



Why do animals migrate?

KS2

KS3

Ages 7-14 ⌚ 3 min read

Migration is the seasonal, often long-distance movement of animals from one region to another — usually following food, warmth, or breeding conditions. It's one of the most spectacular phenomena in nature, and it happens at every scale from butterflies crossing Mexico to whales crossing ocean basins.

Why leave at all?

The basic driver is resources. Environments change with the seasons. A meadow bursting with insects in summer becomes barren in winter. Arctic tundra offers rich feeding grounds in the brief summer, then becomes inhospitable. By following the seasons, animals can exploit peak conditions across a larger range rather than enduring local scarcity. The energy cost of the journey is worth it compared to trying to survive somewhere resource-poor.

Imagine your local supermarket has incredible, cheap food from June to August, then closes completely from September to May. If a different supermarket 2,000 miles away has the same bounty from September to May, it's worth making the trip — if you can. Migration is essentially seasonally following the best "supermarket." The animals that evolved to make the journey successfully had more offspring; those that didn't, died out.

How do they navigate?

Different species use remarkably different methods. Many birds use the Sun's position, corrected for time of day using their internal clock. At night, many species navigate by the stars — specifically by the rotation of the night sky around the celestial pole. Some birds, sea turtles, and salmon can detect Earth's magnetic field and use it as a compass. Salmon return to the exact stream they hatched in using smell — they imprint on the chemical signature of their birth waters as young fish.

The record holder

The Arctic Tern makes the longest migration of any animal — from its Arctic breeding grounds to Antarctica and back, an annual round trip of about 70,000-90,000km. A

30-year-old tern will have travelled the equivalent of three trips to the Moon and back in its lifetime. It experiences more daylight than any other creature on Earth, chasing the midnight sun between polar summers.