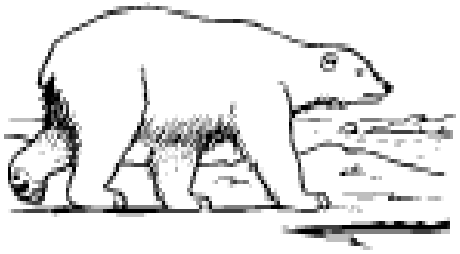
Arctic habitats

The most northern part of Canada extends into the Arctic Circle. The summers here are brief but beautiful, with a landscape that is bathed in light for all 24 hours of the day. The melted snow clears to reveal the Arctic tundra – a special landscape of lichens and small shrubs, like heathers, that grow slowly but are tough enough to withstand the fiercest bite of the Arctic cold. For a few short months flowers bloom, are pollinated and then shed their seeds. Arctic hares and grazing deer feed on the new growth of the plants. The summer melting of the sea ice allows walruses and ringed seals to pull up onto the rocky coastline to have their pups, always looking out for polar bears – the fierce top predators of the Arctic landscape. The seals feed on kelp (a type of seaweed), fish and crustaceans (such as crabs). The fish feed on plankton (tiny plants that float on the currents of the ocean and make food by using the energy from the sun). Very small animals also feed on plankton and these animals are the first consumers in the food chain of the Arctic seas.

Once summer has passed, the chill of winter returns. The light fades and the days rapidly become shorter. Temperatures drop to below -30°C, and the sea once more begins to freeze as the tundra is buried beneath a blanket of snow and ice. Polar bears move onto the ice to hunt for food. They wait by the breathing holes made in the ice by seals, ready to ambush them as they surface for air. The polar bear is well adapted to survive in the Arctic landscape, with its thick camouflaged coat, claws for gripping the ice, broad legs (which it uses as paddles when it swims) and tiny ears (to reduce the amount of heat lost from them). As well as these physical adaptations, the polar bear has another survival technique: through the coldest months of the winter it hibernates, in a den beneath the snow and it is here that the mother bear eventually gives birth to her young in the spring.



With the return of the sun and the onset of spring, the sea ice melts to reveal a thawing tundra landscape that is flourishing with life.

Comprehension questions

1. What is the special name given to the land inside the Arctic Circle?
2. Name a producer that grows there.
3. Name a herbivore that feeds on the plants there.
4. What is the top predator in this habitat?
5. Name three ways in which this animal has adapted to survive in the Arctic environment.
6. Name one prey of the top predator.
7. How do the tiny plants called plankton get the energy they need to survive?
8. Write out a food chain for this habitat.