

# Investigating and analysing changes to bird populations in Wales



## Changes in agricultural practices

- Removal of hedges to create bigger fields.
- Draining land in order to house more animals on the land.
- Ploughing to the edges of fields to increase the planting area.
- Increase in the use of chemicals – pesticides and fertilisers can kill many of the insects our native birds feed on. Some birds who then accidentally ingest the chemicals are poisoned.
- Land is given less time to replenish between crop harvesting.



**These resource cards are for use with Activity 2 - Factors affecting bird populations.**

Please note – Depending on how much support your learners require, you can choose whether to give your learners an explanation card.





## Changes in climate



Periods of prolonged dry weather can cause a decline in the number of invertebrates, meaning less available food for birds. The average global temperature is going up as a result of climate change, leading to changes in seasonal patterns. Research shows that spring is starting earlier than it has in the past leading to the earlier emergence of spring plants and buds bursting earlier. This has implications for birds who want their chicks to hatch when food is most abundant. Erratic weather and changes in seasonal patterns can mean that flowers and insects flourish earlier than expected, meaning less available food when chicks hatch and birds really need it.



On the flip side of the coin, some birds are benefiting from the warmer winters the UK has been experiencing as a result of climate change as there are less instances of harsh, cold weather to kill them off. Garden birds, such as blue tits and robins have seen an increase in numbers over the past few decades. This is thought to be because small, garden birds are often fed by humans and are more likely to survive the milder winters that have come about as part of climate change.





## Oil pollution



Oil spillages at sea can be fatal to many coastal birds. When oil congeals on birds' feathers, it causes them to mat and separate, impairing waterproofing and affecting their ability to stay warm in cold temperatures.





## Predation by cats



The Mammal Society estimate that cats catch up to 27 million birds on average over the spring and summer in the UK. There is no scientific evidence however that this is causing bird populations to decline as cats tend to take weak or sickly birds which may well have died naturally anyway.





## Increase in the number of cars



With more vehicles on the roads, birds are at a greater risk of being killed or injured by passing cars. Birds like ducks and geese who lead their young across roads to find water and low-flying blackbirds, are particularly at risk.





## Changes in gardens



Natural lawns and hedges have been replaced with artificial grass, decking, gravel and fences meaning there is less land for birds to nest and less available food.



