

## FLIGHTLESS BIRDS (RATITAE)

The living wingless or flightless birds belong to the **superorder Palaeognathae** (or Ratitae) of the **subclass Neornithes**. They are usually **very large** and they have **well-developed powerful legs, small heads** and **rudimentary wings** with fluffy feathers which are useless for flight.

### Orders of flightless birds

The living flightless birds belong to the following 4 orders of the superorder Palaeognathae

Order 1 : **Struthioniformes** - Ostriches of Southwest Asia and Africa.

Order 2 : **Rheiformes** - Rheas of South America

Order 3 : **Casuariiformes** -Cassowaries and emus of Australia and adjacent islands

Order 4 : **Apterygiformes** - Kiwis of New Zealand

### Examples of Flightless birds

#### 1. Ostrich

- Ostrich is the largest living bird attaining a height of **more than 2.5 meters** and a **weight of 150 kg**.
- **Head, neck and legs** are sparsely feathered.
- **Wings** are small and usually kept folded while running but sometimes expanded and used as **brake or steering**.
- Wing fingers (two) are clawed which are used for defence.
- Male and female birds differ in the colour of their plumage.
- The **tail and wing feathers** are **white** while the rest are black in the male.
- The **long sturdy legs** are admirably suited to match the **speed of zebras**.
- It can run at a **speed of 80 km per hour**
- **Each foot has 2 toes** only.
- Two **beaks** are **more or less round** and enclose a broad space.
- The food consists of **seeds and fruits**.

- They are **polygamous** as one male attends several females.
- The **egg** of the ostrich is very large and it weighs nearly **1.5 kg**.

#### 2. Rhea

- Rhea is represented by 3 species inhabiting the plains of **South America**.
- They use to live in groups
- They are smaller than the ostriches.
- In the rheas, there are **3 clawed toes** on each foot.
- The **rudimentary wings are better developed** than in ostrich.
- Its head and neck are **feathered**.
- Rheas are **very fond of bathing** and are even able to swim.
- The male is **polygamous**.
- Nest is dug by male and all females use to lay eggs in same nest.
- Nearly **50 eggs** are laid in a season and male incubates them.
- Freshly laid eggs are **lemon yellow** and require **40 days incubation**.
- There are 2 species of Rhea i) *Rhea americana* ii) *Pteronemia pennata*

#### 3. Emu

- Emu is the **second largest living bird** standing more than **1.5 m high**.
- It has shorter neck covered with feathers.
- Body is covered with a **drab-coloured plumage** and both the sexes are similarly coloured.
- There is a remarkable **tracheal pouch** fully developed in adults.
- The bird feeds on **fruits, roots and herbage**.
- It loves bathing and swimming.
- Emu is **monogamous**
- **Male digs the nest** and sits over first brood of egg.
- The females sit over the second brood.
- The **eggs are green in colour** and their number is usually **15** or more.
- The period of **incubation is 60 days**.
- Flesh is moderately good for eating.

#### 4. Cassowary

- The cassowaries are the **world's third largest flightless birds**.
- They are **shy, nocturnal** and rarely seen.

- Adults are **black in colouration** which is brown in the young.
- Each foot has **3 clawed toes**.
- This bird is distinguished by a **horny helmet** on the head.
- It protects the bent head as the bird rushes through the scrub.
- Some individuals become very tame and affectionate.
- Their flesh is considered very palatable.

#### 5. Kiwi

- It is the **smallest living flightless bird**
- They are characterized by **brown coarse hair-like feathers**.
- It has strong backwardly situated legs with **3 toes in front and hallux behind**.
- Their **wings are rudimentary** and tail feathers are lacking.
- Kiwis are **nocturnal** and burrowing in habit, passing the **daytime asleep** in an underground hole but emerging **at night in search of food** which includes worms and insects.
- In proportion to the size of the body, the kiwi lays the largest eggs.
- **Only one white coloured egg** is laid at a time.

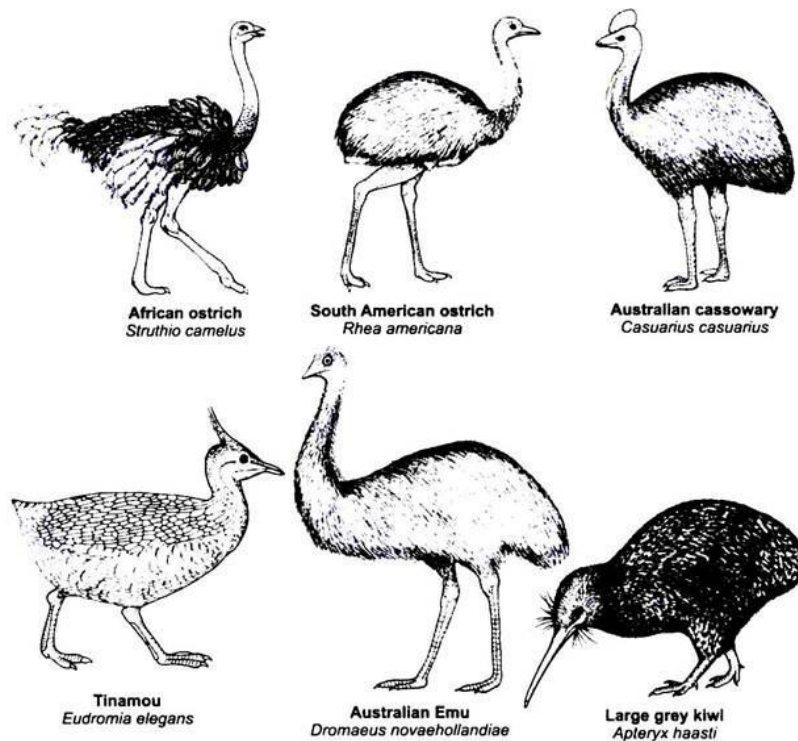


Fig. 28.1. Common flightless birds (Ratitae).