



## Wildlife and Habitats

The following pages describe some of the wildlife and habitats extant in Waterford. Waterford has a natural and rich heritage consisting of plants, animals and their habitats. If you spot anything unusual, please contact the Heritage Officer.

### Grey Squirrel



Ireland has two squirrel species: the native Red Squirrel and the American Grey Squirrel which was introduced at Castle Forbes, Co. Longford in 1911. The Greys have been spreading steadily ever since and reached South Kilkenny and the Suir, certainly by the late 1990s. Red Squirrels are found in many of Waterford's woods and in the rest of Ireland in places where the grey Squirrel has not yet arrived or been living in for long.

The Red species is a conifer specialist which presumably thrived on the native Scots Pine which is thought to have died sometime in the Middle Ages. The Red Squirrels themselves may also have died out until reintroduced in the 18th century, though recent DNA work in Dublin suggests that native stocks survived in the West.

The Grey Squirrel is disliked by foresters because it shreds tree bark, especially that of Beech and Sycamore. Those who study mammals blame the Greys for the disappearance of Red Squirrels from the midlands of Ireland, most likely through food competition as Greys can eat nuts and seeds before they are ripe, while the Reds cannot. In Britain the Greys carry a virus which kills the Reds and speeds their disappearance, though this has not been confirmed in Ireland.

An INTERREG Project being delivered by the WIT Mammal Ecology Unit and Waterford City and County Council in partnership with WIT, the National Biodiversity Data Centre, Natural Resources Wales, Vincent Wildlife Trust and Snowdonia National Park is carrying out research on a number of mammals including Squirrel and welcomes records of either species sighted in the City or County. Grey Squirrel were recorded in the Maypark Lane area in the City in 2011. Information on the project and public survey events is available on [www.miseproject.ie](http://www.miseproject.ie).

### Fewer Eels in our Rivers

#### What might this be telling us?

Eels have been declining fast in Europe in recent years and the speculation as to why this should be so is an indication of just how much is going on in the natural environment.



They lay their eggs in the three-mile-deep Sargasso Sea off Central America and the tiny young eels drift effortlessly on ocean currents to their growing places in North America, Iceland and Europe. By the time they reach our rivers they are able to swim and wriggle and go up the rivers. Fewer of these elvers, as they are called, are reaching our shores and this might be due to changes in the Gulf Stream.

As well as bringing us our baby eels this ocean current brings warm tropical water to our shores and keeps our climate moderate. If it were to alter significantly our climate might become much very much colder in winter-like Canadian Labrador. Any changes are cause for concern and most climate scientists believe that this may happen. They blame Global Warming. It is ironic that a feared result of average Global Warming may what they call the "big freeze" for north-western Europe.

Fish farmers find that Japanese Eels fatten faster in their farms and have imported them. With them came a parasite called Anguicola which may affect European Eels rather more than it does the Japanese ones. Many wild eels now have these little worms in their swim bladders and it is speculated that they may not be able to swim all the way back to breed off the Americas. The sea is so deep and wide than nobody has been able to find out for sure.

Others suggest that overfishing in rivers might be a cause of the decline. Eel fishing can be quite lucrative with big markets in Holland and Germany.

A big issue must be the wholesale drainage of rivers, lakes, ponds and wetlands. Every freshwater pool can contain eels and as these decrease in area, as they have been, the numbers of adult eels that swim from our shores to breed must go down. There are consequences to for some other fish; for birds and for mammals like otters, for whom Eels are a staple diet...

From deep in the water eels might be trying to tell us something about the future.

## Whales at Ardmore Head

### Watching Whales in Waterford

Andrew Malcolm, local organiser of the Irish Whale and Dolphin Group, gives an account of a nice few hours' watch from the old concrete look-out on Ardmore Head. On the first day Common Dolphins were about a good bit; splashing and jumping in two groups of about twenty. The only bigger animal was a Fin Whale. These are the second biggest species of mammal ever to live and are always a spectacular sight on a calm day breaking the surface to blow out a twenty foot tall narrow "blow" of vapour, usually three times in a row and then diving down deeper for a few minutes.

The Common Dolphins were about on the second day too while there was a visit by two Risso's Dolphin, pale grey and about twelve feet long. For a while two more large whales surfaced a few times breathing out a smaller more "puffy" blow, which suggested that they were Humpback Whales. Humpbacks have become famous in recent years since it was discovered they give hours-long successions of calls which have become known as songs. Hearing these requires a boat and a special underwater microphone.

For whale-watching you need a calm day with good visibility. A telescope or binoculars are essential as the animals are usually over a mile offshore. During the year, weather permitting, Andrew and a few others run whale watches at Ardmore Head with some telescopes to see what is about. All are welcome to join in. To find out details on upcoming events or report sightings contact Andrew Malcom on 087 795 2061 or check the Irish Whale and Dolphin Group website- [www.iwdg.ie](http://www.iwdg.ie).



## Japanese Knotweed



The white flowers of Japanese Knotweed *Fallopia japonica* bloom in late summer and make these tall clump-forming plants very noticeable on roadsides and riversides throughout Waterford.

Japanese Knotweed came to Ireland as an ornament for 19th century gardeners but soon spread in the wild by underground stems. Today it is often spread when pieces stick to the mud on digging machines and fall off in new places.

In its native Japan the knotweed is kept under control by a range of wild creatures which eat it, damage it or infect it. It therefore contributes to the natural food chains and ecology. But in Western Europe it has a free rein as it has left all its enemies at home and grows unhindered. Many people see it as a nuisance because it crowds out native plants and damages paving, tarmac, flood defences and archaeological sites. It blocks anglers' access to riverbanks and produces none of the trout food (caterpillars etc) that native backside vegetation does. It dies down in winter leaving bare, easily eroded soil that washes into rivers as silt.

One of the bigger stands in County Waterford is at Ballyvoyle Bridge over the Dalligan river on the coast near Dungarvan. Getting rid of it is expensive in time and systemic weedkillers. Prevention is often best at an early stage before the clumps grow too big.

The more landowners who tackle it (with advice from the local fisheries board on watersides) the better. But nationally the problem is a huge one and is growing all the time.

In Ireland Section 56 of the Wildlife (amendment) Act 2000 says that anyone who plants or otherwise causes to grow in a wild state in any place in the State any species of (exotic) flora, or the flowers, roots, seeds or spores of (exotic) flora shall be guilty of an offence.



## Waterford's Coloured Wood Anemones



Many of Waterford's woodlands have low patches of the snow-white Wood Anemone *Anemone nemorosa*, flowering in Spring. These plants grow in dappled shade, especially as found along woodland edges and along the sides of paths. Walkers in Glencairn and Ballysaggartmore Woods might have noticed a little bit of variation in the colour with pink tinges in some of the clumps. Blue forms may exist but seem harder to find.

In the past, when wild flowers may have been more abundant and plants were not so easily available from the nursery trade, people were more inclined to dig up woodland flowers for their gardens and of course they were attracted to the unusual.

In this way, County Waterford is the origin place of two cultivated varieties (cultivars for short) of Wood Anemone. *Anemone nemorosa* Lismore Pink and Lismore Blue (Currey's Blue and Currey's Pink are alternative names) are to be found advertised on the websites of several British nurseries. Dr. Charles Nelson's book *A Heritage of Beauty, The Garden Plants of Ireland An Illustrated Encyclopaedia*, published by the Irish Garden Plant Society in 2000, describes them as having been collected from the wild in woods near Lismore by a Miss Fanny Currey at about the beginning of the twentieth century.

Plant cultivars are usually propagated vegetatively; by stem or root cuttings or by digging up clumps and dividing them. Some crop plant cultivars grow true from seed by a sort of virgin birth called apomixis; examples of these would be wheat, barley and oats.

Interesting cultivars, even those of economic importance like agricultural crops, can go out of fashion quite easily and many go extinct. Ireland's National Biodiversity Plan (website: <http://npws.ie/PublicationsLiterature/>) has a policy that addresses the conservation of genetic diversity of crop plants and of wild species

## Ragwort - Buachalán

This common plant is a headache to farmers in many parts of the county as the dried leaves and flowers contain at least three prolizidine alkaloid poisons (jaconine, jacobine and jacodine) that can kill livestock by causing copper to build up in their bodies and by causing cirrhosis of the liver.

The name ragwort means ragged or useless plant, referring to the ragged-looking leaves and to the lack of uses that people have for it. Grasslands and waste ground with bare patches are good seedbeds for Ragwort which often thrives on roadsides which are not grazed at all. On the other hand, overgrazing of grass by horses or cattle can cause a build up of nasty-tasting Ragwort plants and, if the animals are left hungry, they may overcome their dislike of it and be poisoned. Ragwort tastes less strong when dried or fermented in hay or silage. Contaminated fodder is therefore very dangerous. The Department of Agriculture is campaigning at the moment for people to control infestations of Ragwort as well as of docks and thistles.





Cinnabar Moth caterpillars eat the leaves of ragwort and store the poison in their bodies along with some foul-tasting materials which make eating them a nasty and dangerous meal for birds-which therefore avoid them. Like many poisonous animals they are brightly coloured, as if to warn off enemies,-in this case with fetching black and amber stripes. Cinnabars are apparently not good ragwort controllers.

Ragwort flea Beetles *Longitarsus jacobaeae* are much better controlling agents and can cause plants to weaken and die or to produce very few seeds. But for creatures like the Ragwort Flea Beetle to survive there has to be respect for what is called biodiversity. Farming and other land management has to allow at least patches-preferably patches joined up by hedges etc.-where a variety of wild plants can thrive. Sheep graze off young Ragwort plants and grazing with a mixture of livestock is often best for biodiversity.

## Nuisance Plants on the River and a Dutch Nature Reserve



The Canal in Lismore was built by the Dukes of Devonshire to enable them to trade in timber and coal and to bring in the Derbyshire Gritstone with which the Castle, the old railway station and some other buildings in the town are faced.

Himalayan Balsam, an escaped garden plant has established itself all along the freshwater sections of the Blackwater and tends to crowd out other plants. It has large pinky flowers which open in July. Some of these invasive species thrive here because nothing in this country eats them. This means that they can grow much more than they would in their home countries where a suite of insects, fungi etc will keep them in check. This also means that they contribute nothing to the food chain in the Irish habitats that they dominate.

Balsam has started to colonise the Lismore Canal in the last few years. When the present group of domestic geese was introduced, it was hoped that they would keep Balsam in check by eating shoots, leaves or seeds. But this seems not to have happened. A determined conservationist carried out an experiment putting leaves and seeds with some bread, but the geese were happy with the bread and actually spat out all the Balsam. Perhaps the new generation of geese pictured here will grow up to develop a taste for the weed and graze it down.

Elsewhere, geese, especially wild Greylag Geese do enhance biodiversity in habitats by their grazing. Anyone who goes to Amsterdam should visit the huge 6000 hectare Oostvaardersplassen (East ford place) Nature Reserve beside nearby Almere on the Flevoland Polder, east of the city. There you will see how wild geese along with gone-wild horses and cattle and Red Deer are keeping open patches in the reedbeds, woods and grassland and allowing a wide biodiversity to thrive.

## Rabbits in Place Names

### What Placenames can tell us

The sand dunes at Tramore are known as the Burrows. The name is a reminder of what valuable properties sand dunes were in Norman times when meat was costly and rabbits were valuable livestock.



Rabbits were first brought to Ireland by the Normans who had difficulties in getting them to dig burrows and settle down. Rabbits are slow diggers and it takes generations to dig the long tunnels that are everywhere in the countryside today. Loose soil is easiest to dig and in most new rabbit warrens the overlords had to employ a team to dig soil into what is now known as a "pillow mound" of loose soil. This expense was unnecessary in soils that were naturally loose and sandy. Sand dunes were therefore ideal for use as rabbit warrens and so many sand dunes continue to be called Burrows. An exception is the Connigar at Dungarvan. This name comes from Coney Garth. Conin/coney is Old French for an adult rabbit-only the half grown young were called rabbits then-and Garth was an enclosure.

Sé an leagan Gaeilge atá ar "Tramore Burrow" ná "An Dumhach/Dabhach", focal a chiallaíonn "sandhill". Tá an tuiséal ginideach den bhfocal seo sa logainm "Gort na Daibhche" sa Rinn. De réir 'Placenames of the Decies' le Very Rev. P. Canon Power, "Reel na Daibhche is the tune played by the phantom band of the "Seahorse", still occasionally heard on the Burrow". Deir sé freisin go raibh sean-iarsmaí le fáil ar an Dumhach ón ré phalaeliotach agus go raibh "kitchen middens sometimes exposed after storms, and ?.fragments of red deer antlers, etc. are found from time to time".

Maidir leis an gCoinigéar sa Rinn, tugann Canon Power "Rabbit Warren" mar bhrí ar an ainm, rud a thagann leis an míniú atá tugtha thuas. Glaotar "An Chois" ar an áit go háitiúil freisin, agus is spéisiúil é tabhairt faoi deara go bhfuil foroinn tugtha ag de Paor i nDumhach na Trá Móire darbh ainm "The Cush" nó "An Chois" freisin. Sé an míniú a thugann sé air ná "The Place Lying adjacent to (the Sandhill). Tagann 'cois' ón bhfocal 'cos' ('a foot') agus deir de Paor, "(it) is applied in toponomy to a level tract at the base of a slope."

Is spéisiúil mar sin an éagsúlacht brí atá ar an dá leagan den logainm sa Trá Mhór: 'Burrow' versus 'An Dumhach', chomh maith leis an ceangal idir é agus Coinigéar na Rinne. Ach is fíor le rá go raibh tábhacht nach beag ag an gcoinín bocht i saol na ndaoine mar shócamas. Mar a deir an seanfhocal, "Is fearr greim de choinín ná dhá ghreim de chat" ("quality is better than quantity")!

## Heather Burning



### The end of the Heather burning season

The end of February marks the end of the season in which upland heather can be burnt. To protect ground-nesting birds and other wildlife, burning is not allowed from the beginning of March up to the end of August. Grouse start selecting their nest sites in March. They may be County Waterford's most threatened bird species and they should benefit from the close season.

Burning is a practice that has gone on for thousands of years and the existence of heathery habitats probably depends on it. The National Parks and Wildlife Service (NPWS) believes that the best interval between burns on any piece of ground is about fifteen years and that



burns should be in smallish patches of varied sizes-garden-sized. Grouse eat the tender shoots of short heather plants and hide their nests among the taller plants. Burning heather in patches that are too big separates much of the feeding ground from the shelter and makes it hard for young chicks to hide. It also means that as the heather grows tall in very big patches, future fires can be uncontrollable.

Where heather grows in a mixture with the tall poisonous Bracken Ferns, burning can often lead to the Bracken taking over completely from the heather, which benefits nobody as sheep do not eat it and the spores are dangerous for people to breathe in during the summer months. In the past, mixed grazing was commoner and cattle, horses and sometimes maybe even pigs were allowed to graze on uplands and between them they apparently kept the balance between heather and bracken. Flocks of sheep on their own unfortunately help bracken to as they eat most other plants and leave it behind to thrive on its own.

Legally, any fire on the mountain should be attended while it burns so that people are not put in danger and so the fire can be put out before the burnt patch grows too big.

## Tree Protection

### How are trees protected?

In general, trees are protected in Ireland under the Forestry Act of 1946 which means that anyone who wants to cut down a tree needs a Felling Licence from the Forest Service. There are exemptions for trees that are within 100 feet of a building and there are certain other detailed exemptions in urban areas and for trees that are certified to be dangerous.

Tree Preservation Orders (TPOs) are made by local authorities and are a Reserved Function, which means that they must be enacted by vote of the elected Members of the Council. Most TPOs in Ireland have been made when the Forest Service asks a local authority for its view on the issue of a felling licence. If the authority wants the trees to be preserved on amenity grounds, it has the option either to acquire the tree(s), or to make a TPO under the Planning Act of 2000.

So far seventeen TPOs have been made in Co. Waterford and they are listed in the County and City Development Plan. Anyone considering actions that might endanger trees covered by a TPO would have to apply for Planning Permission to do so.

The value of some of the county's best specimen trees is detailed in the publication - The Champion Trees of Ireland: A Selection of Ireland's Great Trees; published by the Tree Council of Ireland. It lists thirty seven of County Waterford's finest trees. But it does not claim to list all of the important trees in the county. The trees in Lismore Castle's Yew Walk are among the many that would take literally centuries to replace by replanting.

## Chinese Mitten Crab



## A potential nuisance species.

In early January (2006), anglers James McCartan and Jim Flinders reeled in a crab at King's Channel ("Peg's Hole") in the river Suir estuary. Its claws (which had got tangled in the fishing line) had a furry growth that made it look as if the animal was wearing mittens. They soon worked out that they had found Ireland's first Chinese Mitten Crab.

This was not good news as this species can radically change the ecology of rivers and estuaries by multiplying into huge populations and competing with or eating local species—perhaps including the now rare and protected Twaite Shad fish. In the German river Elbe, up to two and a half tonnes of Mitten Crabs have been caught per day in some years. The Thames, Humber and Tyne rivers in eastern Britain have huge infestations, but, interestingly, the Severn in the west seems to have a population that remains small in numbers.

These are burrowing crabs and such huge numbers can undermine riverbanks all the way up into freshwater reaches. Unlike all native crabs they can migrate hundreds of kilometres up-river. Mitten Crabs can reach new countries in ships' ballast water. Some countries are so concerned to keep Mitten Crabs out that they regulate the disposal of such water out at sea, well away from rivers.

The Mitten Crab grows to full size in 1 year, about 5 centimetres across the brown squarish shell which has three forward-pointing spines along each side. Only males have "mittens". The tips of the claw pincers are pale or white. There is a notch between the eyes. The legs are longer than those of other local crabs.

Inland Fisheries Ireland is keen to receive any specimens that people might find. Frozen or alcohol-picking are good preservation methods.

The local contact is: **Alan Cullagh (087 252 5743) who will welcome any information at all.**

**Lastly, a warning for seafood fans: Mitten Crabs can transfer a lung fluke parasite to humans who eat them.**

## World Wetlands Day and a Local Butterfly

The second of February each year is World Wetlands Day. It marks the date of the signing of the Convention on Wetlands on 2 February 1971, in the Iranian city of Ramsar on the shores of the Caspian Sea.

Waterford County council carried out a wetland Survey in 2006 and 21 locally important wetlands are now included for protection in the Development Plan.

Infilling, drainage and the closing off of river floodplains have been harmful to the interests of people and nature. A wrung-dry landscape has little capacity to provide clean reliable supplies of water. The late Professor Frank Mitchell of Trinity College wrote in the 1970s that





"We are gradually ceasing to regard water as something to be first polluted, and then hustled into the sea as rapidly as possible, carrying its pollution with it." A hopeful recent sign is that the first words of the European Water (Framework) Directive 2000 has as its first words: "Whereas: (1) Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such".

Clean reliable water supplies can never be taken for granted and most people in the world do not have such a luxury. Even in rainy countries like Ireland there are regions whose water supplies are problematic and the new EU Directive lays down an integrated approach to conservation of water everywhere in the landscape.

One specialist wetland species that used to live in several places in Co. Waterford has not been recorded, despite much searching, in the last few years. The Marsh Fritillary butterfly may be a local casualty of changes in the county's wetlands that are not yet well understood.

## Holly & Mistletoe

Among the plants that are symbols of Christmas Holly and Mistletoe are perhaps the best known.

Only holly is native to Ireland having the Irish name of Cuileann. Its evergreen leaves represent immortality, the spines recall Christ's crown of thorns and the red berries drops of His blood.

Mistletoe has white berries and the custom of kissing under it suggests more pagan associations. It is not known to be native to Ireland but it does have an Irish name: drualas, whose origins might make an interesting study.

Waterford is one of the few areas where both species grow; Holly is in every parish while Mistletoe may be confined to just one or two gardens near Waterford City where it grows on a few old apple trees. It does not seem to have spread to other suitable trees in the area and an examination of about twenty berries in 2001 revealed only shrivelled infertile seeds inside. Perhaps the apple trees were imported long ago from a foreign nursery with the parasitic mistletoe already growing under the bark. There are only about a dozen or so Mistletoe sites in all of Ireland.

Some time in the past the symbolism of the Holly and Mistletoe got muddled a bit when nurserymen found a freak white-berried holly which they propagated as a cultivated variety (cultivar). In the 1970s Dr. Susyn Andrews of the Savill Gardens in Windsor wanted to grow some but could find no living bush to propagate and concluded that this cultivar had died out. The only positive response that she got to her extensive enquiries was from Dungannon, Co. Tyrone. A respondent told of having seen white berries on Holly in a market in the mid 1960s and of tracing the source but reaching it only to find that the bush has been destroyed. They might have concluded that the Christian symbols of Christmas Holly had somehow re-asserted themselves.

But the search continues for white-berried Holly. Yellow-berried Holly is common in the nursery trade under the name *bacciflava* and is of no interest in this context. Any news would be appreciated at 086 830 7092.



## Waterford Deer



**Fallow Deer by Billy Clarke. This illustration first appeared in "Exploring Irish Mammals" by T. Hayden and R. Harrington**

### Fallow Deer were brought to Ireland by the Normans...

In Autumn Fallow Deer bucks (males) round up groups of females (does) and demonstrate their health and strength by fighting with other bucks; chasing them off and by making strange deep throaty belching grunts. They vary in colour from white (there is a white herd at Mallow.) through browns-with-white-spots to nearly black. This variation may have been developed by park-keepers who favoured particular sorts-truly wild animal populations are usually much less variable. County Waterford's Fallow Deer are probably all descendants of escapees from demesne parks near the Blackwater. Six townlands in the county are called Deerpark, suggesting the widespread keeping of these animals in the past. The older bucks grow antlers that are flattened out along much of their length.

Red Deer died out in the county over one hundred years ago. They are much bigger than Fallows and the males make long loud roars during the mating season in October. The stags' antlers are not flattened and can have up to six or more points each. The coat is russet in summer and greyer in winter. A few Red Deer have escaped from County Waterford deer farms in recent times and some may still be about, usually in forest plantations.



Sika Deer are a sort of miniature Red Deer that evolved in Japan. Some of these have strayed from captivity in eastern County Waterford over the last few years and are now establishing themselves in the wild. Unlike the other two deer species the stags make loud piercing "whheeeeeoooo" whistles in the mating season; usually three times together. On first hearing these night time noises many people imagine them to be made by birds. The antlers never have more than four points and the face has a wedge-shaped colour pattern that looks like a rather angry frown. The females are brown with white spots while in autumn the stags are nearly black.

Deer numbers in Ireland are increasing as more forest plantations appear and provide shelter. In large numbers deer can significantly damage trees, crops, gardens and fences.

## Orphaned Wildlife

### Orphaned Wildlife - Leave well alone.

This is the time of year when those publicly concerned with wildlife get regular telephone calls from people concerned about apparently abandoned young birds, foxes, deer and other wildlife. The answer always has to be: leave well alone.

Most young wild animals go through a period when they are being fed away from the nest or den and their inexperience leads them into danger. Most in fact die at this stage and if this were not so, the world would be overwhelmed. We cannot value the lives of every young wild animal as we value every human life. We are not responsible for the welfare of mammals and birds living in the wild in the same way that we are responsible for domestic pets and livestock.

Deer and hares leave their newborn young hidden in cover where their only defence against predators is the fact that they have little smell to attract meat-eaters and that they lie very still and stay quiet. A nest full of baby birds is a tempting meal to any carnivore and it makes



survival sense for the infants to go and hide separately, even before they can fly properly. Their hunger calls prompt the parent birds to come and feed them.

Hand-reared creatures stand even less chance of survival after release into the wild than those reared by their parents. Sometimes an obviously injured animal will have to be put down to alleviate distress and this may be a job for a vet. Wild species are almost never suitable for keeping as pets in the way that dogs and cats are, with their thousands of years of domestication history. So, again, the message must be: leave well alone.

## Champion Trees in County Waterford



**The bark of Ireland's second biggest Cork Oak; growing in a Co. Waterford garden. The bark is nothing like thick enough for cutting into bottle stoppers as it would be in the Mediterranean climate**

County Waterford can boast of the tallest Sitka Spruce in Ireland (it grows in the arboretum at Curraghmore and is the second tallest tree of any kind on the island of Ireland. The thickest Ash Tree in Ireland is to be found here too as is the tallest Wild Cherry Tree.

All this and much more is to be found in the book: *The Champion Trees of Ireland, A Selection of Ireland's Great Trees*; published by the Tree Council of Ireland. It lists the finest trees county-by-county and gives some details of each. County Waterford is well represented. Page 47 tells us that three hundred and twenty seven trees have been measured here. Details of height and of trunk circumference (girth) are given of thirty six of the finest.

All but one of the thirty six grow in parks and gardens of the demesnes that are plentiful in the Blackwater and Suir valleys. All are on private property;

The huge Sitka Spruce mentioned above, Ireland's tallest Scots Pine and some other magnificent specimen trees can be seen from the avenues of Curraghmore Estate, Portlaoise. This is the property of Lord Waterford who allows access to walkers from 8.00 A.M to 4.00 P.M.; Monday to Friday. Access to anywhere off the avenues in Curraghmore is by prior appointment only. Among other estates well represented in the Waterford chapter are Lismore Castle, Cappoquin House, and Mount Congreve, which all have opening arrangements.

Finding and measuring big specimen trees will never be finished and it is expected that several more will turn up in Co. Waterford. So far most work has been done in the big estates with well-known tree collections. There may well be surprises elsewhere. Most of the measurements were made by Aubrey Fennell, while employed by the Tree Council of Ireland.



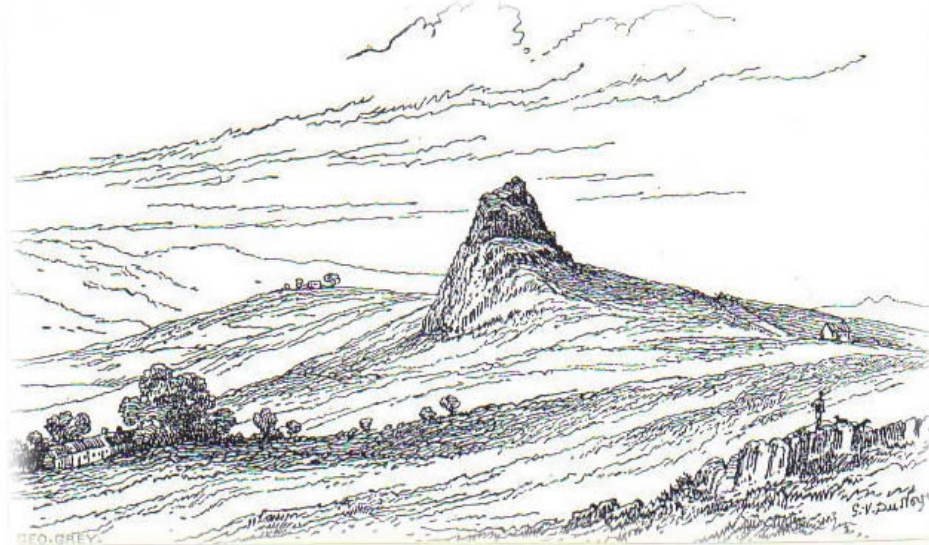


Comhairle Cathrach & Contae Phort Láirge  
Waterford City & County Council

The book is available from the Tree Council of Ireland at Cabinteely Park, Cabinteely, Dublin 18; or from bookshops (ISBN 0-9519147-9-0).  
Title Photo caption. The bark of Ireland's second biggest Cork Oak; growing in a Co. Waterford garden. The bark is nothing like thick enough for cutting into bottle stoppers as it would be in the Mediterranean climate.



## The Sugar Loaf Rock



**View of Sugar Loaf Rock, S. of Waterford, looking westward, visible from many parts of the Counties of Wexford and Kilkenny**

The picture appeared in a published explanation to the mid 19th century Ordnance Survey six inch maps. It shows a rocky outcrop in Knockeen townland, north of Tramore, that is now not as visible as it once was, due to the growth of trees that were planted in the 1960s. Knockeen Dolmen, a Portal Tomb of New Stone Age (Neolithic) date is just one kilometre away to the east-south-east. Given the proven relationships of some Neolithic monuments to features on horizons, it is tempting to ask just how forested Ireland was in ancient times. How much did Stone Age cattle grazing keep trees down?

The artist was George Victor du Noyer, a Huguenot (descendent of French Protestant refugees) Irishman who lived from 1817 to 1869. From 1834 to around his rather early death, he was a draughtsman with the Geological Survey of Ireland. He did hundreds of landscape drawings to illustrate geological structures and he often exaggerated the rocks a bit; sometimes so much so that he could be called a geological caricaturist. He might even have left out any bushes and trees that he felt were in the way. The Romantic Movement in art and literature was very much alive then; Romantics liked crags to be craggy and this drawing of the Sugar Loaf is certainly that.



There are hundreds of steeply conical hills in countries that use the English language-all named after the then familiar shape of sugar loaves. An example on the internet is to be seen at <http://www.mawer.clara.net/loaf.html>

It would be interesting if anyone had pre-1960s photos that show the Sugar Loaf from the East before the trees were planted. They might show how much the artist exaggerated the cragginess.

Du Noyer also produced paintings and drawings of other Waterford views: Mount Misery; Ballyvoyle Head; Coum Mahon; Waterford Harbour; Coumshingaun from half a parish away; and he did a nice sketch of Cloughlowrish; the Speaking Stone in Durrow at the bridge over the River Deehil.



Comhairle Cathrach & Contae Phort Láirge  
Waterford City & County Council

## Scots Pine Trees in the Knockmealdowns



With its bluish needles and red-flushed bark the Scots Pine is one of the most beautiful conifers that can grow in Ireland. The leaves, known as needles are grow in pairs held together at the base. Its timber, when grown slowly, is of good quality and is known as Red Deal. Scots Pines are found growing wild in many countries, from Scotland to Spain and right across to Siberia.

Some of the finest plantations of Scots Pines in Ireland are to be seen from the Vee Road between Lismore and Clogheen. Many of these were planted by people working for the Lismore Estate.





People who study trees often distinguish between trees that came to Ireland naturally (native species) and those brought in by people. Ireland's bogs are often full of logs of "Bog Deal"; good evidence that Scots Pines were growing here well before farmers came who could have planted them. The distinction is important because native species usually spread carrying lots of insects and other animals that provide food for birds etc. Introduced species often contribute little to the food chain that supports wildlife.

The Scots Pine seems to have died out on this island sometime in the Middle Ages and to have been brought back by foresters from Scotland around the seventeenth century. The natural chemicals in the leaves and cones of the Knockmealdown pines suggest that they are related to others in Eastern Scotland.

One Scots Pine population in North-west Scotland; around Loch Maree, seems to be related to Spanish Scots Pines rather than to its Scottish neighbours. This leads scientists to suggest that this is a stock that got to Scotland from land now under the sea between this island and Spain. Perhaps it spread to Scotland via Ireland and over the ancient land bridge. They suggest that the Loch Maree trees represent the native Scots Pines of Ireland, now growing wild only in exile.

## Waterford's Caves contain Lynx remains...

One of Waterford's 27 caves is notable as a site of Ireland's only remains of the Lynx, a spectacular wild cat, about Alsatian dog-sized with pointed tufts of hair on its ears, long legs and a very short tail. The bones were found in about 1934 by archaeologist Hallam Movius, deep inside Kilgreany Cave near Cappagh. The bones were dated in the last few years and showed that the animal lived over 8,500 years ago in the Middle Stone Age (Mesolithic) before farming came to Ireland.

Where lynx live now in Europe, they specialise in feeding on small deer like Roe Deer and young Red Deer. Interestingly, it is now believed by archaeologists that Ireland's Red Deer are not native at all and were introduced thousands of years later in the New Stone Age (Neolithic). So what were Ireland's Lynxes eating all that time ago? It seems that the only likely prey for them then were hares and birds—a very unusual lynx diet. Ireland has very few ancient native mammal species—most were brought in by people.

But the discovery of that one lynx bone does suggest there were native deer in Ireland but that nobody has managed to find their bones. It also shows just how important caves are as a history book of Ireland's distant past. Counties Waterford and Cork have among the most important of all Irish caves because this area was not as icy as elsewhere during the last Ice Age. They are the most likely places in which discoveries can be made in future about Ireland's ancient animal populations.

Some people in Scotland feel that Lynx should be re-introduced there, where they have also become extinct. The purposes would be to conserve the species by creating new populations; to control the numbers of deer which are now too high and are damaging woodlands and to add to the excitement of walking in the Highlands. But Lynxes do sometimes eat sheep and not everybody would welcome them.