



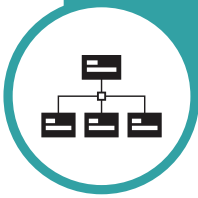
Lifelong Learning through Nature

Youth Leader Training Guide

David Chandler and Hannah Chisholm
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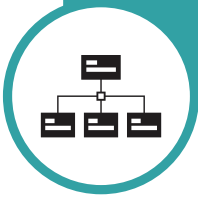


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Overview and objectives

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Overview and objectives

Overview:

This Youth Leader Training Guide provides ideas for you as a leader to run more engaging environmental sessions, and provides an overview of the training process to enable you to train others to do the same.

Objectives: At the end of the course each participant will be able to:

- Recognise the importance and benefits of spending time in nature;
- Deliver a variety of environmental games that build a connection with nature;
- Understand the importance of and use varied methods when working with a group of children/young people;
- Use a range of approaches to manage challenging behaviour when leading a group;
- Adapt activities so that they are appropriate to the culture and context that you work in;
- Describe the training cycle;
- Write course aims and objectives;
- List and employ a range of training methods;
- Understand the importance of evaluating training;
- Evaluate training using a range of different tools;
- Understand how to assess risks;
- Understand the importance of child safeguarding.



The benefits of nature connections

'Every child is born a naturalist. Their eyes are, by nature, open to the glories of the stars, the beauty of the flowers, and the mystery of life' R Search.

'I go to nature to be soothed and healed, and to have my senses put in order' John Burroughs.

In the 1970s, 40% of children played in natural places. Today, less than 10% do so. Research from Sheffield, England, shows a decline from generation to generation in the amount of freedom children are allowed. Ed, who is eight years old, is allowed to walk to the end of the street on his own (about 300 metres). His mum, Vicky, was eight in 1979. She was allowed to walk to the swimming pool about half a mile away on her own. Jack, Ed's grandfather, was eight in 1950. He was allowed to walk to a wood about a mile away on his own. Great grandfather George was eight in 1919. He was allowed to walk six miles on his own to go fishing.

In a society where lives are busier, health and safety is stricter and more people than ever own cars, children have less freedom to explore the natural world by themselves. Furthermore, our cities have less green spaces and are expanding rapidly to develop natural land. It is no longer the norm for children to play outdoors; instead they are captivated by technology, spending the majority of their time indoors.

This increasing disconnection to nature is a major threat to nature conservation. As David Attenborough said, *'No one will protect what they do not first care about'*. Studies have also shown that disconnection to nature negatively impacts health, happiness and wellbeing in society. The importance of environmental education in creating a society that cares and protects the natural world cannot be underestimated.





Part 1: working with children

Ice-breaking activities

Forming small groups

In small groups, this activity allows the members to get to know each other, and creates names for each of the groups. Participants of each group can be decided in advance.

You have 15 minutes to:

- Get to know each other a little
- Find out something interesting or surprising about everyone in the group
- Decide on a name for your group
- Be prepared to introduce your group to the rest of us, and to explain why you chose your group name.

Learning names - Betty the Badger

- Group assembles in a circle
- Each person chooses an animal beginning with the same sound as their name, eg David the Dodo...
- In turns, around the circle, each person says who they are
- Introduce a small ball. Whoever is holding the ball says who they are, and throws the ball to someone else who says who they are...
- After a while introduce a second, and then a third ball
- Wind the activity down by removing the balls one at a time

Nature activities

Starter games

Bird salad

Each person (except one) has a chair in a circle. Everyone is a finch, warbler or bunting. The 'chair-less' person is in the middle and can call any combination of finches, warblers and buntings. Everyone then has to find a new seat, including the person who made the call. Whoever is left without a seat has to make the next call. All sorts of variations are possible.

Woodpeckers pecking

- Arrange the group in a circle
- Everyone becomes a drumming woodpecker, place one hand on their face like a beak
- The other hand should be with the palm facing the 'beak' a few inches in front of the face just like a dead branch
- All the woodpeckers have to drum – pecking the branch as often as they can in five seconds.
- The beak must stay on the face and the branch must stay still. Practice once, then repeat
- Ask how often they managed to peck the branch and make it a competition.

A real Great Spotted Woodpecker has been recorded hitting the branch 16 times in 0.8 seconds – that's 18/second!



Part 1: working with children

Categories

This game is good for starting a session with a new group.

Go around the circle – with each person saying one bird in the category chosen. For example birds beginning with a specific letter; work through the alphabet; each bird starts with the last letter of the previous bird; birds with red in the name; birds with long legs; garden birds.

Change direction every now and then and start with a different person each time. Make sure the categories are relevant to the session you're going to do and that each participant has the knowledge about birds of that category. Of course the categories don't have to be about birds!

Team animal

Teams of four to six have to 'become' an animal. As a group they have to take on the shape of their animal and move like it. Possible animals include elephant, scorpion, spider or snake. Teams can choose their own animal or you can choose for them.

This is not an icebreaker to start with people who don't know each other, make sure everyone is comfortable in the group.

Name that animal

- Choose an animal you want to be
- Read out clues that get progressively easier – along the way, participants try to work out what animal you are referring to.

Animal 20 questions

- Write the name of an animal on a sticky label
- Stick a label on someone's forehead/back without them seeing what's written on it
- They have 20 yes/no/maybe questions to work out what they are. Choose your animals carefully and be ready to provide some gentle help for anyone who is struggling. Working out how many legs the animal has is a very good place to start.

This is a good starter game, though be careful who you choose to stick the label on as some people may feel uncomfortable standing in the spot light.

Musical rookeries

Similar to the game 'Musical chairs' – but people are rooks and the chairs are trees with nests in.

- Lay out a row of chairs with one less than the number of people playing
- Everyone is a rook looking for a nest
- Play some music or nature sounds for a few minutes, whilst the music is playing the rooks have to fly around the chairs trying to choose the best nest
- As soon as the music stops the rooks have to sit on a nest as fast as they can
- The rook without the nest is out of the game
- Keep removing chairs through each round, one at a time, until two rooks have to play for one nest. The rook that wins the nest, wins the game.



Musical herons

Similar to musical statues – but freeze in a heron-like posture. Play some music or nature sounds for a few minutes, everyone has to fly around, flapping their wings. As soon as the music stops they have to freeze in a heron-like posture. Anyone moving is out of the game. Continue until there is only one person left who is the winner.

Caterpillar race

- Create two or more teams of four+ people.
- Teams line up – left legs are joined up down one side, and right legs down the other side (you can tie the legs together using a rope).
- Then it's a simple race to a fixed point and back, as many times as you want! With the front of each caterpillar acting as the brain and trying to coordinate the caterpillar's movement – 'left, right, left, right'.

Animal names

Name your favourite animal and why.

Line ups

Line up in alphabetical order by name, or your favourite animal, or by the distance travelled to get here...

'The sun shines on'

Everyone is in a circle with one person in the middle. The middle person makes a statement e.g. 'the sun shines on everyone who likes geocaching'. Everyone who does has to swap places. The person in the middle tries to fill a gap and whoever is left over becomes the person in the middle and makes the next statement.

'You're only safe if'

An ice breaker that explores the space you're in. The central person calls statements such as 'you're only safe if you're touching an oak tree'. Participants must race to be safe.

Blindfold team walk

Groups of four or five stand in a line behind each other facing the same direction. The person at the back is the leader with their eyes open. Everyone else has their eyes closed. The person at the back has to guide the group to a certain place using shoulder taps to turn the group and shoulder presses to get the group to duck under something – the message should be passed up the line without anyone speaking.





Part 1: working with children

Listening activities

Counting sounds

- Arrange the group in a circle
- Ask everyone to raise both hands in a fist shape
- Everyone closes their eyes for a timed minute or two
- When their eyes are closed, in silence, children raise a finger for each different bird sound they hear (or you can change it to be any natural noise, or first natural then un-natural noises)
- At the end of the minute ask each child how many different sounds they heard.

There isn't a right answer – as well as hearing different things participants will count the same noises in different ways. This is a good activity for calming a group down, and helping people focus on birds (or other) sounds.

Sit spot

Set the boundaries for the area in which the group can explore and adapt the following instructions; on your own, walk for five minutes, find somewhere natural to sit and stay there for five minutes, walk back and join the group. This is a great activity to get people to connect with nature and to feel part of the environment around them. If even works if you have a limited space and the group don't have their own space, if you emphasise sitting quietly and taking it in you'll be surprised at the impact.

Drawing bird noises

Give everyone a small piece of paper/card and a pencil. Participants make marks on the paper to represent how they hear a particular bird noise. This is another good focussing activity that encourages people to really listen to bird song. If you don't have clear bird song in the area you're doing the activity you can play bird songs – there are lots of good applications for this.

Sound maps

Each person draws an 'x' in the middle of their paper to represent their geographical position. They then use symbols/marks to represent all the noises they can hear around them – both natural and man-made in relation to where they are sitting. Everyone should move away from each other and find their own space for this activity.

Steal the treasure

A good focusing activity for woodlands or other areas with noisy ground!

- One person is blindfolded and sits with treasure (something noisy such as keys) at their feet.
- When pointed at by the leader, another child in the group has to creep up and steal the treasure (more than one child at a time is fine)
- If they are heard and pointed at by the treasure-keeper, they return to the starting point
- Another version instead of pointing can be using a water pistol.

If appropriate you can discuss how a predator might sneak up on their prey by walking silently, the slightest sound and the prey would be alerted to their presence.



Part 1: working with children

Active games about birds

Sparrow hawk game 1

- Use fluffy toy finches (birds) or something else that can be safely thrown and assemble the group into a circle
- Everyone standing in the circle is a tree
- Throw one finch from tree to tree, passing both to neighbouring trees and across the central gap
- Introduce a volunteer to play the sparrow hawk – this is a variation of ‘Piggy in the Middle’
- The sparrow hawk is very hungry and has to catch the finch to eat. Make sure that the finch isn’t thrown higher than the sparrow hawk’s shoulders – or the sparrow hawk will go hungry
- Once the sparrow hawk has fed (caught the finch), talk about what finches can do to avoid being eaten. Introduce flocks and why they work; more pairs of eyes looking out for trouble. If there are 100 birds in a flock and one gets taken, there’s only a 1 in 100 chance that it’s you.
- Demonstrate the confusion effect (before mentioning it) by introducing a second and third (or more) finch. The confusion effect is the sparrow hawk being unable to focus on one finch to eat because there are so many flying around.

Sparrow hawk game 2

All of the participants are finches except one who is a sparrow hawk. Start by explaining that finches are a small bird that live in flocks and that the sparrow hawk is a bird of prey who hunts for finches. There are two habitats in this game, the first is a woodland where the finches are safe from the sparrow hawk as it can’t hunt amongst the trees – mark this area with a length of string. The second habitat is open farmland where the finches need to fly to find food – this is the rest of the space which you have (if you’re in a very open area then set boundaries).

Start with all of the finches in the woodland and the sparrow hawk standing next to you – perched on a tree overlooking the farmland. When you call ‘fly’ the finches have to leave the woodland and fly around looking for food in the open farmland. When you call ‘sparrow hawk’ the child who is the sparrow hawk can leave your side and try to catch as many finches as possible while they race back to the woodland. The sparrow hawk catches a finch by tapping them on the shoulder, they are then ‘eaten’ so they’re out of the game.

After a few goes you can explain that due to human pressures on the environment the woodland is at risk and progressively reduce the size of the woodland – do this while they are flying around finding food. For example it could be that the farmer needs more land to grow his crops, or that a developer has decided to build a hotel. You could also add a second sparrow hawk if you want to. Continue until all the wood is removed... habitat loss is a terrible thing!

In order to bring everyone back into the game and to explain that we can also take action to look after the environment you can then explain that environmental charities are working to protect the habitat and a new area of woodland has been created – make a new area with the string. Everyone gets one final go running around, follow up with a discussion about what the game taught them.



Bird feeding game

This game is a relay race with each team collecting cards with pictures of the food that birds eat from a leader. It is a great way to introduce the adaptations different species have for different food sources.

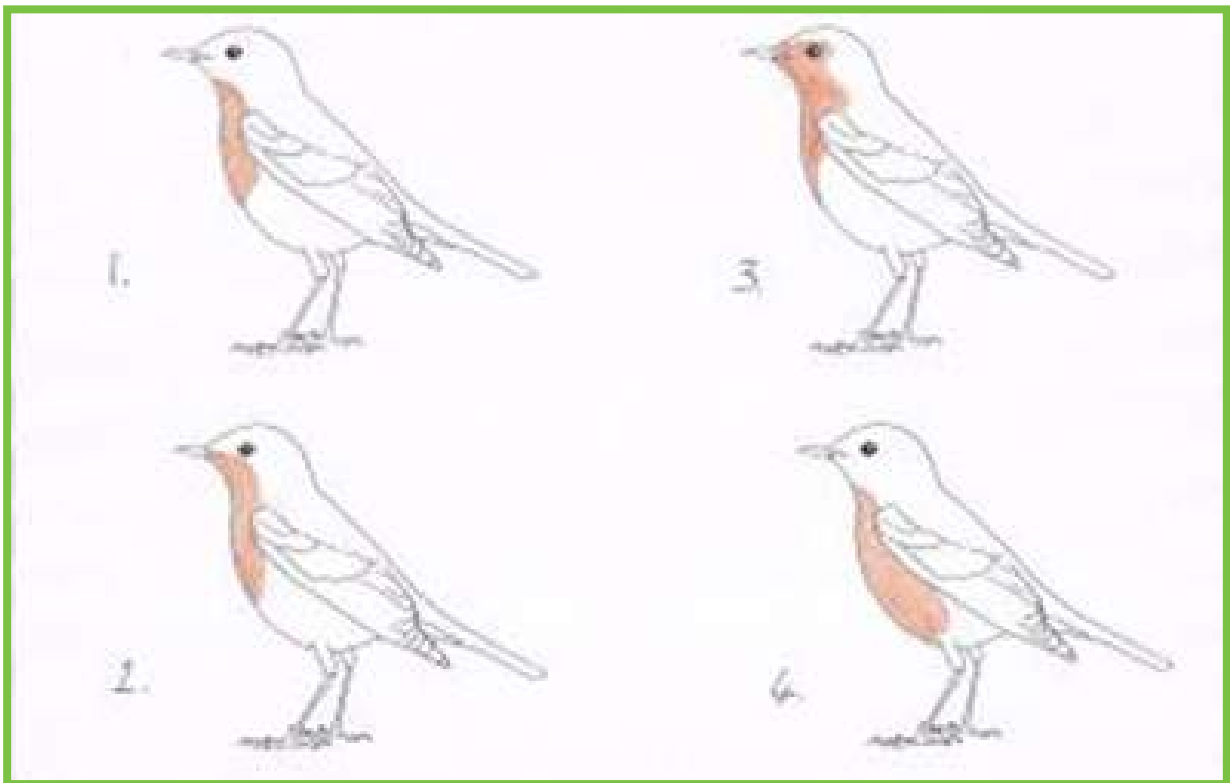
Create three teams – blackbirds, greenfinches and green woodpeckers. Blackbirds eat worms, greenfinches eat seeds and green woodpeckers eat ants. Teams can't see what's on the card until they turn them over. If it's what they eat, they take it back to their team. If it isn't, the card goes back in the pack and the player returns to their team empty handed. The first team to collect all of their food items (the same number for each team) wins.

Fluffy birds' game

The group is taught about four garden birds using picture cards and singing fluffy birds. The birds are then hidden in a bag with picture cards put up in four corners of the area. Press one fluffy bird (hidden) and the kids have to guess which bird it is. The children can move to the picture of the bird they think the call is from. Then reveal the correct answer – repeat as often as you want.

Introduction to bird watching

The Robin activity: an observation game. Use four illustrations of 'Robins' – see below. These could be pinned on trees for example. Participants must decide which one is the 'real' Robin (with the 'red' breast in the right place).





Animal Interactions

Webbing

Construct a food web with people as the plants and animals.

- Start a discussion about what are food webs, depending on the age you can give more in depth knowledge such as the scientific names e.g. primary producers etc.
- If you have pre-prepared a food web, you can make cards with pictures or names of the animals and plants in your food web and give them out to the participants. You can also use sticky labels and write the names of the plants and animals as suggested by the participants.
- Start creating the food web with the first plant; ask questions like what animals eat the plant? Continue until you have completed the food web with all participants included
- Connect each part of the food web with string
- When the web is finished, make sure that the strings are all held taut. Tugging from any part of the web will have a knock-on effect through the whole web – if someone is tugged, they tug too.

This demonstrates the importance of every part of the food web. If one plant or animal goes extinct, it will have a knock on effect with the rest of the food web, creating imbalance in the ecosystem. You can demonstrate this by saying that one species in your food web is destroyed and ask this person to try to leave the circle without letting go of the string.

Bat and moth

- Assemble a circle of people
- Discuss what food bats eat, and how they find their food if they are nocturnal. Introduce the concept of echolocation.
- Choose one volunteer to blindfold to be the bat and one or more moths. (Moths don't have to be blindfolded but they can be to add to the challenge).
- To demonstrate echolocation the bat finds its food (the moth) but repeating “bat, bat, bat”, every time that the bat says “bat” the moth should respond by saying “moth”. The more frequently the bat says “bat”, the more frequent the response should be. Bats use this technique with echolocation making very quick noises when they are near their prey to build a clearer picture.
- The rest of the participants in the circle are the trees and they have to stand still but they can wave their arms. It is important that trees are as quiet as possible so the bat and moth can hear. If a blindfolded child moves too close to the tree circle the children can quietly say “tree” to let them know.
- Once the moth(s) are caught, repeat with different people.





Killer whales and seals

- Create islands using newspaper or ropes
- Everyone is a seal and should swim around in the sea (everywhere that isn't an island)
- When the whale appears (when you shout 'whale') the seals must haul themselves up onto an island to avoid being eaten
- Make the islands smaller and progressively remove them
- If the children don't fit onto the island anymore then they are eaten by the killer whale and are out of the game.

This is a good way of showing one effect of climate change. You can also do the activity with one of the children getting to act as the killer whale.

Noah's ark

- Create cards with pictures of animals (an even number of cards, with two cards for each of a variety of animal)
- Shuffle the cards and give each child a card.
- The group should all spread out in the area that you have and then each child has to move like, assume the shape of and/or sound like the animal on the card and find their partner.

Make sure the animals you choose are 'doable' and that no two pairs are likely to be acted in the same way (e.g. tiger and lion). Possible pairs include: elephant, giraffe, monkey, gorilla, snake, spider, cow, horse, sheep, pig, chicken, duck, woodpecker, butterfly, dog, cat, donkey, deer, skunk, frog, bee.

Find your flock

Similar to 'Noah's ark' but with 'flocks' of birds with distinctive songs/calls, e.g: cuckoo, jackdaw ('jack'), great tit ('tea-cher, tea-cher').

Camouflage game

This game introduces one of the strategies that prey can use to hide from predators - camouflage.

- One person stands in a central spot in a natural habitat, they are not allowed to move
- He/she counts to 20 and everyone hides.
- When the spotter opens their eyes they have to shout out the name of any participants that they can see. If they can't tell who it is they can describe their location or clothes. If they are spotted they're out of the game.
- The spotter counts to 20 again and participants have to move closer. If they are spotted they're out of the game.
- The spotter counts to 20 for the last time – the person closest to the spotter who isn't caught wins.





Midge, Salmon, Otter

This game gives the participants a practical demonstration of how food chains work.

- Split into two groups
- Designate two areas for the groups base
- Separately, the groups have to decide which animal they are going to be (Mosquito, Salmon or Otter). For each animal there is a movement that represents that animal.
- After the groups have decided, ask them to come forward and face each other in a line.
- After the count of three, the groups have to make the movement of the animal they decided
- This food chain is: Otter eats the Salmon, the Salmon eats the Mosquito and the Mosquito eats the Otter.
- If one group is the Otter and the other group is the Salmon. The Otter group will chase the Salmon group back to the Salmon base trying to catch them on the way.
- If you are caught by your predator then you join their team.
- Continue until one team is completely caught by the other team, or until you've had enough.
- You could also work with your group to get them to come up with another food chain which works like this.

Suggested actions: Otter – showing claws, Salmon – swim like a fish, Mosquito – flap little wings.

Mark, release, recapture

One person is the scientist, the others are woodlice who scatter through the woods. The scientist has a time limit and tries to catch and mark as many woodlice as possible. In the second round all the woodlice go off again and the scientist marks them with a different colour. Depending on the level of the group you can then introduce the science of estimating population sizes using the Lincoln Index. This activity can be followed with bug hunting/pitfall trapping to see the insects for real.





Part 1: working with children

Trees

The people tree

You need a reasonably dry area and 12 or more people for this to work. Build a tree using people as the parts. Fuller instructions are in 'Sharing the Joy of Nature'. Here's a summary:

- Heartwood: 1 person, standing. Big, strong.
- Tap root: 1 person, sitting at base of heartwood.
- Lateral roots: 2+ people, lying on ground, feet against heartwood, arms held 'above' head. Preferably people with long hair to demonstrate root hairs - roots make a slurping noise.
- Water tubes (xylem): 2+ people standing around heartwood. Hands held up: hands are leaves - water tubes make an 'aah' noise.
- Food tubes (phloem): 2+ people standing around water tubes - food tubes make a 'wheeee' noise.
- Once these participants are in place the 'tree' should go: slurp, aah, wheee. Repeatedly.
- Bark: everybody else. An outward facing ring linking arms and enclosing the tree.
- Bark boring beetle: complete with twigs for antennae, you attack the tree – the bark defends the rest of the tree trying to keep the beetle out.

Meet a Tree

This is a game to involve the senses, in particular touch. It demonstrates that every tree is unique and special.

- Assemble the group into pairs.
- One person is blindfolded.
- The blindfolded person is turned in a circle to disorientate them and then is led to a tree (safely) by seeing person.
- Blindfolded person then has to get to know their tree using their other senses, primarily touch. Some smell perhaps, but not taste!
- They are then led back to the start point and turned in a circle again.
- The blindfold is removed and they have to re-find their tree.
- Repeat by swapping places.

Why do we need trees?

- Choose three or more people to be trees.
- Everyone else becomes an animal that lives in or on a tree and moves to one of the trees.
- Discuss oxygen-carbon dioxide cycle.
- Animals can only breathe when they are next to a tree and must hold their breath to move between trees when you say 'move'.
- After a while introduce a 'chainsaw' by making the noise and pretending to hold a chainsaw or using a prop and start chopping down the trees.

This activity demonstrates the importance of trees in the ecosystem. If we lose our trees the species that depend on them lose their homes and it has a negative impact on our atmosphere. Chopping down trees also means that we lose the 'lungs' of the planet.



Part 1: working with children

How to age a tree

For an approximate figure, every 2.5 cm of trunk circumference at chest height = one year of age for a tree that has a full crown. You can measure the tree with string (which you could calibrate in advance) or by hugging the tree and then estimating. The formula works for most tree species in the temperate parts of the world.

Estimating the height of a tree

Walk away from the tree until, when you bend over and look back through your legs, with your head as near to the ground as possible, you can see the top of the tree. The height of the tree is the same as your distance from it. You can use a measuring tape to work out the distance

Identify the tree

Collect leaves from trees easily found in the surround area. Give out leaves and ask people to find the tree that matches the leaf they have been given. Using identification guides, they can work out what species the tree is.

Observation Activities

Snapshots

Work in pairs. One person with eyes closed is led to a 'photo'; a nature scene that their partner chooses, it could be a flower, tree or beautiful scenery. The picture is taken by gently tapping the person with closed eyes on their shoulder. Eyes are opened and closed like a shutter to take the nature 'photo'. The brief glimpse gives a quick snapshot and leaves a different impression that fully opening the eyes. Repeat by swapping roles. Discuss what you can learn about your partner by what they chose to show you as their 'photo'.

Observation trail

Arrange some unnatural (man-made) objects along a short trail. Tell the participants where the start point and the end point of the trail is. In a line participants (in silence) move along the trail and keep a count of the unnatural objects they see. At the end, they quietly tell the leader how many they have seen. The leader will tell them if they have managed to see all of the items or if they still have more to find, and then the participants repeat the activity to try to find more items. Chose objects which blend well into the surroundings, some easier and others harder, and make sure that you hide them well enough so that they're not all found first time. A well-positioned mirror is a great object to use – positioned correctly it becomes almost invisible.

This helps sharpen powers of observation and is a good introduction to the use of colour in the natural world.

Scavenger hunt

Give each child a list of things to collect. Examples could include a feather, something yellow, something prickly, and my favourite – something that reminds you of yourself. Make it clear what can and can't be collected.

Frames

Use paper or cardboard frames to turn your group into fantastic artists. All they have to do is find the natural masterpiece and frame it. Why not finish it off with a tour of the 'gallery'?



Colour shades matching

Using colour charts from a DIY shop groups have to search a natural habitat to find the closest match possible. Check what is flowering in advance. With younger children colours work better than shades.

Storytelling methods

Storytelling is a fantastic method of helping children to connect to nature. They can use their creativity to imagine the lives of the plants and animals around them, based on scientific facts. It can be really helpful in providing information in an engaging way. Children will begin to care about nature as they attach emotions through their stories to living things. Most stories begin with setting a scene, presenting a problem and resolving the problem.

There are various methods for storytelling including;

- Leader reads a story
- Group activity of creating a story together. For example each person contributes one sentence continuing on the story.
- Individuals can use their creativity to write or draw a story about nature. It may be helpful to choose a theme.
- Choosing a word or props and developing a story with a group
- Use a character going on an adventure for example 'Big Ted'. You can follow a trail, with pictures on trees.
- Journey sticks create the story of exploring a nature place. Give each child a stick, as they walk along they can collect natural items that remind them of their journey through nature. Each item can be tied onto the stick to create a journey stick.

Testing knowledge at the end of an activity

True-false run-around

- Choose two points a good distance apart – one for 'true' and one for 'false'. This could be a tree, or a person for example.
- Gather the group in the middle between the two points.
- The leaders makes a number of statements. Group members have to decide if the statement is true or false and run to the appropriate point.
- After each statement the leader confirms if it was true or flase and the group return to the middle.

This is a good energiser and a good way to check learning at the end of an activity.





Bird watching for beginners

Making birds bigger – binoculars and telescopes

- 6-8 times magnification
- Children find binoculars difficult
- Compacts may be best
- Practice!
- With a telescope, use an angled eyepiece so the children can look down through the scope
- A telescope needs a tripod
- Binoculars/a telescope are not essential.

Some tips

- Use games to encourage quietness and observation skills such as those described in 'Nature Activities-Listening'
- Use flash cards or a simple field guide, rather than a very detailed bird ID book
- Introduce other activities - to change the pace, maintain focus and for when there are no birds! Use the examples from 'Active games to engage about birds'
- Learn some facts about the birds that you're likely to see, so that you can say more than 'it's a blue tit'
- Check that children are seeing what they say they are seeing. Ask questions like 'what colour is its head?' Rather than 'Can you see it?'
- Encourage children to make notes or sketches. This will improve their observation skills

Choosing field guides

- Choose one that covers the area you are in – a book that includes all the birds of Europe, North Africa and the Middle-East will be confusing for beginners!
- Make sure the illustrations are good. Look at the pictures of a few species that you know well. If these look right to you, the rest of the illustrations will probably be good too.
- Choose one where the pictures and text for any species can be seen at the same time.
- Make sure it is small enough and light enough to carry.





Making field notes

Here is an easy way to remember what to look for when you are trying to identify a bird:

R record

S size and shape

P pattern (colours, markings, leg length, length and shape of beak)

B behaviour

W where and when (habitat and geographical location, time of year)

EX exclamations (sounds – its songs and calls)

A fun activity for your group could be trying to come up with your own acronym which will record the same information.

How to sketch a bird – start with egg shapes:





Minibeasting

Here's a simple way to do it:

Give each child/pair a pot with a lid, and a small paintbrush. Paintbrushes are simple tools for handling minibeasts and reduce the chance of creatures being damaged by small fingers! Instruct the group that their task is to search for minibeasts – you might want to suggest good places to look – and bring back their favourite from the ones they find. Tell them to respect the minibeasts and their homes. Tell them that if they roll a log to look underneath, do it gently, roll it back gently, and if they have removed any creatures from underneath, return them to near the log, not underneath it – so that they aren't squashed.

When the group has gathered their favourites, try to say something interesting about as many of these minibeasts as you can. You might want to do a bit of research first. You don't have to know everything though – there is nothing wrong with not knowing and suggesting that the children try to find out, or helping them to find out. Then ask the group to return the creatures to where they found them and bring the pots, lids and brushes back to you.

You could also use magnifiers and identification guides.

Bug hunting ID ideas:

- Brainstorm: why are minibeasts important?
- Write the name of an obscure minibeast on a sticker and put it on a willing volunteer's forehead. The volunteer has 20 questions to work out what they are, and will probably fail. Then give them a key to work through, and they should succeed. This demonstrates how easy and useful it is to use a key.





Art and craft ideas

• Stained glass windows	• Bird boxes and decorating
• Sticky crowns (cardboard and double-sided tape)	• Photography
• Leaf skeletons on windows	• Pet rocks – mice, ladybirds, bee
• Bird masks from paper plates	• Paper plate folded, with a beak, wings and tail
• Cardboard tube binoculars	• Press seeds into apples
• Mud monsters	• Make bird feeders with yoghurt pots
• Pipe cleaner dragonflies	• Wax rubbing
• Pine cone/clay hedgehogs	• Butterflies – mirror images
• Natural paints / pigments	• Tetra-packs for purses
• Stick sculptures - pioneering	• Design and make a bin
• Potato printing	• Leaf/bark rubbing
• Natural collage on ground/paper	• Photo frames
• Decorate plain cotton bags for nature exploring	• Lanterns
• Drawing and painting	• Natural wind chimes
• Papier mache birds (balloons)	• Silhouettes/coloured birds of prey
• Bark/leaf rubbings	• Projected mural
• Pine cone models	• Tracing using the light
• Mud paint and sculptures	• Felt flowers and birds
• Model making with card, wood and sticks	• Collage
• Tree faces, with clay and leaves	• Mobiles
• Bushcraft – willow weaving, make a plate	• Bird planes
• Dried leaves on windows	• Clay models
• Pressing flowers (make sure it's legal and consider the conservation issues)	





Part 1: working with children

Coping with challenging behaviour

Below are some common challenging behaviours which may occur during an outdoor education session. The behaviours underlined are discussed in greater detail with ideas for how to handle the situation when out with a group.

- Deliberately killing insects
- Dawdling
- 'I hate birds/wildlife/the organisation which you're representing'
- Antagonistic behaviour
- Talking, including the teachers
- Using mobiles etc
- Running off, pushing the boundaries
- Over-enthusiastic
- Non-engagement
- Fear/lack of confidence
- Hand-holding

Note that it may not be your responsibility. If possible make it the teacher's responsibility and make sure that they know that. But even then, there could still be issues.

Talking and disengagement:

- Get their attention back by using a 'key noise' or action from the leader that the group is familiar with.
- Try a one minute silence, encouraging the group to listen for natural sounds.
- 'Read' the group and adapt the activity if it's not suitable.
- Get the teachers to control the behaviour or ask another leader to help you.
- Tell individuals directly that they are disrupting the activity for the others.
- Bring talkers to the 'front' and get them involved.
- Make sure it's clear that there will be times for talking.
- Adults can be asked directly (politely!) to stop talking, or engaged in the session.

Lack of respect for boundaries:

- Make it more fun to be in the area than to leave it.
- Make the boundaries clear to volunteers and participants at the beginning.
- Have another leader or helper at the back of the group if you are walking through an area.
- Have a child safety and welfare procedure in place and know what it says.
- If there is something/somewhere they can't go explain why.
- Present things you want them to do rather than what you want them to not do.
- Make sure the activities are engaging – adapt to the group if necessary.
- Engage people early in the session by asking questions and make sure everyone is involved.
- Have an activity at the beginning to get to know names and then use the students' names.
- Ask for volunteers as a way of getting people involved.
- Get teachers involved in deciding/showing where the boundaries are or get the group to come up with their own boundaries.

Part 1: working with children



- Have a designated number for each child – then they can do their own role call.
- Bribe them – with, for example, a visit to the shop/playground afterwards.
- Use a buddy system.
- Show them how you want them to behave through your behaviour.

Over enthusiastic children:

- Learn their names!
- Ask questions to specific children.
- When asking for their contributions limit the number of responses.
- Use a card system where they have one question/answer each and then have to hand in their card.
- Set ground rules.
- Have a question box.
- Have a time for presentations.
- Use a 'ball speaker' approach – you can only speak when you are holding the ball. Be careful not to force someone to speak if they're shy.
- If they are telling too many stories put a time limit on contributions. If a child keeps talking over you make it clear that you need to talk to the whole group and perhaps there will be a time they can tell you their stories later.

Antagonistic behaviours, including killing insects, pro-hunting etc.:

- Try to pre-empt rather than react.
- Lead by example.
- Say what to do rather than what not to do.
- The challenge is to engage them. Give disengaged people responsibility.
- If a participant is negative towards nature/your organisation, tell them that today we don't want to focus on that but just the activity we're doing today to see if you enjoy it.
- If someone asks challenging questions you could turn it into a debate for the group.

Staying inspired

Spend some time thinking about what inspires you in the natural world. Make time to do the things that will keep you inspired. It's important!

Some ideas to help you get inspired:

- Looking at photographs,
- Listening to poetry,
- Listening to natural sounds music,
- Spending time on your own, in silence, in nature.





Learning styles

Everyone learns in different ways so when you know your key message, or key facts that you want to communicate, try to do so in several different ways. The diagram below shows a simplified version of three different learning styles. Most people use a mixture of learning styles but have a dominant style which they prefer. Being aware of using different learning styles will really improve your outdoor education sessions as people are most stimulated being taught using a variety of methods.





Examples of using different learning styles in outdoor education sessions

Giving people the knowledge to tell a true dragonfly from a damselfly

First, the differences:

True dragonfly	Damselfly
Rests with wings at right angles to the body	Rests with wings held along the 'back' (most do anyway!)
Eyes touch (except in one species in the UK)	There is a space between the eyes
Stout body	Thin, matchstick-like body
Strong flight	Weak, fluttery flight

- 1) An illustrated talk, using PowerPoint, with a quiz.
- 2) A very physical activity, where, when the leader says 'dragonfly wings', participants stand with their arms straight out, or, for 'damselfly wings', with their arms along their back... and so on with appropriate actions for each of the differences in the table above.
- 3) A 'true-false' run around (see 'Nature activities'), using the differences above, and, if necessary, progressing on to other facts or false statements about dragonflies and damselflies.

Migration

- 1) A bingo game. Each child has a fact and has to complete a bingo sheet to win.
- 2) Designate one point as 'Africa' and another as 'Europe'. Start with the group in the middle. They then have to choose whether to be in Africa or Europe when the facts are read out.
- 3) Use clues to lead group members on a 'migration' through an outdoor area.

Habitats

- 1) With a tree as an example of a habitat use tree beating to see some of the invertebrates that live there.
- 2) A food relay race. Place different food items near or far from the nest, to show that when there is plenty of food nearby, birds can find food easier and use less energy looking for it – this would be an example of a good habitat to live.
- 3) 'Capture the flag'. Do this in an open space and then in a woodland to show that richer habitats provide more safety from predators.





Bird beaks, food and feeding techniques

- 1) A traditional presentation with illustrations of skulls and beaks, what the birds eat and how they get their food.
- 2) A scavenger hunt looking for the types of food the birds would eat and any signs of birds using the area.
- 3) A matching game using post-its. Match the beak with the right type of food and the right eating technique.

Food chains

- 1) Go out and look for living creatures. This could be bug hunting, pond dipping or bird watching for example. From looking at the animals first hand, work out the differences between predator and prey and put together a real life food chain.
- 2) Drawing and painting. Older children can draw the whole habitat and the species in the food chain. Younger children can decide the order of species and draw arrows between them.
- 3) Food chain matching game. Give each child a name or picture of an animal/plant. Ask them to describe what they have to the group. Then, it's a race to find their food chain. Then, remove some items to show the impact this has on other species.





Part 2: training

The training cycle – an introduction to NAOMIE

A simple model that works well for planning training:

N	Need
A	Aim
O	Objectives
M	Method
I	Implement (do it!)
E	Evaluate

That's it! It's a cycle because when you evaluate you may find that you didn't meet all of the needs, or that new needs have been identified.

Aims and objectives

An aim is a summary of what you are trying to achieve, from the trainer's point of view. Objectives are more specific and detailed, written from the participants' point of view – at the end of the course, each participant will be able to...

Objectives that have been chosen and written well define what you are trying to achieve, focus the training on the right things, can suggest the right methods and are essential for evaluating the success of your training.

For example – the aim of the Lifelong Learning through Nature training course was

'To give participants a range of basic skills and knowledge that will enable them to introduce children and young people to wildlife in an engaging and memorable way, and to train others to do so.'

The objectives included

At the end of the course each participant will be able to.....

- Explain the importance and benefits of 'nature connections'
- Write course aims and objectives
- Understand how to assess risks

Different types of objective

- Skills
- Knowledge
- Attitude

Examples of good verbs for starting objectives

- Skills: identify, demonstrate, use
- Knowledge: explain, write, describe, list, analyse
- Attitude: accept, recognise, decide, judges





Part 2: training

Training methods

Below is a list of some different methods to use in a training programme. This list is not comprehensive but will show you a variety of activities that can be used to make your training more interesting and interactive.

- Carousel activities – moving from one station to another, adding your ideas to others in rotation.
- Think-pair-share
- Brainstorming
- Case study
- Practical – hands on activities
- Presentation
- Demonstration
- Individual work – working in pairs – group work
- Role play
- Discussion
- Goldfish bowl – observing and then discussing an acted-out role play.
- Collage

Evaluation

Evaluating the training may be scary, but it is crucial to know whether your training was successful and what you may need to improve for next time.

Why evaluate?

- Have you delivered what you wanted to?
- What was good?
- What could be better next time?
- What was its impact?
- Did you get the need right?
- Can you identify new needs?

What can you include in the evaluation?

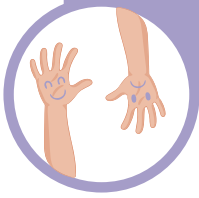
- The content/method/objectives
- The people on the course
- The place where the training took place

When should you evaluate?

- During the course
- At the end of the course
- Sometime after the course

What methods can be used to evaluate?

- Questionnaire
- Report
- Twitter boards
- Interactive questionnaire
- Participants confirm if their objectives were met, and the course objectives set in advance
- Use post-its of participants' objectives – participants remove them if they have been met
- Anonymous comments on a three-sector circle – what was good, what could be better, next time we should...



Assessing risk

Risk assessment is a process that identifies and assesses the importance of risk in a situation and then assesses the measures that are needed to control it. The risk is the effect and the probability of the harm. Control measures list the measures taken to reduce the 'risk' and must be reasonable and practical.

The process:

- Identify likely hazards
- Decide who might be harmed and how
- Evaluate the risks
- Decide on control measures

		Impact		
		Low	Medium	High
Probability	High	low	medium	high
	Medium	low	medium	medium
	Low	low	low	low

A basic introduction to safeguarding

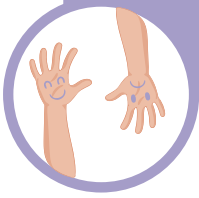
You are unlikely to encounter abuse in your daily work.

A safeguarding policy protects the children, the leaders, and the organisation.

Child abuse comprises:

- Physical abuse: where a child is caused pain, is hurt or injured, by direct force or by the use of some instrument, or by neglect.
- Emotional abuse: where a child is caused distress, emotional trauma or psychological harm by severe or persistent verbal abuse, disparagement or neglect.
- Sexual abuse: where a child is used to satisfy the sexual desire of another, physically or otherwise.
- Neglect: the persistent failure to meet a child's basic physical and/or psychological needs, likely to result in the serious impairment of the child's health or development.
- Online abuse: where a child is subjected to any type of abuse that happens on the web, whether through social networks, playing online games or using mobile phones.
- Grooming, financial abuse, bullying, radicalisation, domestic abuse, female genital mutilation.

In America, the typical offender is male, begins molesting by age 15, engages in a variety of deviant behaviours, and molests an average of 117 youngsters, most of whom do not report the offence.



Do police checks work?

72% of victims did not tell at the time. 31% had not told by adulthood.

Find your local child protection team (or equivalent) phone number and keep it safe.

Try to avoid 1:1s. If it is unavoidable

- Move to a place where you can both be seen by colleagues or the public.
- Avoid any physical contact that could be misconstrued.
- Adopt a friendly open manner.
- If you have to touch or hold a child explain what you are going to do and get their agreement.
- Don't be over-familiar in word or action.

If you have a concern about a child and a member of staff/volunteer

- Report it to your line-manager.
- Report it to the human resources manager.
- Write down why you have concerns and what you have done.

If a child discloses abuse to you

- Don't promise confidentiality.
- Don't interrogate the child. Use open questions if necessary.
- Make notes of words and actions.
- Tell staff as a matter of urgency.

If a child refuses to go home

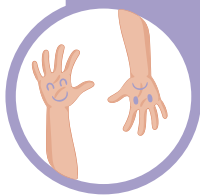
- They should unless you feel there is a real danger.
- You cannot stop a child from going home with its parents/carers.
- You can insist on calling the police and stay with the child until the police arrive.
- If the child goes home contact your local child protection team or equivalent.
- Don't tell the parents/carers what the child said.

If a leader is accused

- If you have good procedures and follow them it shouldn't happen.
- Even if it does not relate to group activities, another leader should explain the situation to the leader.
- Inform staff as soon as possible.
- The accused leader must not attend group activities until the matter is resolved.

Some scenarios – these are examples you can talk through with the group you're training

- You witness a 16-year-old boy bullying a ten year old...
- You witness a parent shouting and hitting a three year old...
- You are leading a guided walk around a nature reserve. A young girl of six comes to walk with you at the front of the group, and holds your hand.
- You are part of an event where there are a range of children's activities, including games and face-painting. There are lots of children and parents around and it is busy. You become aware of a man with a video camera filming children. He appears to be on his own.



Dealing with those scenarios

16-yr-old boy bullying a 10-year-old

- Intervene. Try to stop it and reassure the ten year old.
- Ensure you do not become injured yourself.
- Depending on the severity you may wish to take other measures.

Parent shouting and hitting a three year old

- Intervene.
- The child comes first.
- May need diplomacy. Do not put yourself in danger.

The use of touch

- We do not say never touch a child.
- There are occasions when touch is appropriate – a comforting hug if a young child has been injured for example.
- Touch should be initiated by the child, not the adult.
- Take care to avoid favouritism.
- The binocular trick – to stop unwanted hand-holding. Raise binoculars to your eyes to look at something. Lower them to your chest, resting your hands on them...

Someone videoing an activity

- Difficult.
- Approach them, but not alone.
- Politely ask them who they are and what they're doing. Ask open questions initially.
- Get witnesses.
- You could take their photo.
- Make a report. Let staff know.

Note: the above guidelines are based on RSPB guidelines for the UK. Please check the guidelines that apply in your organisation and country and that you will be supported by your organisation should an incident occur.





Part 4: useful apps/websites/other resources

Applications

Collins Bird Guide

Warblr – an app that recognises bird songs.

Isoperla.co.uk – tree ID, flower ID and more.

Wildlife apps that ID by sight and sound.

Websites

ispotnature.org – load a photo and someone will ID it.

woodlandtrust.org.uk/naturedetectives

xeno-canto.org – bird songs/calls.

grupporicercheavifauna.it/ornitho – Ornitho Base.

Google (everyone's friend!)

You tube

Identification resources

FSC ID sheets – field-studies-council.org/publications.aspx

Opal ID guides – opalexplorenature.org/identification

