



Foghlaim Páirceanna Náisiúnta
National Parks Learning

Guide to Mammals



This key aims to identify the tracks and signs of Ireland's common land mammals and to give notes on their ecology.



About This Key

Many of our mammals are nocturnal. Most avoid people. As a result, it is rare to spot wild animals during an ecology fieldwork session.

However, tracks and signs are often visible.
Look for droppings, feeding signs, fur or hair, bones, tracks and dens.



Tracks & Signs

Tracks

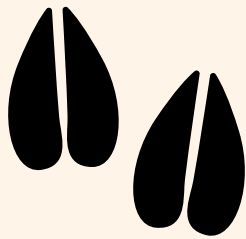


Badger



**Fox
(or Dog)**

**Deer,
Goats or
Sheep**



Droppings

**Deer, Goats,
Sheep, Rabbits
or Hares**
All with similar
droppings



Fox
Droppings
containing
hair from
their prey.



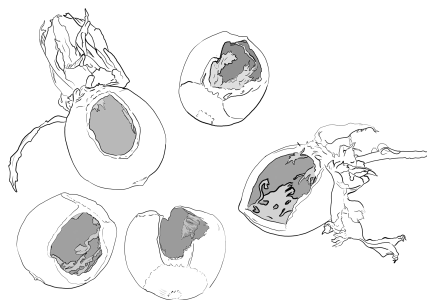
Deer hair



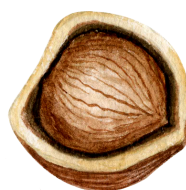
Deer antler



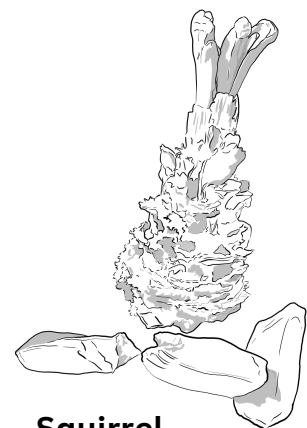
Badger
Snuffleholes where badgers
have dug for worms.



Woodmouse
Chewed hazelnuts



Squirrel
Hazelnuts cracked in
half



Squirrel
Chewed pine
cones

Carnivores



Red Fox

Diet: Mammals, birds, eggs, carrion, human scraps.

Ecology: Foxes are common in cities where they feed on litter, scraps and rats and are not hunted.

Signs: Droppings, often containing fur and hair. Prey remains.



Badger

Diet: Worms, beetles, carrion, berries.

Ecology: Badgers live in colonies in underground burrow systems called setts. Nocturnal.

Signs: Droppings often containing beetle remains, feeding holes, setts.



Pine Marten

Diet: Small mammals, including squirrels. Eggs, berries.

Ecology: May be helping to save red squirrels by eating more grey squirrels.

Signs: Droppings, often containing berries and pips.



Stoat

Diet: Small mammals including rabbits, eggs, birds, invertebrates.

Ecology: Often hunts in dry stone walls. This is Ireland's smallest carnivore. We do not have weasels in Ireland. They are smaller than stoats.

Signs: Live sightings. Prey remains.

Fish Eaters



Otter

Diet: Fish.

Ecology: Native species. Found in both freshwater and marine habitats.

Signs: Droppings (spraints), tracks (webbed paws), trails, dens (holts).



Mink

Diet: Fish, birds eggs, small mammals.

Ecology: An invasive species, introduced from North America. It damages populations of ground nesting birds, especially those that nest near water.

Signs: Droppings, prey remains.



Grey Seal

Diet: Fish.

Ecology: Has a long face with a 'roman' nose (convex muzzle). Marine. Rests and gives birth on land often in large seal colonies.

Signs: Live sightings. Noise from colonies.



Harbour Seal

Diet: Fish

Ecology: Has a short, dished face. Marine. Less common than Grey Seals. Gives birth on land, but not in large colonies.

Signs: Live sightings.

Large Herbivores



Red Deer

Diet: Vegetation.

Ecology: Ireland's largest land animal. Our only native deer species. Hybridizes with Sika deer. Killarney National Park is a stronghold for purebred Red deer.

Signs: Droppings, tracks, hair, shed antlers, damaged vegetation, rutting stags roar.



Sika Deer

Diet: Vegetation.

Ecology: Introduced from Asia. Hybridizes with Red deer.

Signs: Droppings, tracks, hair, shed antlers, damaged vegetation, rutting stags whistle.



Fallow Deer

Diet: Vegetation.

Ecology: Introduced by the Normans from the Mediterranean area. Palmate antlers. Phoenix Park has a large herd.

Signs: Droppings, tracks, hair, damaged vegetation, shed antlers, rutting stags burp.



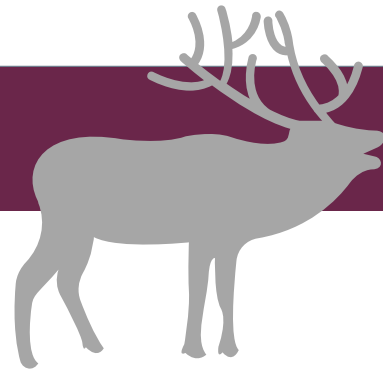
Feral / Wild Goat

Diet: Vegetation.

Ecology: Ireland's wild goats went feral from domestic herds over hundreds of years.

Signs: Droppings, tracks, damaged vegetation.

Ecology of Large Herbivores



Introduced Species & Hybridization

Ireland has three species of deer. Only the Red deer is considered to be native, although some zoologists believe that Red deer were introduced in Neolithic times.

Sika deer were introduced from Asia to Co. Wicklow in 1860. They are closely related to Red deer, and can hybridize with them. Purebred Red deer have disappeared from most parts of Ireland, replaced by Sika hybrids.

Luckily, there remains a large herd of purebred Reds in Killarney National Park. Some of these deer have been moved to Connemara National Park, and also to Inishvickillane island to help secure the species.

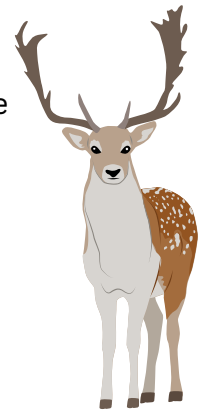
Muntjac

Recently, a fourth deer species, the Muntjac, has been illegally released. In Britain, introduced muntjac have caused great damage to habitats. The National Parks and Wildlife Service is trying to remove any muntjac seen in Ireland, before they become established. Invasive species.



Fallow Deer

Fallow deer were introduced by the Normans from the Mediterranean area. The Phoenix Park in Dublin has a large herd.



The Absence of Wolves

Deer and goats are herbivores. They cause damage to habitats through overgrazing.

Their only natural predator, the wolf, was eradicated in the 1700s. Without a natural predator, populations of deer and goat expand and they start to damage habitats.

Overgrazed woodlands have no shrub layer and few young trees.

In the absence of a natural predator, conservationists often have to cull deer to protect precious habitats.

Lagomorphs & Rodents



Rabbit

Diet: Vegetation.

Ecology: Introduced by the Normans. Rabbits live in warrens consisting of many burrows. They are an important prey species for many carnivores.

Signs: Droppings, burrows.



Irish Hare

Diet: Vegetation.

Ecology: Native species. Hares do not use burrows. They rest in a 'form' - a patch of flattened grass. Hares are an important prey species.

Signs: Droppings.



Red Squirrel

Diet: Nuts, seeds, fungi, tree buds.

Ecology: Native. Red squirrels live in woodland. They are more arboreal and more shy than Grey squirrels. Greys have driven Reds out of many woodlands.

Signs: Chewed pine cones and hazelnuts.



Grey Squirrel

Diet: Nuts, seeds, fungi, buds.

Ecology: An invasive species introduced from North America. It out-competes our native Reds.

Signs: Chewed cones and nuts.

Ecology of Squirrels & Pine Martens

Red Squirrels - A Rocky History

Our only native squirrel, the Red squirrel was present in Ireland before the Ice Age. They are dependent on good woodland habitat. Unfortunately, over centuries, we have cut down most of our native woodlands. Today Ireland has the least amount of forest cover in Ireland. Less than 2% of our original native woodland cover remains.

In the 1600s, we had lost so much forest that it led to the extinction of Red Squirrels in Ireland. They were re-introduced in the 1800's.



Grey Squirrels - Living the Life

Grey Squirrels, originally from North America, were introduced to Ireland in 1913. A basket of squirrels was given as a wedding present and released in Castleforbes, Co. Longford.

Since their release, Grey squirrels have spread throughout the eastern half of Ireland. They have not yet crossed the Shannon.



How do Grey Squirrels Affect Red Squirrels?

Grey squirrels are larger than Reds. They do not actively kill Red squirrels. However, when Greys move into a woodland, the Reds soon disappear.

Red squirrels will only eat nuts and seeds when they are fully ripe. Grey squirrels are happy to eat food before it ripens. In this way, they manage to out-compete Reds.

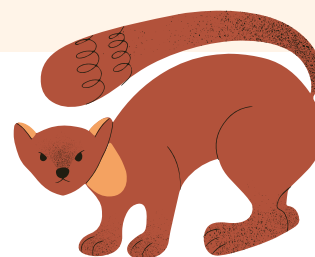
Saved by a Predator

Pine martens hunt squirrels. They are a native species and are the natural predator of the Red squirrel.

Pine martens were once hunted almost to extinction. Legal protection from the Wildlife Act (1976) has seen their numbers rise and their range expand.

Early signs seem to show that when pine martens return to a wood, the numbers of Grey squirrels go down and the numbers of Reds goes up. It appears that Pine martens find Grey squirrels easier to catch. It is hoped that we could end up with a balance of the three species.

This is a classic case of the importance of predators to healthy prey populations.



Rodents



Brown Rat

Diet: Everything, especially grains and seeds.

Ecology: Introduced in the 1700s. Rats can carry diseases such as leptospirosis. They are an important prey item for many predators.

Signs: Droppings. Chewed holes.



Woodmouse

Diet: Nuts and seeds.

Ecology: Woodmice are an important prey item for owls, stoats and most predators.

Signs: Droppings, chewed nuts.



House Mouse

Diet: Almost everything.

Ecology: Common in human habitations.

Signs: Droppings, chewed wood and wires.



Bank Vole

Diet: Nuts, seeds and plants.

Ecology: Introduced in the 1930s and spreading. They are an important food for Barn owls.

Signs: Droppings, chewed vegetation.

Insectivores & Bats



Hedgehog

Diet: Insectivore. Worms, slugs, beetles.

Ecology: Nocturnal.

Signs: Droppings.



Pygmy Shrew

Diet: Invertebrates. Their high metabolic rate means that they must feed every couple of hours, day and night, or they die.

Ecology: May be outcompeted by introduced White-toothed shrews.

Signs: Live sighting and sounds (squeaks).



Bats (Several species)

Diet: All Irish bats eat night-flying insects (moths & midges).

Ecology: Nocturnal. At least nine species in Ireland. Some species use attics as maternity roosts in spring and summer.

Signs: Droppings.