

# NATURE

EXPERIENCE, EXPLORE  
AND DISCOVER NATURE



# EXPERIENCING NATURE

It is important to state that in Scouting we are not overly concerned with the learning of the names of plants and animals; this knowledge will come in time. We want you, at this stage, to explore and discover and open yourself to experience the world around you. Use all of your senses in this discovery, listen to the hum of the bees and the different songs of the birds. Taste the fruits and nuts of the forest from the sweet to the sour be careful however and make sure you know what you are eating (stay away from mushrooms as they are particularly difficult to identify the edible ones from the poisonous). Feel the wind and rain in your face and the mud at the bottom of the stream you are crossing, ooze between your toes, or the smoothness and grittiness of different rocks. See the wonder of the landscape and smell the freshness of the air and the fragrance of the heather and wild flowers.

Once you understand the beauty of our planet and the interaction of each of its elements, it will be easier for you to conclude why we must conserve, why we must protect, and, most importantly of all, why we must live in harmony and not exploit the world around us.

Woodcraft is not only a knowledge of the names of plants and animals, but a deeper and more meaningful relationship with our surroundings. It is the experience of nature through all the senses that provides the mind with a more intensified picture of the interrelationship between

all things on the planet and enable us to harmonise with them. Through the use of all of our senses we become aware, and begin the learning process. Seeing, hearing, feeling, smelling and tasting; each sense provides unique information to the brain. The combination of sensory information greatly increases the experience.

Using all the senses allows a fuller picture to be developed in the mind. A tree, for example, can be seen and recognised.

The leaves have their own shape. Are they shiny or furry as you feel them? Do they have a smell and a taste? The bark can be smooth or rough. Could you identify it blindfolded by touch alone? By using as many of the senses as possible more information is channeled into our memories.

To experience nature you have to get out and explore it fully. This resource will

provide some simple exercises that will help you explore and improve your sensory skills. It will also help your Scouts to explore and discover the wonders of nature. In time each will begin to identify, and remember the names and improve their knowledge of the world around them.



## **TAKING TIME**

Take some time - go to an open space lie on the ground and open your senses to the experience of nature.

Breathe in the fresh air, look at the clouds and nature around you, listen to the birds, buzzing and the wind blowing in the trees, smell the grass and flowers, touch and feel the leaves, trees and grass, taste some edible berries and fruits

## **EXPLORE AND DISCOVER**

Slow down and explore. Discover the awe and wonder of nature.

Discover habitats, wildlife and its inter-connections. Nature's colour palette and textures. How the elements sun, wind and rain impact the landscape and why open spaces are special.

## **AWARENESS AND ACTION**

Observe man's impact and protective actions. How can we help to keep nature alive and well in our communities.

Map an area, measure diversity, show impacts and identify personal and group actions to preserve and protect.





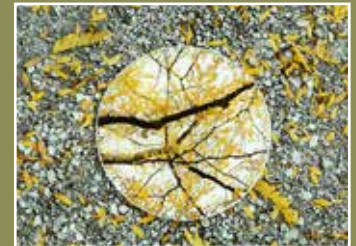
Walk in the mud and cross streams



Taste the rain and feel the wind



Camouflage and blend into your surroundings



Look up and around - lie in the tall grass or see different things in a mirror or reflection



# EXPERIENCE NATURE

# DISCOVERY



**Connecting with nature's lines, texture and shapes**



**Finding nature's colour palette**



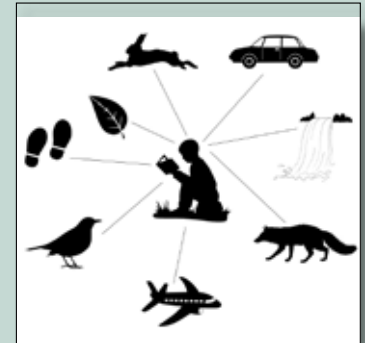
**Exploring underwater with water scopes**



**Exploring the sky and wind with special viewers**



**Discovering sounds around you with sound mapping**








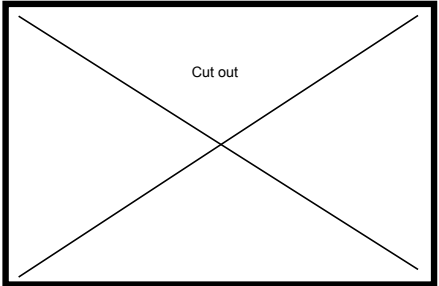







# MAKE A WINDOW VIEWER



1. Print off **Wind Speed** and **cloud viewer** sheet
2. Fold it in half.
3. Unfold and paste some glue on the reverse of the sheet.
4. Fold again to join the halves together.
5. Cut out the window area.

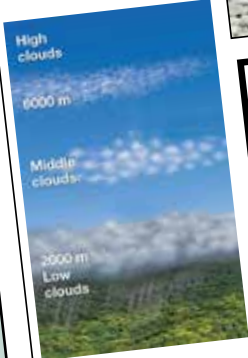
### Wind Speed

#### Beaufort wind scale

 <b>Force 0</b> - calm - mirror smooth smoke rises vertically.	 <b>Force 1</b> - Light air - ripple on water - smoke moves	 <b>Force 2</b> - Light breeze - very small waves - Leaves rustle	 <b>Force 3</b> - Gentle breeze - crests on small waves - Leaves and twigs move, flag extended.
 <b>Force 4</b> - Moderate breeze - small wave with some white horses - small branches move	 Cut out		 <b>Force 5</b> - Fresh breeze - Moderate waves with many white horses - small trees begin to sway
 <b>Force 6</b> - Strong breeze - large branches move, umbrellas difficult to use	 <b>Force 7</b> - High wind - whole trees in leaf begin to sway - broken twigs are seen	 <b>Force 8</b> - Gale - Galia branches broken - trees uprooted	 <b>Force 9</b> - Storm - very high waves, heavy rolling sea - trees uprooted
 <b>Force 10</b> - Violent storm - Exceptionally high waves - widespread damage to structures	 <b>Force 11</b> - Hurricane - Huge waves, severe structural damage to buildings, wide spread devastation.		

### Cloud Viewer

High level clouds usually indicate good weather and calm conditions.



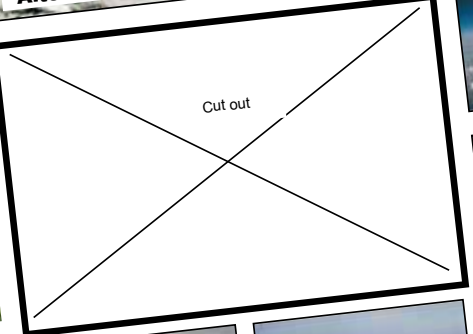
High clouds  
6000 m


Middle clouds  
2000 m


Low clouds


Middle range clouds usually indicate changeable conditions with darker type clouds in this range indicating rainy conditions.


Low level clouds usually indicate drizzle, fog and low wind conditions.


  
 Cut out


  
**Alto-cumulus**


  
**Alto-stratus**


  
**Cirrus**

  
**Cumulonimbus**

  
**Cumulus**

  
**Nimbostratus**

  
**Stratus**

  
**Stratus**



**Stratus**



**Stratus**



**Nimbostratus**



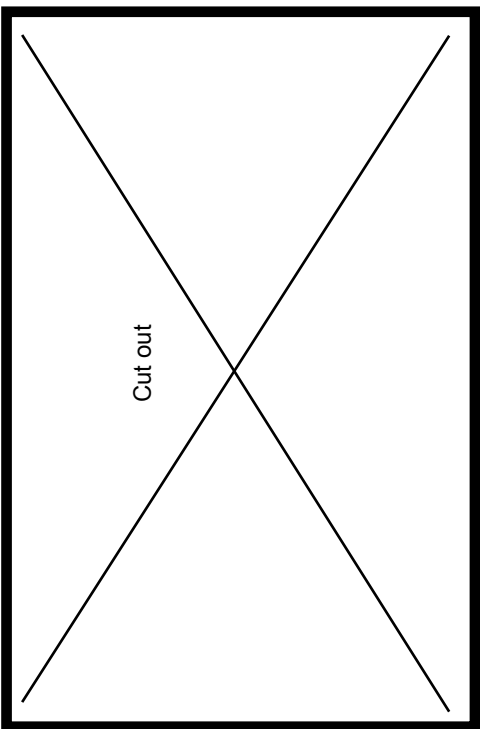
**Cumulus**



**Cumulonimbus**



**Cirrus**



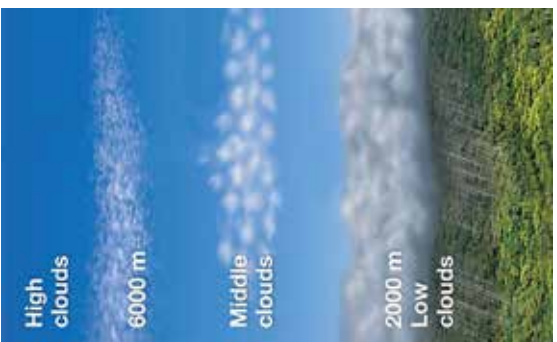
Cut out



**Alto-stratus**



**Alto-cumulus**



Middle range clouds usually indicate changeable conditions with darker type clouds in this range indicating rainy conditions.

Low level clouds usually indicate drizzle, fog and low wind conditions.

High level clouds usually indicate good weather and calm conditions.

Fold over

# Wind Speed

# Beaufort wind scale

Fold over



**Force 0** - calm - mirror smooth smoke rises vertically.



**Force 1** - Light air - ripple on water - smoke moves



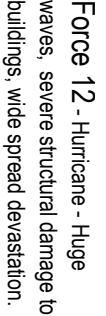
**Force 2** - Light breeze - very small waves - Leaves rustle



**Force 3** - Gentle breeze- crests on small waves - Leaves and twigs move, flag extended.



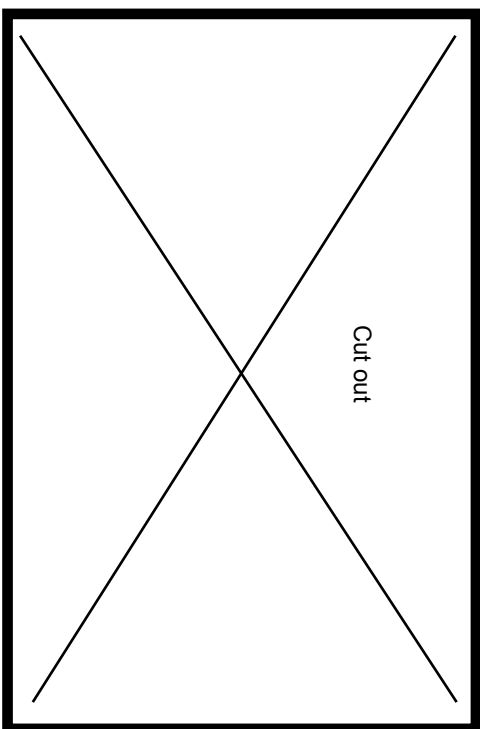
**Force 4** - Moderate breeze - small wave with some white horses - small branches move



**Force 5** - Fresh breeze - Moderate waves with many white horses - small trees begin to sway



**Force 6** - Strong breeze - large branches move, umbrellas difficult to use



Cut out



**Force 7** - Near gale - Sea heaps up with white foam - whole trees move, difficult to walk



**Force 8** - Gale branches break off and very difficult to walk.



**Force 9/10** - Storm - very high waves, heavy rolling sea - trees uprooted, structural damage likely.



**Force 11** - Violent storm - Exceptionally high waves - widespread damage to structures

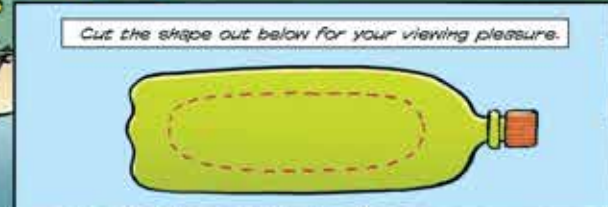
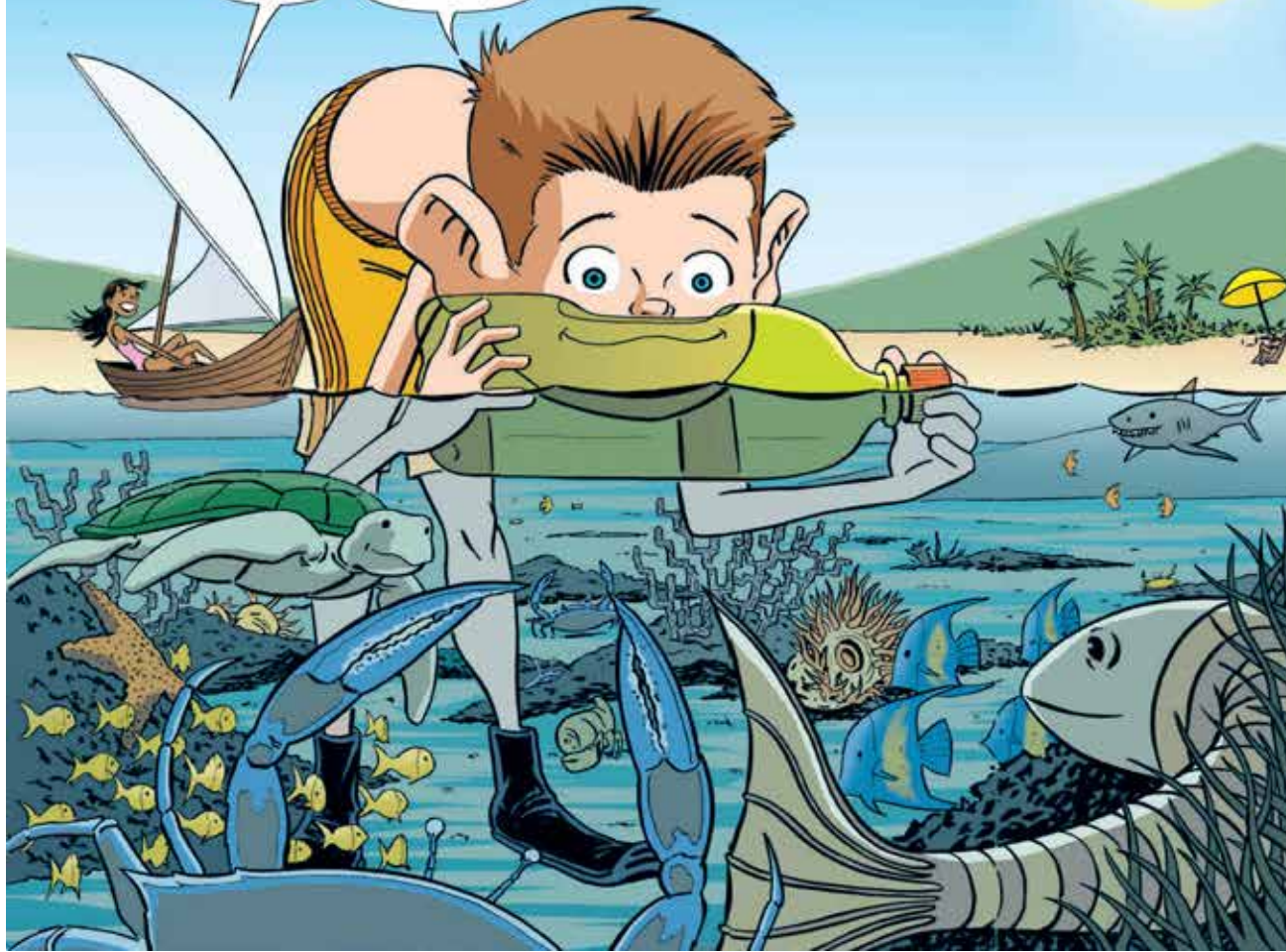


**Force 12** - Hurricane - Huge waves, severe structural damage to buildings, wide spread devastation.

# UNDERWATER SCOPE

Hey Tuck!  
What are you  
doing?

Nothing *really*.  
Just some simple  
*oceanography*.



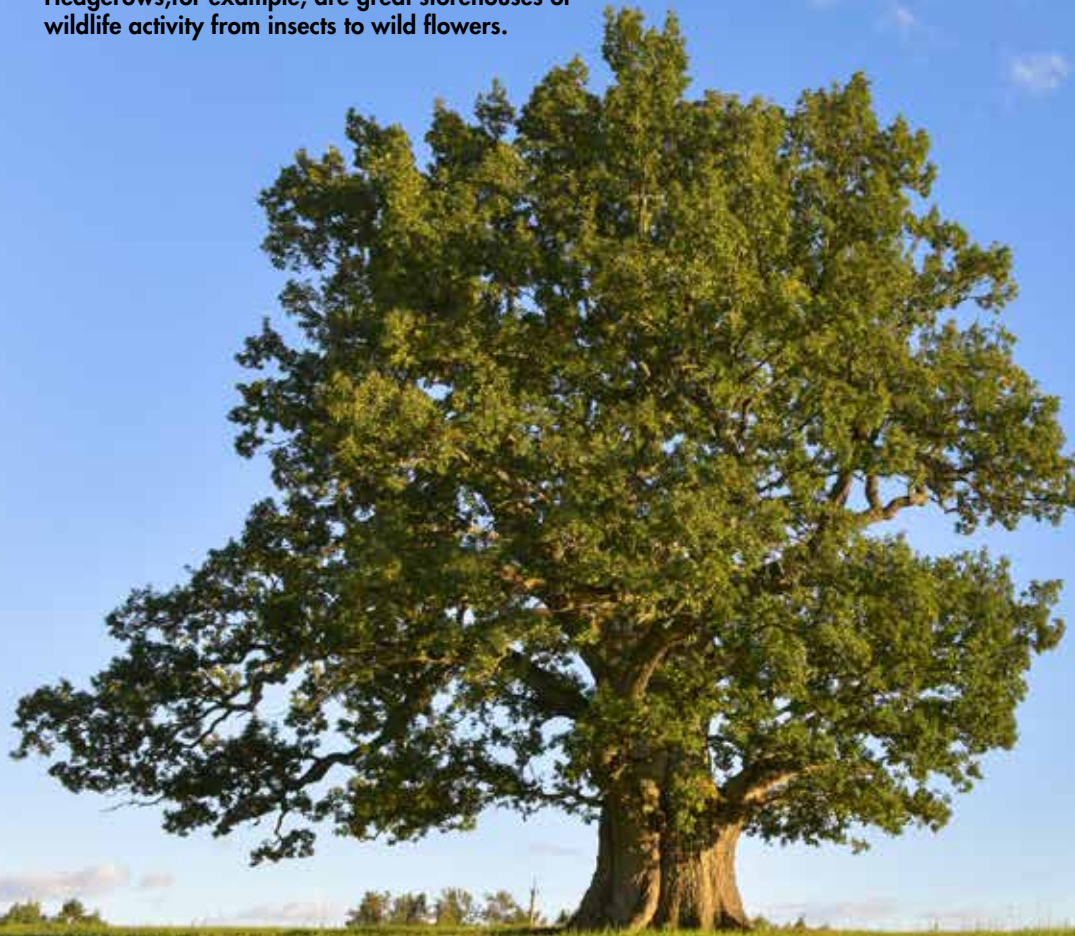
The End!



## Trees and woodlands

Trees and woodlands are a vast living habitat for all kinds of insect and animal life and act as a refuge in open areas for small animals.

Hedgerows, for example, are great storehouses of wildlife activity from insects to wild flowers.



### Hand-Oak

Sit under an Oak tree and compare the lines on your hand with the branch structure and roots of the tree. Before long you will find comparisons between the lines on your hand and your chosen tree - a personal connection.

## THE OAK

The Oak tree can grow up to 45 metres high, 15 metres in girth, sink its roots up to 4 metres into the ground and weigh 100 tons.

It drinks 400 litres of water a day, has 200,000 leaves and grows 10,000 acorns a year.

The oak is home for 500 species of insects and provides nests for 20 species of birds.

Caterpillars swing on threads, devastate leaves and grow into Oak leaf roller moths.

Squirrels rear their young in branches and bury acorns for winter.

Wood mice live in root tunnels.

Earthworms enrich soil by digesting fallen leaves.

Blue tits nest in holes in the trunk and branches whereas wrens build several domed nests in the branches.

The Oak supports 22 different weevils some of which bore into the acorns.

Gall wasp eggs are hatched in knob like apples on twigs and roots.

Beetles and woodlice live in decayed wood and fallen leaves.



## Colour Palette



You will need a name tag label sticker - this is your colour palette. Collect small specks of colour in the area of your exploration. The specks of colour can be placed on the back of a sticky label. You will notice that many different colours are observed and that there really are '40 shades of green'!



# SOUND MAP

To create a sound map you will need a paper and pencil.

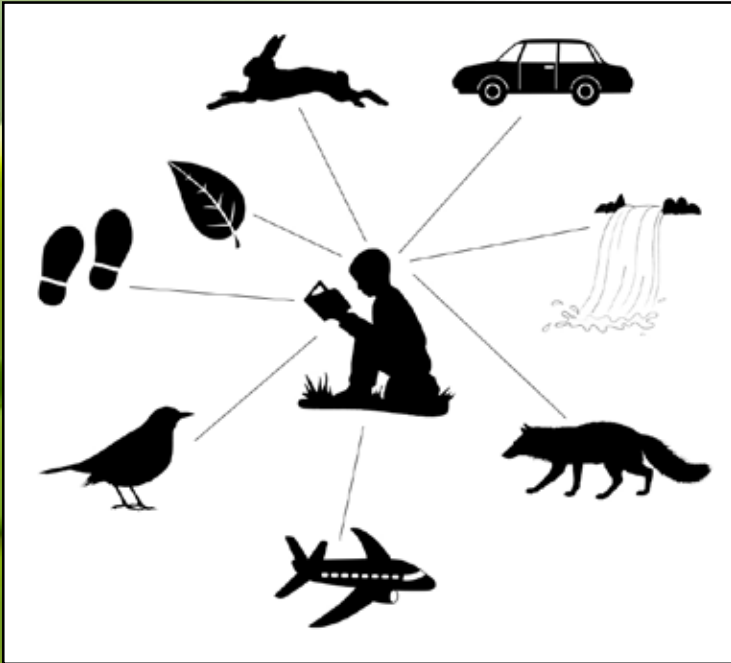
Firstly, find a comfortable spot (in a small wood or open wild space is ideal)

Now on a sheet of paper mark an **X** in the center of the sheet. The **X** represents you. Now, take a few minutes to listen to your surroundings.

If you hear a bird singing then place its location on the page. Is it to your right, left, back or front? Is it near you or a distance away from you?

Listen for other sounds - a running river or stream, bees buzzing, maybe the sound of traffic off in the distance and plot them onto your map.

When you are finished compare your map to other members of your team. It should be possible to create a larger sound map of the location by comparing information on each map.



# THE PLANET

## If the Earth were only a meter in diameter

If the earth were only a meter in diameter, floating a few meters above a field somewhere, people would come from everywhere to see it.

People would walk around it, marveling at its big pools, the bumps on it, and the holes in it. They would also be amazed at the very thin layer of gas surrounding it and the water suspended in the gas. The people would marvel at all the creatures walking around the surface of the ball, and the creatures in the water.

The people would declare it sacred because it was the only one, and they would protect it, so that it would not be hurt. The ball would be the greatest wonder known,

and the people would come and pray to it, to be healed, to gain knowledge, to know the beauty and to wonder how it could be.

People would love it, and defend it with their lives because they would somehow know that their lives, their own roundness, could be nothing without it.

## If the Earth were only a meter in diameter



## Human's impact

More than 3 people are born every second.

Humans have grown to be the dominant species, forcing nature into retreat everywhere.

The world population increases by over 300,000 people per day.

Deforestation - Deserts spread at 16,000 hectares a day.

5 liters of safe clean water is required per person per day.

Forests are disappearing at a rate of 30,000 hectares per day.

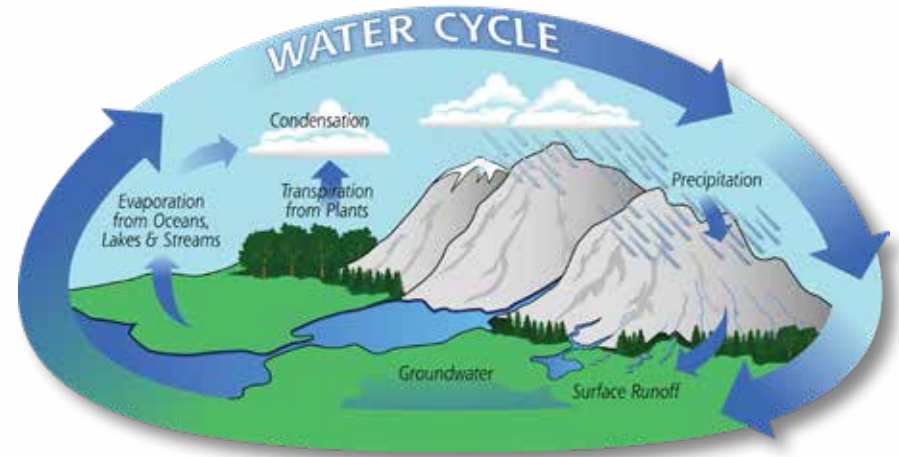
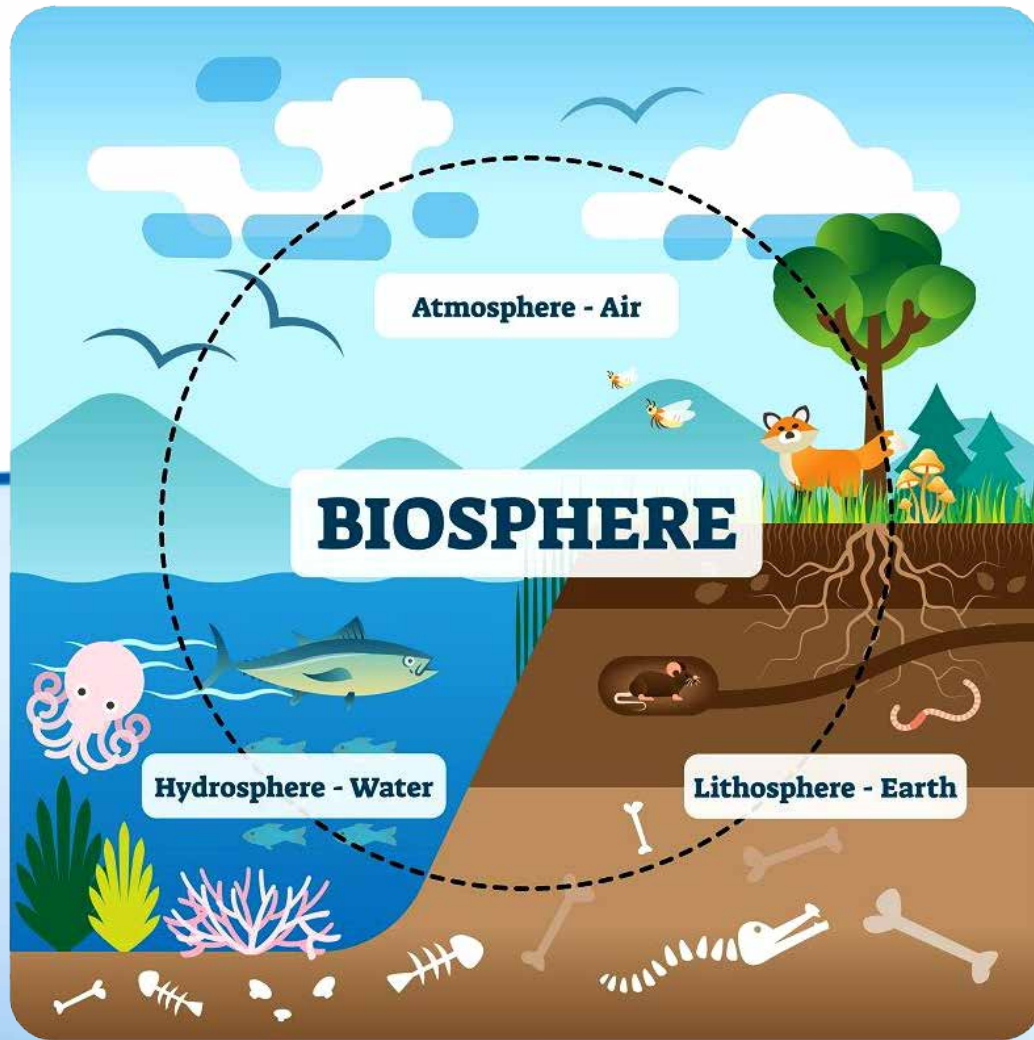
500,000 plastic items are dumped into the sea every day.

It takes about 450,000 liters of water to make a car, 160,000 liters to make four tyres, 1000 liters to make a liter of petrol, 700 liters to make a single newspaper, and 300 liters to make a single canned drink.

Every form of life and resource is unique, warranting respect regardless of its present worth to man.

United Nations: World Charter for Nature

# HABITATS



# FOOD CHAINS



Egg

Caterpillar

Chrysalis

Butterfly



Butterfly  
Chrysalis  
Caterpillar  
Egg



grass



grasshopper



mouse



owl

## Stalking

If you want to observe animals at close range you will need to stalk up (creep up) on them slowly and quietly.

There are a number of techniques, from a stoop to a flat crawl - see diagrams.

Always approach the animals from downwind and wear clothing with subdued colouring.

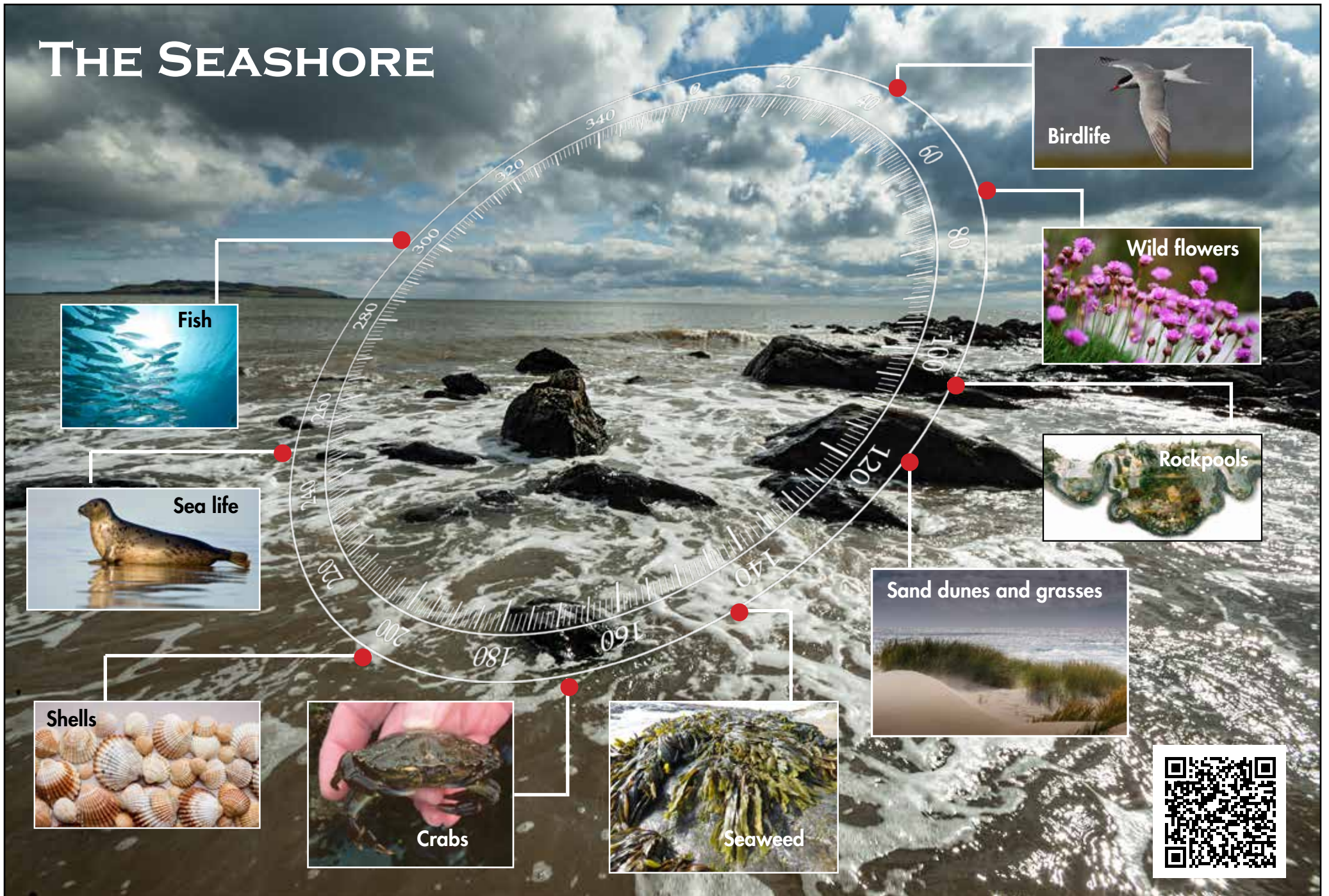
Use whatever cover is available and peep out from the side rather than the top.

Avoid using the skyline where an outline would be clearly seen.



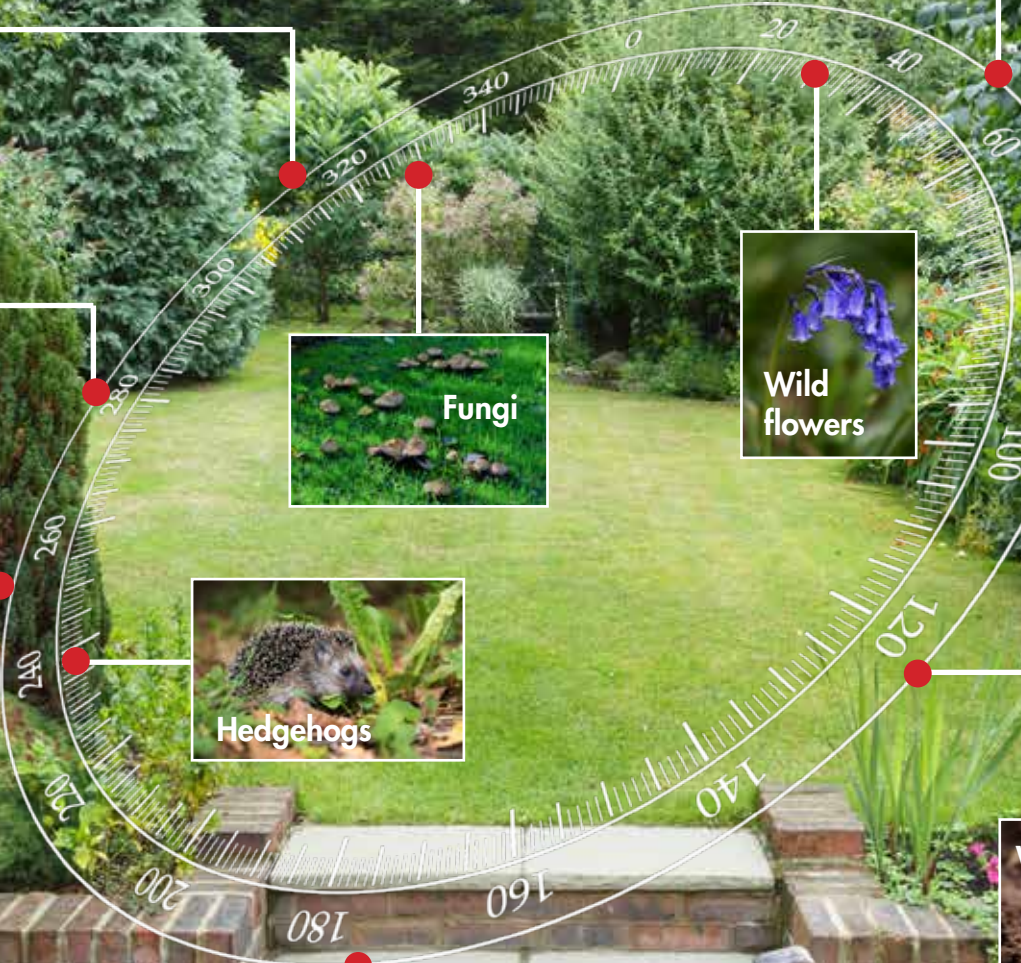
**WATCHING WILDLIFE**

# THE SEASHORE





# NATURE IN YOUR BACK GARDEN



# HELPING WILDLIFE



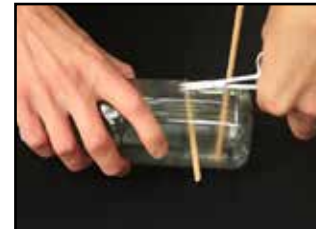
**Bird feeder**



Equipment needed



Push skewer through bottle



Cut a small hole to allow access to seed



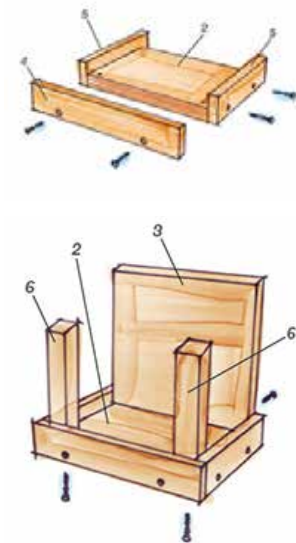
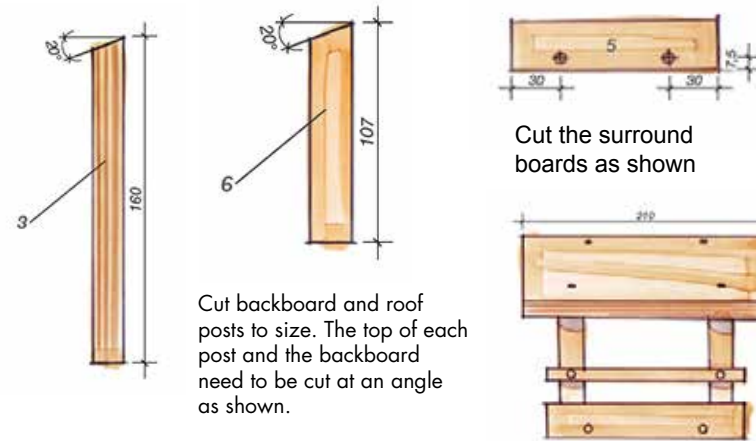
Fill with seed and attached to a branch



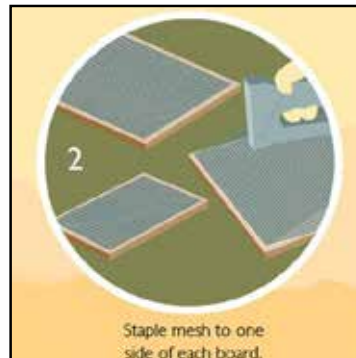
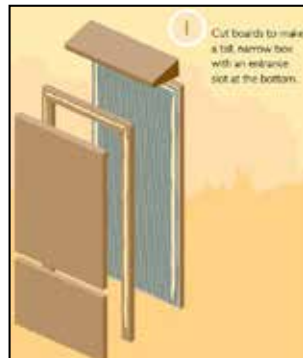
**Bird table**



Roof: 210mm X 170mm  
Base: 148mm X 110 mm  
Back board: 148mm X 159mm



**Bat box**



# SIMPLE HOMES

## Hedgehog Home

Hedgehogs need a simple hideaway. It can be constructed out of any materials in a quiet part of the garden. Pile up some bricks as shown with a small entrance. Line the base of the home with dry leaf litter and grass. Place a roof on top and some logs to weigh it down.



There are many design possibilities



## Wild Flower window box

Bees and butterflies love wild flowers



Glue the joints and nail them together

Use a rough timber plank and cut out the pieces for the box to fit the size of your window sill.

Drill some holes in the base board to allow for drainage



## Keep it simple - Bug Hotel

Create small living spaces for bugs in cut away milk cartons and plastic bottle. Collect twigs, cones, some small paper rolls, bark, pebbles, moss, twine, bamboo. Cut the item to size so they can be stacked. Start to build up your Bug Hotel with all the items you have collected. Be inventive! There is no right or wrong way.



## Under the log

Insects, worms, woodlice, centipedes spiders - they just love an old rotting log to live under.



# LEAVE NO TRACE

The Seven Principles of Leave No Trace provide an easily understood framework of minimum impact practices for anyone visiting the outdoors. Although Leave No Trace has its roots in the countryside, the Principles have been adapted so that they can be applied anywhere — from remote areas, to local parks and even in your own neighbourhood. They also apply to almost every recreational activity.

**The 7 Principles are:**

**Plan ahead and Prepare**

**Be Considerate of Others**

**Respect Farm Animals and Wildlife**

**Travel and Camp on Durable Ground**

**Leave What You Find**

**Dispose of Waste Properly**

**Minimise the Effects of Fire**

**Practicing a Leave No trace ethic is very simple:  
Make it hard for others to see or hear you and  
LEAVE NO TRACE of your visit.**



# BECOME A NATURE TRACKER AND RECORDER

Anyone can be a nature tracker and recorder.

In order to protect our native species and the record the variety and biodiversity that exists in our country there is a national data base of discoveries.

You can contribute to this data base by downloading the app to your phone. Then record your discovers, add a picture, if you wish, and send.

By doing this simple activity you are now part of the Citizen Science community



[Mapping Nature](#)



Get out and experience nature, discover the variety of wildlife in your choose wild place, local park or back garden.



Open the app and start recording your discoveries.



Download the Biodiversity App to your phone.

or you can also log in on the Biodiversity website

Citizen Science Portal:  
[records.biodiversityireland.ie](https://records.biodiversityireland.ie)



Your discoveries are logged and mapped and you are now a Citizen Scientist, nature discover and tracker.

The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice. The Goals interconnect and in order to leave no one behind, it is important that we achieve each Goal and target by 2030.

Conserve and protect are key action everyone can take to contribute to a better world and future for our planet.

Our actions in nature, to experience, explore and discover, will instill a desire to protect and conserve. Small actions and projects adding to collective action at local, national and world levels.

Each Scout section is encouraged to firstly enjoy nature, secondly to understand its various eco-systems and their fragile nature and threat from mankind. This will lead to awareness, concern and love of nature. This will lay the foundation for the development of projects and actions to create a better world.

Scouts worldwide are the biggest contributors to local actions with regard to the protection of our environment and other key Sustainable Goals related to Health and the well being of people and communities.

Your Section and Scouts can be part of this movement via the Better World Programme, undertaking action projects and making a real impact in your communities



[betterworld.ie](http://betterworld.ie)



# SUSTAINABLE DEVELOPMENT GOALS



## Key Goals related to nature



# BADGE POSSIBILITIES



**You can achieve many badges for actions in nature.**

A special interest badge under environment - you design the badge requirements with your Section Scouter. Have a chat with your Scouter to explore this possibility.

You could use your projects in nature - under environment section of the requirements for the Chief Scout Award for your Section.

You could use your projects in nature to fulfill the requirements of sections of the World Scout Environment badge.

You can use your projects in nature to support your community and Better world actions in achieving the Messengers of Peace Badge.

You can use your project actions to fulfill the requirements for the Dublin Bay Biosphere Award and similar approved Awards.



Scout Section  
Special Interest Badge



Cub Scout Section  
Chief Scout Award



World Scout  
Environment Badge



Messenger of Peace  
Badge



Sample of an  
approved Nature  
based award.

