Reptiles II: Snakes
Order Squamata

- Most diverse of extant reptile taxa – 7200 species
- Includes amphisbaenids, lizards & snakes
- Have well developed paired copulatory organs (hemipenes)
Family Colubridae

- Contains 78% of all snake species in the world
- Contains 84% of all eastern US snake species
- Large array of body types, sizes, and natural history characteristics
Coluber constrictor

- Common black snake
- Large, slender, & fast
- White chin
- Smooth scales
- *NOT* a constrictor!
- Eastern / Black Racer

Photo By: B. Johnston
Diadophus punctatus

- Small & slender w/ dark yellow or orange neck ring and venter
- Smooth scales
- Secretive – usually found in moist habitats
- Partially constricts prey

Ringneck Snake

Photo By: D. Stevenson
Drymarchon couperi

- Largest (2-3m) NA snake (blue-black) with rusty chin & smooth scales
- Disjunct distribution – FL and TX
- FL and US listed T – tied to gopher tortoise burrows
- Eastern Indigo Snake
- (D. corais couperi in book)
Elaphe obsoleta

- Long, powerful constrictor w/ weakly keeled scales
- In FL, tend to be yellow / orange with 4 thin black stripes
- “Loaf of bread shaped” cross section
- Arboreal, mostly in hardwoods

Rat Snake

Several subspecies in FL: Gray, Yellow, & Everglades Rat Snakes
E. obsoleta can grow quite large.
Elaphe guttata

- Long, slender w/ red patches, white venter with black checkerboard pattern
- “Loaf of bread” shaped cross-section
- Smooth or weakly keeled scales
- Arboreal – predator of cavity nesters (esp. in pines)
- Corn Snake / Red Rat Snake

Photo By: D. Steen
Farancia abacura

- Shiny blue-black aquatic snake
- Black dorsum with red venter
- Smooth scales, esp. active on rainy nights
- Feeds mainly on eel-like amphibians

Photo By: T. Blunden

Eastern Mud Snake
Heterodon platyrhinos

- Upturned snout
- Chunky snake w/ extreme color variation
- Known for “puff adder” and “playing possum” behavior
- Anuran specialists, rear fanged
- Eastern Hognose Snake

Photos By: E. Condon
Masticophis flagellum

- Very long (2m+), but relatively slender-bodied snake that is very fast!
- Pigmentation tends to vary from dark to light down the body
- Tail appears "braided"
- Scales smooth

Coachwhip

Photo By: T. Blunden
Nerodia fasciata

- Large-bodied, aquatic snake with strongly keeled scales
- Dark overall, with darker crossbands
- Labial scales (around mouth) fringed with black
- Often (fatally) mistaken for Cottonmouth

Southern Water Snake

Photo By: C. Camp
Nerodia floridana

- Large, thick bodied and greenish-brownish aquatic snake without distinct markings
- Strongly keeled scales
- Scales between eye and labials
- Often (fatally) mistaken for Cottonmouth

Florida Green Water Snake

Photo by: M. Aresco
Nerodia taxispilota

- Heavy bodied light brown aquatic snake with large squarish blotches
- Belly light with dark half-moon markings
- Strongly keeled scales
- Arboreal near water

Photo By: D. Stevenson
Opheodrys aestivus

- Very slender bright green snake w/ long tapering tail
- Arboreal, preferring dense vegetation
- Swims well

Photo By: D. Stevenson

Rough Green Snake
Pituophis melanoleucus

- Large tan/rusty brown snake with indistinct pattern w/ keeled scales
- Enlarged & hardened rostral scale (tip of snout/nose)
- Hiss loudly when approached
- Burrow specialists
- SSC in FL

Eastern Pine Snake

Photo By: L. Smith

Photo By: D. Stevenson
Regina alleni

- Highly aquatic w/ shiny scales
- Black and upper sides olive-brown to dark-brown
- Strongly keeled scales
- Narrow head
- Crayfish specialist
- Striped Crayfish Snake
Thamnophis sirtalis

- Long slim snake
- Dark overall color with 3 stripes and keeled scales – huge variation
- Lateral stripes on scale rows 2 and 3
- Generally very common and widespread
- Large numbers hibernate together

Common Garter Snake

Photo By: J. Jensen
**Storeria dekayi**

- Small, dark brown to grayish brown w/ dark blotches
- Keeled scales
- Thrive in urban areas and moist habitats
- Brown Snake
**Lampropeltis getula**

- Pattern Highly Variable
- Two toned scales, with yellow/pale at the base and brown at the apex.
- Crossbars usually visible on neck
- Both Florida and Eastern subspecies occur within Florida (and intergrades)

- Florida Kingsnake
Lampropeltis triangulum

- Coral Snake mimic – Red, Black & Yellow
- Rings continuous through belly
- Snout red
- Not usually out in the open – wedges into loose bark, crevices in logs etc.

- Scarlet Kingsnake or Milk Snake
Cemophora coccinea

- Coral snake mimic – Red bordered by black
- Head red w/ black band behind eyes
- Incomplete rings with white belly
- Snout red
- Secretive – found underground or in under tree bark
- Nocturnal

Scarlet Snake
Family Elapidae

- HIGHLY VENEMOUS!
- Fixed fangs
- Most species from Old World & Australia:
  - Cobras
  - Death Adders
  - Mambas
  - Sea Snakes
  - Kraits
  - Tiger Snakes
Micrurus fulvis

- Red and yellow rings touch
- End of snout black
- Smooth scales
- Neurotoxic venom (nerve cells)
- Eat mostly small lizards and snakes

Photo By: D. Stevenson

Eastern Coral Snake
Family Viperidae

- VENEMOUS!!
- Thick-bodied, with large, triangular head
- "Hypodermic" fangs fold back along the upper jaw when not in use
- N. American sp. ovoviviparous
- Pit vipers – have loreal pits – heat sensing pits on face to detect prey
Agkistrodon contortrix

- Pale overall with darker hourglass shapes across back
- Only FL location in mid-panhandle
- Hemotoxic venom (destroy red blood cells)
- Copperhead

Photo By: B. Johnston
Agkistrodon piscivorus

- Aquatic; dark overall with darker crossbands
- White on sides of head with strong dark band through eye
- White mouth lining used as warning
- Young snakes resemble A. contortrix
- Hemotoxic venom & high bacterial loads with bite
- Swims w/ head out of water
- Cottonmouth (also water moccasin)

Photo By: D. Stevenson
**Sistrurus miliarius**

- Smallest FL viper
- Gray with round black row of spots, and rusty dorsal stripe on back
- Rattle small, buzzy – may be used as lure
- Hemotoxic venom
- Pigmy Rattlesnake

Photo By: R. Birkhead

Photo By: J. Jensen
Crotalus adamanteus

- Largest rattlesnake (1-2m) w/ longest fangs & largest venom sacs
- Dark diamonds on back outlined in yellow or white
- Highly destructive hemotoxic venom
- Eastern Diamondback Rattlesnake
Crotalus horridus

- Large (1-1.5m)
- In South, light overall with dark crossbands & rusty dorsal stripe
- Venom hemotoxic, neurotoxic, or a combination of both
- Exhibit denning behavior

Timber Rattlesnake
Family Pythonidae

- Non venomous snakes native to Africa, Asia, and Australia
- HUGE – some of the world's largest (esp. longest) snake species
- Heat sensing labial pits (as opposed to loreal pits of pit-vipers)
- Constrict prey
Python molurus

- **EXOTIC** in FL (everglades) and spreading
- HUGE (18 feet, record 27 feet, 400 lbs)
- Found near water
  - Native to SE Asia rainforests; wild pop’s threatened
- Huge env. and economic impacts
- Burmese Python
Questions?