

II- Types of Bird Migration

The Migratory Behaviour in birds has been broadly categorised into following types:

- (i) Longitudinal,**
- (ii) Latitudinal,**
- (iii) Altitudinal or Vertical,**
- (iv) Partial,**
- (v) Total,**
- (vi) Irregular or Vagrant**
- (vii) Seasonal,**
- (viii) Diurnal and**
- (ix) Nocturnal.**

(i) Longitudinal migration:

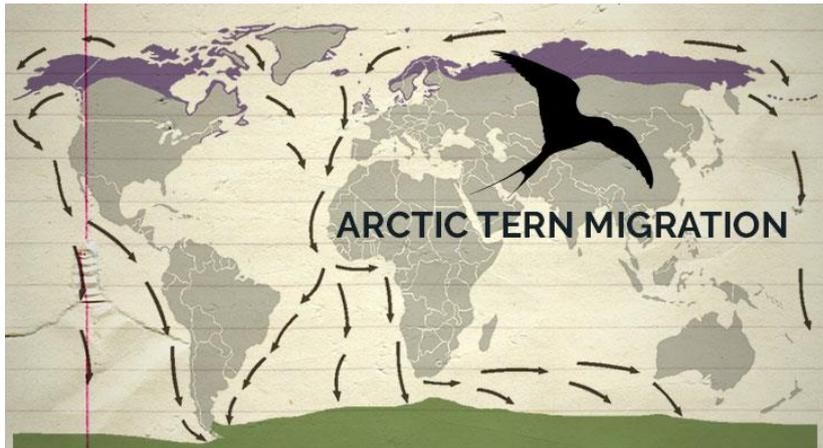
The longitudinal migration means that the bird species occurs moves/migrates from east to west and vice- versa. A species of birds called Starlings (*Sturnus vulgaris*), which is naturally found in east Europe and west Asia migrate towards the Atlantic coast.



Starlings Migration.

(ii) Latitudinal migration:

The latitudinal migration of birds is the movement of birds from north to south, and back south to north. Most birds live in the land masses of the northern temperate and subarctic zones where they get facilities for nesting and feeding during summer. They move towards south during winter. The American Golden Plover bird migrates from America to Argentina to escape from harsh winters of America. Another example is that of the Siberian Birds which move to the Himalayas. The Indian Koel /Cuckoo breeds in India and spends the summer at South-east Africa and thus covers a distance of about 7250 km. *Sterna paradisaea* (Arctic tern) breeds in the northern temperate region and migrates to the Antarctic zone along the Atlantic and many a times also travels a huge distance of 22 500 km during migration.



The Arctic Tern

Many Sea birds also migrate considerably to certain distances. *Puffinus* bird (Great shearwater) breeds on small islands and migrates as far as Greenland in May and returns after few months and cover a distance of nearly 1300 km

Penguins also migrate by swimming and can migrate hundreds of miles in search of fishes.

(iv) Partial migration:

Not all but many members of birds of a particular Family do take part in migration. Birds like Blue Jays of Canada and northern part of United States

travel southwards to and mix with the already resident populations of the Southern States of U.S.A.



The Blue Jay of Canada

(v) Total migration:

When all the members of a species take part in the migration, it is called total migration. The Arctic Tern population shows such a kind of migration.

(vi) Vagrant or irregular migration:

When some of the birds disperse to a short or long distance for safety and food, it is called vagrant or irregular migration. Herons may be the example of vagrant or irregular migration. Other examples are black stork (*Ciconia nigra*), Glossy ibis (*Plegadis falcinellus*), spotted eagle (*Aquila clanga*), and bee eater (*Merops apiaster*).



The Bee Eater

(vii) Daily migration:

Some birds make daily journey from their nests by the influence of environmental factors such as temperature, light, and humidity also. Examples are crows, herons and starlings.

(viii) Seasonal migration:

Some birds migrates at different seasons of the year for food or breeding, called seasonal migration, e.g., cuckoos, swifts, swallows etc. They migrate from the south to the north during summer. These birds are called summer visitors. Again there are some birds like snow bunting, red wing, shore lark, grey plover etc. which migrate from north to south during winter. They are called winter visitors.

Nocturnal and Diurnal Flight:

(i) Diurnal migration:

Many larger birds like crows, robins, swallows, hawks, jays, blue birds, pelicans, cranes, geese, etc. migrate during daytime for food.

(ii) Nocturnal birds:

Some small-sized birds of passerine groups like sparrows, warblers, etc. migrate in darkness, called nocturnal birds. The darkness of the night gives them protection from their enemies.