



# WILDLIFE AND HABITAT MANAGEMENT ON A GOLF COURSE

 11-14 years  20-30 minutes per station

## Introduction

A typical 18-hole golf course is situated on 150 acres of land (75 football pitches). These open green spaces provide significant opportunities to enhance and protect wildlife and native habitats. Many habitats can be found on a golf course such as woodland, sand dunes or wetland. These diverse habitats provide food and shelter for a wide range of plants and animals.

**In this session students will identify different habitats on the golf course and name some of the animals that are found there. They will also learn how greenkeepers help to conserve wildlife on the golf course.**

## Student Learning Objectives

**By the end of the session students will be able to:**

- » identify different habitats on a golf course such as meadow, hedgerow, stream bank, woodland, sand dunes, moorland and wetland.
- » list what is required for a successful wildlife area — food, water, shelter and open-space
- » explain how greenkeepers create wildlife areas
- » identify at least one food chain that exists on a golf course
- » identify the producers, primary and secondary consumers in a food chain
- » describe how a food chain is affected if one organism is no longer available

## What is needed for the session

Item	Who will provide it
Safe location on the golf course to take a class of students, preferably near a lake, pond, hedgerow, woodland etc.	Golf course to identify
Binoculars (if available)	Golf course or school
Bird and animal identification field guides	Golf course or school
Hi-visibility jackets for all student (not essential)	School
Pencil and clipboard for every student (not essential)	School
Printed worksheet for each student (only if using worksheets as agreed with school)	Golf course
Printed food web example	Golf course

## What the greenkeeper needs to do

Prior to the visit plan a walking tour of the golf course that will show different habitats. Also, highlight different examples of wildlife conservation such as wildlife areas, uncut grass etc. if available. Try and identify any tracks or markings that you could point out to the students

Activity	Equipment	Questions to ask
1. Explain to the students that a golf course is a great place for wildlife and a greenkeeper needs to encourage wildlife to the course		<p>What animals do you think can be found on a golf course?</p> <p>What habitats do you think might be found on a golf course?</p> <p>Why is it important to attract wildlife to a golf course?</p> <p>Why do you think wildlife is often found on a golf course?</p>
2. Explain to the students that a good wildlife area requires 4 elements — food, water, shelter and open space. They will need to look out for these elements as they walk around the golf course.		<p>What are the 4 elements required for a wildlife area?</p>
<p>3. Start the walking tour of the course and ask students to complete the worksheet as they go.</p> <ul style="list-style-type: none"> <li>» Count and list any animals that are observed.</li> <li>» Identify the types of habitat that are present on the golf course.</li> <li>» Identify any tracks or markings that suggest animals have been on the golf course.</li> <li>» Describe how the golf course greenkeeper has created wildlife areas to encourage animals including insects to live there. The golf course representative can point these out to the students.</li> <li>» Identify food sources for animals and birds</li> </ul>	<p>Binoculars</p> <p>Wildlife guides/books</p> <p>Worksheet</p> <p>Clipboard and pencil</p>	<p>How has the greenkeeper created wildlife areas?</p>

Activity	Equipment	Questions to ask
4. As the tour progresses, tell the students about animals that have been seen on the golf course. It will stimulate their imagination if they are looking for these animals. Emphasise that they need to be quiet.	Binoculars Wildlife guides/books Worksheet Clipboard and pencil	What different plants and animals do you see in different habitats?
5. When the tour has finished ask the students what they saw and compare with others in the group.		What did you see as you walked round the course?
6. Remind students about food chains and ask them to draw a food chain that could exist on one of the habitats on the golf course.	Food chain example	What is a food chain?  Identify the producers in a food chain? (plants)  Identify the primary consumers in a food chain? (herbivores)  Identify the secondary consumers in a food chain? (carnivores)
7. Discuss what might happen if some of the plant food sources in food chains were destroyed. Discuss why greenkeepers have to be careful before they remove any plants or animals on a golf course.		How could the food chain be affected if the plant in it is destroyed?

## Key words

You may have to explain some of these words as students will not be familiar with them. Check that students know their meaning before using them too much.

**habitat**

**food chain**

**primary consumer**

**herbivore**

**species**

**extinction**

**secondary consumer**

**fungi**

**conservation**

**producer**

**carnivore**

## Lesson extension activities

**Students could be encouraged to:**

- » list the creatures that they spot into categories (such as mammals, birds, amphibians)
- » identify what sort of animal has left the tracks and marking that they spot
- » create a food web for the organisms on a golf course

## Support activities

Provide a list and or pictures of the plants and animals found on a golf course so students can position these to create a food chain.

# Information for the teacher

## National Curriculum links

### England

- » Understand the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops
- » How organisms affect, and are affected by, their environment, including the accumulation of toxic materials
- » Understand that changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction

### Wales

- » Students should use and develop their skills, knowledge and understanding by investigating how animals and plants are independent yet rely on each other for survival.

### Scotland

- » I can use my knowledge of the interactions and energy flow between plants and animals in ecosystems, food chains and webs.

### Northern Ireland

- » To understand the relationship between animals and plants in a habitat.
- » To explore food chains

## Additional Resources that could be used to follow up the session

### Click on the links below to access

- » [Habitats and food chains – Fox and Hedgehog – Teachers TV](#)
- » [Education Pack - food chains – OPAL](#)
- » [Wildlife Watch – Spotter sheets – The Wildlife trusts](#)

# Worksheet: Wildlife and habitat management on a golf course

Date ..... Golf Course .....

Student Name .....

**What different habitats did you see on the golf course?**

**List some of the plants and animals present in one of habitats on the golf course**

**Identify the producers in the habitat.**

**Which animals in the habitat are carnivores?**

**Based on your observations in a habitat develop a food chain**



**In your food chain identify the following:**

- » Producer
- » Primary consumer
- » Secondary consumer
- » Tertiary consumer

**How could your food chain could be disrupted and what effect would this have on other organisms?**

**What would happen if a new animal was introduced to the golf course? How would this affect the existing food chains?**

**What 4 elements are required for a wildlife habitat?**

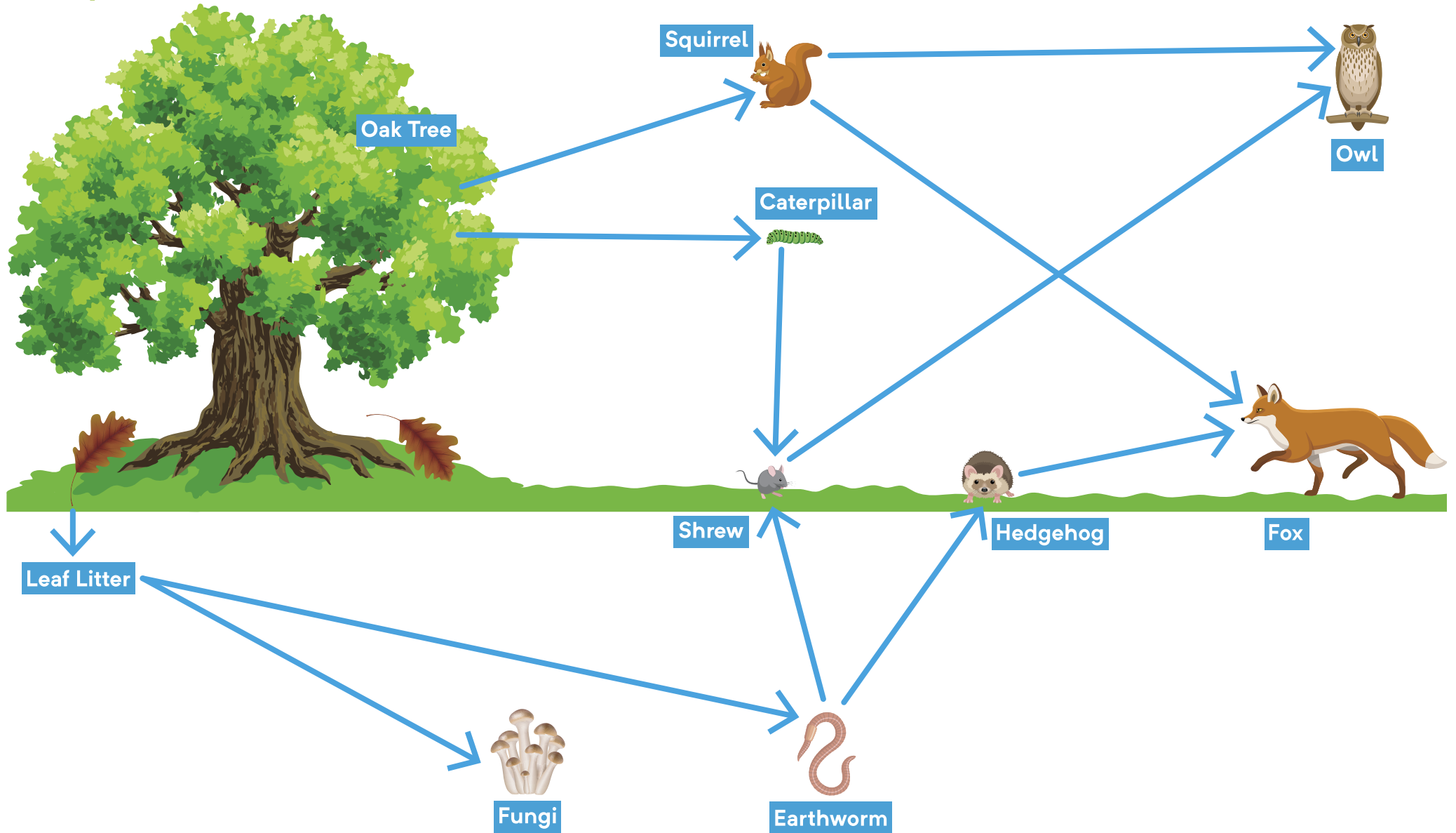
1.

2.

3.

4.

# Example Food Web



# Risk Assessment:

These are suggested risks, you will probably want to add some of your own.

School Name ..... School Representative .....

Golf Club Name .....

Greenkeeper Name ..... Date of Visit .....

What are the hazards?	Who/what is at risk?	What needs to be done to avoid accidents?	Who is to action?
There will be moving cars in the car park	Students	<ul style="list-style-type: none"> <li>» Inform students that they must follow instructions when leaving the minibus</li> <li>» All students to wear high visibility jackets whilst on the golf club (if the school requires)</li> </ul>	Teacher Greenkeeper
Students might get lost from the rest of the group	Students	<ul style="list-style-type: none"> <li>» All students to wear high visibility jackets whilst on the golf club (if the school requires)</li> <li>» Teacher to count students in every time they move between areas</li> </ul>	Teacher
Being hit by a golf ball	Students Teacher Greenkeeper	<ul style="list-style-type: none"> <li>» Inform students that there are some areas of the golf course that may be dangerous, therefore they need to avoid</li> <li>» All student to wear high visibility jackets whilst on the golf club (if the school requires)</li> </ul>	Teacher Greenkeeper
Animals are living creatures	Animals	<ul style="list-style-type: none"> <li>» Ask students not to disturb the habitats of any creatures</li> <li>» Ask students to observe rather than touch</li> </ul>	Teacher Greenkeeper
There will be other adults around the course	Students	<ul style="list-style-type: none"> <li>» Students to be told to report to the teacher if they have any concerns</li> </ul>	Teacher Greenkeeper

