



**Integrating the Science Syllabus  
for Primary Schools  
with field-trips organized by BirdLife Malta  
and the Dinja Wahda  
Environmental Education Programme**

**A report compiled by  
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# Year 4

## 4.11 Sharing Our World: Other Animals and Us

### 4.1.1 Know the basic needs of animals.

During field-trips, students learn how to locate and observe all sorts of wildlife through different activities. At Is-Simar and Ghadira Nature Reserves, observation sessions from the birdwatching hides give students the chance to capture every bird's movement in its natural environment and recognise some of its basic needs when they see it breathing, feeding, drinking and seeking shelter in the reserves' extensive reedbeds and other shoreline vegetation. Students also learn the value of protected areas such as nature reserves for animals to rest, feed and reproduce without disturbance.



shelter

air

food

water





# Year 4

## 4.11 Sharing Our World: Other Animals and Us



*A Spanish Sparrow drinking from a rain puddle*



*A Crab Spider sheltering on a flower*

Large birds may not be so prominent away from the nature reserves, but smaller birds and other forms of wildlife are always present, ready to be discovered. The field-teachers encourage the students to be on the lookout for all types of fauna whilst walking along the nature trail, and to observe their behavior. Various species of insects, spiders and reptiles are regularly observed. Wild rabbits are especially common at Ghadira Nature Reserve and Foresta 2000.



*A wild rabbit feeding on grass*



*A Mediterranean Chameleon eating a wasp*



# Year 4

## 4.11 Sharing Our World: Other Animals and Us

Connecting with...



### 4.1.1 Know the basic needs of animals.

#### Robin Roundup

**Aim:** thanks to a long campaign spread over a number of years, robin trapping has largely been eliminated from Malta. This activity aims at making sure that this habit never returns and emphasizes the need of animals to live in their natural habitat in order to survive.

**Learning activities:** story-telling, oracy skills, craft activity.







### 4.1.1 Know the basic needs of animals.

#### Sparrow in a Spot

**Aim:** to increase awareness and appreciation of Malta's most common bird species: the Spanish Sparrow.

**Learning activities:** story-telling, puppet making and puppet show, observation of Spanish Sparrows in their natural habitat from the classroom and/or school-grounds.



# Year 4

## 4.1 Sharing Our World: Other Animals and Us

Connecting with...



### 4.1 Sharing Our World: Other Animals and Us

#### Dinja Wahda Rangers - Bird table activity

**Aim:** to empower children to take positive action to protect nature by feeding birds in the winter months.

**Learning activities:** children learn about one of the most basic needs of every living thing (feeding) and learn to choose the right type of food for wild birds in winter, when food is most lacking.





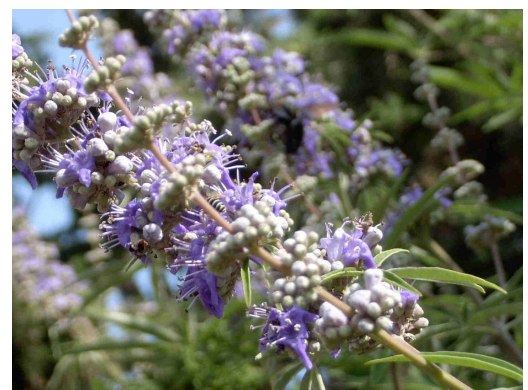
# Year 4

## 4.2 Sharing Our World: Plant life

### 4.2.1 Know that plants need air, water and light to stay alive.

Students are encouraged not only to observe, but also to identify flowering plants with the aid of specially prepared identification sheets. Colouring line drawings of common flower species help the children to notice the finer details.

The basic needs of plants are explained by the field-teachers, and the acquired knowledge is reinforced through questions and simple exercises on the worksheet which is filled up on site.





### 4.2.1 Know that plants need air, water and light to stay alive.

#### Trees are Cool

**Aim:** to make students aware of the importance of trees in ecosystems and of the threats they face from logging and forest fires.

**Learning activities:** students contribute to set up a classroom display, and participate in a group game to reinforce the main points of the activity.







### 4.2.1 Know that plants need air, water and light to stay alive.

#### Foster a forest

**Aim:** to involve students in the maintenance of the Foresta 2000 project.

**Learning activities:** students learn that afforestation work does not stop with the planting of trees, but involves many other activities (drip irrigation, grass-cutting to reduce the risk of fires, maintenance of the site etc). As a follow-up, participating classes are invited to visit Foresta 2000 for a guided tour around the area.



# Year 4

## 4.3 Sharing Our World: Habitats

### 4.3.1 Know that plants and animals in a habitat depend upon each other.

One of the ways in which this concept is brought to the students' attention is through the Lentisk trees, which are found growing in all field-work localities. Lentisk fruit ripens in winter, thus coinciding with the influx of wintering birds in the Mediterranean region which feed on it. The fruit is digested, but the seed is expelled intact from the birds. This helps to disperse the seeds far away from the parent plants.







### 4.3.1 Know that plants and animals in a habitat depend upon each other.

#### Minibeast Magic

**Aim:** to help children appreciate the ecological and economic importance of invertebrates in the soil.

**Learning activities:** students learn minibeast facts by watching a powerpoint presentation, and play an online game to reinforce the main facts.





# Year 5

## 5.1 Sharing Our World: Other Animals and Us

### 5.1.1 Know that animals grow and reproduce



*Common Coot tending its chicks at Is-Simar Nature Reserve*

Students learn that many animals do not only change in size as they grow older, but also in shape. Some teachers use the learning outcomes from site visits to develop follow-up activities at school (see photo below extreme left). A large freshwater pond at Is-Simar helps students to discover pond life at close range. Rockpools in winter offer the same opportunities in the other localities.



*Spiderlings hatching (above) and mosquito larva (left)*



# Year 5

## 5.1 Sharing Our World: Other animals and us

### 5.1.2 Group animals according to common features.

Whilst most children have a favourable impression for certain animal species, such as butterflies and hedgehogs, they are often laden with prejudice against the less popular and attractive species (spiders, geckoes, beetles...). Getting them interested in these species is both challenging and rewarding. One way of doing so is through observation and discussion. Once they start spotting different species in the surrounding area, enthusiasm quickly builds up. The worksheets help to focus the children's attention and round up the activity.

Ikteb l-isem ta' wiehed minn dawn li tkun rajt matul il-mixja:

insett

brimba

amfibju

rettilu

ghasfur

mammiferu

Liema minn dawn il-ħlejjaq huma invertebri (m'ghandhomx xewka tad-dahar)?



#### ħlejjaq Żgħar

Kemm rajt minn dawn fis-Simar?



# Year 5

## 5.1 Sharing Our World: Other animals and us

Connecting with...



### 5.1.2 Group animals according to common features.



#### The Wall

**Aim:** to help children discover hidden life in a micro-environment (rubble walls)

**Learning activities:** students search for different life forms in rubble walls, learn to classify them according to their features and also appreciate the value of rubble walls as a micro habitat supporting a variety of life forms.

It's time to look at rubble walls...

Where is the rubble wall?  
☐ In a built-up place ☐ Just outside a built-up place ☒ Out in the countryside

What is the name of the nearest town or village? Koblenz

What is behind the wall? ☒ field ☐ road ☐ path ☐ garden ☐ rocky land

What is in front of the wall? ☐ field ☐ road ☒ path ☐ garden ☐ rocky land

How high is the wall? cm

Are there any plants growing out of the wall? ☒ Yes ☐ No

Can you name any of the plants? long grass poppy

Are there any plants growing at the foot of the wall? ☒ Yes ☐ No

Can you name any of the plants?

Rubble walls are the home of many living things. Can you spot any of these on the wall?

<input type="checkbox"/> peckle	<input type="checkbox"/> lizard	<input type="checkbox"/> slug	<input type="checkbox"/> spider
<input type="checkbox"/> snail	<input type="checkbox"/> slug	<input type="checkbox"/> caterpillar	<input type="checkbox"/> butterfly
<input type="checkbox"/> beetle	<input type="checkbox"/> bee	<input type="checkbox"/> ant	<input type="checkbox"/> wasp
<input type="checkbox"/> ladybird	<input type="checkbox"/> moth	<input type="checkbox"/> spider web	<input type="checkbox"/> other





# Year 5

## 5.2 Sharing Our World: Plant Life

### 5.2.1 Know that plants have a life cycle

Many students can identify pine cones, but when asked about their function, very few know what it is. Children associate Aleppo Pine cones with the Christmas season, or think of them as a type of 'insect home', but very rarely mention they they contain seeds.

Year 5 students are given the chance to handle partially opened pine cones, and to find out what they contain inside. The life cycle of the tree is then explained in simple terms, starting with the pollination process which takes place in early spring.



*Male cones (top left)*

*Male cones releasing pollen (top right)*

*Female cones (middle)*

*Aleppo Pine seeds (bottom)*





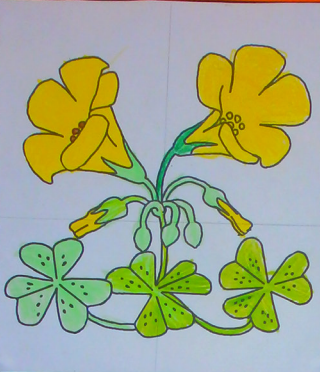



### 5.2.1 Know that plants have a life cycle

#### Flower Detectives

**Aim:** to learn about some of our common wild flowers.

**Learning activities:** fieldwork (in school garden or any suitable nearby site), drawing flower outlines, word-games, getting familiar with plants' life-cycle.

CAPE SORREL ( #AXIXA INGLIŶA)	
	
1. THE FLOWERS ARE YELLOW.	1. THE FLOWERS ARE YELLOW AND GROW IN BUNCHES.
2. THE FLOWERS OPEN IN WINTER AND SPRING.	2. FENNEL GROWS IN SUMMER.
3. SOME FIELDS TURN BRIGHT YELLOW WITH THESE FLOWERS.	3. THE LEAVES LOOK LIKE THREADS.
4. THE LEAVES LOOK LIKE THREE HEARTS STUCK TOGETHER.	4. PEOPLE USE THE SEEDS FOR COOKING, AS WITH 'PATATA L-FORN'.



### 5.2.1 Group plants according to common features



This exercise focuses students' attention on the different leaf forms, after which they can classify the trees and/or plants they encounter according to the common features they notice.

The vocabulary sheet helps the students to acquire a word bank in both Maltese and English which helps them in their descriptions.

#### Vocabulary/Vokabularju

colour	green, brown, yellow, red
lewn	aħdar, kannella, isfar, aħmar
leaf edge	smooth, toothed, wavy, prickly
tarf il-werqa	lixx, isserrat, immewweg, niggieži
leaf surface	smooth, rough, wrinkly dull, glossy hairy, not hairy
wiċċ il-werqa	lixx, aħrax, imkemmex mitfi, ileqq piluz, mhux piluz
leaf tip	pointed, rounded
tarf il-werqa	bil-ponta, ittundjata
leaf stalk	present, absent



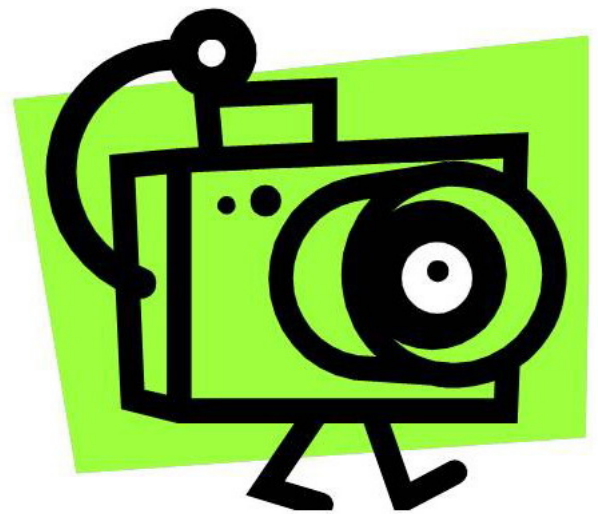


### 5.2.2 Group plants according to common features

#### Picture it!

**Aim:** to learn and practice basic photography skills, which are then used for Environmental Education activities

**Learning outcome:** the activity can be linked to this syllabus module by asking students to photograph and print pictures of different wild plants/trees, and then grouping them according to common features.





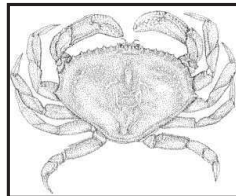
### 5.3.1 Observe that habitats change and that these changes affect plants and animals.

This handout is one of a set used with classes which visit Lunzjata Valley in Gozo. The handout focuses on three particular species whose existence depends on the watercourse, the reedbeds and the bramble. Together with the information provided by the field-teacher, it aims at making the students aware of Lunzjata Valley's biodiversity and the urgent need to protect it and its wildlife.

It is also worth noting that habitat comparison activities are included in all field-teaching sites.



#### Tlett iħbieb fil-Wied tal-Lunzjata



X'jismu? \_\_\_\_\_

Fejn jghix? \_\_\_\_\_

Għaliex hu 'endemiku'? \_\_\_\_\_

Semmi tliet affarijiet li jistgħu jeqirduh għal kollox.



X'jismu? \_\_\_\_\_

Meta jidher? \_\_\_\_\_

Għalfejn iżur il-Lunzjata filgħaxija?

Għaliex f'Wied il-Lunzjata mhux dejjem isib ambjent għal qalbu?



X'jismu? \_\_\_\_\_

Fejn ibejjet \_\_\_\_\_

Għaliex jissejjah 'residenti'? \_\_\_\_\_

X'inhu l-istatus tiegħu? \_\_\_\_\_

x'rabta għandu mal-pjanta tal-Għolliq? \_\_\_\_\_

Għaliex mhux dejjem isib fejn ibejjet? \_\_\_\_\_

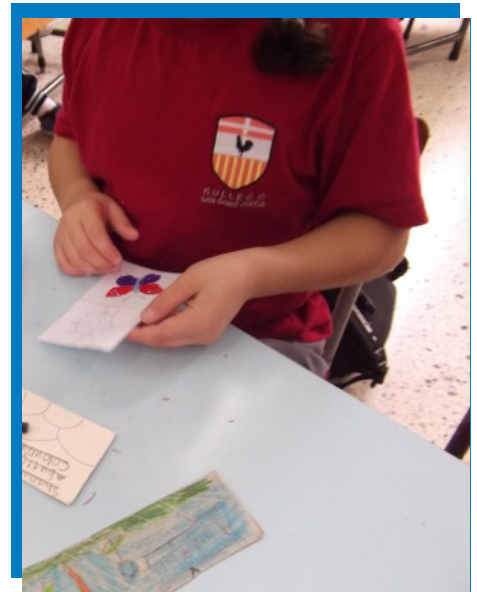


### 5.3.1 Observe that habitats change and that these changes affect plants and animals.

#### Four Friends

**Aim:** to make children aware with four local animals threatened by our lifestyle and development.

**Learning outcomes:** students familiarise themselves with the animal species and the type of threats they are facing. The activity also corrects widely-held misconceptions about these animals. The acquired knowledge is shared through the design and production of bookmarks.





# Year 5

## 5.4 Sharing Our World: Weather Watch

### 5.4.1 Know that the weather has an effect on the lives of people and other living things.

Many things in nature are taken for granted, without ever trying to find out the answer - why do snails come out in the rain? Why do geckoes and other reptiles sun themselves? Is it true that dried pine cones close up before an approaching rain storm? Why does stormy weather bring more birds during migration? These are some of the many questions asked during site visits by the field-teachers, not only to increase knowledge about nature, but also to inspire students to come up with possible answers themselves.



*Edible Snail (top)*

*Barn Swallow (middle)*

*Moorish Gecko (bottom)*

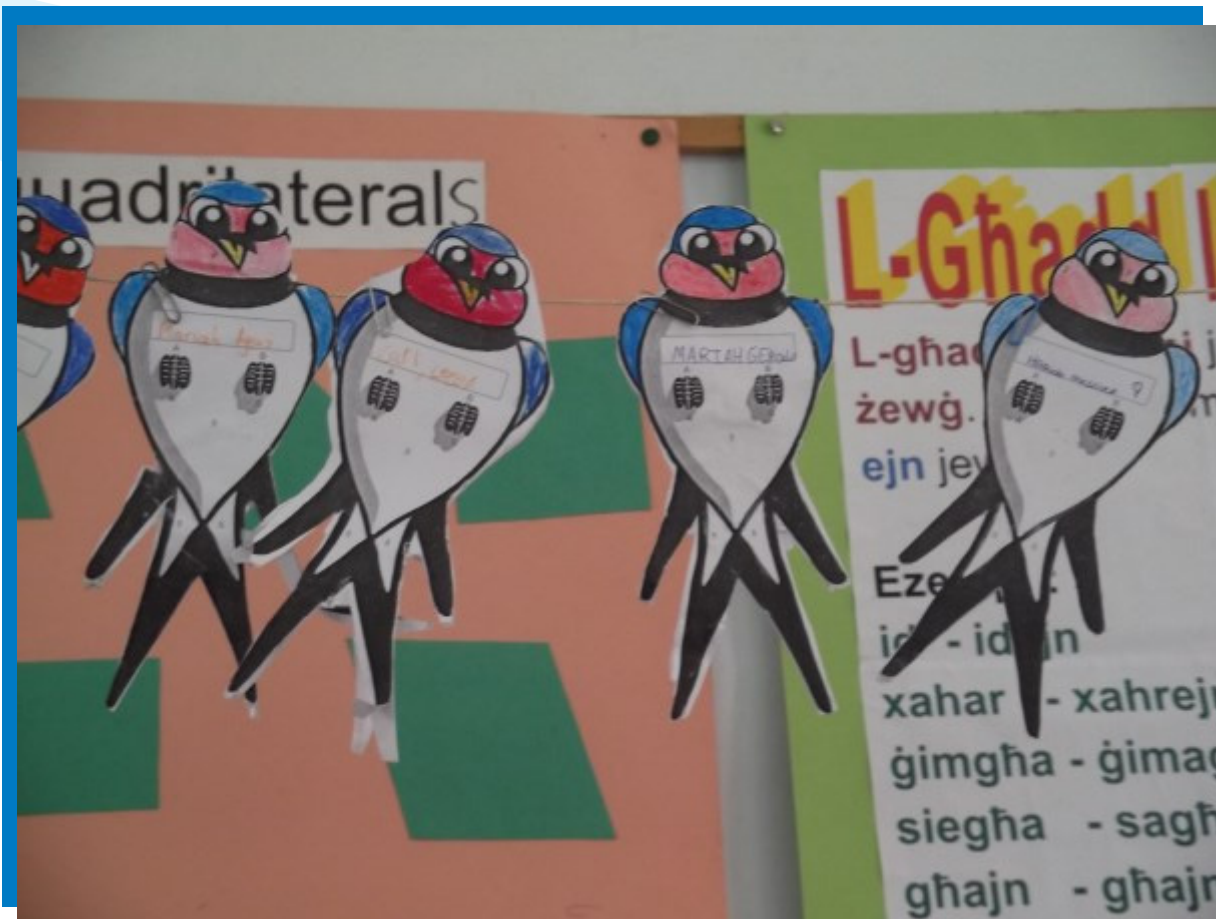


### 5.4.1 Know that the weather has an effect on the lives of people and other living things.

#### Out of Africa

**Aim:** to make students aware of the bird migration and the natural and human perils birds encounter during migration.

**Learning outcome:** through a class-based game, students learn about how the weather affects migration patterns, both locally and globally, and the threat posed to migrating birds by adverse weather conditions. The activity also links with Mediterranean Geography as students will learn to identify the continents of Europe and Africa and the Mediterranean Sea.





# Year 6

## 6.2 Sharing Our World: Plant Life

### 6.2.1 Observe differences between plants and animals

While it may sound obvious that plants and animals are very different from each other, when it comes to the finer details, children find difficulties in identifying the differences. Simple onsite experiments and demonstrations are carried out, and role-play is also used to facilitate learning and assimilation of basic concepts.



*Painted Frog*



*Plants and animals role play on Xemxija Ridge*



*Judas Tree (right)*



# Year 6

## 6.3 Sharing Our World: Habitats

### 6.3.1 Know that the environment is a system which can be harmed.

Each and every site visit presents ample evidence of how humans have damaged the environment over the span of hundreds of years, and of how in some cases action has been taken to restore the habitats which have been harmed or destroyed through human practices. Through observation and with the field-teachers' help, students start becoming aware of the damage which our countryside has suffered through deforestation, soil-erosion, habitat degradation, illegal hunting and trapping and harmful agricultural practices amongst others.







### 6.3.1 Know that the environment is a system which can be harmed.

#### Junior journalist

**Aim:** Students keep their eyes and ears tuned to environmental matters, and to share what they learn with others through different means.

**Learning activities:** Students learn to search for environmental news in different types of media, to summarize the information and read it in front of an audience. Pictures and articles used for this activity can then be used to form a Newsbook.





### 6.3.1 Know that the environment is a system which can be harmed.

#### Vanishing Homes

**Aim:** students learn about the major Maltese habitats, and learn of their importance to wildlife.

**Learning activities:** slideshow about six Maltese habitats, followed by a discussion about the plants and animals that live in them. What is learnt is then reinforced by the Vanishing Homes Game, which emphasises the negative effects of habitat loss on wildlife.



*Playing the Vanishing Homes Game in the school yard*





### Greentalks

Greentalks provide students (and teachers) the chance to learn about different topics related to nature, including environmental problems, local habitats and the species that live in them. BirdLife Malta offers these nature talks free of charge, and since the subjects are changed regularly, it gives participants the opportunity to build a wealth of nature knowledge.

