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MIGRATION IN BIRDS

Introduction and Definition :



Migration is a periodic passing of animals from one place to another. Bird's migration is a two-way journey, **i.e.**, a regular, periodic, to-and-fro movement of some birds between their summer and winter homes or from a breeding and nesting place to a feeding and resting place.

- The word "**migration**" has come from the Latin word '**migrare**' which means **going from one place to another**.
- **According to L. Thomson (1926)**, bird migration may be described as "changes of habitat periodically recurring and alternating in direction, which tend to secure optimum environmental conditions at all times".

Majority of birds have the inherent quality to move from one place to another to obtain the advantages of the favourable condition. Such birds are called migratory birds. Some birds such as bobwhite and ruffed sand grouse, however, do not migrate at all and they remain throughout the year in a country. Such birds are called resident birds. In birds, migration means two-way journeys—onward journey from the ‘home’ to the ‘new’ places and back journey from the ‘new’ places to the ‘home’. This movement occurs during the particular period of the year and the birds usually follow the same route.. It has been described that there is an ‘internal biological clock’ which regulates the phenomenon of migration. Many beautiful birds from Siberian Cranes to Greater Flamingo migrate to India every year during the winters and summers for food, breeding and nesting. Birds can reach great heights as they migrate. Bar-headed geese are the highest-flying migratory birds, reaching altitude of up to five and a half miles above sea level while flying over the Himalayas in India. Birds use several different types of senses when they navigate. They can get compass information from the sun, the stars, and by sensing the earth’s magnetic field. They also get information from the position of the setting sun and from landmarks seen during the day.



Fig: During winter, Migratory birds arrive at Lake Chilika in Odisha .

Types of Bird Migration

Migration may be of following types:

1. Latitudinal
2. Longitudinal
3. Altitudinal or Vertical
4. Partial
5. Total
6. Vagrant or Irregular
7. Seasonal
8. Diurnal
9. Nocturnal

1. Latitudinal Migration:

This migration is between areas of different latitudes from north to south and vice versa. This is the most common migration type with many birds that migrate from the Arctic to the tropics. The exact direction of migration is often determined by geographic features, however, such as mountain ranges, coastlines, and available habitats.

2. Longitudinal Migration :

Similar to latitudinal migration, this type of movement is a change between different longitudes from east to west or west to east. This is a common type of migration for many birds in Europe, where geographic features encourage birds to move longitudinally rather than latitudinally.

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