

Biogeography. Lecture 18

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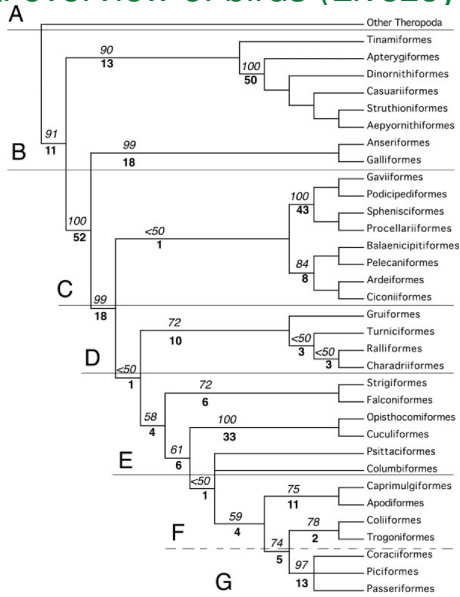


Aves, birds

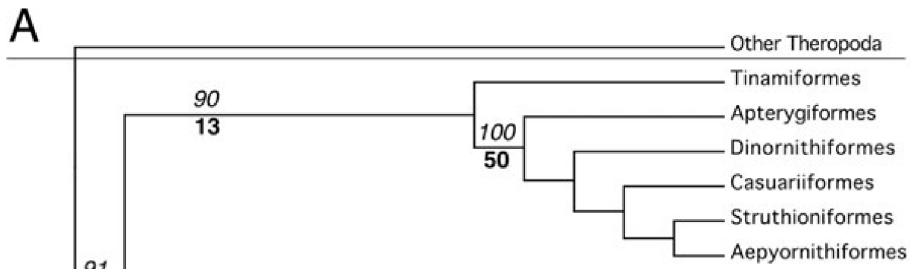
Superorders D–G



Morphological overview of birds (Livezey et al., 2007)



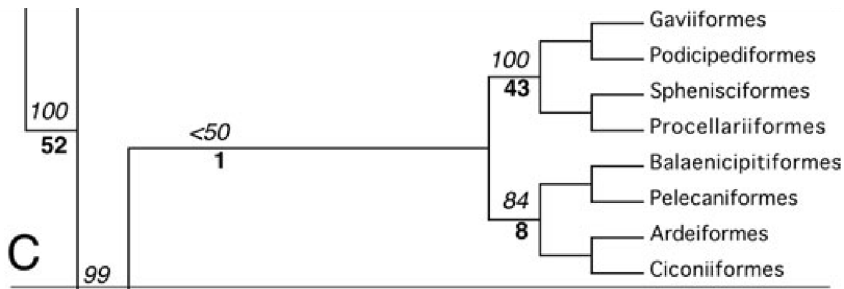
A: non-flying birds, ostrich and others



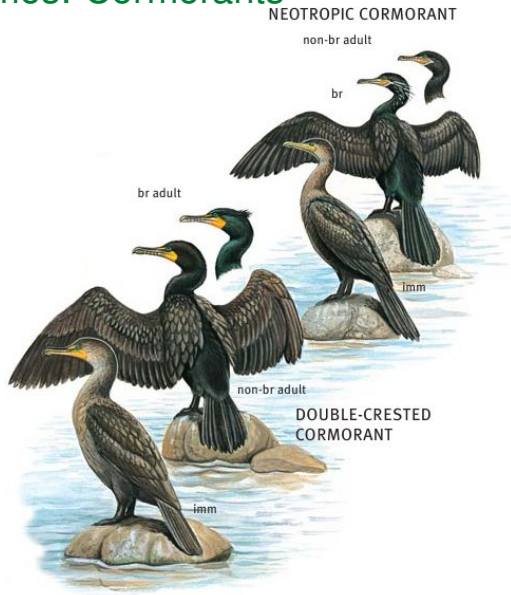
B: Galloanseres, chicken and ducks



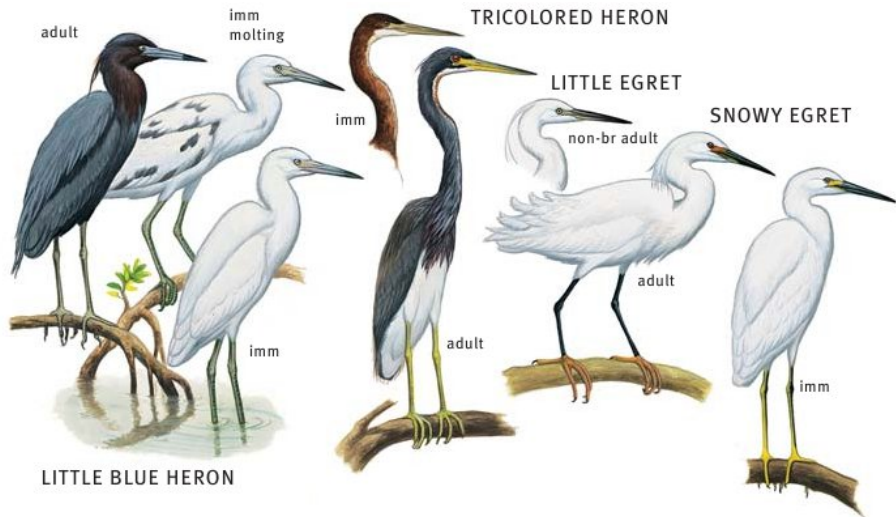
C: seabirds



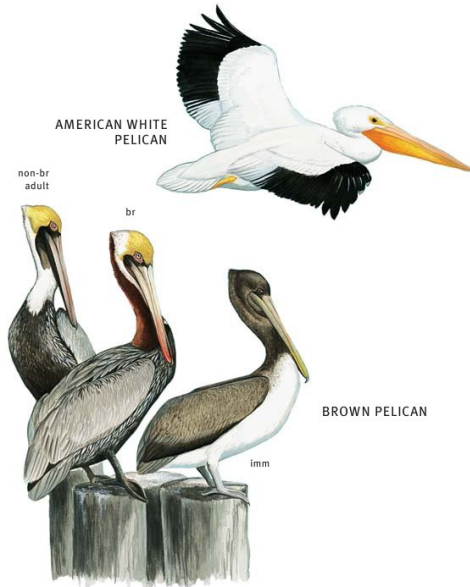
Pelecaniformes: Cormorants



Pelecaniformes: Herons

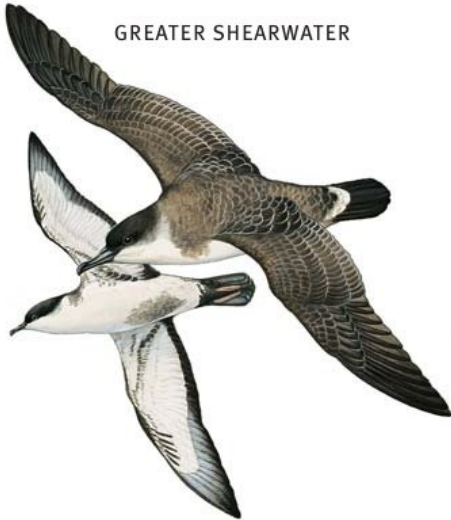


Pelecaniformes: Pelicans

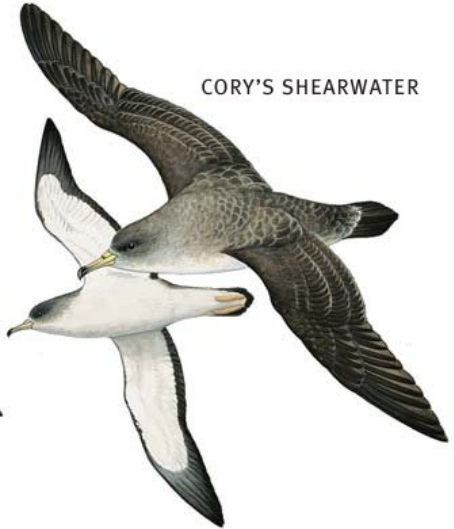


Procellariiformes: Shearwaters

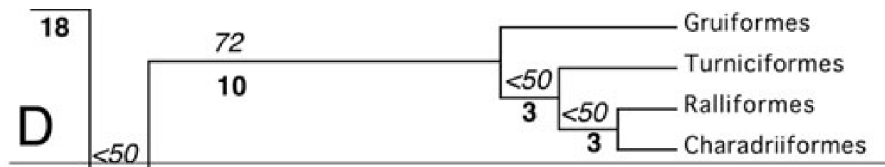
GREATER SHEARWATER



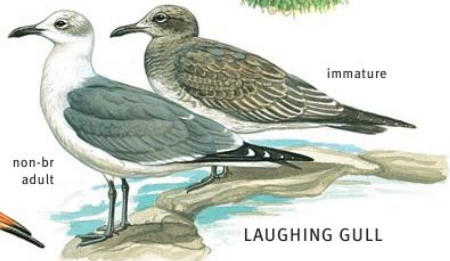
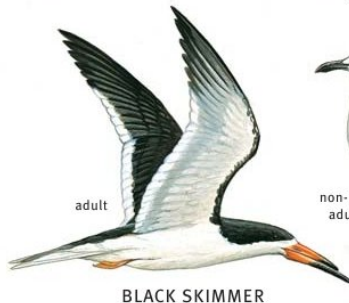
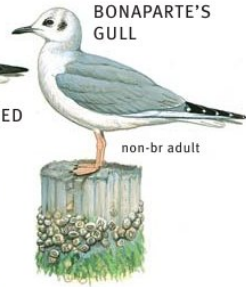
CORY'S SHEARWATER



D: cranes, gulls and others



Charadriiformes: Gulls



Charadriiformes: Sandpipers



SOLITARY SANDPIPER

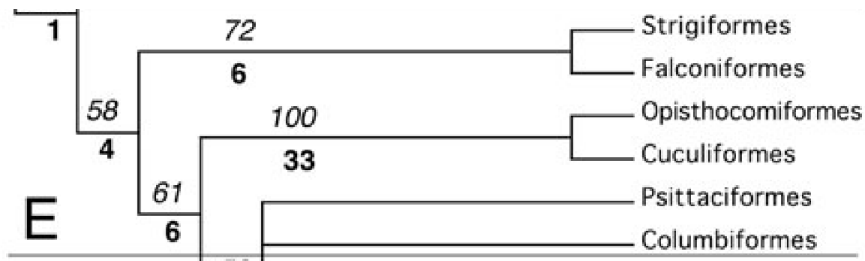


WOOD SANDPIPER

Gruiformes: Rails



E: birds of prey, cuckoos, parrots, doves



Psittaciformes: Parrots

YELLOW-BILLED
PARROT

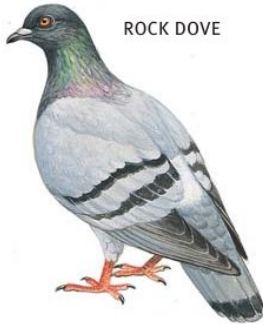


BLACK-BILLED
PARROT



ST LUCIA
PARROT

Columbiformes: Doves



ROCK DOVE

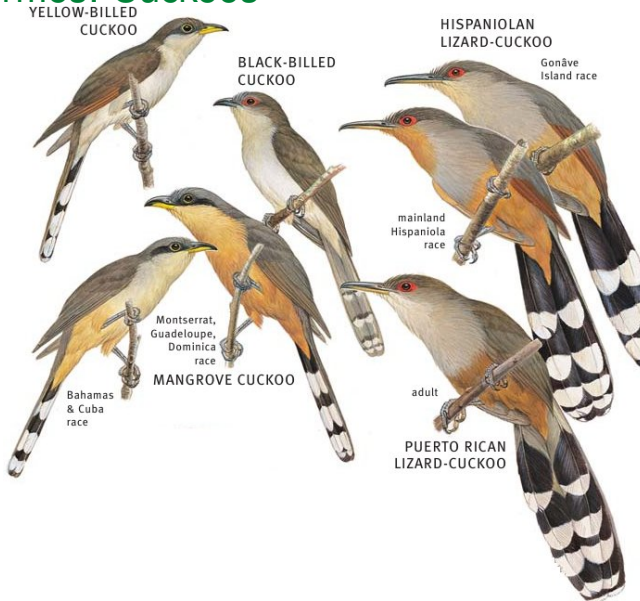


WHITE-WINGED DOVE

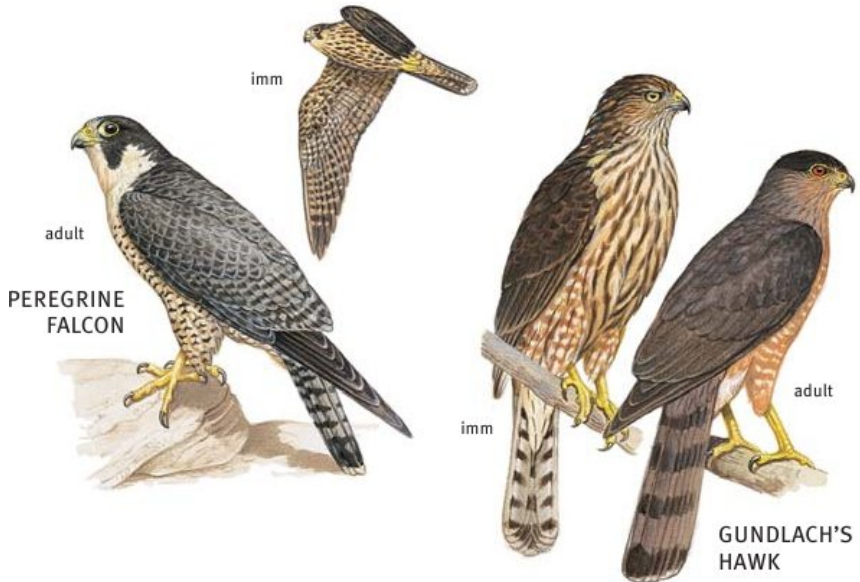


EARED DOVE

Cuculiformes: Cuckoos



Falconiformes: Falcon and hawk



Strigiformes: Owls

PUERTO RICAN
SCREECH-OWL



CUBAN PYGMY-OWL



adult

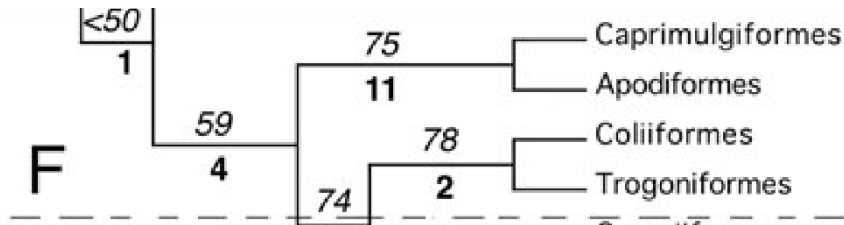


BURROWING OWL

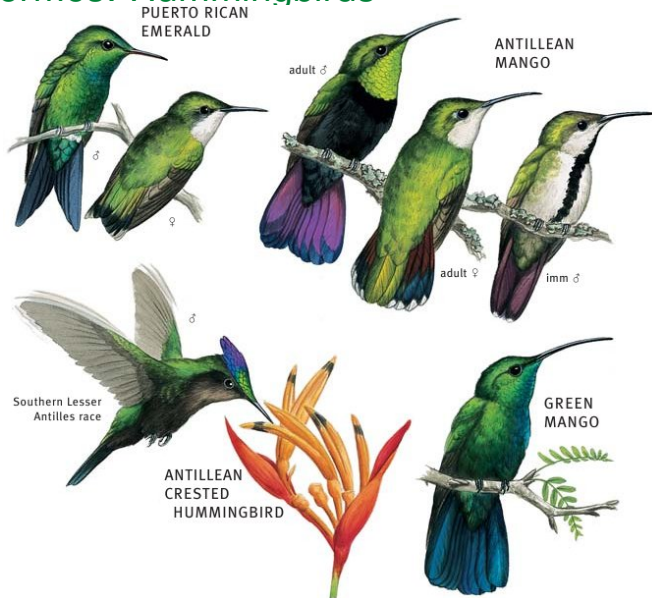


SHORT-EARED
OWL

F: swifts, hummingbirds and others



Apoditiformes: Hummingbirds



Apoditiformes: Swifts



Caprimulgiformes: Nightjars



WHITE-TAILED NIGHTJAR



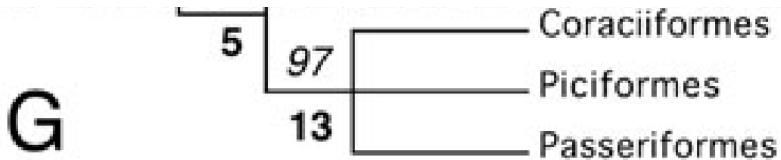
WHIP-POOR-WILL/PUERTO RICAN NIGHTJAR



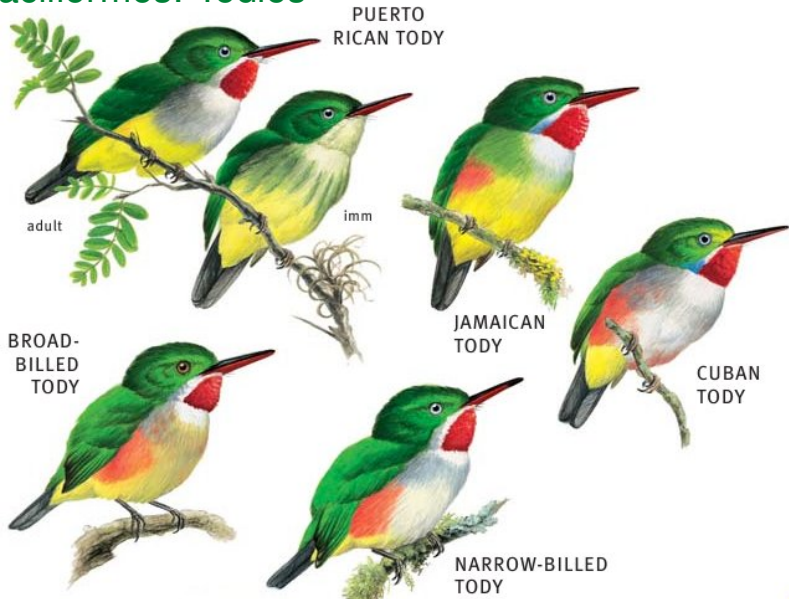
Trogoniformes: Trogons



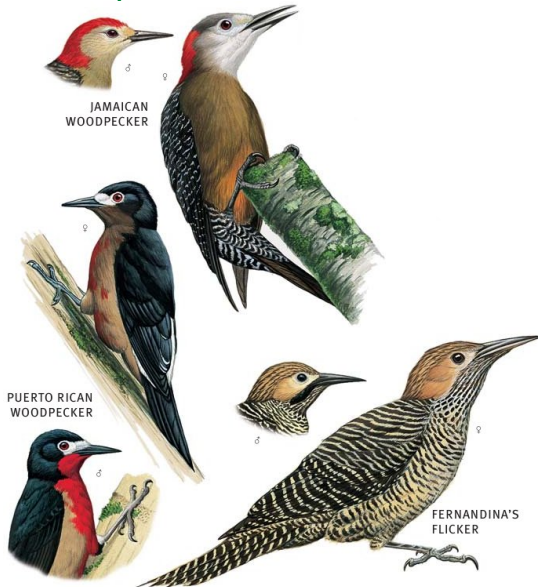
G: woodpeckers, songbirds and others



Coraciiformes: Todies



Piciformes: Woodpeckers

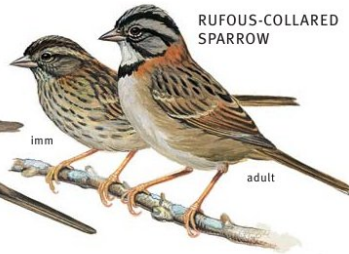


Passeriformes: Sparrows

WHITE-CROWNED
SPARROW



RUFOUS-COLLARED
SPARROW



CLAY-COLORED
SPARROW



LARK
SPARROW



Reptiles and amphibians

Overview



Amphibians: very short overview

► Amphibia

- Gymnophiona: caecilians, legless amphibians
- Caudata: salamanders
- Anura
 - **Archaeobatrachia**, e.g., tailed frog
 - **Mesobatrachia**, e.g., clawed frogs like African *Xenopus*
 - **Hyloidea**, e.g., Puerto Rican tree frog, coqui (*Eleutherodactylus*)
 - **Ranoidea**, e.g., common frogs



American tailed frog (*Ascaphus*)



Puerto Rican tree frog, coqui (*Eleutherodactylus*)



Reptiles: very short overview

► Reptilia

- Testudines, turtles
- Crocodilia, alligators etc.
- Sphenodontia, New Zealand tuatara
- Squamata, lizards and snakes
 - **Gekkota**: geckos like Puerto Rican *Sphaerodactylus*
 - **Scincoidea**: skinks like Puerto Rican *Mabuya*
 - **Lacertoidea**: common lizards like Puerto Rican ameiva (*Ameiva*) and “legless lizards” (*Amphisbaena*)
 - **Anguimorpha**: anguids like Puerto Rican *Diploglossus*
 - **Iguania**: true iguanas like Puerto Rican *Anolis* or *Iguana*
 - **Serpentes**: snakes like blind snakes (*Typhlops*) and Puerto Rican boa (*Epicrates*)



New Zealand tuatara (*Sphenodon*)



Gekkota: Puerto Rican gecko (*Sphaerodactylus*) in hotel



Scincoidea: *Mabuya*



Lacertoidea: *Ameiva exsul*



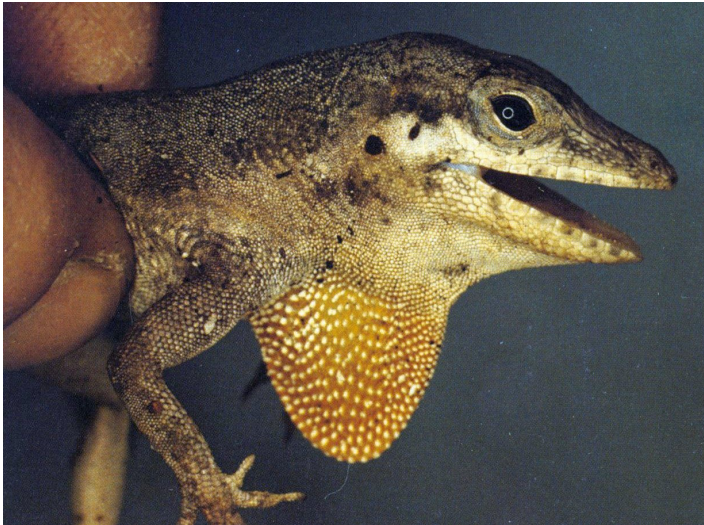
Lacertoidea: *Amphisbaena*



Anguimorpha: *Diploglossus*



Iguania: *Anolis*



Iguania: *Iguana*



Serpentes: *Typhlops*



Serpentes: *Epicrates*



For Further Reading



A. Shipunov.

Biogeography [Electronic resource].

2014—onwards.

Mode of access:

http://ashipunov.info/shipunov/school/biol_330



Amphibians

<http://en.wikipedia.org/wiki/Amphibian>



Reptiles

<http://en.wikipedia.org/wiki/Reptile>

