



PROGRAMME ACTIVITY RESOURCE



Life of a River

Aim 1

Scouts are working towards a world where people and natural systems have clean water and clean air.

Educational objectives

Explore the sources of clean water and clean air in the local environment. Demonstrate the relationship of personal actions to the availability of clean water and clean air in the local and global environment.

Age range

15+

Summary

An exploration of how a river or stream can change as it moves through the landscape.

Aim

To explore a river or stream in the local environment and investigate how it changes naturally and through interaction with people.

Equipment

Glass jars, paper and pens, camera (optional), canoeing or rafting equipment (optional)

Preparation

Identify a suitable stretch of a river or stream accessible in the local environment that can be followed for a length downstream and observe the changes. If conducting activities on the water, ensure suitable safety procedures and experience of participants.

Duration

Variable, up to one day

Setting

In the local area alongside the river or on the river with suitable boating equipment.

Background

Rivers and streams come in many sizes and are very important ecologically and for people that use them for many reasons. A river may have a catchment area (the total land area that collects and funnels water towards the river) many times greater than the river, stretching potentially hundreds or thousands of kilometres away from the river. The land uses in the catchment can affect the river from its point source (the place furthest away from the river in its catchment), to its end point (such as where it reaches a lake or ocean).

Rivers naturally change as they move through the landscape, with different plants and animals taking advantage of the area surrounding a river. People also make use of the waters from rivers, the plants and animals, and the land that surrounds them, which are often very fertile. Many human settlements started along rivers and have progressively grown into town or even cities. These changes in the built environment also affect the river in different ways.

Step by Step guide

- 1. The aim of this activity is to explore the life of a river as it changes throughout its catchment. Explore maps of the river system to learn more about the geography of the area, specially features or different habitats and where human settlements occur that need the river or could affect it. Start at an accessible part of the river or further up its catchment, such as a drainage area or smaller stream.
- 2. Follow the river downstream and record how it changes. What does the environment look like? How are people interacting with the river? Is the water clean? Take samples of the water in glass jars as you travel along the river and record where each sample was taken.
- 3. Include a section of the river where it passes through a built environment, such as a town or city. What happens to the water here and after it has passed by the built environment?

Evaluation

- 1. Have the Scouts present their observations as they followed the life of the river. This could include showing their photographs or sketches, water samples or stories in the order they were collected.
- 2. Discuss the results and the activity. Use the following questions to help the discussion.

What were the natural observations of the Scouts?

Did the environment change as they moved through the catchment?

Were the changes natural or influenced by people?

How were people interacting with the river?

Was clean water available for people and natural systems?

Did the water quality change in the built environment?

How could the catchment be better managed if there were activities that were impacting badly on the health of the environment and the water?

Where would the point source and end source of the river be?

Do people need to share access to the river? Could this cause challenges?

Further activities

- 1. Have the Scouts consider what the river might look like in the future and how they can help ensure that people and natural systems have clean water and clean air.
- 2. Share their experience and results with other people in the community and identify if there are ways the health of the river can be protected.

© World Scout Bureau Rue du Pré-Jérôme 5 PO Box 91 1211 Geneva 4 Plainpalais Switzerland

Tel.: (+ 41 22) 705 10 10 Fax: (+ 41 22) 705 10 20

worldbureau@scout.org scout.org

Reproduction is authorized to National Scout Organizations and Associations which are members of the World Organization of the Scout Movement. Credit for the source must be given.





PROGRAMME ACTIVITY RESOURCE



Creatures Conference

Aim 2

Scouts are working towards a world where sufficient natural habitat exists to support native species.

Educational objectives

Explore a local natural area.

Understand the ecosystem connections of native species of plants and animals and their habitat needs.

Demonstrate the relationship between personal actions and the availability of sufficient natural habitat to support native species.

Be aware of global conservation issues affecting biodiversity.

Age range

Summary

A discussion activity to explore how local ecosystems work and how they might react to different environmental conditions.

To explore the local ecosystem from the point of view of the animals and plants that live there.

Equipment

Cards of local living creatures (for example, man, plants, insects, birds, animals etc). Cards with scenarios and problems to be solved by the group.

Preparation

Prepare the cards and some problems to ask the group

Duration

Thirty minutes

Setting

Scout meeting place

Background

Within a habitat there are many different animals and plants existing in co-operation with one another and with the environment. This activity imagines that all the creatures within a habitat have a say in how that community operates. This is very similar to how human society is managed. Human beings are part of the natural community but do we always give it enough consideration? This activity enables us to explore what could happen if everything within the natural community was equal and able to have its say.

Step by step guide to activity

- 1. Sit the participants down in a circle. Ask everybody to pick a card. On each card is a different creature from within the local ecosystem. Make sure that one participant is a human being. Give the group a few minutes to think about their creature.
- 2. Choose one leader to be the chairperson of the group. They are the guardian of the Earth and must lead the discussion.
- 3. Each participant then introduces themselves. They must tell the group what creature they are, where they live, how they live, what they eat and so on.
- 4. The chairperson presents the first question. The questions should be suitable for the age of the participants and also for the habitat being considered. Think about problems that the habitat could face or is facing. Think about actual problems that have affected your local environment. Some example questions are:

The summer has been very dry and the grass has not grown as much as usual. There is not enough for everyone. What shall we do?

A new family of (choose a suitable predatory animal) is wanting to move into the habitat. What do the group think about that?

The lake has been polluted by human beings. Who has been affected?

Winter is approaching. Is everyone prepared?

5. Each participant comments. They must think about how the question affects them in their creature role. Encourage the Scouts to stand up for their creature and if they want the community to take action on something

then they must tell the group. For each question the group need to decide what they can do to make the environment good for the all the creatures.

- 6. Prepare some additional cards for certain creatures. These should contain a scenario and a question to ask the group. These problems need to be sorted out by the whole group.
- 7. Bring the conference to a close by thanking all the creatures for their participation.

Evaluation

1. After the conference, discuss the effect of human beings on the habitat. Use the following questions to generate a discussion.

How have human actions affected the habitat?

Are humans aware of how their actions affect the creatures living around them? If we considered how our actions affect the environment, would we come to different decisions?

Further activities

- 1. Explore the local natural environment to see how human actions are affecting it. If the environment is being harmed investigate how and why and find out what can be done to solve the problem.
- 2. Have the Scouts do further investigations into their creature to learn more about this animal in the local habitat. What are this animals habitat needs and any threats to this species.
- 3. Visit a wildlife shelter or rehabilitation centre that helps native species.

© World Scout Bureau Rue du Pré-Jérôme 5 PO Box 91 1211 Geneva 4 Plainpalais Switzerland

Tel.: (+ 41 22) 705 10 10 Fax: (+ 41 22) 705 10 20

worldbureau@scout.org scout.org

Reproduction is authorized to National Scout Organizations and Associations which are members of the World Organization of the Scout Movement. Credit for the source must be given.





PROGRAMME ACTIVITY RESOURCE



My Carbon Footprint

Aim 3

Scouts are working towards a world where the risk of harmful substances to people and the environment are minimised.

Educational objectives

Explain the local impact of harmful substances to people and the broader environment and what can be done by individuals, groups and the community to reduce the risk. Understand the global impact of harmful substances and how local actions can change the global environment.

Age range

15-

Summary

A simple activity to start the group thinking about their personal daily energy use and how this affects the environment.

Aim

To raise awareness of how we contribute to climate change in our daily lives by understanding how our everyday actions are associated with releasing greenhouse gases into the atmosphere.

Equipment

Question cards, green, orange and red answer cards. The answer cards should be in three different sizes. The red cards must be the biggest and the green cards the smallest.

Preparation

Prepare question cards and answer cards. Use the questions provided and if appropriate prepare additional questions that are relevant to your local environment.

Duration

Thirty minutes

Setting

Scout meeting place

Background

Our planet is surrounded by a blanket of gases. This is our atmosphere. As the sun shines on the earth it sends us heat. Some of this is absorbed by the earth's surface and some of it bounces back into the atmosphere. The reflected heat is trapped by the atmosphere and this keeps our planet warm. This is known as the greenhouse effect.

The blanket of gases is getting thicker as we release greenhouse gases by burning fossil fuels for energy and as we cut down forests for timber and agriculture. Greenhouse gases are carbon dioxide (CO2), methane and nitrous oxide. As the blanket gets thicker, the temperature rises. As a result of this, our climate is starting to change.

This activity explores how we contribute to climate change in our daily lives by understanding how our everyday actions are associated with releasing greenhouse gases into the atmosphere.

Step by step guide to activity

- 1. Set the question cards out in a circle and place the answer cards in the middle in three piles (a green pile, an orange pile and a red pile).
- 2. Each question has three answers a green answer, an orange answer and a red answer. When making the answer cards, think about the number of participants and what their likely answers will be to the questions. This will determine how many answer cards of each colour are made. The answer cards can be made smaller if necessary. The important point is that the red cards are the largest and the green cards are the smallest
- 3. Explain the activity. Each participant moves around the circle answering the questions and taking the correct coloured answer card at each question. Once they have answered all the questions they find a space and lay out their answer cards on the floor to make a patterned mat.
- 4. Once the Scouts have laid out their mat explain what it means. The mat demonstrates their day to day energy use, which actually represents their day to day carbon footprint. It will vary between participants. The greater your energy use the bigger and redder the mat will be and the less your energy use the smaller and greener your mat will be.

Evaluation

1. Once everyone has finished their mat have a discussion using the ideas below.

Who has the smallest, greenest mat and who has the biggest reddest mat? How do they feel about it?

How green are the group in general? Are there big differences between the participants or does everyone have a similar energy use?

Ask the group how the questions relate to energy. Some of the questions have obvious, direct connections to energy, for example, do you switch off the lights when you leave a room? Other questions need some thought to connect them to energy, for example, how often do you buy new things?

How relevant were the questions to their daily life?

What can they do to reduce their carbon footprint? What would be easy to do and what would be hard to do?

What are the group doing already to help the environment? Are they doing this on purpose or by accident?

Further activities

- 1. Learn about renewable energy.
- 2. Visit a renewable energy facility in your local area.
- 3. Ask the Scouts to think about how they would do their daily actions if they had no energy. Run a weekly meeting using no energy.
- 4. Ask the Scouts to write a list of ten things they can do to reduce their carbon footprint. They should think about things that are easy to achieve and things that are more challenging. After a few weeks, find out whether they have reduced their carbon footprint.

My Carbon Footprint Questions

How do you get to school/work?

By car Red Card

By bus or train Orange Card

By bike or on foot Green Card

Do you switch off the lights when you leave

a room?

Always Green Card
Sometimes Orange Card
Never Red Card

Do you leave your television on standby/in

sleep mode?

Always Red Card
Sometimes Orange Card
Never Green Card

Do you recycle?

Never Red Card
Sometimes Orange Card
As much as possible Green Card

Do you buy locally produced food?
As often as possible Green Card
Sometimes Orange Card
No/Don't know Red Card

How often do you buy new things? (for example, clothes, cd's, computer games etc)

More than once a week
Once a week
Once a month or less
Green Card

Do you use renewable energy?
Yes, a lot Green Card
Yes, but not often Orange Card
No/Don't know Red Card

Have you ever planted a tree?
Yes, several trees Green Card
Yes, one tree Orange Card
No Red Card

© World Scout Bureau Rue du Pré-Jérôme 5 PO Box 91 1211 Geneva 4 Plainpalais Switzerland

Tel.: (+ 41 22) 705 10 10 Fax: (+ 41 22) 705 10 20 worldbureau@scout.org scout.org

Reproduction is authorized to National Scout Organizations and Associations which are members of the World Organization of the Scout Movement. Credit for the source must be given.







PROGRAMME ACTIVITY RESOURCE



Quick Energy Debate

Aim 4

Scouts are working towards a world where the most suitable environmental practices are used.

Educational objectives

Explain how our choice of action and responsibility as an individual, group, community and country can affect the environment.

Understand how we can change our actions to improve our impact on the environment. Demonstrate how local solutions can impact global issues.

Age range

15+

Summary

A quick thinking game to test your Scouts ability to think under pressure and their powers of persuasion.

To think about energy issues from all points of view.

Equipment

Stopwatch, whistle or bell

Preparation

None

Duration

Thirty minutes

Setting

Scout meeting place

Background

There are lots of environmental issues associated with energy. This game asks the Scouts to think about them from all points of view. The participants may have to argue a point that they don't agree with and the true skill in this game is being able to do so convincingly.

Step by step guide to activity

- 1. This activity assumes that the Scouts already have some knowledge of issues relating to energy production and use. It may be necessary to do an introductory activity to remind the Scouts of what they know.
- 2. Select two Scouts to compete in the debate and one to be the timekeeper. The rest of the Scouts are the judges.
- 3. Give each contestant one of the topics provided. This should be done secretly so the contestants don't know their opponents subject. Give the contestants 30 seconds to think about what they are going to say. They then get 30 seconds each to state their argument. After both contestants have talked for 30 seconds they then get a further 15 seconds each to respond to what the other contestant has said. The judges then decide who was the most convincing and declare them the winner. The winner of each debate is the contestant who has shown the greatest skill in presenting their argument. The judges must forget their own opinions on the subject matter and judge purely on the debating skill of the contestants.
- 4. Repeat the game with the next two Scouts and continue until everyone has had a go. The winners can then compete against each other until there is an overall debating champion. If you have a lot of Scouts, you can split the group into two.

Evaluation

1. At the end of the competition discuss the debates with the Scouts. Some ideas for discussion are given below.

Which subjects were easy to debate and which were difficult?

Did knowing more about the subject make it easier to present an argument?

Was arguing against what you believe difficult?

Was it easier to argue for what you believe in?

2. Think about the issues that the debates brought up. Discuss with the Scouts their true feelings on energy production and use. Some ideas for discussion are given below.

Where does energy come from?

How does energy production harm the environment?

How can energy be produced with less impact on the environment?

What can individuals do to help energy production have less impact on the environment?

How do you save energy in your daily life?

What are the Scouts already doing and what do they want to do in the future?

Further activities

- 1. Visit a renewable energy facility in your local area.
- 2. Make your own renewable energy, for example, a solar oven, a wind turbine, a water mill.
- 3. Explore how energy is produced in your country. Is it non renewable or renewable?
- 4. Learn about the environmental problems associated with using non renewable energy, for example, climate change, air pollution, nuclear waste disposal, water pollution from mining, problems associated with offshore oil platforms.
- 5. Decide how your Scout group would find the worlds energy. Pretend that you have control over all the resources of the Earth. Think about all the different ways of creating energy, all the different things we need energy for and also all the different ways we could save energy. You can do this activity as a debate or as a competition.

Debating subjects

Coal is great versus Coal is bad

I love solar power versus I hate solar power

I think wind farms are ugly versus
I think wind farms are beautiful

Global warming is very important versus Global warming is not important

It will be good if temperatures rise versus
It will be bad if temperatures rise

Solar power is the best form of energy versus
Wind power is the best form of energy

We should use nuclear power versus We shouldn't use nuclear power

We need to reduce our energy use versus We don't need to reduce our energy use

Everyone should know how to grow vegetables and basic foods versus Food production should be left to the professionals - farmers

Urbanisation is good versus
People should be encouraged to stay in the countryside

And for a bit of light relief, try these crazy subjects...

Green is the best colour versus
Red is the best colour

Bananas are the worst fruit versus Apples are the worst fruit

You should only wash once a week versus
You should wash every day

© World Scout Bureau Rue du Pré-Jérôme 5 PO Box 91 1211 Geneva 4 Plainpalais Switzerland

Tel.: (+ 41 22) 705 10 10 Fax: (+ 41 22) 705 10 20 worldbureau@scout.org scout.org

Reproduction is authorized to National Scout Organizations and Associations which are members of the World Organization of the Scout Movement. Credit for the source must be given.







PROGRAMME ACTIVITY RESOURCE



A Natural Disaster Story

Aim 5

Scouts are working towards a world where people are prepared to respond to environmental hazards and natural disasters.

Educational objectives

Be able to recognise different types of environmental hazards and natural disasters and explain why they occur.

Demonstrate how to help other people to be prepared to respond to environmental hazards and natural disasters in the local area.

Explain how changes to the environment can influence environmental hazards and natural disasters.

Age range

Summary

A fun, drama based activity that explores how to cope when faced with a natural disaster.

Aim

To gain an awareness of the importance of preparation and decision making in a natural disaster situation.

Equipment

Scenarios, paper and pens, WOSM movie 'Natural Disasters: Will You Be Prepared?' (optional)

Preparation

Print off the disaster scenarios from the resources section, or amend as appropriate for your group

Duration

Sixty minutes

Setting

Scout meeting place

Background

Natural disasters occur all around the world and can have a devastating effect on the natural environment and on human beings. There are lots of different types of natural disaster, for example, hurricane, tropical cyclone, typhoon, tornado, drought, flood, volcano, landslide, tsunami, heat wave, wildfire, insect plague, famine, health epidemic, avalanche and earthquake.

It is very important that we have an understanding of natural disasters. The effect of a natural disaster can sometimes be minimised with careful preparation, awareness of warning signs (if appropriate) and knowledge of what to do once the disaster occurs. We need to be prepared to respond to them when they happen to us and to be able to provide support when they happen to others.

Step by step guide to activity

- 1. Introduce the subject of natural disasters. Ask the Scouts to name different types of natural disaster and write their answers on a large sheet of paper.
- 2. A short movie is available from the World Scouting website (www.scout.org) to introduce how various natural disasters affect Scouts around the world, or have information from recent natural disasters to share with the Scouts.
- 3. Split the Scouts into groups and give each group a natural disaster scenario card. Use the examples provided or write your own using natural disaster types that are more applicable for your Scouts. Ensure that the examples used show the different timescales that are associated with natural disasters. The card asks the group to prepare a short play about the situation described on their card. You can provide costumes and props if appropriate. Allow approximately twenty minutes for preparation and rehearsal.
- 4. Ask each group to present their play to the rest of the group.

Evaluation

1. Gather the group together to discuss the activity. Use the following questions to help the discussion.

What were the main differences in the natural disaster scenarios?

How did the preparation for each disaster vary?

Could all the disasters be prepared for?

How important was the decision making in each scenario?

How pressured was the decision making in each scenario?

Do they think this is how it might happen in reality?

2. Note to Leaders: Natural disasters can be devastating experiences and impact on the environment, infrastructure and people long after the initial event. It is important to provide ongoing support for young people to assist their recovery following a natural disaster.

Further activities

- 1. Make an emergency response kit with the Scouts. See 'Prepare for Disaster!' activity for example.
- 2. Having a knowledge of first aid is very important when placed in an emergency situation. Organise a first aid course for the Scouts.
- 3. Visit an emergency response facility in your local area, for example, the Fire Brigade or the Police Station. How do they cope with emergency situations? Have they ever responded to a natural disaster?

Example Disaster Scenarios

Scenario 1 Long Term Drought

Instructions

Read through the following story about how a long term drought affects a family.

The story is not complete. At each gap in the story there is a question to help your group think about how to decide what happens next.

Make the story into a short play to show the rest of the group.

The story

Your family live very happily on a farm in the countryside near a small town. You have cattle, a vegetable garden and some fields growing crops. Your water supply comes from the local reservoir and your own rainwater tanks.

Your father regularly keeps up to date with information about weather, livestock markets and the agricultural industry through the internet and newspapers.

One evening, he asks the whole family to remain at the table after dinner. "I am afraid I have some bad news," he says. The weather reports on the television are warning that we will be facing a drought this year. This could be very bad news for our crops and our cattle. We will have to start thinking about how we will cope."

Question

What strategies are your family going to put in place to live through this drought?

It is now five months into the drought. Only 40% of your usual rainfall has come, and the crops haven't grown so your animals have little food. You have two options. Firstly, purchase some food for them. This solution is not ideal as there is very little available due to the drought and it is very expensive. The second option is to sell some of your cattle. However, everyone else is trying to sell their animals too, and the prices your family would receive are very low.

The climate predictions say this drought will last for another year. Your Mum's garden is still beautiful, but your Dad does not seem very happy these days.

Question

What do you and your family do?

Scenario 2 Hurricane Approaching

Instructions

Read through the following story about how a hurricane affects a family.

The story is not complete. At each gap in the story there is a question to help your group think about how to decide what happens next.

Make the story into a short play to show the rest of the group.

The story

Your family live in a house on a hill overlooking the ocean, near the equator. You have your own power supply from a wind generator and solar panels. You live in an area that receives hurricanes and when the hurricane season is upon you, you know to be prepared. Your family has an emergency kit ready permanently and you keep an eye on the weather forecasts.

For the last few days, your family has been watching reports on the evening news of a low pressure system that has deepened considerably, turned into a tropical cyclone and is travelling across the ocean heading your way! The latest prediction is that it will hit the coast tomorrow morning. Everyone is warned to be on high alert and prepare for hurricane damage immediately. The hurricane is expected to bring severe wind for around 12 hours.

Ouestion

What do you and your family do to prepare for the hurricane?

Its 6.30 am on the day of the predicted hurricane. The winds are starting to pick up and rain is falling heavily. There are new warnings of a major storm surge/ Ocean levels could rise as much as 5 meters due to the upward sucking of the cyclone system.

Ouestion

Does this change any of the plans your family made?

It is now 7.30 pm. The winds were terribly strong this morning and coming from the east– pieces of buildings and tree branches was flying everywhere, trees were being flattened and the rain kept coming down. Just after lunch, the eye of the storm crossed over you – it was strangely calm and the sun was shining. Then Bam!! The winds came howling again, this time from the west, and more rain fell. More flying materials, and the storm surge came in. Everything within 1 km of the coast flooded – there were fish in the streets. Now the

winds are dying down, but the rain is still falling.

Question

What damage did your home suffer?

It is one week later and the hurricane has totally gone but the damage to your neighbourhood and the environment hasn't.

Ouestion

How did you help after the hurricane?

Scenario 3 Earthquake

Instructions

Read through the following story about how an earthquake affects a family.

The story is not complete. At each gap in the story there is a question to help your group think about how to decide what happens next.

Make the story into a short play to show the rest of the group.

The story

It is a normal weekend morning and your family are enjoying breakfast in your apartment. You live in a big city on a Pacific Island. Your pet cat all of a sudden appears really agitated and then suddenly a loud rumbling sound is heard and everything starts shaking violently. The TV goes off, things are falling off shelves, a light fitting crashes from the ceiling and your Mum screams "earthquake!"

Question

What does the family do?

The shaking comes to a stop. Your home is a mess, your mum has burnt her arm when the hot water from the stove hit her skin, and you're all scared, but otherwise you're all okay, including the cat. However, you know that there could be aftershocks.

Question

What do you do now?

After a few minutes the power goes out suddenly and you are all left in the dark. You can smell gas coming from the kitchen.

Ouestion

What can you do about the gas, and being in the dark?

© World Scout Bureau Rue du Pré-Jérôme 5 PO Box 91 1211 Geneva 4 Plainpalais Switzerland

Tel.: (+ 41 22) 705 10 10 Fax: (+ 41 22) 705 10 20

worldbureau@scout.org scout.org Reproduction is authorized to National Scout

Reproduction is authorized to National Scout Organizations and Associations which are members of the World Organization of the Scout Movement. Credit for the source must be given.