Anti-litter campaign

RSPCA inspectors regularly rescue pets and wild animals trapped or hurt by discarded litter, as everyday objects can become hazards to animals. Protecting pets, farm animals and wildlife from harmful rubbish is straightforward – simply dispose of your waste responsibly.

Your challenge

As a pack, conduct an anti-litter campaign using the information we've given you here. With the help of your leader you might want to design a poster and put some up in your local area. You could also email it to your friends and give a talk at your school.

Glass bottles and drink cans

Glass breaks easily and can cause serious injury to animals or even death. Little animals are curious and will investigate everything they find. They may crawl into bottles and cans and then be unable to escape so they will starve or drown.

Solution: Thoroughly clean all used bottles and jars, then take them to a bottle bank – they should never be left lying around.

Food cans

Small animals such as hedgehogs may get their heads trapped inside cans and starve – a half-open lid can cut.

Solution: Thoroughly clean the can so that animals aren't enticed inside, then completely remove the lid, drop it inside and pinch the top shut. Recycle cans in a can bank – aluminium cans never disintegrate so each one may be a hazard to animals for many years to come.

Plastic can loops

Animals can get entangled in discarded plastic can loops, which may cause sores or choking.

Solution: Always cut open the plastic loops before putting them in the bin.

Plastic containers

Attracted by leftovers, animals will forage inside food containers and may get trapped.

Solution: Remember to completely remove the lid from small containers and cut the container in half. Try to recycle your plastic.

Plastic bags

Animals may climb inside plastic bags and suffocate, or eat them and choke. A single bag can cause the death of more than one animal.

Solution: Tie a knot in all plastic bags and dispose of them properly. Better still, use reusable bags instead.

Balloons

Once balloons burst, animals may mistake them for food and can die if they eat them.

Solution: Avoid letting your balloon go. Cut any used balloons into small pieces before putting them in the bin.

Elastic bands

Elastic bands can get caught around the necks of small animals and the beaks of birds. They can also be swallowed, causing the animal to choke.

Solution: Whenever possible, re-use elastic bands or cut them open before putting them in the bin.

Fishing tackle

Fishing line can get caught around a bird's wings, neck and beak. Hooks can also cut into skin and muscle.

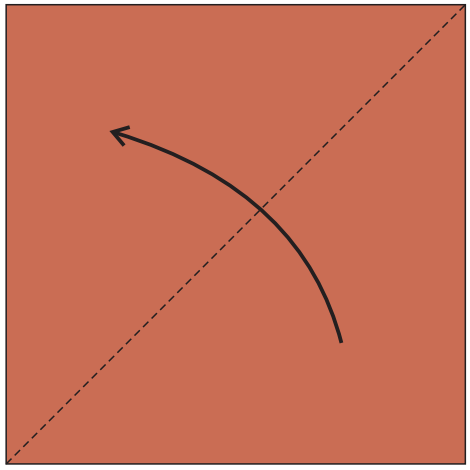
Solution: Take unwanted fishing line home with you and cut it into small pieces before putting it in the bin. Wrap discarded fishing hooks in newspaper before putting them in a bin.

cubs

A big thank you to the RSPCA

OMSCo Conservation Badge

Make...an origami fox



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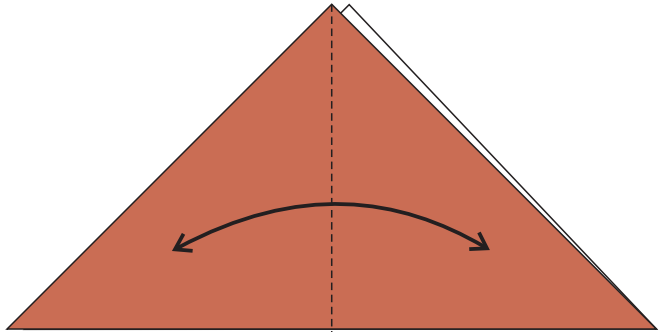

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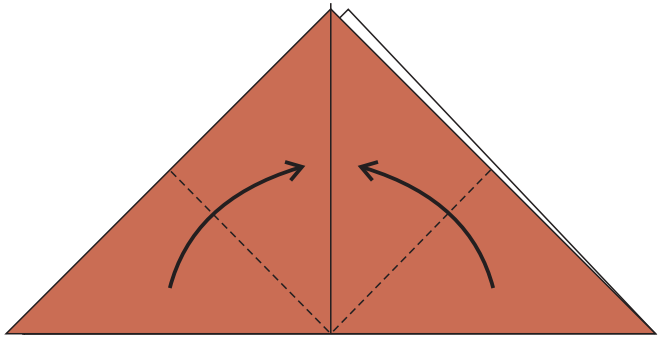

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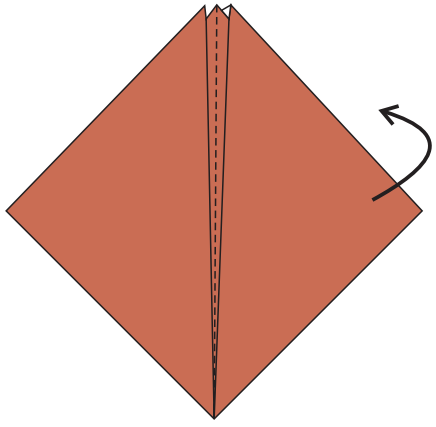

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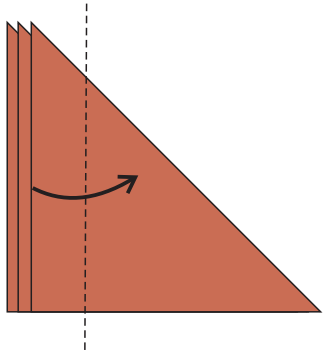

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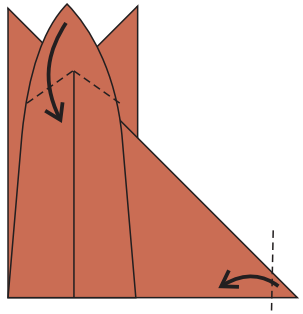

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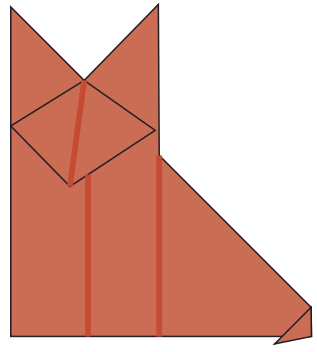

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Hedgerow Safari

Over 600 plant species, 1,500 insects, 65 birds and 20 mammals have been recorded at some time living or feeding in hedgerows.

There is an estimated 200,000 miles of hedgerows in Britain, enough to go around the world eight times.

Birds nest and feed in hedgerows. They are easy to spot especially at dawn and dusk when they are most active. A pair of binoculars and a good bird field guide will help you identify them.

You can also learn to recognise them by their song.

A well-managed hedge will provide food, nesting sites and protective cover for a vast array of wildlife. In return for food and lodging, many of these species help the farmer by consuming the pest species that threaten his crops.

Hedges are the main habitat for at least 47 species of conservation concern in the UK, including 13 globally threatened or rapidly declining ones.

Bats roost during the day in the holes and hollows of mature hedge trees, and feed on the countless insects that hedges attract. Watch out for them hunting above the hedge in evening.

Your Pack challenge

As a Pack make your insect nets ready to go on your Hedgerow Safari. Your leader will book this for your group.

Make an insect sweep net

Equipment list:

1 wire coat hanger
A wooden pole (broom handle or a cane)
An old pillowcase (preferably white)
A needle and some thread or a stapler
2 jubilee clips

Instructions

1. Straighten the coat hanger. Bend it into a circle. Sharply bend each end of the wire to form two arms.

2. Cut the pillowcase in half. Then turn the edge of the pillowcase over the edge of the wire hoop. You can either staple or sew this in place.

3. Attach the wire arms to the wooden pole using jubilee clips.

cubs

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Make...an origami bat

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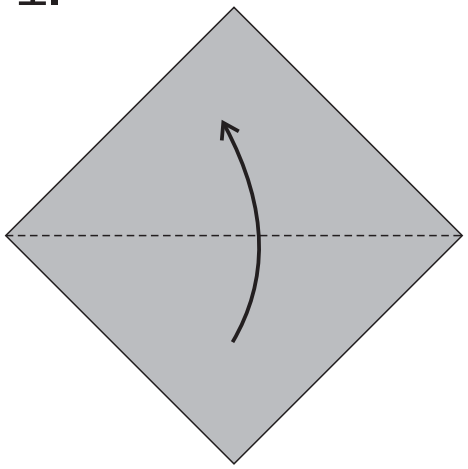

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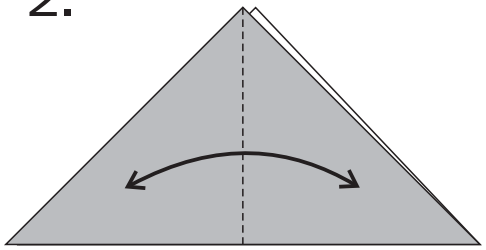

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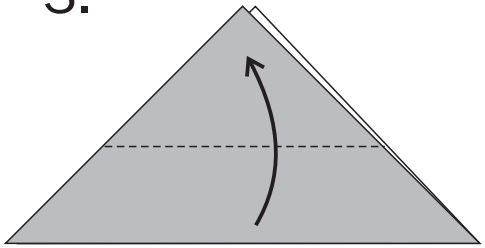

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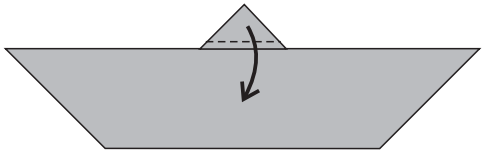

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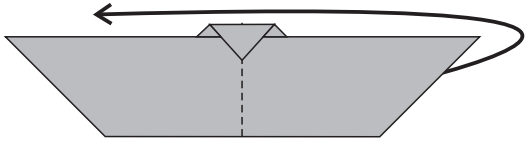

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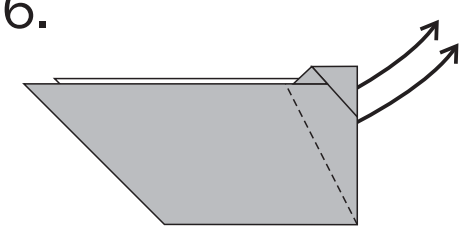

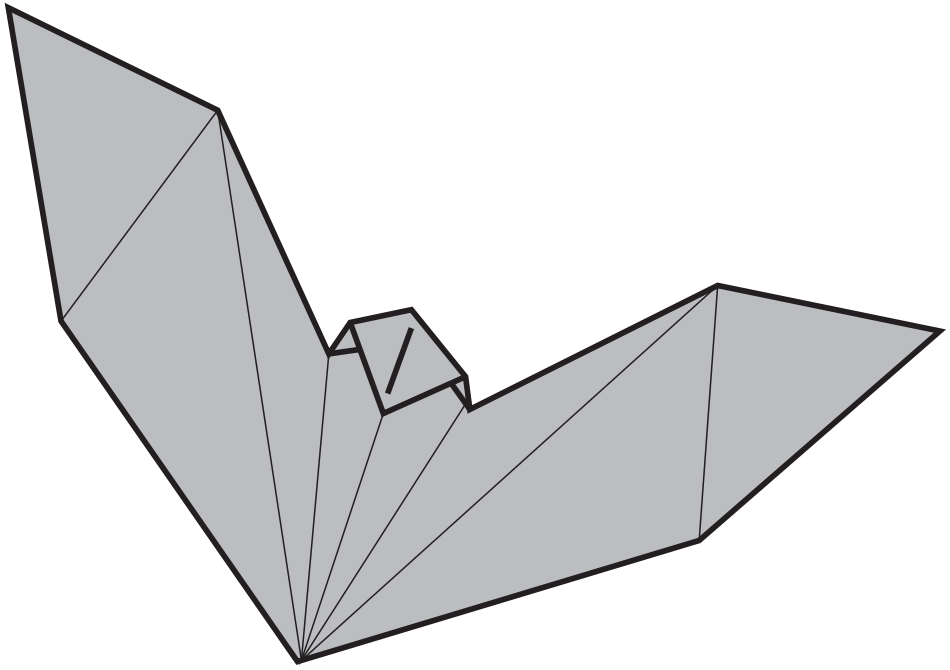

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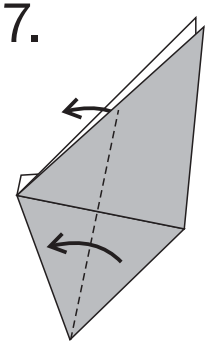

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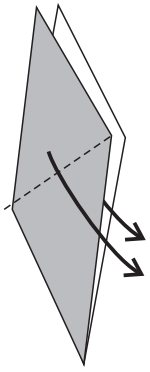

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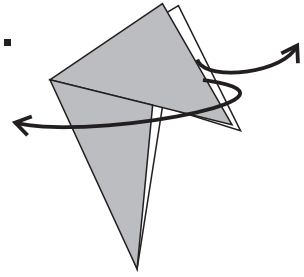


Dormouse

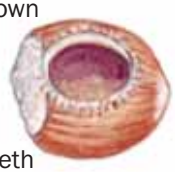
Dormouse facts:

Dormice are endangered. In the last 100 years they have disappeared from over half of the areas they used to live. Often, this is because their habitat is lost when woodland is cut down and older trees with nest holes are removed. Putting up nest boxes has helped to bring them back in some areas.

Dormice are really cute with big eyes, a sandy-coloured coat and furry tails, sometimes with a white tip. If caught by a predator, the skin of the tail may come off allowing the dormouse to escape but it does grow back eventually. They are nocturnal and very shy so extremely hard to spot in the wild.

The name 'dormouse' comes from the same root as 'dormir', the French word for 'to sleep'. This is appropriate because they are one of only three species of British mammals that truly hibernate (along with bats and hedgehogs). Also, in early summer when there isn't much food available for them, dormice save energy by going into torpor, which is a very deep sleep. This is why the dormouse in Alice in Wonderland couldn't stay awake!

Dormice eat mainly flowers, nuts and berries so they love hawthorn, honeysuckle and especially hazelnuts - in some places they are known as Hazelmice. If you find a hazelnut shell with a round hole in it, you can find out whether a dormouse has eaten it by looking at the teeth marks around the edge of the hole.



Hazelnut image by Carol Roberts from *Guide to hedgerows* © Field Studies Council). Available from www.field-studies-council.org

Dormice weave a round nest, often out of honeysuckle bark, which they make in holes in trees. In recent years, many boxes have been put up for dormice and they will make their nests in these. They have only one or two litters a year, unlike woodmice which will have many litters in one year.

Hedgerows on organic farms are good places for dormice to feed and travel through, as they are not cut too often and produce lots of flowers and fruit.

Books about dormice:
The Dormouse by P Bright and P Morris, published by The Mammal Society
Dormice by P Morris, published by Whittet Books

Did you know...

Dormice live and forage in trees and avoid coming down to the ground except to hibernate. This makes it hard for them to be caught by predators so they can live for up to seven years, compared with mice or voles which rarely live more than six months.

Your Pack challenge

Using this information, make a display about dormice and their conservation. You may want to find some pictures, as well as some honeysuckle, hawthorn, maybe a dormouse nest box (your local wildlife trust may have one of these) and some hazelnuts that have been eaten by dormice.

NB. Dormice are not found in Scotland. Instead of the dormouse, you may want to do a display about the pine marten or wildcat, both of which are endangered mammals found in Scotland. The Mammal Society produce cheap booklets about both of these, or you can look on the internet.

cubs

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Web of Life Game

You will need:

A ball of string

Cards with the names of each of the following organisms written on them:

sun
earthworm
dead leaf
snail
bumblebee
ant
butterfly
living leaf
mushroom
spider
flower
owl
rock
river
tree
squirrel
grass
woodpecker
snake
soil
mouse
rain
frog
deer

How to play:

Sit in a circle.

Each player takes a card from a pile in the middle and holds it up so that everyone can see the name of the organism on the card.

The person with the Tree card starts off the game by tossing the ball of twine to someone else in the circle.

The person who catches the ball tries to explain how the organism on his or her card interacts with the Tree. Anyone in the group can join in to help out.

Next, the person who caught the ball holds onto the string and tosses the ball to a third person.

The third person explains how the organism on his or her card interacts with the second person's organism. If the player gets stuck, anyone in the game can make a guess.

The game continues until everyone has had a turn at catching the twine.

The twine is now complex and tangled—everyone in the group is connected to everyone else.

Players can also talk about how their organisms are connected to others that came up earlier in the game.

Choose one of the organisms in the game. Can anyone predict what would happen if it was removed from the web? Which other organisms would be affected?

What would happen if you cut the twine with scissors? What effect would this have on the ecosystem?

The tangled ball of twine has formed a web, just like the complicated web of life in an ecosystem. The web shows how closely organisms in an ecosystem interact with one another. Anything that happens to part of the web has an effect on the whole system.

Making compost

Compost is the result of a natural process which transforms kitchen and garden waste into a nutrient rich food for your garden – it's nature's way of recycling!

So how do I do it?

Step 1 The bin

You can make your own compost bin from a variety of readily available materials – four wooden pallets upended and tied together with string makes a perfectly good bin. Use a piece of old carpet as a 'lid'. Alternatively, most councils will supply low cost compost bins.

Step 2 Where to put it

Place your bin somewhere fairly sunny and warm. On bare soil is best but you can stand it on slabs or concrete, just put a layer of soil or moist scrunched up cardboard in the bottom.

Step 3 What goes in?

The key to successful compost making is to have a good mix of 'greens' and 'browns'.

Greens are wet, soft materials that are high in nitrogen, such as

- Raw vegetable & fruit waste
- Tea bags
- Coffee grinds & filters
- Annual weeds
- Grass clippings

Browns are dry, harder, absorbent materials that are high in carbon, such as

- Paper
- Cardboard including egg boxes & loo rolls
- Eggshells
- Straw & hay
- Hair

Things NOT to compost include

- Meat & fish scraps
- Cooked food
- Dairy products
- Bread
- Cat litter
- Dog poo

If your heap seems a bit dry, water it lightly and increase your greens; if it's a bit wet and smelly add more browns.

Step 4 What happens next?

Once you've filled your compost bin you can relax – compost just happens!

A compost heap is a magnet for all kinds of wildlife, including frogs and toads, slow worms and even grass snakes. Give the heap a stir occasionally and you may see some of the following mini beasts chomping their way through your rubbish!

You might see

- Tiger worms
- Earwigs
- Ground beetles & woodlice
- Millipedes & centipedes
- Slugs & snails

Did you know...?

The UK produces enough waste to fill the Albert Hall every two hours

On average, each of us throws away seven times our body weight every year

Much of this waste could be Reduced, Reused, Recycled or.... COMPOSTED

Step 5 When it's done

Your compost is ready to use when it looks dark and crumbly and has a lovely warm, earthy smell. It can then be used in your forest garden or in containers, window boxes or hanging baskets.

By making your own compost you are helping to send less rubbish to landfill, reducing harmful methane emissions and the need for chemical fertilisers.

cubs

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Compost Game

Your will need three containers, one of each marked ‘Greens’, ‘Browns’ and ‘Uncompostable’.

Make three sets of cards with pictures of the items in the list on the right of the page. If you can't find pictures, you can write the names of the items. Each set needs to be different in some way (eg. square, round, rectangular).

Split the group into teams and name them with the same shapes as you've used for the cards (Square, Round and Rectangle teams).

Each team forms a queue. The first person in each team is given a card. They decide whether the item on it is ‘Green’, ‘Brown’ or ‘Uncompostable’ and run to the correct container and put in their card.

On the way back, they collect another card which they hand to the next person in the team who then has to put it in the correct container and so on.

When all the teams have finished, check how many cards are in the right container. The team with the most correct cards wins.

Sort out the items below into Greens or Browns or Can’t Be Composted

Greens
Annual weeds
Comfrey leaves
Coffee grounds
Grass mowings
Hay
Nettles
Seaweed
Uncooked vegetable & fruit waste

Browns
Cardboard
Egg boxes
Hair
Newspaper
Sawdust
Straw
Paper bags
Wool socks
Sweetcorn cobs
Toilet rolls

Do not compost - but most can be recycled in other ways
Tin cans
Glass
Plastic bottles
Cooked food
Crisp packets
Stones
Bones
Plastic bags

Plant a forest garden

A forest garden is a special garden made up of trees and shrubs grown in a way that mimics a natural woodland. It provides a crop, usually edible, but possibly for fuel and other useful materials.

People have been managing forests for food and fuel since Neolithic times (4000 – 2500BC). A man named Robert Hart was the pioneer of what is now termed forest gardening in Britain, creating the country's first complete forest garden on Wenlock Edge in Shropshire in the 1970's.

Forest gardening is a natural, sustainable way of gardening. A forest garden makes an excellent home for all kinds of birds and other wildlife, as well as providing food and materials for humans.
Forest gardens generally need less work than some other kinds of garden. Harvesting your crop is often the most you'll have to do!

A forest garden is made up of at least three layers:

The Top Layer – Trees

This is the tallest layer and is made up of fruit or nut trees such as apples, pears, hazelnuts etc.

The Middle Layer – Shrubs

This layer is planted under and around the tree layer. This is usually made up of soft fruit bushes eg raspberries, gooseberries, blackcurrants etc.

The Lower Layer – Herbaceous
This layer is planted under and around the shrub layer, and also used to fill gaps and provide ground cover. Edible plants such as strawberries, mint, pumpkins and squash fall into this category.

Activities

As part of a group plant a forest garden.

Decide what kind of fruits, nuts and edible plants you would like to grow. Try to grow things that you and your friends/family actually like to eat!

Make sure that you choose varieties that will comfortably fill the available space. Remember that all plants need a certain amount of light to grow and ripen fruit. You don't want to grow a jungle!

Standard size fruit trees are great for a large garden or allotment, but dwarf or semi-dwarf self-fertile fruit trees are best for smaller areas. Lots of dwarf fruit trees, fruit bushes and herbs will grow very successfully in pots. You could easily grow a mini forest garden with just one fruit tree, a couple of fruit bushes and a few herbs grouped together!

Did you know...

Despite the name, you don't need a large amount of land to create a forest garden. The principles of forest gardening are adaptable to quite small areas, even container gardens. Forest gardens are also suited to allotments, community groups and schools.

Create a recipe using the crops from your forest garden – here's one to get you started:

Chocolate coated apples

12 apples
12 lollipop or skewer sticks
Organic dark chocolate
Waxed paper
Sprinkles or nuts (opt)

Insert sticks into apple cores and put in fridge. Melt chocolate over a bowl of hot water. Dip apples into chocolate, place on wax paper. Put in the fridge for 15 mins. You can dip them in sprinkles or nuts too!

cubs

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Make your own tree guards

Saplings (young trees) can be destroyed by rabbits and other animals, which love to eat them. They also need to be supported so that the wind and rain doesn't blow them over. To protect your trees while they grow you can make tree guards out of plastic milk bottles (4 or 6 pint). These can be threaded over the supporting canes.

Take a plastic 4 or 6 pint milk carton and wash it out.

Cut off the bottom of the container with a pair of scissors

Carefully cut off the top about 2 cm above the handle hole.

Turn upside down and insert the supporting cane into the handle part of the container. The small overhang of plastic you left will help grip the cane.

Plant your sapling and place your tree guard very carefully over the plant. Check which direction the prevailing wind comes from and make sure the handle faces that way so that it doesn't swivel in the wind. Push the cane at least 15cms into the ground.

Barn Owl

Barn Owl Facts

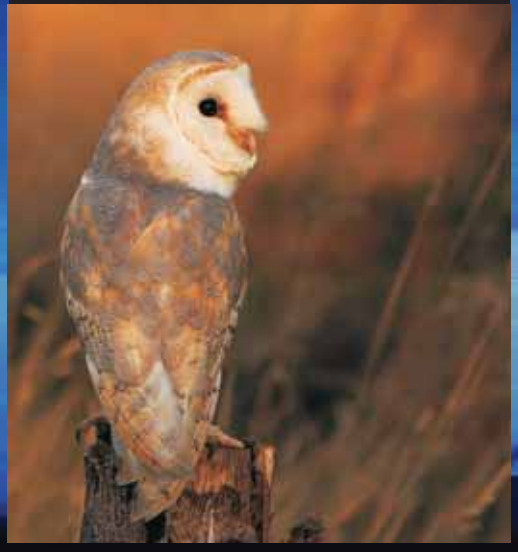
The barn owl was the most common owl in Britain during the 18th and 19th centuries. The population began to decline in the latter half of the 1800s, and by 1932 there were estimated to be some 12,000 pairs in England and Wales. Intensive farming and the use of pesticides after WW2 reduced the figure to around 3,800.

Barn owls can be found on mixed farmland with hedges, copses and areas of rough grassland. Organic farms where pesticides aren't used are good places for barn owls.

Barn owls have amazing hearing and hunt by sound rather than by sight. They have a concave heart-shaped facial disc that acts like a radar dish, funnelling sound towards the ears. These are asymmetric, meaning one ear is higher

than the other, and this allows barn owls to detect the location of their prey with pinpoint accuracy.

Owls eat their prey whole, but regurgitate the bones, fur and other indigestible bits as owl pellets. You may find these in your owl box or in a barn that owls are using. You can pull the pellets apart and try and identify the bones to find out what's been eaten (usually voles, mice and shrews).



Did you know...

Because barn owls hunt at night, are pure white underneath and fly silently, they are sometimes known as Ghost Owls. Oh, and they don't hoot, they screech. Spooky!

The Box

To give the best chance of success, your nest box should be put up by November, although there are no guarantees that it will be used in the next breeding year. You can put it in an old barn, on isolated farmland trees or on the edge of a wooded area, overlooking open land where they can hunt. They need a clear flight path to and from the box.

Boxes should ideally be placed around 15 feet high (to avoid vandalism) and face south-east, but more importantly, facing away from prevailing wind and rain.

To find out more about barn owls and where you can see them, go to www.barnowl.co.uk. Useful books are Barn Owls in Britain by Jeff Martin published by Whittet Books, and Analysis of Owl Pellets by Derek Yalden published by The Mammal Society

cubs

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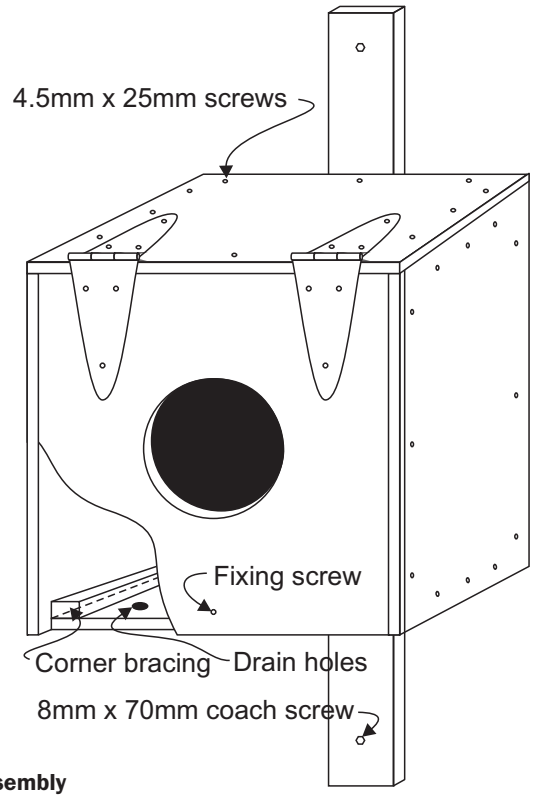
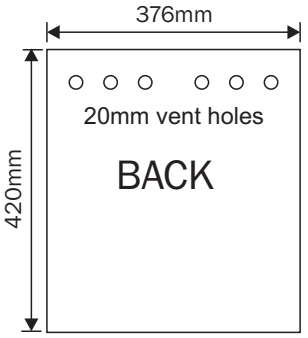
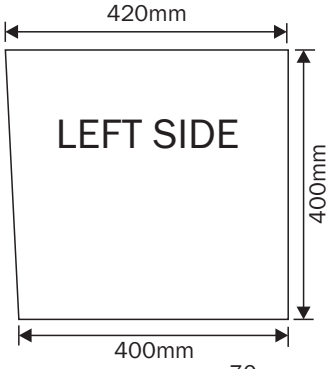
Make...a Barn Owl Nest Box

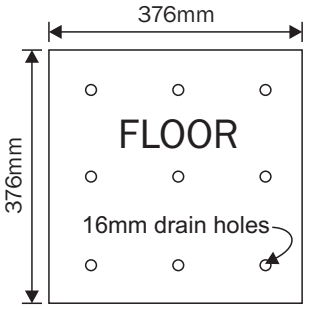


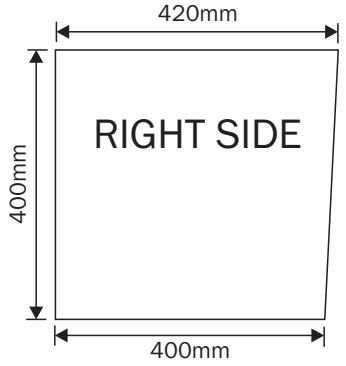
Materials

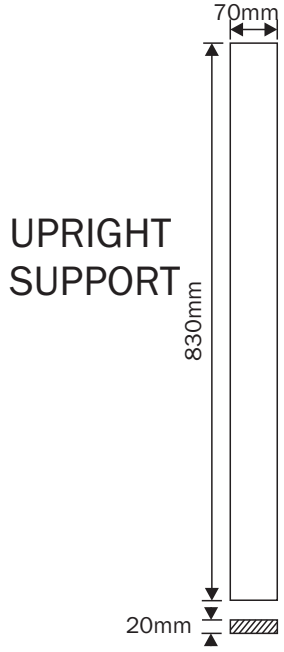
12mm exterior ply 1220mm x 2440mm (for box panels)
3.5m of 18mm x 30mm sawn timber (for corner bracing)
830mm of 20mm x 70mm PSE timber (for support)
68 4.5mm x 25mm screws (for screwing main box panels)
2 M8 x 70mm coach screws (for attaching support to building)
2 M8 x 25mm penny washers (to be used with coach screws)
2 150mm strap hinges (for hinging front panel to top)
16 3.5mm x 12mm screws (for attaching hinges)

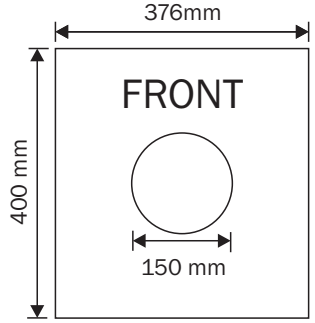


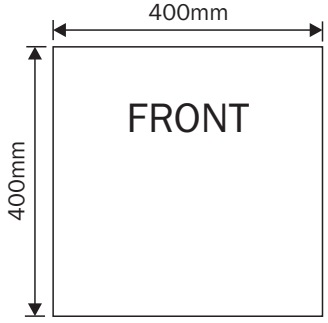


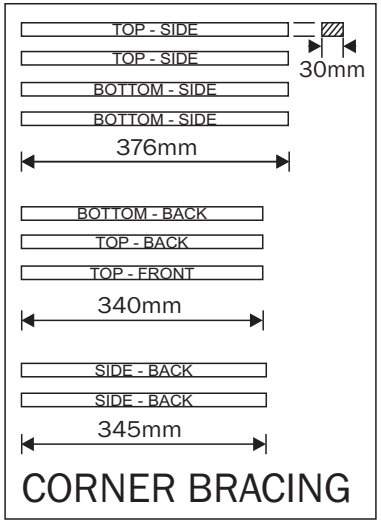












FRONT FASTENING TIMBER BLOCK

Assembly

1. Cut ply into panels as shown on plan
2. Cut corner bracing as follows:
   4 x 376mm (top and floor sides)
   3 x 340mm (top front, top & floor back)
   3 x 345mm (floor sides)
   1 x 100mm (front fastening timber block)
3. Assemble panels starting with the floor and sides. Use corner bracing and 12 screws per panel (3 along each side). Pre-drill screw holes with 4.5mm drill
4. Fit top and back panel in same fashion
5. Drill 16mm evenly spaced drain holes in floor panel
6. Fit upright support using 8 evenly spaced screws. Drill 8mm hole both ends to take coach screws
7. Cut 150mm entry hole in front panel. Fit to top using strap hinges and 12mm screws
8. Fit timber block to front edge of floor panel to take front fastening screw
9. Paint whole box with eco-friendly waterproof timber paint
10. Screw upright in selected location