



# Wildlife Safety in the Field

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All Photos by FWC Unless Specified



# Overview of FWC

❑ State agency – managing fish and wildlife resources for their long-term well-being and the benefit of the people

❑ Headquarters Tallahassee, 5 regional offices, 76 field offices and facilities

- Freshwater & Marine Fisheries Mgmts.
- Fish and Wildlife Research Institute
- Hunting and Game Mgmt.
- Law enforcement: Protect, patrol, and preserve
- **Habitat & Species Conservation**
  - **Wildlife Impact Management**
    - **Wildlife Assistance Program – assisting the public with nuisance wildlife and conflict issues thru education and outreach**
    - **Non-native Wildlife Program**



# Wildlife Assistance Program

*...Addressing Conflict, Fostering Coexistence*

- Six regional staff providing technical assistance to foster coexistence
  - Primarily over the phone
  - Site visits
- Partnerships and coordination with other agencies and NGOs
- Pro-active engagement of communities and neighborhoods



# Some thoughts on wildlife...

- Wildlife is not inherently dangerous to people
- Most people injured by wildlife are doing something they shouldn't
  - Getting between the animal and its food or offspring
  - Trying to capture the animal
  - Trying to kill the animal
  - Trying to feed the animal
- Prevent encounters with wildlife by paying attention to your surroundings, securing attractants, and using common sense
- Know the species in your geographic area
  - Knowing how to identify wildlife and a little about their biology can help reduce encounters and conflicts.



# Distinguishing Behaviors of Wildlife

## Avoidance

- Most common behavior by far
- Running or flying away
- Hiding
- Climbing trees
- Stay still and hope not to be noticed

## Curiosity

- Stays in place
- May stand upright (bears, raccoons)
- Smelling the air
- Ears, nose, eyes, alert and directed toward the person
- Not aggressive

## Indifference

- Not reacting to human presence at all
- May come close to humans without seemingly acknowledging them
- May continue to engage in its activities



# Distinguishing Behaviors of Wildlife

## Defensive

- May produce noises such as growls, yelps, other calls
- Circling the threat but not coming closer
- Bared teeth, hair or feathers puffed up trying to look threatening or larger, snake in s-shape, rattling tail (not just rattlesnakes)
- Produces musky odors (skunk, snake)
- Animal feels threatened

## Aggressive

- May or may not produce noise – sneaking up on prey
- Unprovoked physical contact
- Charging or diving at a person can be confused for aggressive but is defensive if the animal feels threatened (such as birds diving at a person near their nest or an animal bluff-charging a threat)





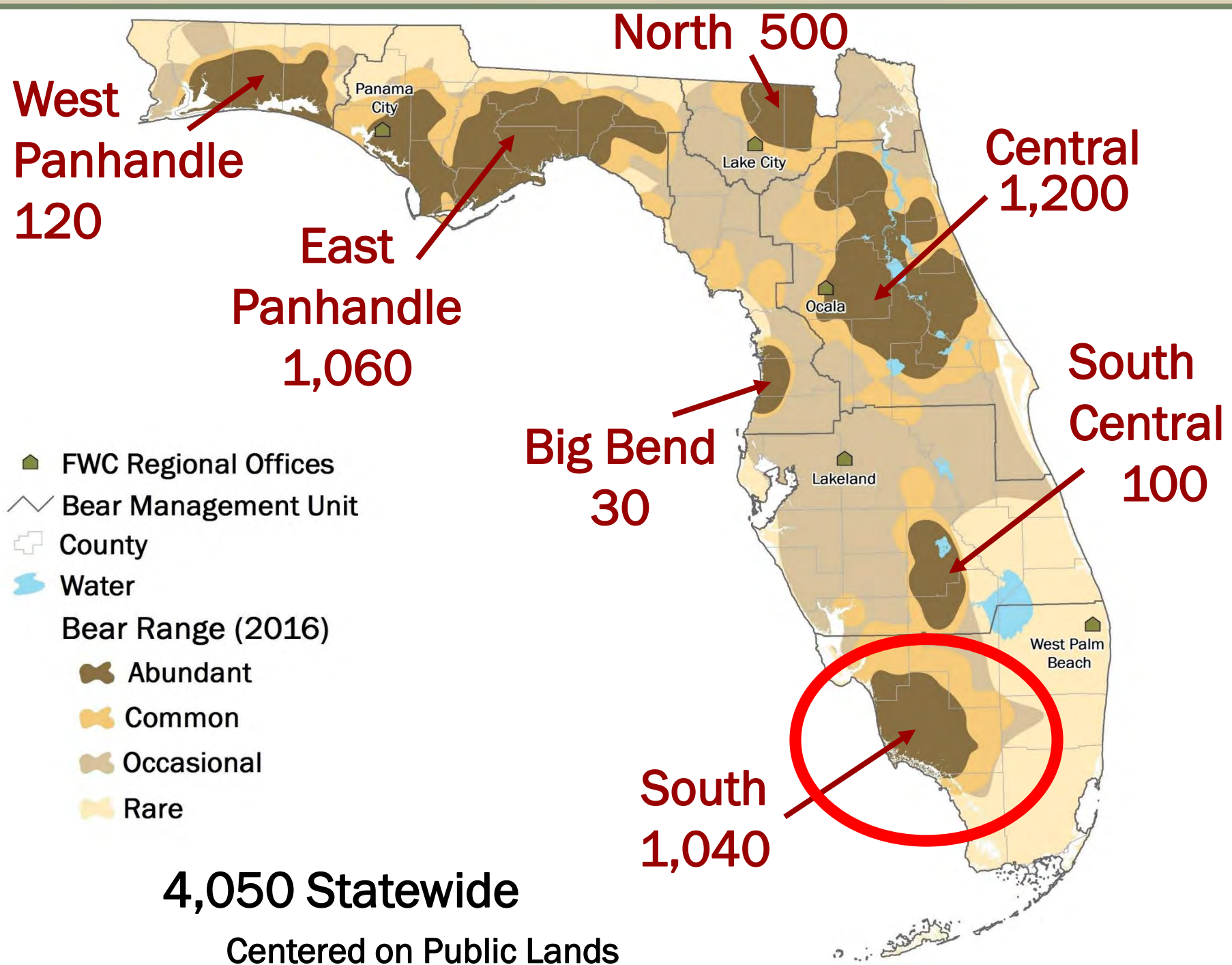
# Florida Black Bear

- Weight: Males avg. 250-450lbs (max 760), females 125-250lbs (max 400)
- Diet primarily consists of plants and insects
- Commonly attracted to neighborhoods by unsecured household garbage, bird feeders, grills, and pet food





Males  
range  
wider  
than  
females





# Coyotes

- 25-40lbs, ~3-4ft long, ~2ft shoulder height, fur color varies greatly
- Found from Alaska to Panama
- Naturalized in Florida
  - Major range expansion – benefited from wolf removal, forest clearance and urban food sources
- Highly adaptable diet and behavior (foxes similar)





# Grey Foxes



- Found throughout much of USA and Cen. Am. to N. S Am.
- ~8 to 15lbs, ~30-45in total body length, ~12-15in shoulder height, grizzled fur on back and sides



# Red Foxes

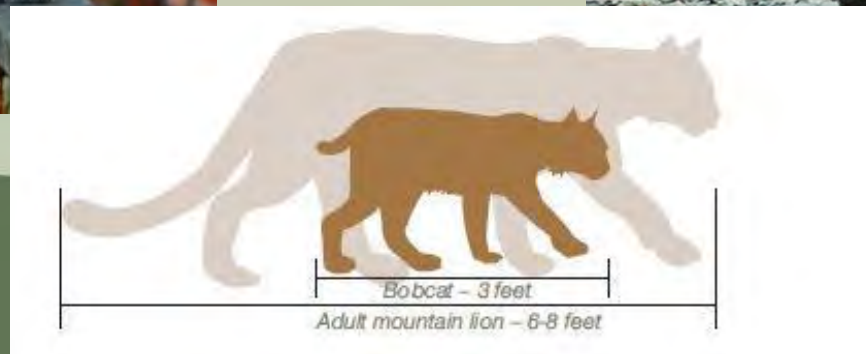


- Many subspecies around the northern hemisphere
- ~5 to 24 lbs, ~18-35in body length, ~12-22in tail length, ~14-20in shoulder height
- Also naturalized



# Bobcats

- Found from S. Canada to Cen. Mexico
- Fur mostly a spotted tan, pointed ears, short tail
- Weight: 8-40 lbs
- Often confused for a panther



# Florida Panthers

- Endangered Subpopulation found only in SW FL
  - Species is found from from SW Canada to Tierra del Fuego
- Fur mostly solid tan, young can be spotted like a bobcat, long, thick tail
- Weight: 55-176 lbs





# Raccoons

- Found throughout much of N and Cen. Am.
- Weight: 10 – 30 lbs
- Commonly attracted to human dwellings and farms



# Opossums

- Found across most of E US and US W Coast, and in Cen. Am.
- Weight: 1.7 to 14 lbs
- Florida's only marsupial
- Can “play possum” – playing dead



# River Otters

- Found throughout Canada, Alaska, NW US, and E US
- Weight: 11-30 lbs
- Found in a variety of aquatic habitats





# Wild Hogs



- Invasive/non-native species
- Weight: 200 lbs or more
- Found in every county in Florida
- Travel alone or in small groups
- Most common in areas with dense vegetation nearby



# Rabies in Florida: 1997-2016

20-Year Animal Rabies Summary by Species: 1997-2016\*

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	20 Year Total	20 Year Average	Last Year of Positive Rabies Case
Bat	19	13	15	19	19	14	18	15	23	20	19	20	28	21	19	23	19	17	6	17	364	18	
Beaver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	
Bobcat	0	1	0	0	2	3	2	4	2	3	4	1	2	1	0	3	1	3	3	4	39	2	
Cat	11	4	8	15	9	8	11	15	11	9	14	10	26	7	15	7	15	9	13	13	230	12	
Coatimundi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
Cow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	
Coyote	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
Deer	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
Dog	2	0	2	2	0	2	1	0	1	0	1	2	5	1	2	3	1	6	2	2	35	2	
Ferret	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1996
Fox	8	6	10	5	2	11	6	15	21	20	20	27	29	31	27	29	34	28	32	21	382	19	
Goat	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1947
Horse	0	2	0	1	0	2	1	1	1	2	1	3	0	0	0	1	1	0	1	2	19	1	
Mule	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1911
Opossum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1981
Otter	0	1	0	0	0	0	0	3	1	0	4	1	1	1	1	0	2	1	3	0	19	1	
Panther	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1989
Pig	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1969
Raccoon	37	31	45	50	71	59	79	75	92	88	66	111	108	146	127	115	124	97	126	153	1800	90	
Skunk	2	0	1	0	2	2	1	0	2	2	2	1	2	1	0	0	0	1	0	2	21	1	
Squirrel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1961
	79	59	83	92	105	102	119	128	154	144	131	176	201	209	191	181	198	162	186	215	2915		

\*Florida Department of Health only performs rabies testing on suspect rabid animals that have potentially exposed a person, pet, livestock, or captive wildlife.



Source: Florida Department of Health



# Wild Turkeys



- Protected species in Florida
- Will approach people if being fed, turkey toms can have breeding aggression
- May peck at reflective surfaces
- Can be scared away with loud noises, etc. (cannot be done around nests)



# Sandhill Cranes



# Ospreys, Hawks, and Songbirds

- Birds, eggs, and active nests are protected by federal law
- Nests in trees or in a structure
- Defensive of their nests, especially between Feb-May
- Use umbrella, hats, or hazing techniques to keep aggressive bird away from contacting you
- Keep distance from nest as much as possible



N. Mockingbird By Captain-tucker - Own work, CC BY-SA 3.0,  
<https://commons.wikimedia.org/w/index.php?curid=6930319>





# Prevent Problems with Mammals and Birds: Hazing

## Establish Human Dominance

- Rocks & sticks
- Whistles
- Pots & Pans
- Car & air horns
- “Coyote shaker”
- Motion-activated sprinklers
- Water pistols
- Motion lights
- Firecrackers
- *Bear spray*



# Bear Spray



- For mammals only
- Have easily accessible
- Aim just below face
- 2-3 second bursts
- 25 feet
- More effective than a gun
- Account for wind direction
- Have a container to store can in





# Notes about Hazing

- Do not haze birds when you are very close to the nest
  - This could cause nests to fail from the disturbance
- Make sure the animal has a safe place to escape to
- Be mindful of where the wildlife will retreat to. Wildlife may try to escape towards a busy road, endangering the animal and people on the road, or into a building





# American Alligator (*Alligator mississippiensis*)

- Conservation success in Florida
- Included on original Federal Endangered Species List in 1967
- Today, population estimated at 1.3 million alligators of every size
- Population stable for many years



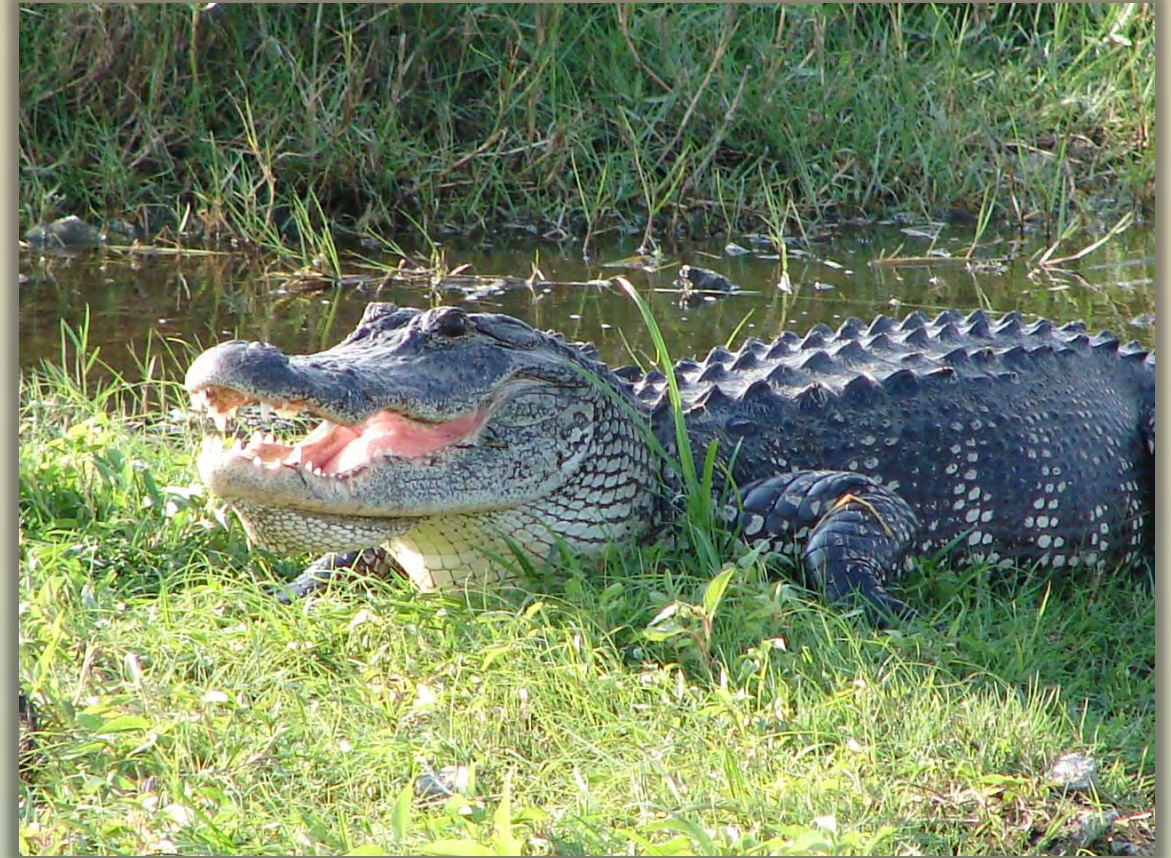
American alligator U.S. range





# American Alligator Biology and Ecology

- Can't tell males and females apart by outward appearances
  - Males can grow to 14 feet in length
  - Females smaller than males. Can grow to 8-9 feet in length
- More visible and active when temperatures rise
  - Bask in sun to regulate body temperature
- Courtship begins in the spring, with mating occurring in late May or June
  - Nests constructed after courtship
  - Eggs hatch from August to September





# American Alligator Biology and Ecology

Why alligators are an important part of freshwater ecosystems:

Keystone species:

- Help keep prey species populations in balance
- Create holes and caves that store water during dry seasons



# Avoiding Conflicts with American Alligators

- Any fresh or brackish water could have alligators - crocodiles in far southern Florida
- Be on the lookout for alligators when working in water or near water's edge
- Seek medical attention if bitten, serious infections can occur
- Alligators are most active at dawn and dusk





# Avoiding Conflicts with American Alligators

- Never feed an alligator
- When fed, alligators can overcome their natural wariness and learn to associate people with food
- Also prohibited: harassing, killing, or possessing alligators w/o permit
- If you see or have knowledge of an alligator being fed, report it to Wildlife Alert Rewards Program



# FWC Statewide Nuisance Alligator Program (SNAP)

- If you encounter an alligator that you believe poses a threat to people, pets or property, call:

**FWC's Nuisance Alligator Hotline at:**

**866-FWC-GATOR (866-392-4286)**

**Please be aware, nuisance alligators are killed, not relocated.**

- SNAP uses contracted nuisance alligator trappers throughout the state.
- If a complaint meets the criteria, SNAP will issue a permit to a contracted nuisance alligator trapper authorizing the removal of the animal.

**Complainant must be able to grant legal access to the property on which the alligator is located. SNAP does not permit the removal of nuisance alligators from private or publicly managed property without first obtaining permission from the property owner or management authority.**







# South Florida's Snakes





# Introduction to South Florida's Snakes

## About Snakes

- Cold-blooded, smooth- or keel-scaled, no eyelids
- All are carnivorous
- Lay eggs or live birth
- Young do not require parental care
- 45 species native to the state - 6 venomous

## Snake Lookalikes

- Legless lizards (e.g. skink)
- Glass lizards



Eastern Glass Lizard



Sand Skink (Federally threatened)





*Southern Black Racer*



*Red Rat Snake*



Common Species

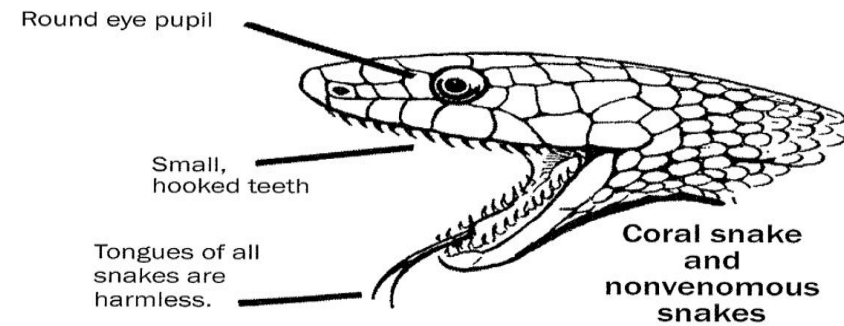
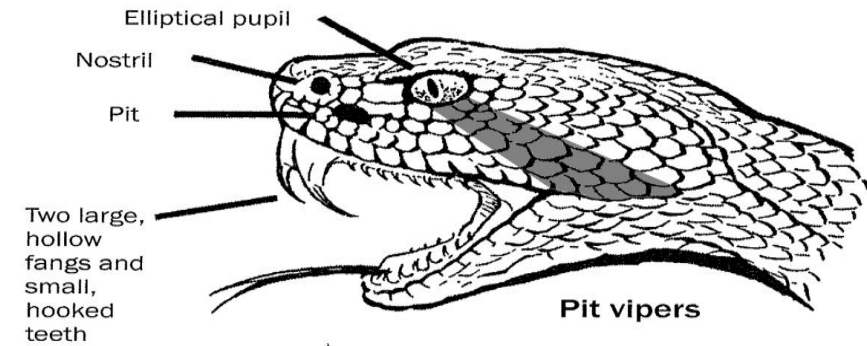
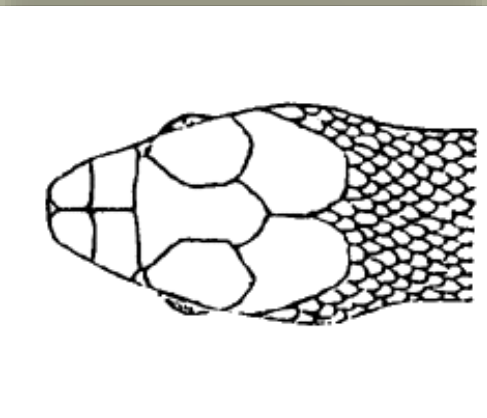
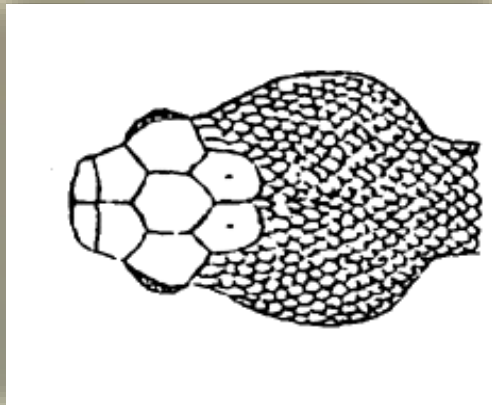
# Know Your South Florida Snakes

*Southern Ring-necked Snake*





# Identifying Venomous Snakes



Pit vipers are named for their trademark heat-detecting pits between each eye and nostril. They can detect temperature differences as slight as 0.003 degrees C.





# Cottonmouth/Water Moccasin

- Broad, angular head & thick body, up to 4ft
- When threatened will open jaws and reveal white inside mouth
- Usually found in wet habitats, eats primarily aquatic animals
- Look alike: Water snakes, genus *Nerodia* – notice round pupils

Juvenile  
Cottonmouth



Adult  
Cottonmouth



Banded Water  
Snake  
(nonvenomous)





# Pygmy Rattlesnake

- Small, has black patches on a lighter body, with variable amounts of red or other colors. Rattle very small if present
- Usually flees from danger or stay still. Sometimes are quite docile
- Similar Species: Hog nosed snakes
  - Non-venomous
  - 2 species in Florida: both possess prominent up-turned nose used for burrowing
  - Defensive strategies: puff up their necks like a cobra, play dead



Pygmy Rattlesnake



Eastern Hog-nosed Snake





# Eastern Diamondback Rattlesnake

- Broad, angular head, length up to 6ft
- Diamond-shaped designs on keeled scales, sometimes possesses distinct rattle on tip of tail
- Can be found in a variety of habitats, prefers gopher tortoise burrows
- Will warn a threat by shaking its tail, may form an s-shape with its body
  - May possess rattle but it can be broken off
- NOTE: Many species of snake rattle their tail to scare off a threat





# Eastern Coral Snake

- Black nose, red with yellow on either side (red on yellow – kill a fellow), avg. length to 30in
- Rear-fanged elapid (cobra family) - will only bite if handled or severely harassed
- Spends much time hidden underground, in debris, or in rotting logs
- Similar Species: Scarlet snake and scarlet kingsnake
  - Non-venomous
  - Very similar to each other
  - Red-tipped nose, red bands surrounded by black bands (red on black – friend of jack / venom lack)



Eastern  
Coral  
Snake



Scarlet  
Kingsnake





# Preventing Encounters

- Stack materials neatly on a platform above ground
- Check behind objects
- Avoid thick vegetation or tread lightly through it
- Leave the snake alone so it doesn't become defensive
- Toss objects towards it to scare it away



# Venomous Snakebite Do's

Most people bitten are capturing them or killing them

- If struck, move away from the snake.
- Seek medical treatment immediately.
- Keep victim warm and as comfortable as possible.
- Note any symptoms and allergies of victim.
- Remove bracelets, rings and constrictive clothing.
- Keep the bite area lower than victim's heart.
- Wash the bite wound with soap and water.





# Venomous Snakebite Don'ts

- Do not wait for symptoms to develop!
- Do not apply “traditional” remedies.
- Do not apply ice, heat, or a tourniquet.
- Do not draw an “X” incision and suck out the venom.
- DO NOT ATTEMPT TO CATCH OR KILL THE SNAKE!



# High Priority Non-Native Species

## Please Report Sightings to 888-IVE-GOT1

- Always use caution
- Park a short distance away
- Take photos while approaching
- Keep a distance of 15 ft
- If bitten, wash wound with soap and water
  - Seeking medical attention recommended





# Burmese python



*Burmese pythons/Photo credit Edward Mercer*



# Boa Constrictor





# Tegus (Argentine Black-and-White)



# Monitor Lizards (Nile)







# Seen something exotic? Report your sighting!

- 1. Take a picture**
- 2. Note the location**
- 3. Report your sighting**

**By phone:** 888-Ive-Got1 (888-483-4681) **Online:** [IveGot1.org](http://IveGot1.org)  
or download the IveGot1 reporting app.

Knowing the distribution of nonnative species in Florida helps wildlife biologists plan more effective management strategies.

**[MyFWC.com/Nonnatives](http://MyFWC.com/Nonnatives)**



# Things to Remember...

1. Be aware of your surroundings
2. Know the attractants
3. Stop and stay calm
4. Haze the animal if needed
5. Defend yourself
6. Seek medical attention
7. Respect wildlife





# FWC Contact Information

- South Regional Office Phone:  
(561) 625-5122
- Wildlife Alert Hotline / Rewards Program:  
(888) 404-3922  
Text/email [Tip@myfwc.com](mailto:Tip@myfwc.com)
- Exotic Species Hotline:  
(888) 483-4861
- South Region Wildlife Assistance Biologist email:  
[Bryce.Pierce@myfwc.com](mailto:Bryce.Pierce@myfwc.com)
- AskFWC for online inquiries

