

Updates on Current Research: Tegus and Nile Monitors

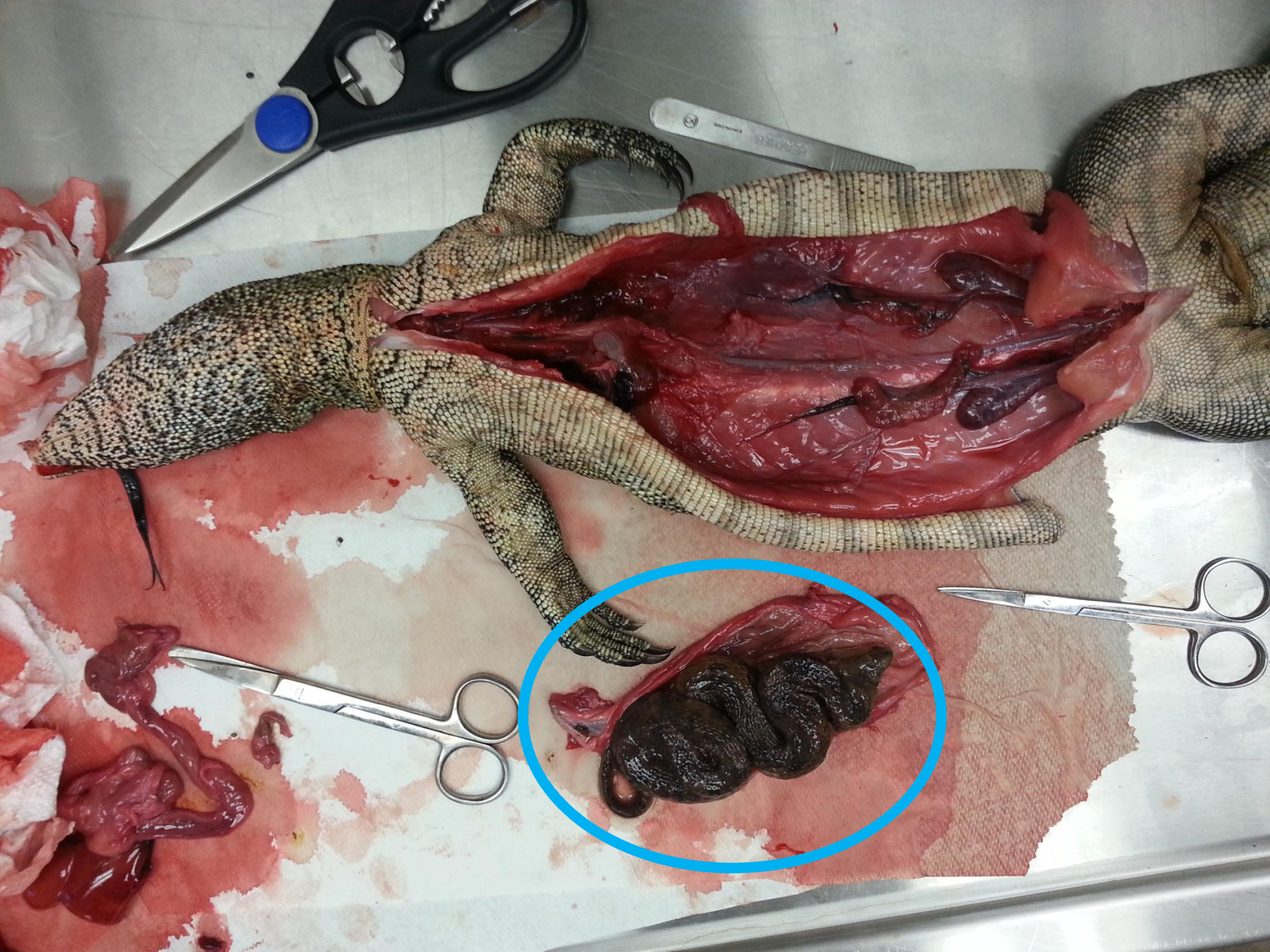
Liz Barraco

Florida Fish and Wildlife Conservation Commission



Research Updates

- Nile monitor diet study (UF)
- Tegus telemetry study (UF)
- Tegus diet study (FWC)



Tegu Telemetry

- Female tegu behavior
 - Nesting
 - Sex ratio of clutch





- TuMe380
 - 7 April 2014 –
18 June 2014
 - 23 May 2014
 - 18 eggs
 - 18 June 2014
 - 14 viable

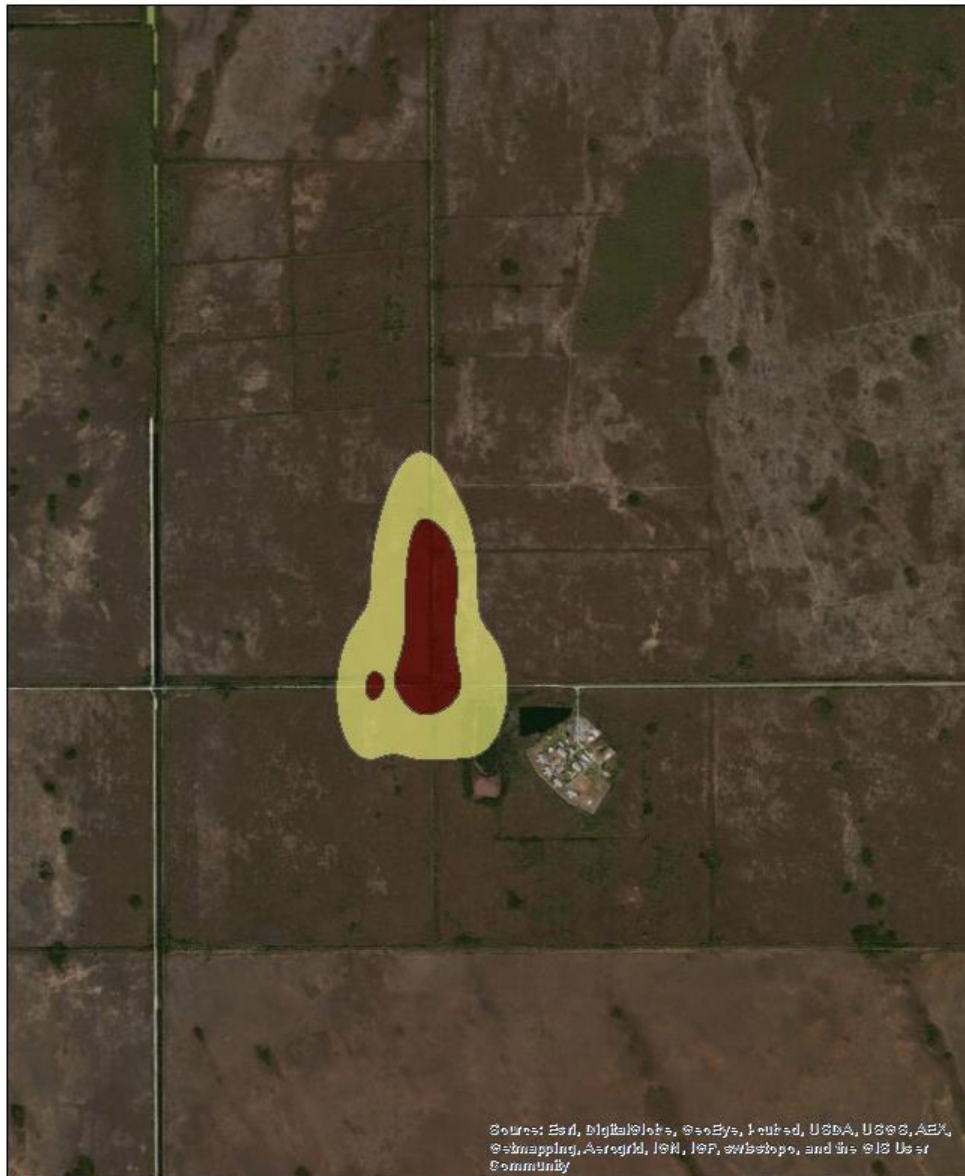
Legend

95% KDE 50% KDE



Meters
0 100 200 400

- TuMe409
 - 21 April 2014 –
 - 11 June 2014



Sources: Esri, DigitalGlobe, GeoEye, Earthstar, USDA, U.S.G.S., AeroMap, GeoEye, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

Legend

95% KDE 50% KDE



Meters
0 250 500 1,000



- TuMe440
 - 5 May 2014 –
18 June 2014
 - Tracked to
multiple
locations
 - 25 June 2014
 - 27 eggs
 - 25 hatched

Tegu Telemetry

Tegu ID	SVL (cm)	Mass (kg)	Monitoring period (days)	Number of locations	Mean daily distance moved (m)	95% KDE (m ²)	50% KDE (m ²)
TuMe380	33.5	1.16	72	29	2	34,238	6,991
TuMe409	31.5	1.16	51	20	17	325,648	89,753
TuMe440	35.5	1.2	44	18	9	165,605	22,014

Tegu Telemetry

- Female tegu behavior
 - Nesting
 - Two different nest structures
 - Sex ratio of clutches
 - Upcoming



Tegu Gut Contents Analysis

Trees, shrubs, and vines observed at Southern Glades Tegu capture locations

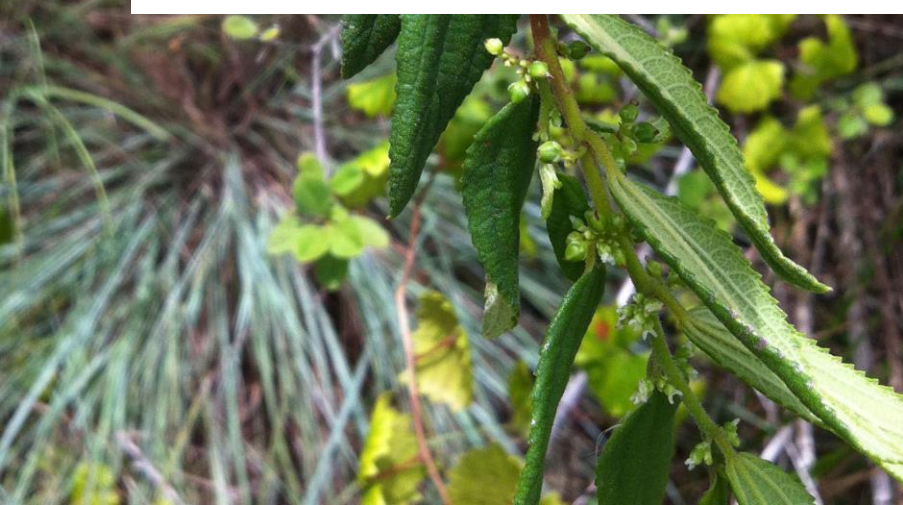
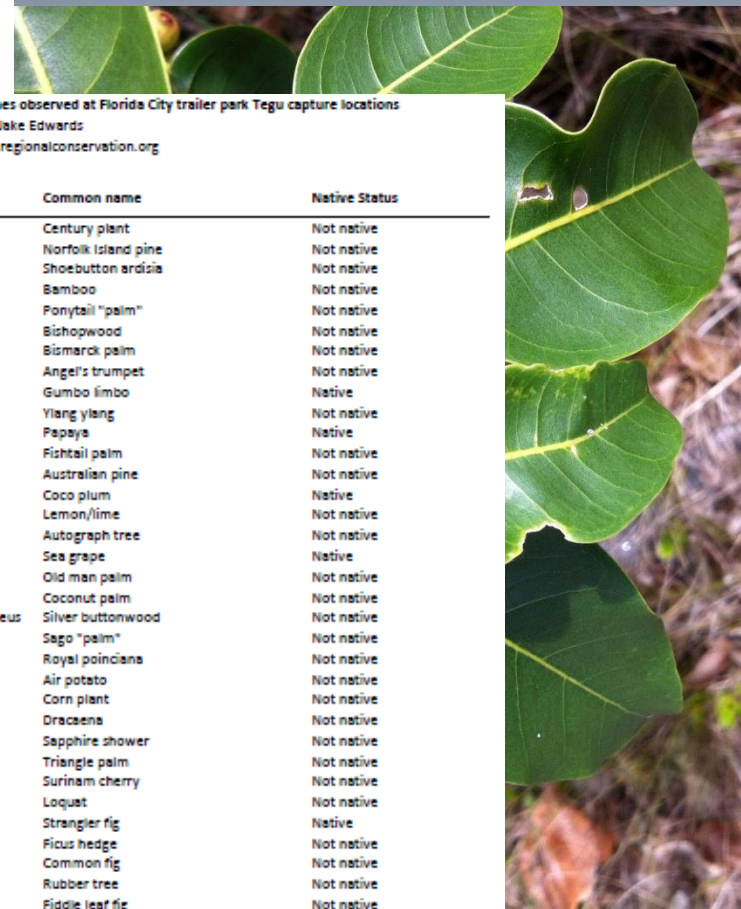
Jennifer Possley, Liz Barraco, Jake Edwards, June 10, 2014

Plant information from www.regionalconservation.org

Scientific Name	Common name	Native Status	Habit	Fleshy Fruit	Presence	
					Site1	Site2
<i>Annona glabra</i>	Pond apple	Native	Tree	YES	X	X
<i>Ardisia elliptica</i>	Shoebuttan ardisia	Not Native, Naturalized	shrub	YES	X	X
<i>Ardisia escallonioides</i>	Marlberry	Native	shrub	YES	X	
<i>Baccharis halimifolia</i>	Saltbush	Native	shrub	NO	v	v
<i>Caszytha filiformis</i>	Love vine	Native	vine	YES		
<i>Casuarina equisetifolia</i>	Australia pine	Not Native, Naturalized	Tree	NO		
<i>Cephalanthus occidentalis</i>	Buttonbush	Native	shrub	NO		
<i>Chiococca parvifolia</i>	Snowberry	Native	shrub	YES		
<i>Chrysobalanus icaco</i>	Cocoplum	Native	shrub	YES		
<i>Conocarpus erectus</i>	Buttonwood	Native	Tree	NO		
<i>Dodonaea viscosa</i> var. <i>angustifolia</i>	Narrow varnishleaf	Native	shrub	NO		
<i>Ficus citrifolia</i>	Short-leaf fig	Native	Tree	YES		
<i>Ilex cassine</i>	Dahoon holly	Native	Tree	YES		
<i>Ipomoea indica</i>	Morning glory	Native	vine	NO		
<i>Kosteletzkya virginica</i>	Marsh mallow	Native	shrub/herb	NO		
<i>Lantana involucrata</i>	Wild sage	Native	shrub	YES		
<i>Ludwigia peruviana</i>	Peruvian primrose willow	Native	shrub	NO		
<i>Metopium toxiferum</i>	Poison wood	Native	Tree	YES		
<i>Mikania cordifolia</i>	Climbing hempvine	Native	vine	NO		
<i>Myrica cerifera</i>	Wax myrtle	Native	shrub	SORTA		
<i>Myrsine cubana</i>	Myrsine	Native	shrub	YES		
<i>Parthenocissus quinquefolia</i>	Virginia creeper	Native	vine	YES		
<i>Passiflora suberosa</i>	Corky stem passionflower	Native	vine	YES		
<i>Persea palustris</i>	Swamp bay	Native	Tree	YES		
<i>Pluchea</i> sp.	Flabane	Unknown	shrub	NO		
<i>Psychotria nervosa</i>	Wild coffee	Native	shrub	YES		
<i>Sabal palmetto</i>	Sabal palm; cabbage palm	Native	Tree	YES		
<i>Salix caroliniana</i>	Coastal plain willow	Native	Tree	NO		

Trees, shrubs, and woody vines observed at Florida City trailer park Tegu capture locations
Jennifer Possley, Liz Barraco, Jake Edwards
Plant information from www.regionalconservation.org

Scientific Name	Common name	Native Status
<i>Agave</i> sp.	Century plant	Not native
<i>Araucaria heterophylla</i>	Norfolk Island pine	Not native
<i>Ardisia elliptica</i>	Shoebuttan ardisia	Not native
<i>Bambusa</i> sp.	Bamboo	Not native
<i>Beaucarnea recurvata</i>	Ponytail "palm"	Not native
<i>Bischofia javanica</i>	Bishopwood	Not native
<i>Bismarckia nobilis</i>	Bismarck palm	Not native
<i>Brugmansia</i> sp.	Angel's trumpet	Not native
<i>Bursera simarouba</i>	Gumbo limbo	Native
<i>Cananga odorata</i>	Ylang ylang	Not native
<i>Carica papaya</i>	Papaya	Native
<i>Caryota</i> sp.	Fishtail palm	Not native
<i>Casuarina equisetifolia</i>	Australian pine	Not native
<i>Chrysobalanus icaco</i>	Coco plum	Native
<i>Citrus</i> sp.	Lemon/lime	Not native
<i>Clusia rosea</i>	Autograph tree	Not native
<i>Coccoloba uvifera</i>	Sea grape	Native
<i>Coccothrinax</i> sp.	Old man palm	Not native
<i>Cocos nucifera</i>	Coconut palm	Not native
<i>Conocarpus erectus</i> var. <i>sericeus</i>	Silver buttonwood	Not native
<i>Cycas revoluta</i>	Sego "palm"	Not native
<i>Delonix regia</i>	Royal poinciana	Not native
<i>Dioscorea bulbifera</i>	Air potato	Not native
<i>Dracaena fragrans</i>	Corn plant	Not native
<i>Dracaena marginata</i>	Dracaena	Not native
<i>Duranta erecta</i>	Sapphire shower	Not native
<i>Dyopsis decaryi</i>	Triangle palm	Not native
<i>Eugenia uniflora</i>	Surinam cherry	Not native
<i>Eriobotrya japonica</i>	Loquat	Not native
<i>Ficus aurea</i>	Strangler fig	Native
<i>Ficus benjamina</i>	Ficus hedge	Not native
<i>Ficus carica</i>	Common fig	Not native
<i>Ficus elastica</i>	Rubber tree	Not native
<i>Ficus lyrata</i>	Fiddle leaf fig	Not native
<i>Ficus religiosa</i>	Secred fig	Not native
<i>Hamelia patens</i> var. <i>glabra</i>	Fire bush	Not native
<i>Hibiscus</i> sp.	Hibiscus	Not native
<i>Ixora</i> sp.	Ixora	Not native
<i>Jacaranda</i> sp.	Jacaranda	Not native
<i>Mangifera indica</i>	Mango	Not native



Tegu Gut Contents Analysis

Category	Frequency of Occurrence
Crustacea	8%
Gastropoda	26%
Insecta	71%
Plantae	60%
Vertebrates	39%
Eggs	8%

Tegu Gut Contents Analysis

- **Insecta (89; 71%)**
- 24 families
 - Romaleidae (60; 67%)
 - Lubber grasshopper, *Romalea guttata*
 - Carabidae (17; 19%)
 - Scarabidae (11; 12%)



Tegu Gut Contents Analysis

- **Plantae (76; 60%)**
- 17 families, 26 species
 - Chrysobalanaceae (20; 26%)
 - Cocoplum, *Chrysobalanaus icaco*
 - Arecaceae (20; 26%)
 - Anacardiaceae (16; 21%)
 - Poisonwood, *Metopium toxiferum*



Tegu Gut Contents Analysis

- **Vertebrates (49; 39%)**
- **Mammalia (28; 57%)**
 - Cricetidae (16; 57%)
 - Cotton rat, *Sigmodon hispidus*
 - Opossum, black rat, cat
- **Reptilia (9; 18%)**
 - Snakes (4; 45%)
 - Lizards, turtles



Tegu Gut Contents Analysis

- Varied diet
- 75% had multiple diet items
- Where are the eggs?

- Statistical analysis
 - Size class
 - Gender
 - Collection location
 - Collection date
 - Body condition

I hope you have enjoyed your lizard update!

