

Tree Spotting

at Carnfunnock Country Park

A useful guide to identifying our most common trees



A Larne Borough Council Publication

Carnfunnock Country Park

Like most landed estates Carnfunnock offered prestige to its wealthy owners, the Agnew family (1850 - 1865), the Chaine family (1865 - 1937) and the Dixon family (1937 - 1957).

Over the years this land has been farmed, developed and changed in keeping with the ideals of landscape beauty and fashion of the time, resulting in mature tree lined avenues and woodlands. The parks limestone soil made it suitable for trees, such as Beech, Ash and Lime whilst species, such as Sycamore and Scots / Austrian Pine, were planted to provide shelter from the strong coastal winds. As the park's trees continue to age there is an ongoing commitment to replant. You will also find many young species of trees spread throughout the park.

Trees of Carnfunnock

Trees are one of our most important plants providing an important landscape feature and valuable habitat. There are 3 types of trees planted here:



Native Trees

These trees are defined as native as they re-colonised after the ice began to melt around 10,000 years ago. This melt water filled up the North Channel and eventually cut Britain and Ireland off from Europe. Native trees in particular provide an important habitat for a large variety of flora and fauna including insects, birds, mammals, fungi, lichens and wildflowers. Examples include: Ash, Rowan, Wych Elm, Oak, Cherry, Scots Pine, Alder and Birch.



Naturalised Trees

Over several hundred years ago these species were imported to Britain from faraway places, for their edible seeds, fruit and timber. These trees have now become naturalised. Examples include: Horse Chestnut, Sycamore and Beech.



Newcomers

These species were introduced for either timber or ornamental purposes. For example: Larch, Cabbage Tree, Sweet Chestnut, Monterey Cypress, Austrian Pine and Lime. The Wildlife Garden was originally part of the Cairndhu estate, which was owned by Lady Dixon's family (1878 -1947). Lady Dixon was a great plant collector and many of these exotic species were gifted to her or brought back from her travels abroad.



Max. Height: 45 metres **Lifespan:** 200 to 300 years.

Shape: Tall broad spreading domed crown.

Wildlife Value: Good for hole nesting birds and supports up to 68 species of invertebrates and 200 species of lichen.

Tree Year: Flowers (April); Leaves (May); Fruit (June); Fruit ripens (September/October); Leaves fall (October).

Bark / Twigs: Long straight trunk with smooth greenish / grey bark, which darkens and becomes split by long ridges as the tree ages. In winter / spring its jet-black buds contrast with its thick grey green twigs.

Leaves: The leaf has 9 - 13 long tipped leaflets, each up to 10 cm long. It is one of the last native trees to come into leaf. The leaves usually fall when still green.

Flowers / Fruit: Purple coral like male and female flowers often occur on the same tree, on separate twigs. The first flowers do not appear until the tree is 30 years old. The fruits hang in clusters of long, narrow winged 'keys', which are each about 3 cm long and ripen from green to brown.

Wood Used for: Sports equipment such as hockey sticks and tennis rackets, tool handles, furniture, ladders and tabletops.

Best Locations to See: Around the Activity Centre, Biodiversity Trail and the top walks.



Woodlandpictures/Steven Kind





Max. Height: 40 metres
Lifespan: Up to 500 years.
Shape: A broad spreading tree with the trunk usually forking into a Y shape. Unlike other elm species, it does not produce suckers to create new trees but reproduces from seed.
Wildlife Value: Supports up to 81 species of invertebrates.



Tree Year: Flowers (March - May); Leaves (May); Fruit ripens (May / June); Leaves fall (October).

Bark / Twigs: Grey to dark brown bark, which is smooth in young trees but, as it ages, develops long vertical ridges.

Leaves: Its dark green leaves are alternate, about 15 cm long with bristly hairs both on top and below making them rough to the touch like sandpaper. They are double toothed, shaped oval or round in the middle and have a long pointed tip. The base is unequal and sometimes covers a short stout stalk.

Flowers / Fruit: Its purplish flowers grow in clusters before the leaves appear. The fruit is a small winged seed chamber, like a papery disc, about 1 cm across, which ripen from green to brown.

Wood Used for: Furniture, coffins, cartwheels and boats.

Best Locations to See: Biodiversity Trail, Drains Bay walk and path from Walled Garden to Caravan Park.



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Other Elms

Originally there would have been many English Elm (*Ulmus procera*) growing in the park. However they have been more prone to Dutch Elm disease than Wych Elm, as they reproduce by suckers. The disease is caused by the elm bark beetle tunnelling under the bark of the tree carrying with it a fungus, which invades the tree and blocks the flow of life-giving sap. This process causes the tree to die.

Irish Yew (*Taxus baccata* 'Fastigiata')

1



The Irish Yew originated from the Common Yew, in a place near Florence Court, County Fermanagh in about 1760.

Max. Height: 28 metres.

Lifespan: Not known - very slow rate of growth with trunk increasing only 0.5 - 1mm in diameter each year.

Shape: Straight and narrow column.

Wildlife Value: Limited - only supports a small number of insects. Berries are eaten by birds in winter.

Tree Year: Evergreen. Flowers (March / April); Fruit ripens (October).



Bark / Twigs: Branches point up bushily from a central trunk. The dark brown / reddish coloured bark flakes easily.

Leaves: Its dark green curved needles are lighter underneath and poisonous.

Flowers / Fruit: The yellow catkin like male flowers and green bud shaped female flowers are borne on separate trees. The red fleshy fruit is cup shaped and the dark single seed at its base is poisonous.

Wood Used for: Fine furniture, carving and fencing.

Best Locations to See: Walled Garden.



Common Yew (*Taxus baccata*)

Unlike the Irish Yew, the Common Yew does not grow upright but forms a massive broad headed tree up to 25 metres tall. It grows very slowly, in an unusual way, as its branches root themselves to the ground and grow to form new trunks. It can live up to 1,500 years and continues to grow width ways, which is why the trunk is often hollow when the tree is very old. Unlike the Irish Yew its leaves are straight. It was once used to make medieval longbows, spears and dagger handles.

Best Location to See: Walled Garden entrance and Home Farm lane.



Scots Pine (*Pinus sylvestris*)

1



There are over 100 pine species worldwide but this is the only one native to Britain. In 300 AD the Scots Pine died out in Ireland and was reintroduced in about 1800.

Max. Height: 40 metres.

Lifespan: Up to 300 years old.

Shape: When young it is fully branched and has a narrow outline. As it matures it loses its lower branches and develops a flatter spreading crown with high branches.

Wildlife Value: Excellent - attracts over 172 invertebrate species.

Tree Year: Evergreen. Cones (May - June) Cones fall 3 years after fertilisation.

Bark / Twigs: Young trees have grey / green bark. Older trees have rusty brown / orange bark on the upper trunk cracked into small, smooth plates with thick, scaly dark grey / brown bark on the lower section.



Woodlandpictures / Pat Herbert



Leaves / Cones: Flat blue / green twisted needles, 4 - 8cm long, arranged in pairs. The male flowers form a yellow cluster around the base of young shoots but soon fall to the ground. The red female flowers are carried in pairs at the end of the current year's shoot and ripen to a greyish / brown egg shaped cone, 5 - 7.5 cm long. Winged seeds are released when the cone's scales open.

Wood Used for: Fencing, joinery, flooring, poles and turpentine.

Best Locations to See:

Along Biodiversity Trail, Nature Reserve and top walks.



Austrian Pine

3

(*Pinus nigra*)

The Park's other pine tree is the Austrian Pine (also known as European Black Pine), which was introduced to Britain in 1835. It differs from the Scots Pine in that it has very dark grey, almost black bark. Its dark green / black needle pairs are longer at about 8 - 16cm, grouped in distinctive whorls on the branchlets and are much stiffer than other pines. Its brown, rounded woody cones are also larger than Scots Pine and it has a more densely branched, darker, conical shaped crown.

Best Locations to See: Main Car Park and Biodiversity Trail.



Common Alder (*Alnus glutinosa*)

Up to 25 metres tall. Grey or brown bark with ridges. Leaves are very rounded and flat topped with 4 - 7 pairs of veins, which go black in autumn. Male catkins are dark yellow, female catkins are purple, longer stalked and mature to green cones, which turn black after the seed is shed. Catkins (March/April); Leaves (April / May); Leaves / fruit fall (winter). Up to 141 invertebrate species feed on alder.



Best Locations to See:

Activity Centre, Golf Course and Main Car Park.



BIRCH Up to 334 invertebrate species have been recorded on birches. The following types can be found intermixed together around the Maze, Activity Centre, Main Car Park and Golf Course:



Silver Birch (*Betula pendula*)

Up to 30 metres tall. Silvery / white bark and drooping branches. Leaves are triangular toothed with pointed tip held on a hairless stalk. The base of the leaf is straight. Hanging purple/brown male catkins and slender green upright female catkins. Catkins stay on the tree until winter when they break up into scales and winged, wind-borne fruits. Female catkins / Leaves (March / April); Seed dispersal (September / October); Male catkins (autumn); Leaves fall (November).



Downy Birch (*Betula pubescens*)

Up to 25 metres tall. Its bark is darker than Silver Birch. Branches do not droop down but tend to twist and it has fewer and thicker branches than Silver Birch. The leaf lacks the long point of the Silver Birch, being more rounded. Its teeth are more even in size and it has a hairy stalk and hairy veins underneath. The base of the leaf is also triangular or rounded. Catkins, fruit and tree year similar to Silver Birch.





Rowan - Mountain Ash

(*Sorbus aucuparia*)

Up to 10 metres tall. Smooth grey / green bark. Leaves are similar to Common Ash but smaller, 3 - 6cm long, and more numerous with up to 15 leaflets. Dense clusters of small creamy white flowers appear in May / June. Red berries appear in August / September and are very popular with songbirds. The leaves turn yellow and red in autumn. Leaves fall October.

Best Location to See:

Around Visitor Centre and path between Ice House and Wildlife Garden.



Cherry

There are a number of species of cherry in the park. The following types can be found near the Golf Course, the Maze, Biodiversity Trail and on the path between the Ice House and Wildlife Garden:

Wild Cherry (*Prunus avium*)

Up to 25 metres tall. Shiny chestnut-brown bark, which peels in horizontal strips. Oval leaves are alternate and 7 - 10cm long with regular forward-pointing teeth and a longish point. There are glands at the base and the stalk is red and grooved. Small clusters of white flowers bloom in April / May, before the leaves appear. Birds such as starlings feed on the bright red cherries in July.



Bird Cherry (*Prunus padus*)

Up to 15 metres tall. Grey / brown peeling bark with unpleasant smell. Tough, light green pointed oval shaped leaves 6 - 10cm long with fine regular teeth. Hanging white flowers appear in May / June. Flowers and leaves are almond scented. In August the red fruits ripen to shiny black cherries with a single hard poisonous stone.



Sycamore

(*Acer pseudoplatanus*)

2



Origin: Central and south-east Europe.

Max. Height: 35 metres.

Lifespan: Up to 400 years.

Shape: Magnificent domed tree with broad crown and heavy lower branches.

Wildlife Value: Limited - supports a small number of insect species, including spiders, which attract migrating warblers to feed in autumn.

Tree Year: Flowers / Leaves (April / May);
Fruit ripens (September);
Leaves fall (November).

Bark / Twigs: Smooth grey / brown bark

but as it ages goes pinkish brown, roughens and cracks with large pieces flaking off. Stout twigs with fat, green buds.

Leaves: 5 pointed lobed leaves up to 18 cm with large regular teeth and a darker upper side. The lowest lobes are not fully separated. A common leaf fungus called 'tar spot' disfigures, but does not harm the tree.

Flowers / Fruit: Flowers hang in long greenish / yellow spike-like clusters with up to 100 in each. The fruit or 'key' has two seed chambers joined at the centre by two 90° angled flat spreading wings, which are green, tinged with red, and ripen to brown.

Wood Used For: Furniture, flooring, kitchen utensils and turnery.

Best Locations to See: Biodiversity Trail and top paths.



Woodlandpictures/Steven Kind



Other Maples

Norway Maple (*Acer platanoides*)

2

Up to 27 metre tall tree. Grey ridged bark. Leaves have 5 - 7 pointed lobes with a few large teeth. Golden yellow flowers appear in April before the leaves. Seeds come in pairs joined in almost a straight line (150°) with long parallel wings.

Best Location to See: Main Car Park and Visitor Centre.



Woodlandpictures/Juliana Ditsche

Field Maple (*Acer campestre*)

1

Up to 26 metre tall tree. Grey-brown, ridged bark. Leaves are 5 lobed with a few blunt teeth and are much smaller than sycamore (7.5 cm). In summer the leaves are hairless above but furry below. Small yellow-green clusters of flowers. The paired seeds are hairy and yellow green with a pinkish tinge, joined in almost a straight line (180°) by small blunt wings.

Best Location to See: Biodiversity Trail.

Common Beech (*Fagus sylvatica*) 2



Origin: Spain to South Norway to England

Max. Height: 40 metres.

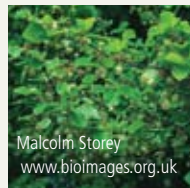
Lifespan: Up to 320 years.

Shape: Older trees have an enormous many-branched crown. Young trees are slimmer and more conical in shape.

Wildlife Value: Supports up to 94 species of invertebrates.

Tree Year: Flowers / Leaves (April / May);
Fruit ripens / Leaves fall (October).

Bark / Twigs: Smooth pale grey trunk often green with algae. Twigs are brown, slightly flexible with narrow pointed buds.

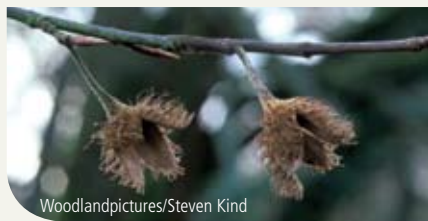


Malcolm Storey
www.bioimages.org.uk

Leaves: These are alternate, shiny green, up to 10 cm long with a wavy margin and 6 - 7 pairs of parallel veins. Young leaves are delicate yellow-green. In autumn the leaves change from pale yellow to deep orange / red.

Flowers / Fruit: Yellow male flowers are borne in small, rounded catkins, hanging on long stalks. Greenish - white female flowers are borne in short stalked, erect clusters. The fruit are 2 shiny brown triangular nuts ('mast') contained in a hard brown prickly case and occur in abundance every 5 to 8 years.

Wood Used For: Furniture, kitchen utensils, tool handles, flooring and children's toys.



Woodlandpictures/Steven Kind

Best Locations to See:

Wildlife Garden, Biodiversity Trail and Nature Reserve.



Copper Beech (*Fagus sylvatica purpurea*) 2

Smaller than other beech varieties, it has dark purple leaves, which turn copper in autumn. Flowers and fruit also have a pinkish brown tint.

Best Location to See: Path from Walled Garden to Caravan Park.



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Woodlandpictures / Keith Huggett

Max. Height: 45 metres.

Lifespan: 1,000 years +.

Shape: Large branches rise from a short trunk to form a massive crown. Sometimes hybridizes with Sessile Oak.

Wildlife Value: Excellent - supports birds, bats and 500 species of invertebrates, more than any other species of British tree.

Tree Year: Flowers / Leaves (April / May); Fruit ripens (October); Leaves fall (November).

Bark / Twigs: The pale grey bark is smooth and develops finely cracked vertical ridges as it ages. The twigs bear rounded but pointed buds.

Leaves: The smooth leathery leaves are almost stalkless, normally up to 10 cm long, with 'ears' at the base and 4 or 5 deep lobes on each side.

Flowers / Fruit: The yellow male catkins form short clusters 2 - 5 cm long. The female catkins are similar but reddish, shorter and bear small flowers. Fruits are acorns, often in small clusters on long stalks, 4 - 8 cm long.

Wood Used for: Houses, boats, furniture and bridges.

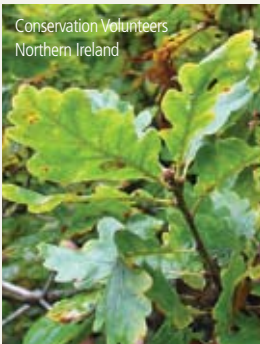
Best Locations to See: Biodiversity Trail, Main Car Park and path from Ice House to Wildlife Garden.



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Sessile Oak (*Quercus petraea*)



This oak differs from the Common Oak in that its branches rise at different levels from a long trunk, forming a fan-shaped crown. Its leaves are similar but generally bigger up to 12 cm and the leaf base is wedge shaped without the 'ears' of Common Oak and with a distinct stalk of about 2.5 cm. Its male catkins are also similar but longer at 5 - 8 cm long and its bud shaped female flowers are stalkless. The acorns are stubbier without stalks.

Best Location to See: Main Car Park and Biodiversity Trail.



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Turkey Oak (*Quercus cerris*)



Origin: Turkey. Rough leaves with deep, regular almost triangular lobes. Unlike other oaks it has rougher more ridged grey bark and has long narrow whiskers that surround its leaf buds and form stipules at the base of the leaf. Acorns are borne in very 'mossy' cups.

Best Location to See: Path to Drains Bay.





Origin: South East Europe in the early 1600s.

Max. Height: 35 metres.

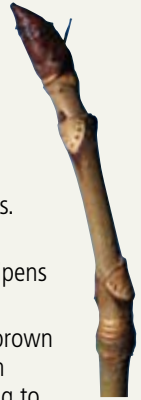
Lifespan: Up to 350 years.

Shape: Stout tree with huge domed canopy.

Wildlife Value: Nuts provide food for mammals. Flowers provide pollen for insects.

Tree Year: Leaves (April); Flowers (May); Fruit ripens (September / October); Leaves fall (October).

Bark / Twigs: Massive red brown or dark grey-brown trunk with bark flaking off in long plates. Its rich brown sticky buds are up to 3.5 cm long, bursting to unfold leaves.



Leaves: The leaves are formed from 5 - 7 oval stalkless leaflets, up to 20 cm long with pronounced veins and a long tapering base. Leaves turn from orange to scarlet in autumn.

Flowers: Clusters of 5-petaled white flowers make it look like a huge candelabra. Its green and spiky fruit split open along 3 'seams' to reveal 1 to 3 inedible brown nuts - 'conkers'.

Wood Used for: Toys, artificial limbs and fruit trays.

Best Locations to See: Visitor Centre and around Activity Centre.



Environment & Heritage Service



Sweet (Spanish) Chestnut 3

(*Castanea sativa*)

This is the tree which yields the edible chestnut and can live up to 450 years. Native of Southern Europe. It is tall and narrow with many low branches and has large spear shaped alternate leaves with saw like toothed edges. It flowers later in July and its flowers are quite different from the Horse Chestnut. The male flowers are long, golden and upright. The female flowers are small green rosettes found at the base of unopened male flowers. The chestnut is contained in a spiny green casing, which splits in autumn to release 1 to 3 edible nuts. Due to our colder summers, British grown nuts seldom ripen to full size.

Best Location to See: Main entrance road close to Activity Centre.

Lime trees can be found in the Lions House Garden and woods along Home Farm lane up to the Ice House.



Common Lime

(*Tilia x vulgaris* or *europaea*)

Origin: Europe.

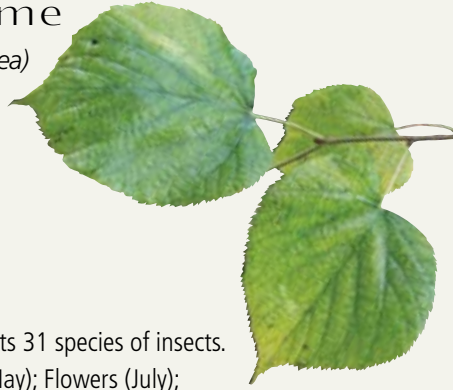
Max Height: 40 metres.

Lifespan: Up to 500 years.

Shape: Tall tree with long slender branches that start near the ground, the lower ones arching.

Wildlife Value: Good - hosts 31 species of insects.

Tree Year: Leaves (April / May); Flowers (July);
Fruit ripens (September); Leaves fall (October).



Bark / Twigs: Black / brown bark which has long ridges, cracks and sprouting shoots. The twigs are hairless.

Leaves: This is a hybrid between small leaved and large leaved limes. It has pale green heart-shaped leaves 5 - 10 cm long with serrated borders and an almost straight base. They also have tufts of whitish / buff hair underneath at the vein junctions.

Fruit / Flowers: The flower clusters contain 5 - 10 whitish-yellow 5-petalled fragrant flowers. The clusters are attached via stalks to a single small leaf which falls off with its round, hairy, faintly ribbed fruit.

Wood Used for: Wood carving, clogs, rope and musical instruments.



Large Leaved Lime (*Tilia platyphyllos*)

The other lime tree in the Park is the Large Leaved Lime. This differs from the Common Lime in that its trunk has no dense growth of sprouting shoots. Its leaves appear earlier and not only are hairy on top but very hairy underneath and can be up to 15 cm long. The stalk is also hairy. It flowers in June, earlier than the Common Lime, to provide an early nectar source for insects. Its fruits are similar to the Common Lime but differ in that they have five strongly ribbed markings.



Origin: New Zealand **Max. Height:** 20 metres tall.

Shape: Grows at first on a single stem, but, as it matures, divides into a much branched crown, each branch forking after producing a flowering stem.

Tree Year: Evergreen: Flowers (June - July); Fruit (October)

Bark / Twigs: Rough tan bark flares at base.

Leaves: The light green arching leaves are sword-shaped, 0.5 - 1 metre long with numerous parallel veins. New leaves grow continually from the centre, taking the tree upwards. The older leaves at the bottom die back and hang down.



Flowers / Fruit: In mature trees the flowers are creamy white and produced in large dense clusters. Each flower is small, about 1 cm diameter. The fruit is a bluish white berry 5 - 7 mm diameter.

Food and drink: Their high carbohydrate content can be made digestible by cooking. They were a valuable food source for the Maori people for at least 800 years. The trunk and root material can be twisted into ropes while the leaves can be woven for clothing and footwear fabrics. Juice from the plant has value for fighting infections.

Best Locations to See: Wildlife Garden, Main Car Park and Walled Garden.



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Monterey Cypress 3

Cupressus macrocarpa

Origin: North America (California). **Max. Height:** 40 metres.

Lifespan: Up to 300 years.

Shape: Massive spreading tree. When young it has a narrow, erect outline and a pointed crown but broadens as it grows older and can be shaped by the wind.

Tree Year: Evergreen. Flowers (April to June); Cones (All year).

Bark / Twigs: Brown, ridged and broken into scales. Spiky looking twigs.

Leaves: Yellowish lemon-scented scale leaves which are 1 mm long with branchlets pointing forwards.

Flowers / Fruit: The small, yellow egg shaped male flowers shed their pollen. Females develop into rounded brown cones up to 4 cm across with lumpy leathery scales. After shedding their seed the cones often remain on the tree.

Best Location to See: Wildlife Garden.



Hybrid Larch 3

Larix x eurolepis

Max Height: 40 metres

Shape: This is a cross between the European and the Japanese Larch so combines features of both parents. Long lower branches spread downwards with the tips turning up again.

Tree Year: Leaves (March / April); Flowers (March - May); Cones (September / October); Leaves fall (November / December).

Bark / Twigs: Grey or brown bark with regular ridges. Twig is pinkish or grey-blue.

Leaves: Needles are soft, pale green to blue-green growing singly on long shoots or in spiral clusters on short shoots and turn yellow in winter. This is the only conifer in Britain that loses its leaves over winter.

Flowers / Fruit: The male flowers are whitish yellow. The reddish purple female flowers ripen to form egg shaped cones with scales sometimes turned outwards.

Wood Used For: Construction, posts, boat building and garden furniture.

Best Locations to See: Home Farm lane and top paths.





Origin: Iran / France
Max. Height: 10 metres
Shape: Rounded with spreading branches.
Tree Year: Flowers (March) then leaves; Fruit ripens (August / September); Leaves fall (October).
Leaves: Dark red young foliage, later turning to a deep purple, oval leaf 65 mm in length. This is covered with downy hairs along the midrib and veins.



Flowers / Fruit: Flowers are pink in the bud and white on opening. They are produced both singly or in twos or threes creating dense clusters. Fruits are not often produced but when present are a smooth dark purple berry about 25 mm in size.

Best Locations to See: Lions House and Main Car Park.

This publication focuses on the common trees growing in Carnfunnock although there are many more tree species and shrubs to be found.

For further tree information see:

www.larne.gov.uk/carnfunnock.html
www.naturedetectives.org.uk
www.cvni.org

For information on Carnfunnock contact:

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