

Classification of Birds-II

Degree-I

Classification of Birds

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Subclass II—NEORNITHES

1. Living as well as extinct birds
2. Tail usually short, ends in a pygostyle
3. Rectrices are arranged in a semicircle around the pygostyle
4. Teeth are absent except in few forms
5. Metacarpals fused with distal carpals to form a carpo-metacarpus
6. Claws are absent in the fore-limbs
7. The sternum is well developed and usually provided with a keel or carina
8. Vertebrae are heterocoelous in living forms
9. Caudal vertebrae 13 or less

Superorder I—ODONTOGNATHAE

1. Extinct cretaceous birds
2. Teeth present in furrows on jaws

Examples : *Hesperornis*, *Ichthyornis*

Superorder II—PALAEOGNATHAE

1. Mostly flightless walking or running birds.
2. Wings are reduced or absent.
3. Teeth are absent
4. Tail vertebrae are free.
5. Coracoid and scapula are small and fused at an obtuse angle.
6. Sternum devoid of keel or carina

Order 1. Struthioformes

1. Large flightless terrestrial birds
2. Head, neck and legs sparsely feathered

3. Feathers without attend-Left
4. Head comparatively small and neck very long and flexible
5. Beak is short and broad
6. Only two toes (3rd & 4th) on each foot
7. Sternum has no keel
8. Pubic symphysis present
9. No pygostyle



Figure 2 Struthio

Example: *Struthio camelus* (Ostrich)

Order 2. Casuariiformes

1. Large flightless terrestrial birds
2. Head sparsely feathered while body densely feathered
3. Feathers with aftorshaft nearly equal to shaft
4. Wings small or rudimentary
5. Three twos with typical claws on each foot
6. Sternum has no keel



Figure 3 Casuarius

Examples : *Dromaeus* (Emus), *Casuarius* (Cassowaries)

Order 3. Aepyornithiformes

1. Flightless, terrestrial
2. extinct elephant birds
3. Wings vestigial or tiny
4. Legs powerful with 4 toes, sternum short and without keel

Example: *Aepyornis* (Extinct)

Order 4. Dinornithiformes

1. Giant flightless, terrestrial, extinct birds

2. Wings almost absent
3. Sternum reduced and without keel
4. Pectoral girdle completely absent

Example: *Dinornis* (Moas) Extinct

Order 5. Apterygiformes

1. Flightless terrestrial birds
2. Feathers flappy, hairlike and devoid of aftershaft
3. Wings degenerate
4. Beak is long and slender
5. Nostrils at the tip of maxilla
5. Eyes are small
6. Neck and legs are comparatively short
7. Legs have 4 toes
8. Sternum without keel
9. Eggs largest among all living birds
10. Nocturnal, Feeding on worms and insects



Figure 4 Apteryx

Example : *Apteryx* (Kiwi)

Order 6. Rheiformes

1. Flightless, terrestrial and swift-running birds
2. Head, neck and thighs are feathered
3. Feathers have no aftershaft
4. Legs bear 3 tees with heavy and typical claws
5. Sternum has no keel



Figure 5 Rhea americana

Example *Rhea americana* (American Ostrich)