



Introduction

There are many habitats around the world.

Grasslands

Deserts

Mountains

Forests

Rainforests

Wetlands

Oceans

Within these main habitats there is an abundance of other habitats. Wherever birds, animals and plants live they have to adapt to their environment. This means that they change over time to make themselves fit in with the conditions in the place where they live. Many birds have adapted to live beside humans. Robins, Blackbirds, Dunnocks and Pigeons were, and still are, birds that thrive in hedges, broad-leaved woodland and coniferous forests. However, over time they have adapted to live in gardens and near humans for one main reason, food. Extra food either provided by humans at a feeding station, or provided through our gardens has allowed these and many other birds to survive and thrive in close proximity to humans. Birds must adapt to their environment. For example, those who live in the desert, where it is very hot and dry have evolved to be a similar colour to their dry back grounds. This colouration is in response to predation. Many desert birds use rodent burrows and other shelters to avoid the heat during the day. The other extreme is the Antarctic and the Arctic. Those who live in these places, where it is very cold and bleak, have adapted to suit their harsh environments. Emperor Penguins have 4 layers of feathers; these birds and others who live in these extremes have thick fat layers to keep them warm. If birds do not adapt to their habitat they will not survive.

Question 1: What does the word habitat mean?

Question 2: Why are habitats important?

Question 3: What do birds need to survive?

Question 4: What are the main habitats around your home?

Question 5: Can you list 4 different habitats on the Isle of Man?

Question 6:

What is the main habitat of a Peregrine?



Why does the Peregrine live there?

Question 7:

What is the main habitat of a Mute Swan?



Why does the Mute Swan live there?

Question 8:

What is the main habitat of a Barn Owl?



Why does the Barn Owl live there?

Question 9:

What is the main habitat of a Goldfinch?



Why does the Goldfinch live there?

Task 1:

Think about the local habitat. In summer the Isle of Man is home to Puffins. For most of the year Puffins live in the ocean, bobbing around on the waves. They come to the coast in May to lay their eggs and raise their chicks. One of the Puffins' favourite foods is Herring fish.

Below is a simple food chain.

Describe what would happen to the Puffin if all the Herring fish disappeared.

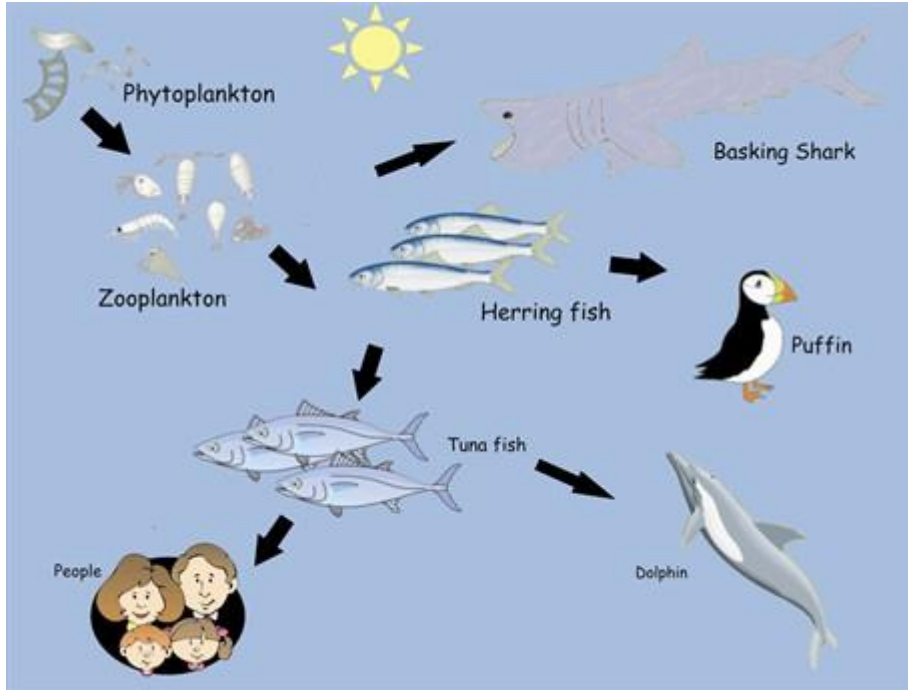








Image: Credit, Life Adrift

Tick the correct box

		True	False
	A Robin has webbed feet for swimming		
	A Swift is a summer visitor, flying all the way from Africa. One was recorded flying 3,100 miles in 5 days.		
	A Bewick Swan lives on the Isle of Man all year round.		
	The Arctic Tern never sees a winter. Every year it flies around 56,000 miles from the North Arctic to the Antarctic. https://vimeo.com/145404965		
	The Cuckoo is a migrating bird. Climate change can lead to droughts, because of warmer weather. Droughts cause a decline in the number of invertebrates (the Cuckoo's food) which means they are unable to refuel properly for their long journeys.		
	Treecreepers live in broadleaf woodland and sometimes in gardens with lots of trees. In the winter if wet snow or rain is followed by a hard frost it can freeze the tree, trapping their food inside. Birds in large sheltered woods do not have this problem.		

Task 3

How is the Long-eared Owl adapted to its habitat?



Task 4

How is the Curlew adapted to its wintering habitat, estuaries?



Task 5

How is the Kingfisher adapted to its habitat?





Answers

Question 1: The place where animals and plants live interdependent upon each other and perfectly suited to live there.

Question 2: Habitats provide all the environmental conditions the bird (or animal) needs to survive. This means it has everything it needs to find and gather food, find a mate and produce chicks.

Question 3: **Food:** to obtain energy; **Water:** to stay healthy and hydrated; **Shelter:** to protect from harsh weather; **Space:** to gather the other three resources reproduce; raise their young and defend their territory.

Question 4: Individual answers

Question 5: Arable and Livestock farming; Sandstone cliffs; Yellow and grey sand dune; Lichen heath; Bog habitat; Secondary woodland; Hay meadows; Upland heather moorland; Conifer plantations; Broadleaf woodland; Saltmarsh; Heather, bracken and gorse moorland.

Question 6: Peregrines' main habitat is wide open spaces and they thrive near coasts, where shorebirds are common. Peregrines are one of the most adapted birds as they are found throughout the world on all continents except Antarctica.

The live there because there is plenty of food available and they have good nest site opportunities on cliff edges.

Question 7: Mute Swans' main habitat is water. This can be coastal, areas close to the shore or freshwater, lakes and ponds.

They live in these areas as they eat aquatic vegetation and slow moving rivers, lakes, ponds and marshes all provide good areas for nesting.

Question 8: A Barn Owl's main habitat is farmland. Tufty grass and unimproved grassland, field edges and rough grass strips alongside woodlands are some of the best places to see Barn Owls and they are often in and around farm buildings because of the rodents. They like long grass because small rodents live there.

They live in many different areas but they all have one thing in common, good rodent populations. Quiet farm buildings and big holes in trees provide good roosting and sites.

Question 9: Goldfinches' main habitats are gardens, parks, orchards and heathland.

The reason they live in this habitat is because of the food sources, their main food is seeds which come from plants that thrive in these areas. Thistles, Sunflowers, tree seeds from Alder, Birch, Cedar and Elm are amongst their favourites and these plants and trees are widespread throughout the gardens and parks.



- Task 1:** If the Herring fish disappeared the Puffin would either
- A) Grow hungry and eventually starve to death if it stayed in the same place
 - B) Have to move to a new place where there were more Herring fish
- Task 2:**
- Robin – True
 - Swift – True
 - Bewick Swan – False
 - Arctic Tern – True
 - Cuckoo – True
 - Treecreeper – True
- Task 3:** Long-eared Owl: Silent flight, large eyes, disk shaped face to help collect sound for hunting, asymmetrical ears for excellent hearing, camouflage, slim bodies that look like tree branches, sharp claws to catch their prey.
- Task 4:** Curlew: Long legs for wading, long, curved beak for probing in to the sand and mud for worms, shellfish and shrimps, camouflage.
- Task 5:** Kingfisher: Fast flight, low over water, hunt fish from a perch, large broad beak to spear fish, its pointed spear like beak means it is streamlined when entering the water, visual adaptations to enable it to see prey underwater and it has a 3rd transparent eyelid which protects its eyes when open underwater.