

Muinín Catalyst STEAM Education for Sustainable Development and Futures Literacy

SDG15 Seeding Sustainability



Programme Phase 1: Research and Development

Micro-Module 3: Examining Edible / Medicinal Plants

SUBJECT AREAS: English, Geography, Home Economics, Irish, Science, SHPE



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Micro-Module (MM) 3: Examining Edible / Medicinal Plants

Research and Development

Subjects: English, Geography,
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Micro-module Summary: Examining Edible/ Medicinal Plants

This micro-module contains eight lessons that introduce learners to the various habitats and in Ireland and the flora they support. Learners build on this knowledge to identify edible/medicinal plants that are widely available in the wild yet often overlooked and develop simple and safe applications.

Vocabulary: Application, Balm, Collection, Directory, Edible, Flora, Habitat, Harvest, Medicinal, Salve, Tea, Tincture, Tisane

In this lesson, the learner will:

- understand the connection between habitat and plant growth
- become aware of the wide ranging edible/medicinal Irish wild plants
- begin to develop the skills to safely identify and collect wild herbs / plants
- identify the mechanisms and policies of food production and distribution
- develop simple and safe application skills using wild plants

Materials

- Eight lesson plans
- Learners Activity and worksheets
- Internet Access required

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



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Seeding Sustainability: Examining Edible/ Medicinal Plants

Lesson 1: Biota, Flora and Fauna

Flora and Fauna also contribute significantly to the ecosystem of the Earth. This lesson will build and consolidate key vocabulary that learners will use throughout the micro-module. It encourages the development of research skills to develop an awareness of the different types of edible plants that can be found growing in Ireland.

Resources: Worksheet: Wild Irish Edibles, Flipped Classroom Task: Biota, Flora and Fauna

Lesson 2: Habitats

Over 100 habitat types have been classified in Ireland, boasting a rich array of flora and fauna. This lesson asks learners to use independent and collaborative research skills to discover information about habitats in Ireland and the different types of flora and fauna that can be found in each.

Resources: Worksheet: Habitats, Flora and Species Webquest, Support: C.R.A.A.P Test

Lesson 3: Local Flora/ Fauna Scavenger Hunt

Flora and fauna is linked with the air we breathe and the food we eat and are interdependent. This lesson connects learners with their local, natural place as they are tasked with identification, information-gathering and evaluation of local flora and fauna.

Resources: Worksheet: Local Flora/ Fauna Scavenger Hunt, Optional Extra Worksheet: Web Quest 1 Wild Irish Edibles (Lesson 1)

Lesson 4: Creating a directory

Foraging is becoming a hobby of increasing interest for many people. It gives us the opportunity to use what nature has provided, and encourages growing plants in our own backyards that can be used for a range of purposes, such as in cooking and for medical remedies. In this lesson, learners will begin to compile the information they have gathered and evaluated to form an online directory.

Resources: Worksheet: Creating a Directory of Local Edible Flora

Lesson 5: Sacred Trees of Ireland

Many types of trees found in the Celtic nations are considered sacred, whether as symbols, for their medicinal properties, or consideration as the abode of particular nature spirits. This lesson supports learners' understanding of sacred trees in Ireland by developing their own research questions.

Resources: Supporting Skills Worksheet: C.R.A.A.P Test

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Lesson 6: Plant learnings and synthesising information

This lesson builds on lesson 5 and the learners' research on Ireland's sacred trees. This lesson will enable learners to develop their visual communication skills. They will take the research they conducted in the previous lesson and develop a research poster to share their knowledge to a wider audience.

Resources: Worksheet: Plant Learnings (Recording Information) Linked Learning Media Communication 2 - Design a Poster

Lesson 7: Teas, Tinctures and Tisanes

Teas and tinctures are natural remedies for a variety of complaints dating back to Ancient Egypt and Ancient China when our ancestors added herbs to hot water and began distilling alcohol and adding herbs to make tinctures. This lesson will develop the understanding and awareness of natural remedies (teas, tinctures and tisanes) that support individual health and wellness.

Resources: None required

Lesson 8: Topical Applications

Topical applications are applied to the skin to reduce pain and inflammation, but also for mental health benefits. Potential risks of side-effects from pharmaceutical applications lead a lot of people to turn to natural remedies. This lesson will demonstrate how local plants can be used to promote health and well being, topically. Learners can make a number of options, e.g. a balm, a sugar scrub or a shower scrub using wildflowers.

Resources: None required

This is a making session and requires at least 90 mins, it is recommended this is undertaken in the Home Economics classroom or Science lab although it could be completed using camping equipment however this would be more of a demonstration approach.

External Expertise: Bianca Peel

Module Development and Expertise: Rebecca White and Anita McKeown

Using the Resources:

If you wish to use these resources, we can offer an induction and online support throughout the module to help you plan integration into your projects and timetable. To register for this option, please contact us e:hello@futurefocus21c.com For more information on the resources please visit www.muinincatalyst.com

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Setting up an online learning environment for the lessons on this module:

Our lessons integrate the use of virtual learning environments. To ensure seamless use of our lessons, a module should be setup on your school's virtual learning environment such as Teams, Google Classroom, etc. Learners are encouraged to upload documents to share with their peers. If your virtual learning environment does not support document sharing, we recommend OneDrive or Google Drive.

You can also use Google Sites or Microsoft Sway to encourage learners to present their work over the year - this can easily be set up to reflect the aims of TY and provide a showcase for their work as well as assessment tool.

Setting up a Canva Education account:

As our lessons integrate design, our lessons also refer to Canva. Educators and schools are able to open a free Canva for Education account by registering here: <https://www.canva.com/education/> Canva for Education provides primary and secondary school teachers and students with premium features and templates. You can then also set up lessons and invite your learners to the class.

Examining Edible Medicinal Plants References

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