

Date  
20/06/2020

Page no. :- 01

Class  
Date  
Page

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Buxar (Bihar). Notes for B.Sc  
part 1st, paper 2(A).

Question :- Write Notes on a Migratory  
Behaviour of Birds.

Answer :-

### Bird Migration :-

Bird migration is the regular seasonal movement, often north and south along a flyway, between breeding and wintering grounds. Many species of bird migrate. Migration reduces high rates in predation and mortality, including from hunting by humans, and is driven primarily by availability of food. It occurs mainly in the northern hemisphere, where birds are funneled on to specific routes by natural barriers such as the Mediterranean sea or the Caribbean sea.

The timing of migration seems to be controlled primarily by changes in day length.

Date  
13-6-2020

Page no.: 02

Class  
Date

Migrating birds navigate using celestial cues from the sun and stars, the earth's magnetic field, and mental maps.

### Historical views :-

In the Pacific, traditional landfinding techniques used by Micronesians and Polynesians suggest that bird migration was observed and interpreted for more than 3000 years. In Eastern tradition, for example, Jagantha sent his daughter Sira to Earth in the form of a bird. Tuli, to find dry land, the world full of water, specifically to landfinding swallows, often to the Pacific golden plover. Records of bird migration were also known in Europe from at least 3,000 years ago as indicated by the ancient Greek writers Hesiod, Homer, Herodotus and Aristotle. The Bible also notes migrations as in the Book of Job, where the inquiry is made: "Is it by your insight that the hawk hovers, spreads its wings southward?" The author of Jeremiah wrote.



## Types of Migration

### 1. Daily migration

- Many birds make daily movements from their nest in response to environmental forces such as light, darkness, temperature, humidity etc.
- Daily migration from their roosting site to feeding area.
- Eg: crows, sparrows, starling.

### 2. Local migration

- Local migration occurs because of heavy rain, flood, excessive cold & hot.
- Return to that area when crisis is over.
- Ripening of certain plants and appearing of fruits also cause local migration.

Swallow migration versus hibernation

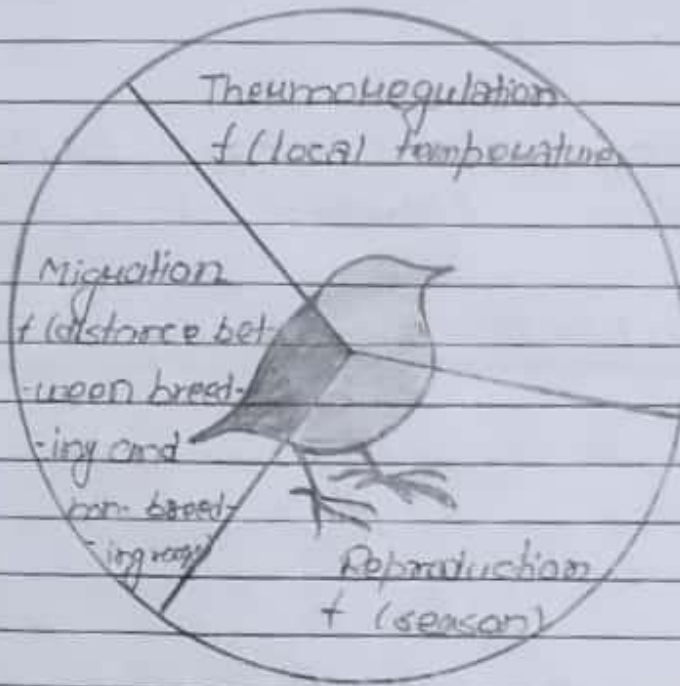
Aristotle, however, suggested that swallows and other

Date  
12.06.2020

Page no. :- 04

Class  
Page No.

species' energetic costs,  $E_c$  of  
(seasonal migrations' location)



Migrant Bird - an overview

Faster travel  
Worse weather

