A Bug's Life

A Second Level Creative Inquiry



Keep Scotland

Introduction

A Bugs Life is the story of a brave ant Flik, who realises that his ant colony is being unjustly treated by the grasshoppers. Each year the ants must harvest food for the greedy grasshoppers who are led by Hopper. Despite moments of fear Flik is brave enough to take action against the grasshoppers. With many comic twists and turns Flik mistakenly recruits circus bugs instead of 'warrior bugs' to help him drive away the grasshoppers. Eventually, Flik realises that by combining the different talents of the circus bugs with the teamwork of the ant colony the grasshoppers can be defeated.

Through this public screening we invite pupils to analyse how we plan and produce food to ensure we have sustainable sources of food. The screening will allow time for thought and reflection for pupils on their own food choices and also serve as an opportunity for group discussions on the social, environmental and moral implications of food production and consumption.

The way you choose to show the film will depend on the size, time restraints and age of the audience. The idea is that this is a flexible resource that can be adapted and used as suits your audiences' needs with suggested inquiries that can be developed at later events or on the screening day itself.

The Screening



Before the film – Wee chats

Here are five ideas to use at the start of your screening to encourage an atmosphere conducive to relaxed discussions at your event. A bug can mean many things including a type of insect. We have used the word 'bug' to fit with the film title. If you prefer, you can talk about 'mini-beasts' to include other creatures e.g. worms.

1) Beautiful Bugs!

Put a picture of different bugs on seats ask the audience to discuss with their shoulder partner if they can identify the bug, what they know about it, how they feel about it, if they have they ever seen one before and where?

2) Heavenly Habitats!

Place pictures of different habitats on each chair (ideally from around the school ground or local environment) and ask pupils to discuss the habitat, what kind of creatures and food plants might grow and live there.

3) Mapping activity

Create a large drawing of your building and grounds or area. As the audience enters the screening give them either a picture of a bug or little plastic bug. They place their bug on map thinking about where and why their bug might live in that particular area of the local environment.

4) "Where's my food?"

A character in the film called Hopper shouts "Where's my food?" Discuss with shoulder partner who you rely on to get food. Do you help buy/grow/prepare their own food or do you expect it to be delivered to you like Hopper?

5) Sustainable Development Goals Activity

Pictures of all the 17 SDGs placed on chairs. Pupils/parents/carers do a before and after discussion about goals that they think will be/were addressed in the film. Any surprises? Any points for further discussion?

Before/during/after the film



Lines of Inquiry

Some of these suggested lines of inquiry can be presented for individuals to reflect upon as they watch the film and/or used as a basis for group discussions at the end. Some could be activities for another time.

- "I'm never going to make a difference" Flik How did Flik make a difference in A Bug's Life? Have you ever felt so passionate about something that you have been prepared to stand alone for what you thought was right?
- 2) Why are bugs so important? We depend on insects as pollinators for 1 in 3 mouthfuls of what we eat. Explore the role of insects as pollinators. https://www.buglife.org.uk/sites/default/files/Pollinator%20manifesto%20 with%20covers 1.pdf
- 3) What happens if food production stops? Why might farmers not be able to keep up with demand? Investigate how natural disasters can impact on food production.

 http://bugs.bio.usyd.edu.au/learning/resources/Entomology/htmlecology/environmental.
- 4) "Nature has a certain order" Princess Atta.

 What do you think she means? Do you agree with Princess Atta?
- 5) "Ideas are very dangerous things" Hopper.

 How could ideas be dangerous? Who are they dangerous for? Think of a dangerous idea that could help to end hunger.
- 6) Food waste. What do you think about wasting food that could be eaten? Explore how a bit of planning can reduce food waste. This site offers a meal plans option to help organise your shopping by how many people you are feeding (1,2 or 4), and shows the budget as well as options for types of meal. http://resourcefulcook.com/mealplans/browse/forone
- 7) What is Entomophagy? Is eating insects one of the solutions to food shortages in the world? Can you create a delicious recipe using bugs as the main ingredient?



http://www.insectsarefood.com/what is entomophagy.html http://www.fao.org/docrep/018/i3264e/i3264e00.pdf

8) Metamorphosis- pupils research and depict through drama/art/dance/ the life cycle of bugs exploring the role they play in ecosystems and the food chain.

https://online.kidsdiscover.com/unit/metamorphosis

9) Foraging Activity - Nettles are a food source *for the caterpillars* of these butterflies: Comma, Red Admiral, Small Tortoiseshell, Peacock. Take pupils to gather nettles to make soup. If you are gathering nettles to eat e.g. in soup, make sure that you check underneath the leaves for butterfly eggs and caterpillars. Leave 'inhabited' nettle stems in the nettle patch. Harvest some others for your soup.

http://www.nettles.org.uk/nettles/wildlife/butterflies.asp

http://butterfly-conservation.org/292/gardening.html

http://www.theguardian.com/lifeandstyle/2012/mar/30/nettle-recipes-hugh-fearnley-

whittingstallhttp://www.bbcgoodfood.com/recipes/2137636/nettle-soup

10) Exploring local habitats (walking and talking activity) - What bugs live in different habitats? Why are they important? What can you do to protect them? Pupils create local environment map. http://www.bbc.co.uk/schools/teachers/livendeadly/lesson2 habitat invest

http://www.bbc.co.uk/schools/teachers/livendeadly/lesson2 habitat invest igation.shtml

11) How can you help prevent the destruction of habitats and preserve biodiversity?

http://www.ecologyfund.com/ecology/res kid care.html

12) Bug Hunt – Pupils can be given a fact sheet on bugs they might find in the school grounds. Pupils then go on a bug hunt to collect evidence of the numbers and species of bugs in the school grounds. Pupils then continue to monitor the sites and evaluate the data they have collected. If there are very



few bugs why? Why might number of bugs change? Design and make bug hotels to encourage different bugs in certain areas of the school grounds. http://animals.nationalgeographic.com/animals/bugs/

https://www.buglife.org.uk

13) Supermarket Scavenge- contact local supermarkets and ask to visit so pupils can explore products for sale locally. How many products are produced in the local area? Why do food miles matter? http://www.foodafactoflife.org.uk/index.aspx

What is Fairtrade and can pupils identify Fairtrade products? What is meant by ethical trading?

http://www.fairtrade.org.uk/

Many of the large supermarkets have teaching resources about sustainable, local and seasonal food and offer visits to schools to share resources and cook with pupils.

Visit a farmers market or local farm shop to compare and contrast with foods for sale in the supermarket.

14) Seasonality- source, taste and cook with seasonal Scottish products exploring the benefits for consumers, farmers and the environment. http://www.greenerscotland.org/eating-greener/in-season-food-calendar

http://www.foodnetwork.co.uk/recipe/scottish-seasonal-recipes-february-keyword.html?search=scottish-seasonal-recipes-february§ion=recipes



After the film - Reflection

Here are some questions you can use after your screening to encourage your audience to reflect on what they have seen and heard and what they might like to do next.

Did you enjoy watching 'A Bug's Life' with family and friends?

Did the activities change the way you think about the film?

What is the most significant thing you have learnt through exploring issues in 'It's a Bug's Life'?

Are there any other issues highlighted in the film that you would like to explore?

Did you work well with your team in the challenge?

What is the best habitat in your local environment? Why?

Do you feel confident expressing your own opinions about food?

What else would you like to know about bugs/habitats/food choices?



Key Challenge

Mock Newspaper Front Page (Designed for pupils to read- 1 side Newspaper front page then on reverse Task and Points to consider)

Today in Scotland parents and carers across the land have decided to go on strike!

Tired of being asked "Where's my food?" parents and carers have decided to let children across Scotland take action on feeding themselves.

Tomorrow we will report on the reaction of pupils across Scotland, how they are responding to the news and what they are doing to ensure they can keep eating!

In groups come up with a plan of action to make sure you and your friends are fed today and for the coming weeks. Points you may like to consider;

- How do you feel about this shock announcement?
- Do you want to ask anyone for help?
- What will you actively do to seek food?
- Where will you get your food from? How long will this food last?
- Do you know where you can find food locally?
- Will you share what you already have?
- Will you try things you would not normally eat? (Maybe even some bugs for protein?)
- How will you plan for your future meals?

Key Learning Focus

I understand how to make sustainable food choices in everyday life.

Further possible ideas that may be explored through the challenge;

- What do values such as fairness and equality and love, caring, sharing and human rights have to do with what we eat?
- Can my food choices be respectful / disrespectful of others? How? Why?
- How does what I eat in day to day life impact on my local environment?



- Do I know where my food comes from and how much it costs?
- What food grows in Scotland and when?
- How much food do I need? Do I ever waste food?
- A grasshopper said "We have more than enough food to get us through the winter" but they still wanted the ants to get them more. Should we hoard food?
- Do I try to eat locally produced food?
- What or who influences my eating habits?

Taking Learning Further

• Insect week is 20th -26th June 2016. Visit the website for events and events and interesting insect facts.

http://nationalinsectweek.co.uk/

- Host a Bug friendly One Planet Picnic.
 http://www.keepscotlandbeautiful.org/sustainable-development-education/food-and-the-environment/one-planet-picnic/
- Explore food marketing. Pupils create marketing campaigns to promote the eating of bugs!
- Your school might co-ordinate online shopping direct from the producer so only what is ordered is harvested.
 http://thefoodassembly.com/en#buy –competition with farm gate sales or farmers market must be considered too.
- Flik invented a machine to "speed up production." Explore the advances in technology surrounding food production and the impact this has had on not only what we eat but the cost and quality of the food we eat.



Looking out for learning

Head

I can identify insects in their local habitats.

I understand the life cycles of insects.

I know the importance of insects in our food production.

I can identify and use seasonal and locally sourced food.

Heart

I understand what a person eats is an individual's choice.

I can empathise with people whose lives are affected by the actions of others.

I know how to act justly and respect others' opinions.

I can stand up for what I believe in.

Hands

I can explore habitats in my local area.

I can make bug hotels to enhance my schools biodiversity.

I can visit my local food producers and make informed decisions about what I see.

I can create a drama/art/music to convey the lifecycle of insects.

I can find seasonal and local bug friendly products to make tasty food.

I can grow plants that will help biodiversity in my school.

I can plant and grow and nurture crops that can be eaten by my school.



CfE Experiences and Outcomes

Religious and Moral Education

I can share my developing views about values such as fairness and equality and love, caring, sharing and human rights.

RME 2-05b

I can explain why different people think that values such as honesty, respect and compassion are important, and I show respect for others.

RME 2-09c

Social Subjects

I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally-responsible way.

SOC 2-08a

Through exploring ethical trading, I can understand how people's basic needs are the same around the world, discussing why some societies are more able to meet these needs than others.

SOC 2-20a

Sciences

I can use my knowledge of the interactions and energy flow between plants and animals in ecosystems, food chains and webs. I have contributed to the design or conservation of a wildlife area.

SCN 2-02a

By investigating the life cycles of plants and animals, I can recognise the different stages of their development.

SCN 2-14a

Health and Wellbeing

Through contributing my views, time and talents, I play a part in bringing about positive change in my school and wider community.



HWB 2-13a

Through exploration and discussion, I can understand that food practices and preferences are influenced by factors such as food sources, finance, culture and religion.

HWB 2-34a

When preparing and cooking a variety of foods, I am aware of the journeys which foods make from source to consumer, their seasonality, their local availability and their sustainability.

HWB 2-35a

Helpful previous experience/ Prior Knowledge

I can show my understanding of values such as caring, sharing, fairness, equality and love.

RME 1-09b

I can consider ways of looking after my school or community and can encourage others to care for their environment.

SOC 1-08a

I have developed an understanding of the importance of local organisations in providing for the needs of my local community.

SOC 1-20a

I can explore examples of food chains and show an appreciation of how animals and plants depend on each other for food.

SCN 1-02a

When preparing and cooking a variety of foods, I am aware of the journeys which foods make from source to consumer, their seasonality, their local availability and their sustainability.

HWB 1-35



Resources

'It's a Bugs Life'-Disney Pixar

http://www.nettles.org.uk/nettles/wildlife/butterflies.asp

http://butterfly-conservation.org/292/gardening.html

http://www.theguardian.com/lifeandstyle/2012/mar/30/nettle-recipes-hugh-fearnley-whittingstall

http://www.bbcgoodfood.com/recipes/2137636/nettle-soup

https://www.buglife.org.uk/sites/default/files/Pollinator%20manifesto%20with%20covers 1.pdf

http://resourcefulcook.com/mealplans/browse/forone

http://www.insectsarefood.com/what is entomophagy.html

http://www.fao.org/docrep/018/i3264e/i3264e00.pdf

http://www.tes.co.uk/teaching-resource/Earth-Day-Lesson-Plans-6039681/

http://www.bbc.co.uk/learningzone/clips/time-for-change/12845.html
http://www.bbc.co.uk/learningzone/clips/chrysalis-to-butterfly/12882.html
http://www.bbc.co.uk/schools/scienceclips/ages/6 7/plants animals env.sht
mlto

http://www.bbc.co.uk/schools/scienceclips/ages/6 7/variation.shtml

https://www.tes.com/teaching-resource/hop-into-a-movie-with-the-ants-from-a-bugs-life-6336230

http://www.bbc.co.uk/sn/tvradio/programmes/lifeintheundergrowth/video.sh tm

TES -Teachers TV: Bugs by Teachers Tv - UK Teaching

http://www.foodnetwork.co.uk/recipe/scottish-seasonal-recipes-february-keyword.html?search=scottish-seasonal-recipes-february§ion=recipes





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