

BIRD MIGRATION**Words**

Look for the following words as you read the passage. Match each word with its correct definition.

Words

1. aspect
2. breed
3. diurnal
4. endure
5. evolve
6. fascinate
7. feat
8. fuel
9. hemisphere
10. imperative
11. inhabit
12. migration
13. navigation
14. nocturnal
15. observer
16. obscure
17. optimal
18. species
19. stray
20. windswept

Definitions

- A. n., type; a basic group in biological classification
- B. v., to live under difficult conditions
- C. n., a priority; an urgent need
- D. n., a part or feature
- E. v., to interest greatly
- F. n., a person who watches something
- G. v., to provide energy
- H. v., to live in
- I. adj., active during the day
- J. n., a difficult act or achievement
- K. n., movement from one place to another
- L. v., to reproduce
- M. adj., active at night
- N. adj., unprotected from the wind
- O. v., to make difficult to see
- P. v., to leave the correct route; become separated from the group
- Q. adj., best, most favorable¹
- R. n., finding the way from one place to another
- S. n., one half of the Earth; also, one half of a sphere
- T. v., to develop gradually

¹BrE: favourable

Reading

Bird Migration

Migration is the regular movement of animals between their breeding grounds and the areas that they **inhabit** during the rest of the year. Many types of animals migrate, but bird **migration** in particular has fascinated **observers** for centuries. Migration is an excellent example of how nature has responded to the biological **imperative** for species to evolve and spread out into all possible ecological niches that can provide the conditions necessary for species to **breed** and raise young.

The most common form of bird migration involves traveling¹ to higher latitudes to **breed** during the warm season and then returning to lower latitudes during the nonbreeding period. This form of migration allows birds to breed in areas that provide **optimal** conditions for nesting and feeding their young. Because of the way in which the continents are situated upon Earth, migration of this type takes place primarily into the higher latitudes of the Northern Hemisphere. No land birds are known to migrate into the higher latitudes of the Southern Hemisphere; only **species** of seabirds migrate to the Southern Hemisphere to **breed**.

Although most bird migration takes place between the lower and higher latitudes of the Northern Hemisphere, many species are **transequatorial**, living in the Northern Hemisphere during the breeding season and in the Southern Hemisphere during the remainder of the year. A well-known example of transequatorial migration is the arctic tern. This tern, which **breeds** in the arctic regions and winters in antarctic waters, travels 24,000 miles a year during migration.

Not all migration is long distance. Some **species** exhibit **altitudinal migration**. Their **breeding** areas are in higher elevations, near or at the peaks of mountains, and they spend the nonbreeding season in neighboring² valleys or other nearby low country. This variety of migration is typical of many **grouse species**, including the ptarmigan, a type of arctic grouse. Many rock ptarmigan never leave the high arctic tundra, spending their breeding season atop windswept arctic peaks and the winter season in nearby valleys, **enduring** some of the coldest conditions on Earth.

During migration, most birds fly for a limited period each day, probably about six to eight hours, typically flying distances of several hundred miles. Some birds, however, undertake much longer flights when their routes include crossing large bodies of water or other geographic features such as deserts and mountains. For example, many species regularly cross the Gulf of Mexico, a trip that requires a continuous flight of more than 1,000 miles and takes from twenty-four to thirty-six hours or longer. An extreme example of nonstop bird migration is done by the

¹BrE: travelling

²BrE: neighbouring

miles from Alaska to New Zealand each year. At the start of its trip, about 55 percent³ of its body weight is made up of the fat necessary to fuel this amazing journey.

How birds manage to unerringly travel between distant locations is one aspect that has fascinated observers for centuries. Modern-day researchers have attempted to understand this feat. Most studies have found that migratory birds all have some ability to navigate and an innate drive to travel in a particular direction. Nocturnal migrants, those species that travel at night, seem to take their navigational cues from the stars. When the stars are obscured by clouds, nocturnal migrants may become confused and return to land or stray off course. Diurnal migrants, those migrating during the day, take their cues from the location of the sun. In addition, diurnal migrants have also been shown to use geographic features such as mountain ranges or seacoasts as other cues for navigation. Because the stars and the sun move constantly over the course of twenty-four hours, this suggests that migrating birds also have some sense of time.

Answer the questions about Bird Migration.

Questions 1–4

Do the following statements agree with the information in the reading passage?

Write

TRUE if the statement agrees with the information.
FALSE if the statement contradicts the information.
NOT GIVEN if there is no information on this in the passage.

- _____ 1. Transequatorial birds cross from one hemisphere to the other when they migrate.
- _____ 2. Many migratory birds breed in the Southern Hemisphere.
- _____ 3. Migrating birds spend the warm months where conditions for breeding are optimal.
- _____ 4. Many birds fail in their migration because they do not have enough body fat to fuel the journey.

³BrE: per cent

Questions 5–8

Look at the following descriptions of migratory habits.

Match each type of bird with the correct description.

Write the correct letter, **A** or **B**.

- A Diurnal species of birds
- B Nocturnal species of birds

- _____ 5. They navigate by looking at the sun.
- _____ 6. They navigate by looking at the stars.
- _____ 7. They may stop flying when clouds obscure the sky.
- _____ 8. They navigate by looking at landforms.

My Words

Write the words that are new to you. Look them up in the dictionary and write their definitions.