

Lab # 2 BIOL 427





Falconiformes



Accipitriformes



Charadriiformes



Gruiformes



Columbiformes



Falconiformes vs. Accipitriformes

A Phylogenomic Study of Birds Reveals Their Evolutionary History

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Hawks



Falcons



Parrots and Passerines

ORDERS

FAMILY

Falconiformes



Falconidae (Falcons)

Accipitriformes

Gruiformes

Charadriiformes

Columbiformes

Falconiformes (Falcons)

- Diurnal birds of prey
- Wings sharply pointed at tips
- Tooth on the upper mandible of the beak
- Vertical stripes before and/or behind the eye
- Streaking vs. barring on juveniles vs. adults



Head of a Falcon (*Hierofalco islandus*)
to show impervious nostrils,
and tooth-like process of the bill.

ORDERS

Falconiformes

Accipitriformes

Gruiformes

Charadriiformes

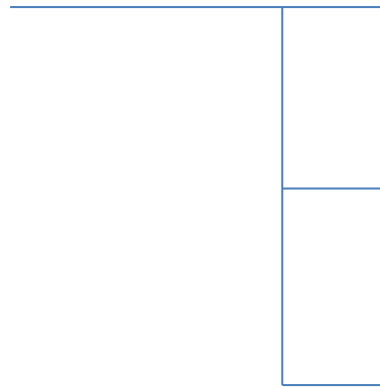
Columbiformes

FAMILY

Pandionidae (Ospreys)

Accipitridae (Hawks,
Eagles and allies)

Cathartidae (NewWorld
Vultures)



Accipitriformes (Ospreys, Eagles, Hawks and Vultures)

- Diurnal birds of prey
- Large bodies and bills
- Osprey – scales on feet, reversible outer toes
- Vulture – long curved bills, weak feet, long wings (V)
- Hawks – major species plus Accipiter and Buteo species (forest vs. open-country)



ORDERS

Falconiformes

Accipitriformes

Gruiformes

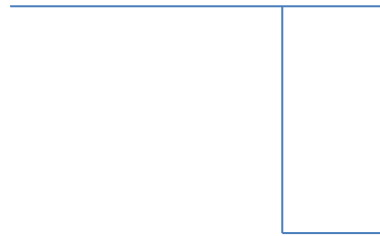
Charadriiformes

Columbiformes

FAMILY

Rallidae (Rails,
Gallinules and Coots)

Gruidae (Cranes)



Gruiformes (Rails, Gallinules, Coots and Cranes)

- Marsh birds
- Coots - very aquatic, lobed toes to aid in swimming, forehead shield
- Cranes - tall, long necks and legs, red plumage distinguishes from herons



ORDERS

Falconiformes

Accipitriformes

Gruiformes

Charadriiformes

Columbiformes

FAMILY

Charadriidae (Lapwings, Plovers)

Haematopodidae
(Oystercatchers)

Scolopacidae (Sandpipers,
Phalaropes, Allies)

Laridae (Gulls, Terns, Skimmers)

Stercorariidae (Skuas, Jaegers)

Alcidae (Auks, Murres, Puffins)

Charadriiformes (coastal water birds)

- Lapwings and plovers = small, long legs and short bills, black and white markings
- Oystercatchers = pink-red legs and feet, long bills flattened laterally
- Auks, murrelets and puffins = black and white colouring



Charadriiformes (coastal water birds)

- Sandpipers – brown/gray, pale bellies
 - length of bill relative to head
 - shape of bill
 - markings on the head
 - rusty colouring
 - colour and length of legs
- Gulls
 - colour of the bill
 - amount of black on upper wings
 - colour of the legs
 - body size



Great Auk



ORDERS

Falconiformes

Accipitriformes

Gruiformes

Charadriiformes

Columbiformes

FAMILY

Columbidae (Pigeons
and Doves)



Columbiformes (Pigeons and Doves)

- Doves - smaller bodies, longer necks and tapered tails



Songs to know

- Virginia rail
- Sandhill crane
- Killdeer

