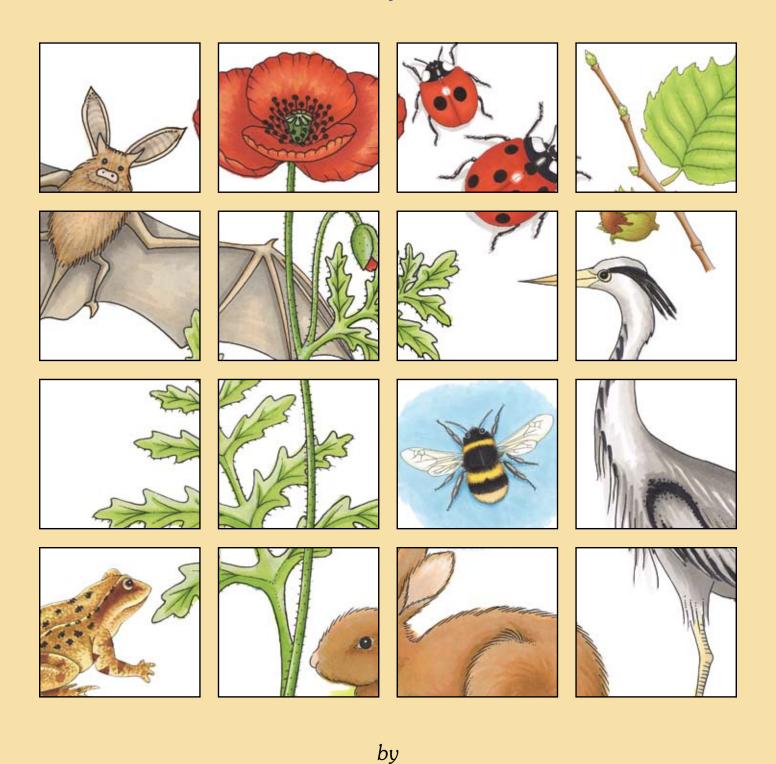
# Wild Things at School

A book for Primary School Teachers



Éanna Ní Lamhna

Illustrations by Christine Warner

Wild Things at School







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# Éanna Ní Lamhna



Published by Meath County Council County Hall, Navan, Co. Meath in association with Laois and Monaghan County Councils









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ISBN: 978 1 900 923 118

Graphic design by Connie Scanlon and James Fraher, Bogfire. www.bogfire.com

Typeset in Calibri, Cambria, Souvenir and Technical. Printed in Northern Ireland on recycled paper.

This publication has been supported by the Heritage Council.



#### **Dedication**

I dedicate this book to my father — Peadar Ó Lamhna — who taught me in Fifth, Sixth and Seventh class in St Nicholas' Primary School in Stabannon in Co. Louth.



#### Foreword

Counties Laois, Meath and Monaghan have come together to develop this book for Primary School teachers called *Wild Things at School*.

"If only the kids learnt even three plants or animals each year . . ." This statement from the naturalist, author and broadcaster Éanna Ní Lamhna was picked up by us as the basis for this publication. We are delighted that Éanna agreed to write the book. With her usual style, flair and knack of picking out snippets of information, she has written fabulous thought-provoking accounts of all the plants, animals and creepy-crawlies identified for study in the book.

These accounts are well matched by beautiful illustrations from Christine Warner.

Connie Scanlon and James Fraher of Bogfire have brought it all together with their design.

The County Heritage Plans for each of our counties have actions relating to education and for building awareness of our heritage, including wildlife. The Heritage Council has co-funded this book with Laois, Meath and Monaghan County Councils.

We hope that this book will provide an opportunity for every child in Primary School to participate in a nature studies programme which helps them identify common plants, trees, animals, birds and creepycrawlies. This will make it easier for them to take up ecology modules in the science programme in Secondary School, and help them to know their own local environment.

Our hope is that *Wild Things at School* will encourage children to develop a respect and love of nature that will stay with them all their lives.

We hope that you find it useful.

Catherine Casey, Heritage Officer, Laois County Council Shirley Clerkin, Heritage Officer, Monaghan County Council Loreto Guinan, Heritage Officer, Meath County Council



### Acknowledgements

Full credit for this book must go to Catherine Casey of Laois County Council, who put it up to me to write a book which would be used to teach the basic plant and animal species to school children, instead of lamenting the fact that they did not know more than daisies and dandelions in Sixth Class. Thanks, too, to Shirley Clerkin of Monaghan County Council and Loreto Guinan of Meath County Council for enthusiastically supporting this project.

I must also thank the Primary School teachers of Ireland who have invited me into their classrooms over the last 35 years to talk to their pupils under such varied schemes as Heritage in School, the Ringo Project, or judging various school garden projects, or indeed as an inspector for trainee primary teachers. The interaction with their pupils has inspired me during the writing of the book.

I particularly want to thank Christine Warner, whose accurate and beautiful colour illustrations and line drawings have brought life so vividly to the words on each page.

I want to thank Connie Scanlon and James Fraher at Bogfire who have designed and laid out the pages of the book and made such a harmonious whole of the project.

My thanks also go to the sponsors — Laois, Meath and Monaghan County Councils and to the Heritage Council.

Finally, I would like to thank my husband, John Harding, who bore stoically the time filched from days off and weekends together, which I needed to complete the writing and proofreading. His reward will be great!

— Éanna Ní Lamhna, July 2009

















#### Introduction

If you ask pupils in Junior Infants what wild flowers they know, they will tell you "daisies, dandelions and buttercups". If you go into Sixth Class and ask the same question you will get the same answer. They know three species in infants and they know the same three eight years later. Yet, with no difficulty, they could learn two wild flowers every year, and a tree, and a mammal, and a bird and indeed a creepy-crawly. So, with relatively little effort, each pupil would leave Primary School knowing, recognising and realising the importance of 48 native Irish species. A co-ordinated effort on the part of their teachers would ensure this.

But how to do it? Which species to teach each year, where to find them, and what pupil exercises to carry out? How does the school ensure that each year the wildlife knowledge of each Class is built on and improved? How do the teachers find out themselves all about the chosen species? What practical work can they carry out with the class to ensure that the teaching is carried out to conform with the Living Things Strand of the Science Curriculum?

This book is the answer to such questions. The 48 species that every child should know are outlined in the following pages. Many of them occur in the school grounds (so the pupils can have firsthand experience of them); others are found in the hedgerows which may be round the school field or nearby. None are rare or endangered. The objective is that if pupils and teachers know all about common species, then they will be in a position to appreciate the value and importance of species that are less common and that require different habitats in which to live.

The book is divided into eight sections — one for each year of Primary School from Junior Infants to Sixth Class. The six species to be taught each year are described. The descriptions are all written for the teachers to absorb and then to teach to the class at whatever standard the class can learn. The "To do" section is geared however at the standard of the class being taught. The ideas are given and again the teacher uses these ideas to carry out the practical work in a way that suits their particular class.

When teachers have Planning Days to work out what the teaching schemes for the year will be, this book will be invaluable. Each year the six species listed for that class are taught. The teachers know what their class has been taught in earlier years and can revise and build on this.

So I look forward to the day in eight years time when I ask a Sixth Class what flowers they know and they can rattle off 16 species of wild flowers, complete with details of what they look like, where they grow and what folklore is attached to them.

Bainigí taithneamh as.



# In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught.

-Baba Dioum, 1968

Taken from a speech made in New Delhi by the Senegalese Environmentalist Baba Dioum to the International Union for the Conservation of Nature (IUCN).



### List of helpful publications

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# Junior Infants

Daisy	~~~~~~	
<b>Dandelion</b>	······································	······································
Horse Chestnut	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Hedgehog		······································
Robin	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Ladybird	······································	······································
- MANANAN		

# Daisy Latin name-Bellis perennis Irish name-Nóinín



Daisies are probably the most familiar wild flowers in Ireland. Every lawn or playing field is full of them from March onwards. The English name daisy comes from Day's Eye. This reflects the appearance of the daisy with its yellow centre — the eye, and the ring of white petals — the eyelash. The daisy flower closes at night and opens when daylight comes as if it were waking and sleeping — like real people do.

It is considered to be a sign that spring has arrived when daisies appear in numbers. You must be careful not to step on the first one you see for the tradition is that if you do you will be "pushing up daisies" yourself before the end of the year.

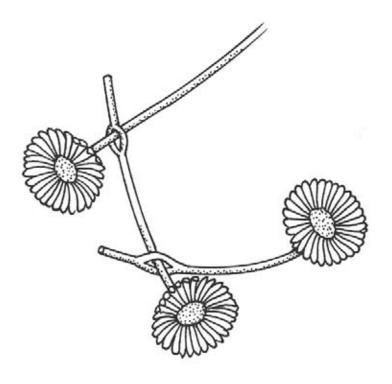
The daisy is a perennial flower — it comes up every year without having to set seed. It has a rosette of leaves around the base. Each leaf has an oval shape. One flower grows on each stem and sometimes the white ring of petals has a tinge of pink on the outside. Because the leaves form a rosette the plant is not destroyed by mowing the grass and in fact it thrives in areas where the grass is mowed regularly.

It is a universal custom for children to make daisy chains by making a slit in the stem of one daisy and inserting another daisy stem first into the slit. This continues until the chain is long enough to be worn.

### Divisy

#### To do with Junior Infants

- Get each pupil to gather one daisy and see if the petals are tinged with pink.
- Put a circle such as a hoop on the grass and get the children to count how many daisies are there.
- Get them to make daisy chains.



## Dandelion

Latin name - Taraxacum officinale Irish name-Caisearbhán



Dandelions have many common names — pissybeds, wet the bed, clocks and jimmyjoes. It is often thought by children that if you pick the flowers then you will wet the bed later on. This is of course not true. What is true is that the leaves of the dandelion act as a diuretic if eaten. They were used in ancient times as a cure for dropsy — an ailment that caused a limb to swell up. Eating dandelion leaves caused the liquid to move to the bladder and no doubt could cause a bed-wetting incident if the person had fallen into a deep slumber.

The English name dandelion comes from the French dent de lion — and refers to the toothed leaves which must have put someone in mind of lions' teeth. The Irish name is caisearbhán, from — gas searbh — the bitter stem. The white stem juice is alkaline and was used in ancient times as a cure for warts.

The leaves grow in a rosette from which come the bright yellow flowers on a single stalk. These quickly turn into white seed heads known as clocks and the seeds, each with its parachute of white hairs, are easily blown away in the wind to settle and grow again quickly. A favourite game among children is to collect one and to tell the time by counting how many puffs of breath it takes to blow away all the seeds.

Dandelions have long tap roots which were dug up and dried and roasted in times of poverty to make a type of "coffee" drink. Its flowers do make a good wine if one has the patience to use just the yellow petals and its clean, very young leaves can be eaten in salads in spring.

Dandelions grow in fields, lawns and along roadsides. They are in flower all summer long. They are well able to withstand mowing — indeed, the more a lawn is mowed the more dandelions grow as other competing plants are removed.

#### To do with Junior Infants

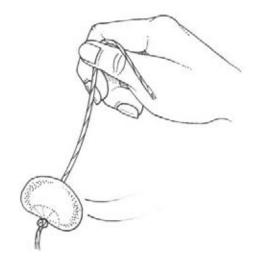
- Get each child to find and gather one dandelion each.
- Get them to collect one with a white seed head and blow away the seeds counting the puffs—i.e. playing clocks.
- Count the number of dandelions inside a hoop placed on the lawn. Are there more daisies than dandelions?



# Horse Chestnut

Latin name – Aesculus hippocastanum Irish name – Crann Cnó Capaill





Horse Chestnut trees are very common in Ireland and are easily identified at any time of year. They are not native to Ireland, they originate in the Balkan regions, but were introduced in the 1600s — probably as great dignified trees to enhance estates formed during the plantations of that century.

Probably as a result of originating in such a warm part of Europe, they are the very first large tree species to get their leaves in spring. The large brown sticky buds open in March. The leaves are compound — which means that seven leaflets radiate out from one stalk that joins to the twig. By May the tree is covered in large white clumps of flowers that remind people of candles and are beloved of bees, who make very fine honey from the nectar. This work by the bees also results in the flowers being pollinated and the formation of fruits and seeds.

By mid-summer it is easy to see the green prickly fruits which contain the seeds or conkers. These ripen quickly and by late September begin to fall and burst open revealing the brown shiny chestnuts inside. They are the first trees to get leaves in spring and indeed the first to lose them as well. The leaves look decidedly withered and yellow in September and are easily blown away by the winds of late September and early October. The trees are then set to overwinter in this dormant state and we have to wait until spring for the sap to rise and the cycle to begin all over again.

But why are they called "horse" chestnuts? It could be because the word "horse" in biological terms means big and coarse and the nuts are bigger and coarser than those of the edible sweet chestnut. Or it could be because the Turks used to feed conkers to horses to cure them of coughs. But it probably is because of the little horseshoe marks (complete with nails) on each twig, as if a little horse had walked there leaving its footprints behind.

In herb medicine they contain cures for varicose veins.

#### To do with Junior Infants

- Examine twigs in spring to see sticky buds and horseshoe marks.
- Note when the buds open and encourage the pupils to keep a record each year as they move up through school.
- Collect conkers in autumn and thread them on strings to play at "conkers" hitting them one off another in turn to see whose breaks first — a traditional game.
- Collect some keep in a paper bag over the winter and plant in pots in early spring. They are really easy to grow and can be planted out in their second year.

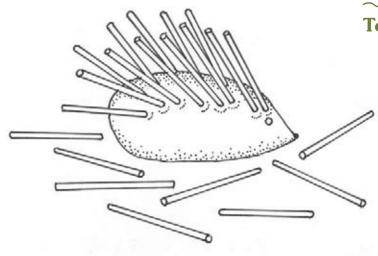


Hedgehogs were introduced to Ireland by the Danes as a source of food. The country suited them and they quickly became established in hedges, gardens and woodlands. They are carnivorous animals and feed on snails, slugs, beetles, caterpillars, earwigs and earthworms. They visit gardens at night and are often tempted by the contents of the dog's bowl — much to the annoyance of the resident dog. When they feel under threat they roll into a prickly ball which deters all enemies except badgers who are able to attack and eat them.

Hedgehogs breed in May and the young, three or four, are born in June, which gives them a good long summer to grow and put on that vital pound of fat, which they need for hibernation. They go into hibernation at the end of October and stay asleep until April. They do this — not because it is too cold — but because there is no food for them, as snails and other minibeasts are not around in winter and as carnivores hedgehogs must eat meat. Lately however, it seems that hedgehogs are producing a second litter in September. Apparently, climate

change is making our summer nights warmer than they used to be and hedgehogs are coming into season for a second time in midsummer. These poor little late babies are on a hiding to nothing as they can't put on enough fat in time to survive hibernation.

Surviving hibernation is no small feat in itself. If we were to go to sleep in October and stay asleep continuously until April, we'd wake up dead! We'd have died of hunger and thirst. So how do the hedgehogs manage? They must have a body weight of over 450 grams before going into hibernation or they won't have enough fat resources to survive. They also must slow down their metabolic rate. Normally in summer months, hedgehogs maintain a temperature of 34°C and a heartbeat of 190 beats per minute. In order for the pound of fat reserves to last for six months the hedgehog in hibernation drops its heartbeat to 20 a minute and its body temperature can go as low as 5°C.



#### To do with Junior Infants

• Learn the song "Harry the Hedgehog:"

I'm Harry the hedgehog as everybody knows

And I can feel the frosty wind nip my little nose

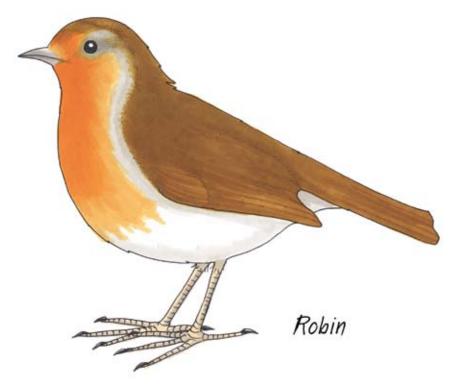
So I think it would be best if I found a little nest

Where I could lie and rest until the springtime.

 Make a model of a hedgehog using plasticine for the body and lollipop sticks for the spikes.

### Robin

Latin name – Erithacus rubecula Irish name – An Spideog



Let's start off the story of the robin in winter. This is the time when the robin visits the bird table. So, during the winter months, it is very important to put out food such as nuts and seeds, rasher rinds, bits of bread, cakes of fat even, if you are up to it, and most especially water. Come spring, however, with its lengthening days, robins leave the bird table and start to hold territories and attract a mate. They do this by singing. Only the males sing and other males know to stay away as robins are very territorial and can kill other males if they wander into their territory. A female however is tolerated and after a while they set up home together. The male collects nest material from which the female constructs a nest and fashions it to her body shape. Robins can have a clutch of up to six eggs which hatch out after two weeks and are fed by both parents with the creepy-crawly content



of the garden — spiders, woodlice, small caterpillars and the like. In a good year the performance can be repeated twice and even three times over, with the same missus of course.

Baby robins are all brown — they do not develop red feathers until they are fully grown. Once they leave the nest on their first flight, two weeks after they hatch out, they never return to it. They are fed by their parents in the garden for a few days until they learn to fend for themselves. So by the end of the summer, your robins could have had at least ten babies, which together with the original parents come to twelve — a six-fold increase in the robin population. But things don't get to this stage. Most robins don't survive babyhood. They are almost all caught by predators in the inexperienced early days of flying. They are food for the next level in the food chain. It has to be or they would all die of starvation.

By autumn the pairs have broken up and robins no longer hold territory. They will spend the winter in the garden surviving on whatever food they can find. Robins are omnivores, which means that they can digest food of both animal and plant origin. So they can survive the winter in Ireland and do not need to migrate to Africa like the swallow who can only feed on insects. But we can help them by putting out food.

#### To do with Junior infants

• Make a Christmas card with a robin on it.

# Ladybird

Latin name – Coccinella 7-punctata Irish name – Bóinn Dé



Ladybirds are very common and recognisable insects. They belong to the beetle group and have the smooth curved shiny back that is typical of beetles. This curved back is made of two hardened wing covers which open to reveal two transparent wings with which the ladybird can fly.

There are eighteen different species of ladybird in Ireland. Some of them are red with black spots such as the seven spot and the much smaller two spot. But we also have yellow ladybirds with black spots, red ladybirds with cream spots and even a pink ladybird with black and yellow-ringed spots. They are all brightly coloured and all are poisonous — to birds that is. All ladybirds are brightly coloured to warn birds not to eat them. They contain formic acid so that if an inexperienced bird were to eat one its tongue would be burnt and it would never eat another one. So the bright colour acts as a warning. In fact, if you catch one and let it walk on your hand it might secrete some of this orange-coloured liquid which — if you were a bird — would burn your tongue and you would spit it out. This is another defence stratagem.

Ladybirds themselves are carnivores and they eat greenflies. They visit gardens where there are roses, in order to feast on the greenflies that are sucking the juices out of the tender rose leaves. In the winter when there are no greenfly to eat, ladybirds will hibernate. You could make a "hotel" for them in the school garden by tying together a bundle of hollow bamboo sticks and leaving them on their side on a shelf or something above the ground. The ladybirds could climb in here and have a safe place over winter.

#### To do with Junior Infants

Learn the rhyme:

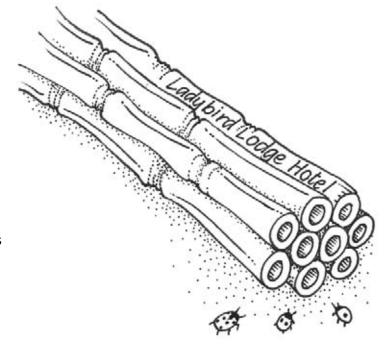
Ladybird, ladybird fly away home

Your house is on fire, your children are gone

All except one and that's little Anne

And she crept under the frying pan.

 Bring the children out to look for ladybirds at the end of May, in June and in September. Places such as rose beds, hedges, low shrubs are all good places to look. You could also shake the branches of a tree into an upturned umbrella and see if any fall down into it.



#### About the Author



#### Éanna Ní Lamhna

Éanna Ní Lamhna is best known for her environmental expertise as a broadcaster on the radio programme *Mooney Goes Wild*. Her Co. Louth accent gives her one of the most instantly recognisable voices on radio. Her ability to bring her subject to life is legendary and her no-nonsense approach to romantic views about wildlife is well known.

She is first and foremost a botanist with degrees in both botany and ecology from University College Dublin. Her interest in the environment has expanded with her work over the years, to include birds, mammals and in particular creepy-crawlies whose doings hold a particular fascination for her. Her ability to awaken enthusiasm for these creatures in her listeners is exemplified by the remark made to her lately, "Whenever I see a spider I always think of you and put it outside instead of stamping on it."

She began work in 1974 in the Biological Records Centre — in its first incarnation in An Foras Forbartha. She quickly realised that if she was to receive any biological records from the Irish public she would first have to go and teach them about Irish wildlife. So began a career of teachers' courses, radio programmes, lecturing at third level, field trips with Secondary School pupils and most significantly of all, visits to Primary Schools to teach the pupils and indeed the teachers there, about the wildlife around them.

Her publications include *Talking Wild, Wild and Wonderful, Straight Talking Wild* and *Wild Dublin*. She has just completed a five-year term of office as President of An Taisce and is currently the Vice-President of the Tree Council of Ireland.

#### About the Illustrator



#### **Christine Warner**

Christine Warner is an illustrator and calligrapher working mostly in the field of education. She provides full colour illustrations, line diagrams and cartoons for textbooks, workbooks and posters. She has worked for many educational publishers and also for Dúchas, Forfás and Trócaire.

While she illustrates material on a wide variety of subjects, she specialises in science, having science degrees from University College Dublin and Trinity College Dublin. She particularly enjoys producing wildlife illustrations and cartoons. She has been an environmental activist for many years. Christine may be contacted via email at cwarner1@gmail.com

