

Environmental Explorer

Ages: 11-18 years old



Photo by Aron Tanti

Do you want to explore the natural world like Darwin did? As an island located in the middle of the Mediterranean, Malta possesses a unique community of plants and animals that are waiting to be discovered!

Through BirdLife Malta's Environmental Explorer programme, you will gain exclusive access to one of Malta's beautiful and biodiverse nature reserves, including a guided tour and the opportunity to participate in a range of activities exploring Malta's wildlife!

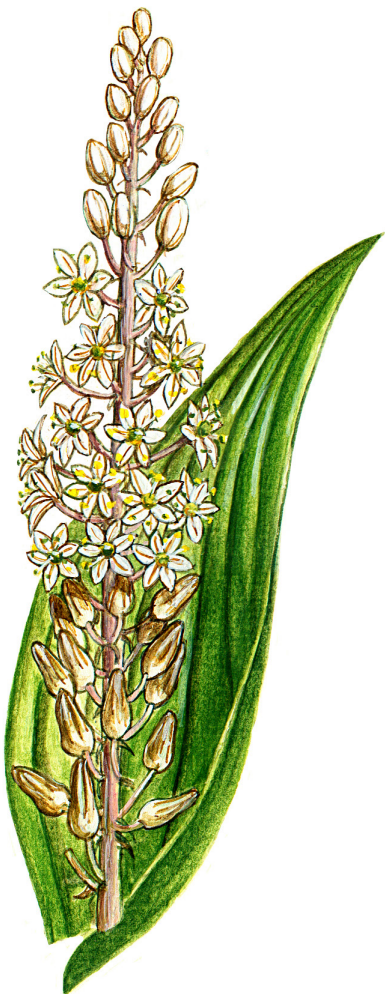
The programme will help you to develop the investigative and analytical skills necessary to become a budding scientist!



Activity 1:

Plants Exploration

When going about our lives, it's easy to take for granted the plants surrounding us! This activity provides you with the opportunity to embrace your curiosity and learn how scientists survey the amazing plants found on the island. Working as a team, you'll use quadrats to mark areas of the reserve and then use a guide to identify the plant species present. The team that is able to identify the most plant species in their quadrat wins!



Art by Victor Falzon

We'll explore how the micro-environment in the quadrats influences the types of plants species found there – Do we find more species in shaded or sunny areas? Does proximity to water influence species diversity?

Through this activity, you'll learn not only how to conduct plant surveys like a scientist, but also the importance of asking 'why?' – Why does species diversity change between quadrats? Why do some species only inhabit certain quadrats?

Activity 2:

Ageing an Aleppo Pine

Aleppo Pine (*Pinus halepensis*) is a widespread species found throughout the Mediterranean region. The species was introduced to Malta in the late 15th Century and has since spread to establish wild populations, becoming one of Malta's most charismatic trees.

Pine trees are able to live for thousands of years! Therefore, it is important for us to be able to estimate the age of an individual.

We can determine the age of a tree by chopping it down and counting the rings or by using a borer – But both of these techniques are highly invasive and can kill the tree.

However, we can estimate a tree's age in another way, using a relatively simple formula. In this activity you're going to learn how to do this, while competing with your friends to find the biggest, oldest tree!

Art by Traité des Arb (courtesy of rawpixel.com)



Activity 3: Fantastic Minibeasts and Where to Find Them

Some of the animals inhabiting Malta can be difficult to notice at first, requiring you to carefully search high and low! In this activity, you'll be exploring the remarkable miniaturised world of invertebrates.

Invertebrates make up a whopping 95-99% of all animal species on Earth, with over one million species discovered so far! But there's probably far more than that, and we're always discovering new and incredible species!

Invertebrates play essential roles in ecosystems globally, including:

- Breaking down dead plant and animal material
- Engineering ecosystems
- Providing food for insect-eating animals (e.g. birds)

In this activity, you'll use an eye loupe to search for and identify insects in a range of habitats – We'll then discuss the importance of invertebrates both for natural ecosystems and humans, the declines they're currently undergoing and how you can help protect them!



Photo by Aron Tanti

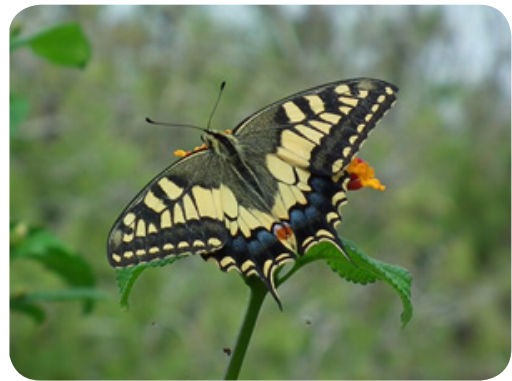


Photo by Aron Tanti

Activity 4:

Here Be Dinosaurs

Believe it or not, the birds you see in Malta every day are the last living dinosaurs!

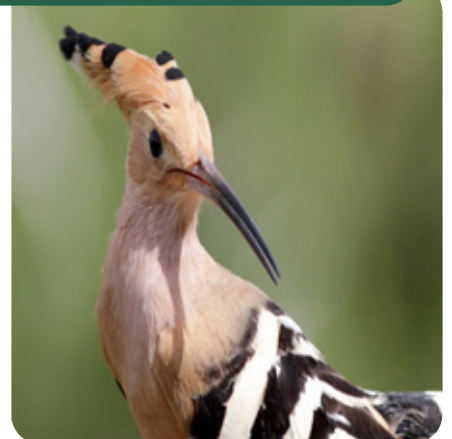
Because of its location in the middle of the Mediterranean, sandwiched between Europe and North Africa, Malta is a crucial stopover site for birds migrating between the two continents and therefore is one of the best places in Europe to see birds!

A whole range of incredible bird species can be seen on these islands – Including the suave Black-necked Grebe (*Podiceps nigricollis*), the mohawked Hoopoe (*Upupa epops*) and the majestic Honey-buzzard (*Pernis apivorus*).

They may be beautiful, but birds aren't just a pretty face! They play a crucial role in ecosystems globally, but they face a range of threats in Malta, including habitat loss, pollution and poaching.

In this activity, you'll have the opportunity to join a member of BirdLife Malta's staff in a bird hide on one of our reserves to watch carefully and quietly for birds – When you see a bird, you'll use a guide to try and identify the species and record where you saw it and how it was behaving.

Through this activity, you'll learn how to identify birds and gain a better understanding of the wide variety of behaviours they exhibit – essential skills for any scientist!



Activity 5:

What makes an environmental leader?

Around the world, young activists and environmentalists are leading the environmental movement and demanding action on climate change and environmental destruction.

From Greta Thunberg to Autumn Peltier, these incredible young people are inspiring millions around the world to strive for a better, greener world.

In this activity, we'll discuss what makes an environmental leader and how you can act as a champion within your community.

Photo by
European Parliament



Greta Thunberg

Photovia
womenofinfluence.ca



Autumn Peltier

Price: €3 per person

Time: 9:30 am – 2:00 pm

Available at Simar Nature Reserve **and** Għadira Nature Reserve

Book now by emailing us at education@birdlifemalta.org

Disclaimer: Due to the changing climate in Malta throughout the year, some of these activities may be adapted depending on the season in which they are undertaken.

