

Volume 32, Number 2, November 2020

Activity

Lundy Island's food web

Michelle Minton

Read the 'Lundy Island: a conservation success story' case study in **WIDELWORLD Vol. 32, No. 2**. This activity sheet will encourage you to explore food webs in more detail.

Task

Use this article and knowledge of food webs to answer the following questions:

- 1 Define 'food web'. (2 marks)
- 2 Name a primary consumer. (1 mark)
- 3 Identify the food sources of a peregrine falcon. (3 marks)
- 4 Is a fox a:
 - herbivore
 - omnivore
 - carnivore

Justify your answer (2 marks)

- 5 Explain the impact of a decline in insects for species on Lundy Island for
 - pipistrelle bats
 - peregrine falcon
- 6 Explain the impact of an increase in goats for: (6 marks)
 - grasses
 - rabbits
 - foxes

Teacher notes

This sheet could be given as homework or used as a class activity. It aims to encourage students to deepen their understanding of the interdependent nature of a food web.

Answers

Use this article and knowledge of food webs to answer the following questions:

1 Define 'food web'. (2 marks)

A series of organisms which are interdependent by predator–prey interactions.

2 Name a primary consumer. (1 mark)

Goats, rabbits or insects

3 Identify the food sources of a peregrine falcon. (3 marks)

Rabbits, birds, pipistrelle bats

4 Is a fox a:

Carnivore

Justify your answer (2 marks)

A fox only eats meat (pygmy shrew and rabbits).

5 Explain the impact of a decline in insects for species on Lundy Island for

- pipistrelle bats

Less pipistrelle bats as their only food source is insects

- peregrine falcon

Peregrine falcons would likely have to eat more rabbits, as pipistrelle bats and birds may decline. This could cause a decline in peregrine falcons if there wasn't enough rabbits to feed them and foxes.

6 Explain the impact of an increase in goats for: (6 marks)

- grasses

Decrease in grass, as more goats will be eating more grass.

- rabbits

With a decline in grass, rabbits may also decline as they rely on this food source too.

- foxes

If there is a decline in rabbits, then foxes may also decline, unless they can find more pygmy shrews.

This resource is part of WIDELWORLD, a magazine written for GCSE students by subject experts. To subscribe to the full magazine go to www.hoddereducation.co.uk/wideworld