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Wild and wiggly!

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We are grateful to Hymns Ancient and Modern for a grant towards the costs of Messy Adventures – **hymnsam.co.uk**

BRF

Theme: minibeasts and insects

MESSY CHURCH GOES WILD CHAPTER LINK: 2 – CARING FOR ANIMALS AND BIRDS

Aim: to discover more about God and the importance of minibeasts and insects in the circle of life.

Science advisor: Tom Hartman

Remember to complete a risk assessment for each adventure and ensure you are fully compliant with good safeguarding procedures.

Messy Church values:

- Christ-centred – using the story of Moses (Exodus 2, 8–10) to think about insects and habitats and learning that little things, little people and little details matter to Jesus: Jesus meets Zacchaeus (Luke 19:1-10)

- Hospitality – insects play a vital part in the food chain for animals and humans.

- Celebration – thanking God for his creation, even for the minibeasts and insects!

- Creativity – discovering more about minibeasts and insects as an essential part of God's creation.

- All-age – opportunities for adults and children to reflect on the variety of insects and the part they play in God's creation and in sustaining the earth.

Locations: field, park, woods, pond or river, car park, church grounds.

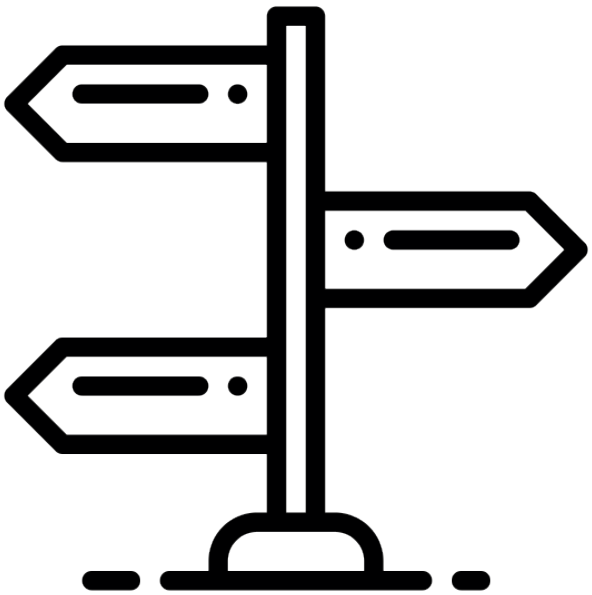
If these are inaccessible: large rocks/stones or logs left outside for a couple of weeks.

Please note that many minibeasts are more active in spring and summer although can be found all year round.

Section 1 On the move

Pause at different stops on an adventure around your area. Issue the relevant health and safety warnings needed for your situation. These stops can be used in any order.

You could do a minibeast trail or insect hunt across the varying habitats. As well as identifying various insects you could do a ‘number of legs’ count or list the different colours spotted. Each stop has suggestions for local experts you could invite to add specialist knowledge and local context to the adventure.



1 Car park/roadside/pavement

- As you pause by the roadside (in a car park or on a path) where might you find some minibeasts? Is this a good environment for them to live in? What do they need to survive? Talk about how resilient insects can be.

- Turn over any logs or stones nearby and see what minibeasts you can find? Why do some insects like to live in dark places?

- What plants or hedges are there along the road/path? Do these make good habitats for insects? Which ones?

- On a wet day you often see slugs, snails and worms on the pavement – is there a reason for that?

- Snails have their home on their back as a form of protection. In the Bible we find several metaphors referring to God's protection over us – shield, hiding place, refuge, rock, shelter – are they like our shell? One of the names of God is 'protector' (Elohim shomri) How does God protect us and what from? (Psalm 91)

Ask: what questions do you have about this?

Suggestions for specialist input: environmental scientist, botanist, entomologist.

2 A field or park

- Look carefully at a patch of short grass – you could use a magnifying glass – what insects can you see?

- Now look carefully at a patch of long grass – can you find different insects living here?

- Make a sweep net (see instructions in section 3) and explore any long grass, using this to collect insects.

- Set a pitfall trap by digging a small pot into the ground (e.g. yoghurt pot) making sure the rim is level with the ground. If set the day before, place a couple of stones and a raised lid over the top to stop rain getting in. Observe what insects have fallen in and safely release once identified.

- A pitfall is defined as an unexpected or difficult danger. Sometimes people refer to the pitfalls of life – can you think what they might be referring to? How can God help us avoid any pitfalls? (Proverbs 22:5)

- Check around the flowerbeds – what insects can be found here?

- How are minibeasts important to nature and to humans?

- Why do we need to take care of insects and their habitats? What do you know about the role of insects in pollination?

Ask: what questions do you have about this?

Suggestions for specialist input: environmental scientist, botanist, entomologist.

3 Pond or riverbank

- Using a fishing net or kitchen sieve, carefully go pond dipping. Make sure children are well supervised around the water's edge. Empty what you catch into a tub of water so you can see and identify the minibeasts that live in water. Carefully return them to the water when you've finished and then wash your hands if possible.

- What insects live along the bank, in the grass and reeds? Use a sweep net (see instructions in section 3) to collect insects and identify them.

- How else might pond or river water be helpful to insects?

- You could make a mini wildlife pond in your garden by putting a bucket in the ground and lining it with sand and rocks and then observing what creatures you find in it.

- In the story of Moses (Exodus 2:1–10), we read of his family hiding him as a baby in a basket down by the riverbank. Why do you think they did that? Why was it a good place to hide him?

Ask: what questions do you have about this?

Suggestions for specialist input: environmental scientist, botanist, entomologist, fisherman.

4 Woodland

- What conditions do insects like to live in? Moist, damp, shady conditions

- Find some rotting wood and gently poke around with a stick to see what minibeasts come scurrying out. Make sure you put back anything that you move.

- Lay a white sheet or tray beneath the trees and then gently shake the branches to see what insects falls out. Make a list of what you find. How do they help the environment?

- Using a pooter (see activities below) find some insects in bushes and take time to discover what they are and what they do by looking it up on the internet.

- The appearance and colour of insects can be the key to their survival. What is camouflage? How does this help them?

- We read in the story of Moses (Exodus 8–10) of the plagues of gnats, flies and locusts sent by God to persuade Pharaoh to let the Israelites go. Have you ever seen a swarm of insects? How do you think it would feel to be invaded by one? Is it right for us to lay traps or to catch and kill insects and minibeasts? Why or why not?

Ask: what questions do you have about this?

Suggestions for specialist input: environmental scientist, botanist, entomologist.

Celebration and prayer
See Section 4

As you leave
Invite everyone to talk on your way home about where you saw God at work today.

Section 2 Adventure area in one spot

Meet at a place where there are likely to be lots of minibeast living, e.g. woodland, pond, riverbank. Issue the relevant health and safety warnings needed for your situation.

- Where can you see around you that insects are likely to be living?

- Explore the different habitats and complete a minibeast trail using an 'I Spy' sheet. You could take photos on a phone of all the different species you find or look up their scientific names.

- If there are trees around, lay a white sheet or tray beneath them and then gently shake the branches to see what falls out. You may need to be quick to identify the insects as they may run or fly away!

- Make a sweep net (see instructions in section 3) and explore any long grass, using this to collect insects. Gently put them into pots so you can identify them and observe their behaviour.

- Turn over any logs or rocks and watch how the different species move. How would you describe their movement? Do they slither, squirm, scuttle, shuffle, fly? Play the game in activity 6 below.

- If you are by a river or pond, you can go water dipping using a net or a kitchen sieve. Make sure children are well supervised around the water's edge. Empty what you find into plastic tubs of water to look more carefully at the different species but remember to return them to the water when you have finished.

- In many countries insects are regularly eaten by people as part of their diet as a good source of protein e.g. snails (France), deep fried crickets (Thailand) and ant soup (China). Would you be willing to try any of these? You could order a selection of edible insects for people to try!

- Can you name any by-products used by humans that insects produce? e.g. honey, beeswax, silk, cochineal (red colouring).

- Lots of minibeasts use their senses of smell, touch and taste to experience the world around them rather than their hearing or sight. Talk about how we use our senses to experience the world around us.

- Read together Genesis 1:24–25. Talk about why you think God thought what he'd created was good? Are there any parts you think aren't good? Does that include any minibeasts?

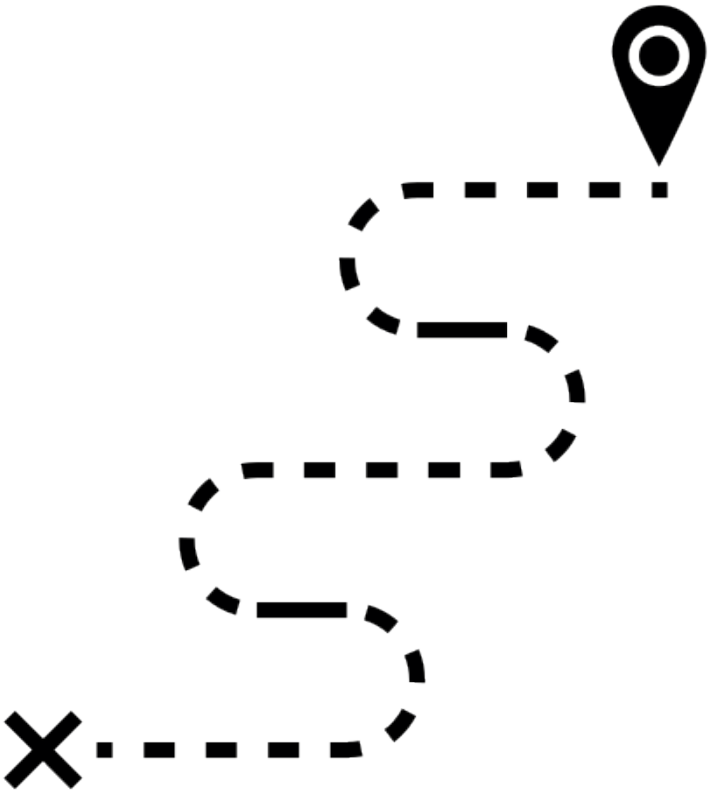
Wonder:

- What is your favourite insect? Are there any you don't like or find scary? Do you think God has a favourite or any he dislikes?

- Talk together about what minibeasts can teach us about who God is and how much he loves the world he created and especially about how much he loves us.

- We read in the story of Moses (Exodus 8–10) of the plagues of gnats, flies and locusts sent by God to persuade Pharaoh to let the Israelites go. What do you think it was like for all the people having to live with those plagues?

Suggestions for specialist input: environmental scientist, botanist, entomologist, minister.



Section 3 Activities to explore insects and minibeasts

In the Old Testament one of the key expressions for a place of plenty is when God says he will lead his people to a land of milk and honey. This is not just a location where you scratch a living from the land, but a place of abundance, overflowing with milk and honey. If there is milk then there is grass, not just grass, but rich meadows of succulent green grass on which the cattle and goats can feed to their hearts content and produce rich milk. From the milk people can make cream and cheese and butter. It is a place full of richness and joy.

Then, if there is honey there will be a bountiful supply of flowers which means that the land is full of meadows, flowering shrubs and trees (for honeybees need a place to make their hives). It is full of colour and sunshine (and rain) and where there are honeybees there are other insects too as they are part of a rich ecosystem of bees, flies, grasshoppers, spiders and many other minibeasts. All of them fulfil their role in the land and produce a place full of vibrancy and activity.

1 Sweep net

You'll need: an old pillowcase; two wire coat hangers; duct tape; wood/bamboo cane; scissors; pliers.

What to do: turn the two wire coat hangers into circles and tape them together in several places leaving the ends open. Cut two holes in either side of the double layer of the pillowcase and thread the wire through. Straighten the ends and tape them to the handle to secure. Find an area of long grass or soft shrubs and swipe the net through it. After a couple of sweeps, have a look at what you have caught.

Big thinking: what have you caught in your net? What sort of things might you have caught? What might you have missed? Do you think you might catch different things at different times of the day? Or in different seasons during the year? What do you think you might catch if you went out in the middle of the night? Before you sweep, listen. Can you hear the minibeasts?

Sweep nets catch insects that rest on grasses or feed on them. You may have caught the odd snail as some of them like to climb, but mostly you will catch insects and spiders. Some of them feed on the plants by sticking their mouthparts into the plant to suck their juices as though they were feeding through a straw. These will be the aphids and shield bugs. Where you find them, you may also find ants. Some ants tend the aphids like farmers and 'milk' them for honeydew. They make sure that their predators such as ladybirds don't get too near. In late summer you may also find grasshoppers who climb the stems to make sure that their chirping can be heard. If you sweep though flowers, then do be careful. While you might catch some hoverflies, yellow and black striped flies that pretend to be wasps, you might catch some wasps and bees too.

Big question: nets are useful for catching things. Can you think of any Bible stories with nets in? How will these sweep nets help when exploring minibeasts and insects?

2 Edible insects

You'll need: a variety of fruit and vegetables – it is probably easier for these to be ready chopped and served from tubs or a paper bag; picnic/ camping plates; cocktail sticks.

What to do: using the fruit and vegetables available, see if you can make some insects and minibeasts. You could even order a selection of edible insects for people to try!

Big thinking: our farms plant huge areas of a single crop in one place. Hectare after hectare of the same plants because farmers need to balance different crops with how easy they would be to harvest. What that does is make huge bull's eyes on the land for anything that would eat those plants, an almost limitless swathe of food for anything that would eat it. We may be used to seeing farmland with pigeons and crows on it, but the sheer number of insects is almost impossible to gauge. Until you use insecticides. Then farmland becomes a desert for everything apart from what the farmer grows. There are other ways of farming that have less of an environmental impact, but with the world population still increasing rapidly tried and tested methods of production will always win out. One alternative is to farm insects. Almost 30% of farmed plants are eaten by insects and the news is, if you ever eat anything made with flour then a good proportion of that is insect (up to 5%) and we also eat bits of insects in fruit, sauces and juices.

Why do we find insects so unappealing to eat? We eat other strange articulated animals such crustaceans (shrimp, prawn, crab, lobster) and really slimy molluscs (mussels, winkles, snails, oysters). The idea of a diet that excludes insects is slowly changing. Insects are eaten in many other parts of the world and they are very healthy as both snacks in and of themselves, but also when ground up and added into flour. They are full of protein, rich in calcium, loaded with vitamins and minerals, low calorie, low sugar and lactose free.

For those of an adventurous disposition, there are plentiful places selling insect snacks on both the high street and the internet (try the fried waxworms!).

Big question: in the Bible we read of John the Baptist eating 'locusts and honey' (Mark 1:6). If insects are a good source of protein, why don't we eat more of them?

3 Make a pooter

A pooter is a simple way of catching bugs so you can look at them close up.

You'll need: small, clear container with a lid; hammer and nail; scissors; paper straw; piece of kitchen cloth or tights; elastic band; plasticine.

What to do: make a straw sized hole in the lid and the bottom of the container. Cut off the bottom quarter of the straw and then wrap the cloth or tights around the end of the longer piece with an elastic band. Push the other end of the long straw through the lid so the covered end is in the pot. Push the short straw through the bottom of the container and seal the spaces around both holes with plasticine. Put the lid back on.

To catch a bug, hold the short straw over it and suck on the long straw. Only suck up bugs small enough to go safely through the straw and then release them as quickly as possible once you have looked at them.

If you can, get hold of a hand lens to look at them with. Some people might have a phone with a macro lens on it which you can use to photograph your captures and zoom in on them. Or you can use a phone microscope attachment.

Big thinking: what can you find? You may want to pair this activity with the sweep net. Another thing that you can do is put a pillowcase under a tree or shrub and waggle the branches so that all the minibeast fall onto the pillowcase so you can then pooter them up.

Most insects that you find will either be flies or bugs like aphids, though you may also get a lot of spiders. Most of them will be fairly bland in their colouration as most minibeasts seek to blend in with their environment. Some, however, are brightly coloured and look obvious on any background. Ladybirds are a good example. The familiar red colour with black spots that look so attractive to us carry a warning. These animals are poisonous so don't eat them! In biology, this is an example of honest advertising. The colours advertise the fact that they are not good to eat so they can be conspicuous. Another good example are wasps with their black and yellow colours. They are a very gaudy signal that says, 'leave well alone'. Bees also advertise the fact that they have a poisonous sting with black and yellow patterns. They advertise themselves honestly. But there are also insects that mimic wasps and bees by having the same colours, but with no sting. The most brilliant ones are hoverflies. These are two winged insects that look amazingly like wasps but have no sting (there are also beetles and moths that do this). This is dishonest advertising in that they send out a signal that they have a sting, but they don't. In the Bible in Genesis 27, we read of two brothers, a hairy one and a hairless one, Esau and Jacob. Jacob fooled his blind father into giving him his brother's blessing by using lamb hair on his own arms – another case of dishonest advertising.

Big question: many insects and minibeasts have good camouflage to help protect them. Can you think of any? One of the names of God is 'protector' (Elohim shomri) – how does God protect us?

4 Bug hotels

You'll need: an empty tin can (make sure it has no sharp edges); natural materials; twine.

What to do: Pierce a hole in the bottom of the can and thread some string or twine through it so it can be hung up. Collect natural objects that can be put inside your tin can such as sticks, dried leaves, bark, bamboo canes, hay and little pine cones. A variety of materials is good because they provide habitats for different bugs.

These individual bug hotels can be taken home and hung in gardens – don't forget to encourage people to revisit them to see which creatures might have moved in!

If your Messy Church has access to some grounds, could you work together to build a multi-story minibeast mansion? Search the internet for larger scale bug hotel building plans (e.g. wildlifetrusts.org and woodlandtrust.org.uk) using wooden pallets, bricks and natural materials.

Big thinking: where do all the animals go? There are so many of them and yet we so rarely see them. They are very good at hiding. Not only that, but for many minibeasts their babies may look very different to the adult. When we look at a beetle with their strong bodies, six legs and hard shell it seems inconceivable that they start off life looking something more like a caterpillar. Many beetle babies live inside wood, chewing that hard material slowly over many months or even years before they enter the stage where they turn from the baby into the adult. If we remove all the dead wood from a park or garden then we lose all the baby stages so we never get new adults to replace the old ones. Sometimes it is important to be untidy.

For there to be lots of different minibeasts we need to create a whole suite of different habitats including letting areas fill up with plants that we may think of as weeds (nettles, thistles, ragwort). We should have areas where we leave dead wood around to decay in its own time, areas that are dry and areas that are wet. If we are really serious then making a pond is the simplest and best way to increase biodiversity. A pond is an amazing asset to wildlife.

? **Big question:** talk about the different places (habitats) where animals live. How do human actions impact these habitats? What can we do to try and help?

5 Play Beetle Drive

You'll need: paper; pens; dice.

What to do: draw a beetle shape by rolling the dice and adding body parts according to the number you throw. e.g. 1 – body, 2 – head, 3 – legs, 4 – eyes, 5 – spots, 6 – antennae. Simple printable sheets are available to download on the internet.

Big thinking: the biggest beetle in the UK is the stag beetle. They reach 75 mm in length and the males have enormously elongated mouthparts which they use, like a deer uses its antlers, to fight with other males. They are very rare now, but you can sometimes see them in the south of England.

By contrast, the smallest British beetle is only 1 mm in length and are known as featherwing beetles. The ones that we are most familiar with are the ladybirds and beetles which come in all sorts of shapes and sizes. Their most distinguishing feature is that their first pair of wings are hard and act as a cover for the second pair which they fly with. If you are lucky enough to see a beetle in flight, then you might even see the elegant way in which they have to fold their hind wings up to pack them away under their first pair. Just like a convertible car has to fold up its roof into the boot space. Most beetles spend their time walking around looking for food, but some, like the Tiger Beetle are incredible fliers and hunt flies on the wing. They have sharp mouthparts to bite their prey in mid-air! Others collect poo and roll it around to take it to a safe space – these are dung beetles. There are so many beetles that if you were to count all the different species you would find that they outnumber all of the other sorts of animals put together.

Big question: minibeasts tend to use their senses of smell, touch and taste to experience the world around them. How do we experience the world around us? How can we praise God using our senses?

6 Move like a… game

You'll need: pictures of minibeasts that move in different ways

What to do: put the pictures of minibeasts face down. As you turn them over move like the minibeast picked (e.g. crawl, slither, fly, swim, scurry, jump, wiggle, shuffle, squirm). Some might also move slowly or even stay still!

Big thinking: everybody is entranced by the big minibeasts, but most are small and often overlooked. If we look for them with pooters and sweep nets, we will often find insects and spiders, but there are so many more. We need to look elsewhere.

If you look under rocks (especially in damp places) or in compost heaps, then you might find all sorts of different animals to those that we find in grass or in bushes. In damp places you may find worms and slugs, perhaps snails. You may see the armoured woodlice, the closest relative to crabs that we find on dry land (or damp land). You might also encounter long animals with lots of legs. If they have two pairs per segment, then they are millipedes, or one pair per segment then they are centipedes. Millipedes often look like their legs are tucked underneath them whereas centipede's legs stick out the side.

If any minibeast has eight legs then it belongs to the spider family: the arachnids, but if they have six then they are insects. While most insects just use their legs for walking some, like fleas and grasshoppers, have a pair just for jumping, and mole crickets have a pair just for use as shovels to dig with. The more exotic insects like praying mantises use their front legs as a trap to grab other animals on which they feed.

If it has wings and if it can fly then it is definitely an insect for, though not all insects can fly, the only minibeasts that can fly are insects. They are not the only minibeast that you can find in the air. There are some tiny spiders, however, that weave tiny silk parachutes and catch the breeze to be whisked away to some other area.

? **Big question:** most insects move to protect themselves. Have you ever had to run from something? How did it feel? Isn't it good to know that God is always with us – that he is our protector (Psalm 91)?

7 Natural insect collages

You'll need: twigs, leaves, grass, moss, wildflowers, petals etc. Please don't pick wild or planted flowers from public gardens or parks and do not break bits off living plants.

What to do: create a collage of an insect on the ground using natural materials you can find around you.

Big thinking: what do insects do? As you create your insect think about their mouthparts as there are so many components to an insect's mouth. We have an upper and lower jaw lined with teeth, but some insects have four sets of jaws. Some, like beetles and grasshoppers, have mouthparts that include gripping pincers (mandibles) that work like pliers. House flies have an extendable tube which has a sponge on the end of it. Butterflies have a roll up tongue that extends out from their head to the flower whereas mosquitoes have a hypodermic needle to stick into your skin and suck out blood. They are all very good at what they do!

Even the ones that we find really annoying may have some hidden benefits. Wasps, for instance, are mainly known to us by being annoying (and they really hurt when they sting us), but for most of the year wasps are out hunting other animals for food. They take caterpillars and other insects that harm plants back to their nests to feed to their babies, so they have a very important role in the countryside. Flies, that carry germs around because they walk over poo and then transfer it to our food, also play a vital role in removing poo from the environment (you can imagine how important that role is if they were not there to do it) and there are lots of other minibeasts for whom a big pile of poo is a home, not something to avoid.

Flies and wasps, like bees, are important pollinators without which many of our fruits would not form. Another, rather more macabre role of minibeasts is to clean up the dead. There are so many mice, rats, pigeons and so many more animals that die every day and their bodies would form a horrible, smelly, disease-filled environment were it not for the flies and beetles and other minibeasts that clean them up. We have a lot to be thankful for.

Big question: insects recycle dead matter and waste to help the ecosystem. How can we recycle to help look after the world God created?

8 Dancing worms

You'll need: gummy worms; baking soda; warm water; vinegar; chopping board; knife; two clear cups; tablespoon.

What to do: cut the gummy worms into approximately 3 cm lengths. Measure out 3 tbsp of baking soda and stir them into a glass filled with one cup of warm water. Add the worms into the baking soda and water and leave for about 15 minutes to soak. (Have some prepared ready to use.) Fill the second clear glass with vinegar and then place a couple of worms in the vinegar. Watch what happens.

Big thinking: everything has a role to play in the complex interactive web of life and earthworms are really important to the health of an ecosystem. In good, healthy soil there maybe 450 worms per square metre of ground so any football pitch sized bit of ground may have four and a quarter million worms living in it. They are not crammed in the grass because some of them can burrow up to 2m below the surface. There may be a highly complex set of tubes and burrows under your feet at any given point. The burrows of worms aerate the soil so it stays healthy and they keep the soil from becoming packed which means that plants grow better since their roots aren't having to break up the soil. It also lets water drain away more easily. If you ever see a slimy set of 'mud tubes' on a lawn, that is worm poo and it enriches the soil with vital nutrients that plants need.

There are 300 types of worms in the UK and when you have a look at the common ones you can see that it has a pointed head end and a flattened, curved tail end. If you are feeling brave, pick a worm up (gently) and run your finger up its belly going from the tail to the head. It feels a bit rough because each segment of a worm has eight tiny hooks that the worms use to stop them sliding about. It also means that if you see one coming out of its burrow it is hard to pull out because it uses the hooks as little anchors.

Big question: in the Bible worms are often referenced alongside death – why do you think that might be?

9 Butterfly art

You'll need: paper; paint; scissors.

What to do: fold a piece of paper in half and cut out a butterfly shape. Paint one half using either a brush or fingers and then fold over and press. Open to reveal the symmetrical butterfly wings.

Big thinking: many creatures change as they grow up and become mature, but none are so dramatic as those insects that go through complete metamorphosis. We are most familiar with butterflies and moths but the same is true for flies, bees and ants. They hatch from eggs and spend most of their lives as a caterpillar feeding. In fact, there are so many caterpillars around in an oak wood, and they feed so much, that if you listen carefully, on a warm summer day, you can hear their droppings raining down onto the forest floor. All a caterpillar knows is about feeding and, every so often, shedding their skins as they grow bigger!

Then, when they are large enough, they attach themselves to a fixed point and pupate. Moths make a chrysalis (often out of silk) whereas butterflies form a hard outer shell. Inside the caterpillar dissolves into its component cells which then reorientate themselves and form a new body, the adult. In butterflies and moths their juvenile chomping mouthparts are replaced by an extendable straw with which they suck up nectar from flowers, but for some species the adult never feeds so is born without any mouthparts. In exchange for feeding, they now are able to fly with wings that have enchanted people for millennia. If you were an intelligent caterpillar, what would you think about the idea of becoming a butterfly?

? **Big question:** talk about how a caterpillar changes into a butterfly and how we change as we grow older. How does becoming a friend of Jesus transform our lives?

10 Growing a butterfly and bee garden

You'll need: pots; compost; wildflower seeds.

What to do: fill the pot with compost and then add some wildflower seeds. Place it by a sunny window and see what happens. Add water to the pot as needed. Transfer outside.

Big thinking: the bees that we see visiting flowers are collecting nectar (a sweet, sugar filled liquid from the base of a flower's petals) and also pollen which the plant makes to transfer to another flower so that they can make seeds for the next generation. Bees live in hives of between 20,000–80,000 workers and they get very excited when they find a good patch of flowers producing nectar. The bee flies back to its nest and tells the others about the flowers – they do this through the medium of dance! The hive has an area where the incoming bee dances in a figure of eight around what is known as a 'waggle line'. This lets the bees that are watching know what direction they should fly in and how far it is to the nectar. If it is a really good patch, then the dancing bee waggles even more energetically.

If you want to attract bees and butterflies to your garden then plant a variety of flowers that flower for as long as possible over the spring, summer and autumn. Information on which ones are best can be found wherever you buy your plants, but some of the best ones are buddleia, lavender, clover and many more. Remember though, that while providing food in terms of nectar and pollen is very good, these animals also need places to stay, and butterflies in particular need food plants for their caterpillars to grow on and these may not be plants that you want in the garden (thistles, nettles, Ragwort and so on). Bees also get thirsty so having a source of water like a small pond is also a good idea. Making a garden or small plot of land into one that is friendly to insects can be unnerving at times, but it is incredibly rewarding and finding that wild animals are coming to an area of land that you look after is an amazing experience.

Big question: in Psalm 119:103 we read, 'How sweet are your words to my taste, sweeter than honey to my mouth!' What do you think this means? How can we make sure our words are sweet when heard by others?

Section 4 Celebration

Little things, little people, little details matter to Jesus: Jesus meets Zacchaeus (Luke 19:1-10)

Talk about the things you've seen and found out about today, with an emphasis on how tiny the minibeasts are but how vital they are in the biodiversity of your outdoor space, as pollinators, soil conditioners, recyclers, part of the food chain and as things of beauty in themselves. Clock when someone says 'Ugh!' or 'I hate spiders!' or similar.

I wonder how many minibeasts today have made you automatically go, 'Ugh!' or 'Eeeeuw' or Yuk'? Perhaps before you took the trouble to stop and notice how brilliant they are, how beautiful they can be, how they change the world around them?

I wonder if there are some people who make us automatically – without thinking - go Ugh, Eeeeeuw or Yuk, before we take the trouble to stop and notice just how amazing they are and how they have special gifts that can change the world around them, just like the amazing worms, bees, beetles and snails that we've seen today?

One day Jesus was walking through the city of Jericho with a crowd of people around him cheering him on. But in the middle of the crowd, Jesus stopped and looked up. There in the tree above him was a short man, a small man, a worm of a man who was so bad he should have been hidden under a rock, a man who simply wasn't good enough to be anywhere near Jesus – at least that's what everyone in Jericho thought. His name was Zacchaeus and he got rich on the back of the poor, by collaborating with the Roman occupiers, collecting taxes and taking a nice cut for himself – at least that's what everyone thought he was doing. He shouldn't have been up a tree: he should have been hiding under a rock, like a woodlouse or a slug! He certainly didn't deserve to be anywhere near Jesus.

But Jesus stopped and noticed him. He stopped. And he took the trouble to notice him. He actually saw him as he really was. What a great scientist Jesus would have been! And you know what he did next. That's right, he invited himself for tea at Zacchaeus' house. Which meant that from being the smallest, nastiest little parasitic wasp of a man, in the eyes of everyone else, suddenly Zacchaeus was more like a big, beautiful butterfly, making everyone say 'Wow, how amazing!'

And because of that tea, Zacchaeus changed his behaviour completely. Something about meeting Jesus made him see a whole new world of possibilities, like a dragonfly nymph inching out of the water ready to fly for the first time. He promised to repay everyone he'd stolen from – with interest - and to give half his belongings to the poor. Imagine the difference that made to the town of Jericho!

People who follow Jesus try to be like Jesus. Sometimes that means stopping and noticing what nobody else has noticed and valuing what nobody else values. If we did that with the

people around us, with the insects and minibeasts around us, I wonder what difference that might make to the place we live in?

Try a noticing prayer together. If it's possible to pass round a minibeast without hurting it, (perhaps in an observation box or jam jar) do that and as each person takes it, invite them to thank God for one thing about the creature. The first people to take their turn will have lots of things to choose from; the later people will need to work harder to notice things! Draw the prayers together with thanks to Jesus for knowing every detail about every living thing, including each person, large or small here today, and for caring so much about each one of us.

Section 5 Eating together

Pick an idea from the Messy Take-out menu or another source for outdoor meals, snacks and treats.

You could wind bread dough into snail shapes to bake on your fire or have spaghetti 'worms' in tomato sauce.