

# Biodiversity

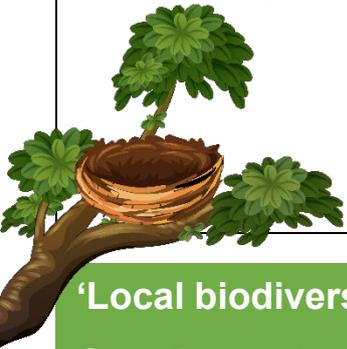
## Activity Sheet 2



For more educational resources or to book a visit find us at [weset.org](http://weset.org) or follow us @WeSETeducate

### The wind farm and solar park at Westmill are a haven for wildlife!

We planted wildflower seeds around the turbines and solar panels to encourage biodiversity.



Biodiversity is the **range** of different types of animals and plants living in one given area. **Variety is good!**

Did you know that plants take in CO<sub>2</sub> and release oxygen, so without plants we would not have the oxygen we need to breath?

### What else plants do for us!

- ♥ Plants 'clean' the air we breathe
- ♥ Plants are the basis of our diets
- ♥ Plants, especially trees, retain water preventing flooding

### 'Local biodiversity'

Over the next week, look outside or go into a garden, yard, park or outdoor space and record the different types of plants and animal life you see. Look and listen closely, you may have to do some research to find out what goes in which column!

TIP: There can be a surprising level of biodiversity in cities and urban areas too!

Plants	Birds	Mammals	Insects	Reptiles
				<b>Fish</b>
				<b>Amphibians</b>



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**Westmill** wildflower meadow is a great place for **pollinating insects!**

We also see all sorts of birds including **red kites**, **corn bunting** and **meadow pipits**.



**Hares** are regularly spotted in the fields and **wild orchids** grow amongst the flowers in the meadow.

To produce flowers, fruit or seeds plants need to be **pollinated**. Some plants can do this themselves however may rely on animals and insects to do this for them.

Plants have both male and female parts. The male part is called the **anther** and the female part is called the **stigma**. Pollination is when **pollen**, which is a fine powder, is transferred from the anther to the stigma.

**Why do you think some flowers are brightly coloured, have attractive scents and sweet tasting nectar?**



Some birds also help with pollination! When a **hummingbird** feeds on the nectar in one plant, the pollen is caught on its beak and feathers and is carried to the next appetising looking flower!

### Try the Biodiversity Word Search!

Look closely and see if you can find **12** words associated with biodiversity at Westmill in the word search below. **TIP:** Look in all directions!

J G U T T H O S F P K N U Z V K K T S O  
H K I H Q A L A W R E J E T I K R C G J  
P P A Y V N W U E M C N X G Z C J W M Z  
G H W R O U T A P Z P A N Q Y F R T G P  
V X L Q A O T C F D O T S V W X Y O W R  
W G B K J Q H A I I L R M Q Y P O X C S  
U B K E R B S H S J L L P V P P P R W K  
V I R B Q C C P X A I T V W T I J G I Q  
L M L T J R L C X W N N S I M F N N Z B  
V B W H O V A G I J A L Y L A F C I E Y  
G H Y Z D M Q N X O T A T D S J L T T M  
Q Q C B O K P Y Q E E Z Z F T L P N V M  
E A K G Q Y C W K V F D Q L V U B U N X  
N V V T U P Q N W T I T I O E G R B N J  
D M F S O A S A W T T R G W T E K Q T C  
J P Z G H W E T K Y C E B E E S P M R Z  
W Z I U A E T U A S T E L R U D E R B W  
Z B R H R K Y R W T U S S S B U Z C C A  
D G O H E G D E H C V J V N A N R G X E  
O U Y B Q R V R R M I T F U I D R X N Y

NATURE	TREES	WILDFLOWERS
POLLINATE	OXYGEN	INSECT
BEES	ORCHID	KITE
BUNTING	HARE	HEDGEHOG

The pollen covered anther is located on a filament

The stigma is located at the top of the style

Filament

Style



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There are lots of ways in which we can **encourage biodiversity** where we live. You could build a **bug hotel**, put up a **nesting box** or create a **hedgehog highway** by making a small opening in the base of a fence. (Please ask first!)

**These video clips may give you some more ideas!**

### Try making:

Bug hotels:

<https://www.youtube.com/watch?v=OexxoXo9uFk>

Hedgehog highway:

<https://www.youtube.com/watch?v=vogfmQKME4g>

Nesting box:

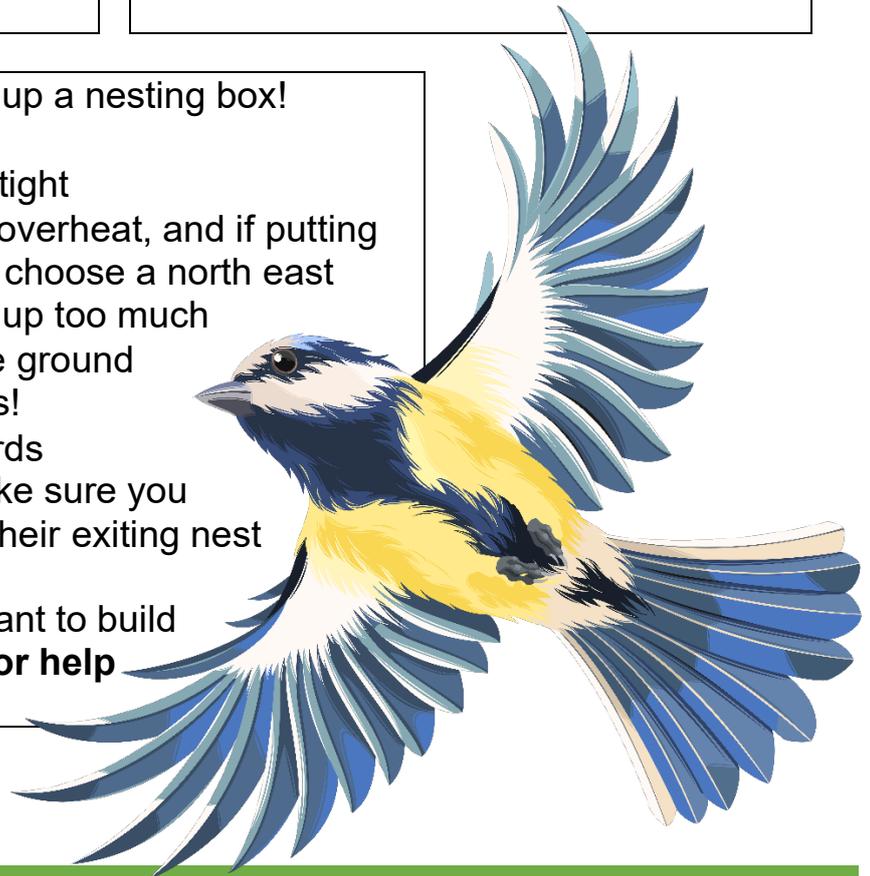
<https://www.youtube.com/watch?v=Yq7ApDf8iP0>

Things to remember when putting up a nesting box!

- ♥ Make sure your box is watertight
- ♥ Choose materials that don't overheat, and if putting nesting boxes on a building, choose a north east facing wall which won't heat up too much
- ♥ Ensure that the box is off the ground and out of reach of predators!
- ♥ If you know you have any birds already nesting close by make sure you situate your box away from their existing nest

Here are some free plans if you want to build your own and **remember to ask for help when cutting and using tools!**

<https://www.thespruce.com/free-birdhouse-plans-1357100>



At Westmill, we don't like waste and instead, we like to find ways to **reuse** things. Here is a way you can reuse old newspaper and printer paper to grow plants and to encourage biodiversity at the same time!

**Have a go at creating paper seedling pots and planting a seed or transplanting a seedling.**

Remember to protect seeds and seedlings and keep the earth or compost moist; you could keep them on a sunny windowsill but always put them on a saucer or tray!

**Please tweet us a photo of you plant and pot or any other projects you make @WeSETeducate**

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1. You will need: used papers or newspaper, a small jar, seeds or seedlings and some earth or compost.	2. First, fold you paper lengthways. If you are using news paper you may need to fold it several times.	3. Place the jar, lid off, on the folded paper. The paper should overlap the jar about 25mm at the open end.	4. Roll the paper tightly around the jar. You will need to hold it firmly (if you like you can use an elastic band!)
			
5. Once you have rolled it around the jar, hold the end in place and turn the jar opening uppermost.	6. Now start to fold the overlapping edge of the paper halfway into the jar opening.	7. At this point you might see a slight hole in the base of the pot, don't worry!	8. Remove the jar and turn the pot over so that you can see down to the base inside.
			
9. Now put the jar back in but the other way up, base into the base of the pot. Press onto a table.	10. The base of the pot should now be fairly flat and the hole should have disappeared.	11. Fill your pot with earth or compost if planting a seed or cover the base if planting a seedling.	12. Choose your seed! I used coriander as I like herbs, but it could be a flower, vegetable or tree!
			
13. Cover your seed with about 5mm of compost and water lightly.	14. Make sure you label your seed! Lolly sticks make great labels.	15. Put all your pots in a tray so that you can water and carry them easily.	16. There are lots of things you can reuse and repurpose to grow seeds!
			

Other things that make great planters and seed trays include:

- ♥ Empty cardboard toilet and kitchen towel rolls
- ♥ Cardboard packaging boxes and plastic food trays
- ♥ Washed tin cans and old chipped mugs and cups

If it isn't porous like paper and card, ask for help to add drainage holes!