Good Thymes in the Garden

Time | 45 mins Cost | £ Location | Outdoors Group size | Teams

Play plant protectors and learn about native and invasive plant species in your area.

You will learn

Value the outdoors

Enjoy being outside, feel comfortable in nature, and feel connected to the natural environment

Develop skills

Gain a range of practical and modern skills for school, work, and your social life.

You will need

- Scrap paper
- Pens or pencils
- Stopwatch or phone
- Quardrants
- Plant ID cards



Before you begin

Some invasive plant species can be really dangerous, so it's important to do some research about the different plants in your area before you get stuck into this activity. You could chat to some local experts or ask them to come along to help with your session.

You'll need to get some ID cards to help everyone identify the different plants. You could use this great example from NHBS or find other examples online to print or share on mobile devices.

Mark out a playing area so everyone knows where they can go.

Chat about plans

- 1. The person leading the activity should ask the group why they think plants are important. Does anyone know the difference between native and non-native plants?
 - People might say things like we rely on plants for food, water, medicine and even the air we breathe. <u>Check out this Woodland Trust</u> blog for some more ideas.
- 2. The person leading the activity should explain that non-native plants called invasive species can sometimes have a negative impact on their environment if they're not carefully controlled. They should share some of the information from 'Non-native invasive species' below.

Play plant protectors

- 1. The person leading the activity should introduce the game. In this game, everyone will play different plants. The game will show the effect of non-native invasive plants and help everyone understand what they can do to help.
- 2. The person leading the game should choose some people to be the invasive species. Everyone else will be native species.
- 3. When the person leading the game says 'Go!', everyone should run around the space. The invasive species should try to tag the native species.
- 4. If an invasive species tags a native species, the native species should freeze and put their arms in the air. After 10 seconds, the tagged native species should become an invasive species too they should try to tag any remaining native species.
- 5. Everyone should play for about 45 seconds, then they should gather together. How long did it take the invasive species to take over? Why do people think the invasive species was able to take over? How might people be able to limit the spread of the invasive species?

The more invasive species there are, and the longer they're present, the greater the impact that they have.

- 6. The person leading the game should explain that everyone will play again. This time, they'll play with double the number of people beginning as invasive species. Before they start to play, everyone should guess what will happen.
- 7. Everyone should play for 45 seconds, then gather together and talk about whether their predictions were right.
- 8. The person leading the game should explain that everyone will play one more time. This time, some people will be protectors. Now, if a native species is tagged, they should freeze, put their arms in the air, and count backwards from 10. If they reach zero, they become invasive (like in the previous rounds). If a protector tags them before they reach zero, they go back to being a native species and can carry on running around.
- 9. Once everyone's finished playing, they should compare the different rounds. What difference did the protectors make?

There should be more native species left in the round with the protectors.

- 10. The person leading the activity should explain that everyone can take action to help protect native species. People can learn to identify invasive non-native plants, what to do to help, and how to report them.
- 11. The person leading the activity should share examples of different native and non-native invasive plants from their area.

You can look up some examples, or see some of the information in 'Non-native invasive species' below. Some plants (like giant hogweed) can be really dangerous, so it's important you work with experts if you're completing any practical conservation work.





Look at what's around

- 1. The person leading the activity should explain that now everyone knows some information about native and non-native invasive plants, they'll go and identify some more of the plants that surround them.
- 2. Everyone should split into smaller groups. The person leading the activity should hand out the equipment and set boundaries.

The size of your groups will probably depend on how much equipment you have.

- 3. Each group should put their quadrant down.
 - A quadrant is a frame that helps you to focus on a certain area, for example, a small area of grass or soil. You can use what you find out about your quadrant to help you understand more about the plants or slow-moving organisms in a wider area (for example, a field).
- 4. Each group should make a list of all the plants that they can find in their quadrant.
- 5. After around 10 minutes, everyone should gather together and share one plant they found. If other groups found the plant in their quadrant, they should put their hands up. How many did each group find in their quadrant? Who had the most?

If there's time, groups could share all of the different plants they found.

6. What plants did the group enjoy finding and looking at? Are there other plants which could be grown in this area that might look good? What would the benefits of these plants be? Don't forget to think about what everyone learned about native and invasive species in this activity.



Non-native invasive species

Non-native plants are plants that live outside their natural range. They're usually introduced by people, as they're not native to the UK. Most non-native plants are harmless, but 10–15% of non-native plants become invasive plants that can harm the environment. Invasive species compete with native species for food and habitat, and some carry diseases that harm local wildlife. Plants can be invasive because there's no natural control mechanisms, because they spread really fast, or because they suppress other species by competing for resources.

Non-native, invasive plants can:

- Outcompete native plants by changing the habit or spreading so rapidly that they crowd out slower growing species, threatening their long-term survival.
- Harm native plants by spreading pests and plant diseases, and competing for space, light, nutrients and water. This has a wider impact on other species which rely on native plants, including birds, butterflies and other insects, and could threaten the survival of rare plant species.
- Change ecosystems and habitats and have other effects like reducing water flow leading to flooding. They can also change the pH (how acidic something is) or the chemical composition of the soil, or lock up nutrients.
- Take a long time to become invasive. Many of the plants now considered invasive have been growing in the UK for over one hundred years and for much of that time showed no sign of becoming a problem.
- Be expensive to get rid of. It is also very costly to restore degraded habitat, if it can be done at all.

Some examples of non-native invasive species include:

- Japanese knotweed
- Giant hogweed
- Himalayan balsam
- Rhododendron ponticum
- New Zealand pigmyweed
- Floating pennywort
- Floating water primrose



Reflection

| Time | Activity |
|---------|---|
| 15 mins | This activity was all about getting out and learning more about the local environment. Did anyone learn anything new during this activity? Did they find any species of plants that they didn't know about before? Maybe they hadn't heard about some of the invasive plants before. |
| | Plants are really important; people rely on them for food, water, medicine and even the air they breathe. It's important to think about some of the negative impacts of different species being introduced by humans. Can anyone think of some different ways that humans might have introduced invasive plants to the area? Quite often it's by accident! |
| | To finish, think about what practical action everyone can take to become a real life plant protector and how they can help reduce the damage of non-native invasive plants. Share some ideas with the group – people could report any invasive plants you find, or plan some practical action to improve their local environment |

Change the level of challenge

For a simpler game, try out <u>Noughts and crosses</u> relay and split your group into native and invasive non-native teams. Instead of using cones, you could print images or names of different plants relevant to their invasive or native team.

Make it accessible

Make sure to think carefully about the location you choose for this activity so that it's accessible for your whole group.

All Scout activities should be inclusive and accessible.

Safety

All activities must be safely managed. Use the **safety checklist** to help you plan and risk assess your activity. Do a **risk assessment** and take appropriate steps to reduce risk. Always get approval for the activity and have suitable **supervision** and an **InTouch** process.

• Outdoor Activities

You must have permission to use the location. Always check the weather forecast and inform parents and carers of any change in venue.

• Gardening and nature

Everyone must wash their hands after the activity has finished. Wear gloves if needed. Explain how to safely use equipment and set clear boundaries so everyone knows what's allowed.