**GFG Foundation**

**Environmental Awareness: Seed Bombs**

**Key Information**

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| Resource Type | Seed Bomb Year 1 Workshop |
| Duration | 1 day |
| Location | GFG Liberty Club, Gelati |
| Max number of students | 21 |
| Facilitator | GFG, teacher |
| Room setup | Desks and chairs arranged facing a screen with session presentation and connection to sound. The students will be working in 4 teams of 5, therefore it will be helpful if they’re already placed and arranged in these groups. Access to the club’s surrounding areas. |
| Required materials | * + Seed bomb kits containing a variety of seeds, peat-free compost and powdered clay. Also requires water. * Lesson plan * PowerPoint * Workbook * Risk assessment * 4+ Laptops/computers with excel (Extra-curricular) * Recycled materials for plant pots (Extra-curricular) |

**Session Aims and Objectives**

In this workshop, participants will gain knowledge of biodiversity and the importance of maintaining garden areas through creating plant ‘bombs’ that will supplement the GFG Liberty Club’s green spaces. Learners will have to consider the different types of habitats in the area and match the best seeds/plants to them. The course will focus on teamwork and planning so that learners are prepared to plant and maintain their seed bombs.

**Learning Outcomes**

1. Learners develop upon their knowledge and practise of environmental awareness
2. To understand the importance of biodiversity
3. To create and execute an action plan to create seed bombs to plant at the GFG Liberty Club

**Workshop Timetable**

**Day 1 9am-2pm**

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| **Activity** | Time Allocation Guide (minutes) |
| **Course introduction** | 15 |
| **Introduction to biodiversity, habitats and plants** | 45 |
| **Liberty Club habitat observations** | 30 |
| **Biodiversity survey** | 60 |
| **Seed bomb activity** | 60 |
| **Exhibition** | 30 |

| **Time Allocation** | Activity | Description/instruction | Facilitator to check learning by | Resources |
| --- | --- | --- | --- | --- |
| **15** | **Introduction** | **Introduction Objectives**  Staff to introduce/re-introduce themselves to the participants, communicating their name and role within the GFG Foundation.  Staff to use PowerPoint as a visual aid to introduce the overview of the course, course timetable and outcomes.  **Overview**  Learners to continue on the success of the GFG Foundation Student Programme by creating a ‘seed bomb’ to enhance biodiversity in and around the GFG Liberty Club. Participants learn about the plants on offer and create their own seed mix that they believe would best promote biodiversity. This includes attracting bees and other wildlife, pollination, capturing C02 as well as looking good.  Learners will have to consider the best areas to plant/throw the ‘bombs’ and create a maintenance plan. Information on each plant/seed will be provided to enable learners to make their decision.  **Day 1 Timetable**  9:00-9:15 Introduction  9:15 - 10:00 - Biodiversity  10:00 - 10-:30 - Observation walk  10:30 - 10:45 - Break  10:45 - 11:45 - Surveys  11:45 - 12:30 - Lunch  12:30 - 13:30 - Seed bombs  13:30 -14:00 - Exhibition  **Outcomes**   * Learners develop upon their knowledge and practise of environmental awareness * To understand the importance of biodiversity * To create and execute an action plan to create seed bombs to plant at the GFG Liberty Club | Ensure that learners are engaged and listening to the introduction of the course | PowerPoint |
| **45** | **Introduction to biodiversity, habitats and plants** | **Introduction to biodiversity, habitats and plants objectives**  Staff to hand out workbooks.  Staff to use PowerPoint as a visual aid to recap biodiversity and introduce habitats and plants to the participants.  Staff guide participants through the related workbook activities, such as the matching activity.  **Outcomes - Learners to understand…**   * The definition of biodiversity * Different types of habitats * Different types of plants and their benefits | Ask participants what they remember about biodiversity from the last course. | PowerPoint  Workbook |
| **30** | **Liberty Club habitat observations** | **Liberty Club habitat observations objectives**  \*Staff to place participants into 4 groups, if they are not already  Staff to use the PowerPoint to introduce the first challenge  **Challenge 1: Liberty Club Habitat Observations**  Participants are tasked with working in their groups to walk around the Liberty Club and observe the habitat(s) and biodiversity, filling in their workbooks with their findings.  Participants should consider the following;   * What seeds they have available would best suit the habitat(s) * How the seeds would enhance the habitat(s)’ biodiversity * Use the workbook to create an aerial plan of the Liberty Club and where the ‘bombs’ will be planted   **Outcomes - Learners to understand…**   * What seeds best suit the Liberty Club’s habitats * The best locations to plant their seed bombs | Ensuring groups are using teamwork to discuss the habitat(s) around the Liberty Club. | PowerPoint  Workbook |
| **15** | **Break** | **10:30 - 10:45** |  |  |
| **60** | **Biodiversity survey** | **Biodiversity survey objectives**  Staff to introduce the challenge through the PowerPoint.  Staff to oversee learners role-playing their questions with their peers as practice before they conduct their survey.  Staff to participate in answering participant questions, as well as, overseeing and observing participants ask the public their survey questions.  **Challenge 2: Biodiversity questions**  Participants are tasked with working in a team to establish 12 questions (3 questions per team) to ask their peers, staff and potentially the public about what they would like to see considered at the liberty Club. Participants should consider the following;   * What wildlife people may want to attract to the Club * What coloured plants would look good, etc..   **Challenge: Conduct survey questions**  Participants are tasked with working in a team to ask GFG staff and the public their survey questions. Answers should be recorded in the learner’s workbook/hand-outs.  **Outcomes - Learners to understand…**   * What people would like to see in the new Liberty Club biodiversity plan   **Additional Challenge: Excel: survey data activity (Time permitting)**  Participants are tasked with working in a team to collate their data into an Excel document. The results should give teams a better understanding of what their peers, GFG staff and the public want to see from the seed bombs. | Ensuring that participants are engaging in discussion around potential questions.  Overseeing learners asking staff and public their survey questions and collating the results. | PowerPoint  Workbook  Computer with Excel for the additional challenge (1/team) |
| **45** | **Lunch** | **11:45 - 12:30** |  |  |
| **60** | **Seed bomb activity** | **Seed bomb activity objectives**  Staff to introduce the challenge through the PowerPoint.  Staff to hand out Seed Bomb kits.  Staff to guide participants through workbook activities.  **Challenge 3: Seed bombs**  Participants are tasked with working in a team to choose their seeds, conduct final research through their workbooks and create their seed bombs.  Finally, participants will plant/throw their seed bombs in ideal locations and create a maintenance plan to ensure their seeds grow.  **Outcomes - Learners to understand…**   * What best seeds to use for the Club’s habitat * How to create seed bombs * How to look after their plants | Ensuring that participants are following the instructions properly.  Observing participants throwing or planting their seed bombs. | PowerPoint  Workbook  Seed bomb kits  Access to water |
| **60** | **Exhibition** | **Exhibition Objectives**  Staff and participants to rearrange the room to best display the participants' work.  **Challenge 4: Exhibition**  Participants are tasked with working in a team to showcase their work to GFG staff, members of the public, friends and family. Including a guided walk and description of the habitats and plants.  **Outcomes - Learners to understand…**   * how to present their work and ideas | Encourage learners to be polite, maintain eye contact and shake hands with people attending the exhibition.  Ensure that learners are showcasing their work. | Workbook |

**Plant Research**

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| **Plant** | **Advantages** | **Disadvantages** | **When does it grow?** | **Growing conditions/Habitats** | **Description** |
| Dog Rose | * Native to Romania * Grows quickly | - Can grow up to 10 foot tall and scales fences and other structures | June/July | - Grows in a wide range of soil types and weather conditions | * Shrub * White or pink five-petalled flowers |
| Transylvanian Sage | * Native to Romania | - Rare | June | * Needs full sun light * Rich soil * Dry to medium watering | - 2-foot tall flowering perennial that develops lavender-blue flower spikes in summer |
| Globe Daisy | * Native to Romania * Does not require maintenance |  | Spring/Summer | - Dry, rocky grasslands | * blue puffball flowers * 8 inches tall with a spread of 15 inches |
| Crocus | Native to Romania | - Normally grows when there is still snow on the ground | April/May | - Cool, moist environments |  |
| Bulbous Buttercup | - Prefers to grow in nutrient-poor soil | - Finds it hard to compete with already established and tall plants | March | - Sunny, chalk and limestone grasslands | - Bright yellow |
| Chamomile | * Fragrant, medicinal, calming * Helps to repel unwanted insects | - Found in the South of the UK - Not sure if it would grow in Romania | June | - Grassland, costal, freshwater, wetlands , towns and gardens | * daisy like * Yellow centre and white petals |
| Common Bird’s-foot-trefoil | - Important plant for caterpillars and butterflies |  | May | - Grassland, heathland, moorland, farmland, coastal, rocky habitat, towns and gardens | * Low growing plant * Seed pods that look like birds feet |
| Common Knapweed | - Attracts clouds of butterflies | * Hardy and fast-spreading * Considered an invading species in North America | June | - Grassland, heathland, moorland, farmland, coastal, woodland, towns and gardens | - Large pink flowers |
| Common Spotted-orchid | * Attracts moths * Cheap and easily to obtain |  | May | - Grassland, heathland, moorland, freshwater, farmland, coastal, wetlands, woodland, towns and gardens | * Green with many purple, oval spots * Flowers range from pale pink through to purple |
| Lady's bedstraw | - Honey-like scent |  | June | Grassland, heathland, moorland, farmland, coastal, towns and gardens | * small, narrow leaves * tiny, yellow flowers that appear in dense clusters. |
| Red Clover | * Attracted bumblebees * Can balance nitrogen-rich soil * Pet-friendly |  | May | - Grassland, farmland, towns and gardens | - Round pinky red flowers |
| Wild Thyme | - Fragrant |  | June | Grasslands, heathland and moorland, coastal and rocky habitat | - oval leaves, with pinky-purple flowers |