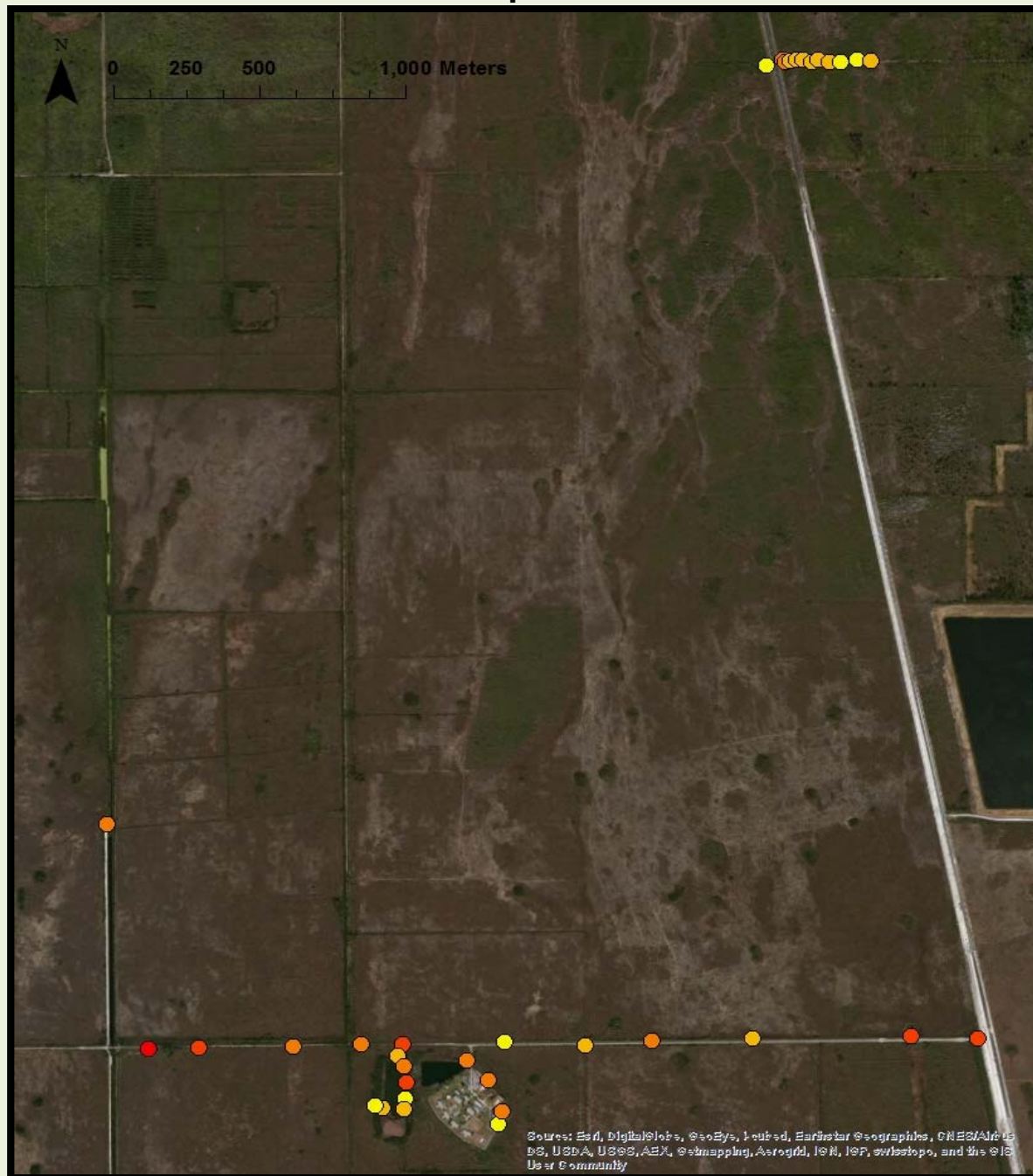
Tegus/Trap day



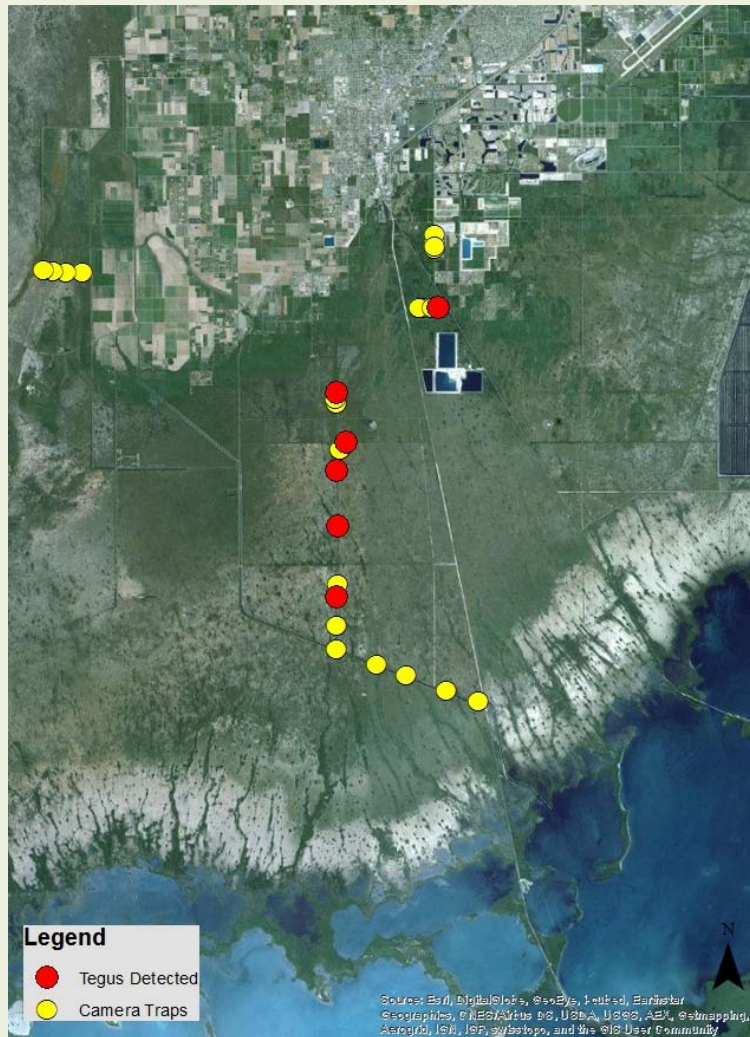
# Female Tegu Home Ranges



# Live Trap CPUE

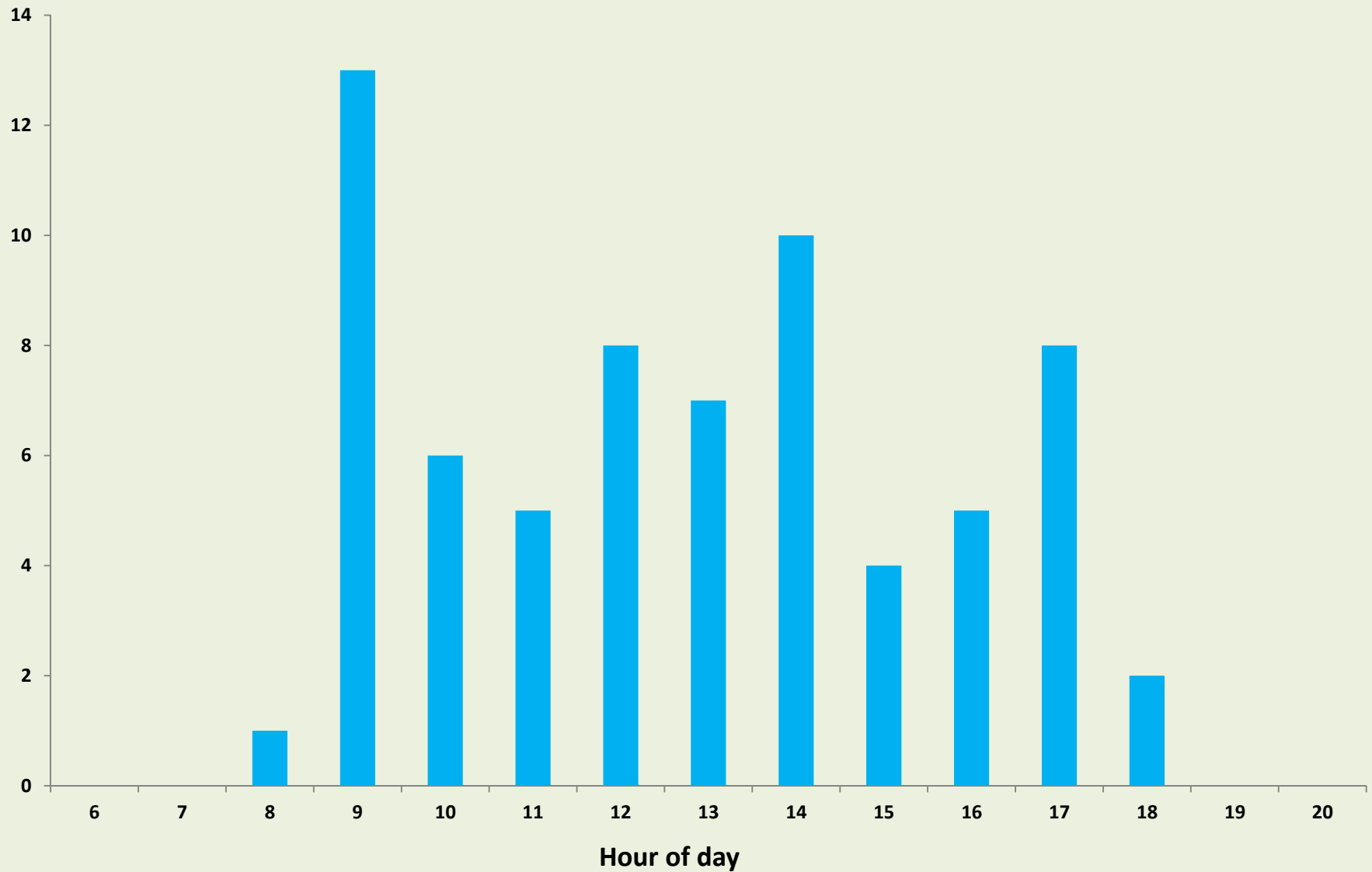


# Camera Trap Success





# Daily tegu occurrence by hour



# Discussion/Management Implications

- **Start and stop of brumation**
- **Protandric emergence (males first then females)**
- **Sizes and sexes to focus removal effort on**
  - Dispersing tegus
  - Reproductive females
- **Trap placement and density**
- **Trap characteristics that increase CPUE of tegus**



# Acknowledgements

- Florida Fish and Wildlife Commission
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- Dallas Hazelton; Dustin Smith; Christopher Smith, DVM

