# Introduction to Deer and Deer Management in Ireland (Part 1)

There are 40 known deer species found worldwide, three of which can be found in Ireland. Deer evolved about 23 million years ago. They belong to a group (order) called artiodactyls (eventoed). Deer are herbivorous hoofed ruminants.

#### **Habitat and Diet:**

All deer generally feed early in the morning and late evening and rest during the day. Red and fallow deer are primarily grazers (various grasses), but will supplement their diet with leaves of various trees, acorns, fruits, mushrooms and agricultural crops. Sika deer are intermediate (grazers and browsers) and opportunistic feeders. All deer are associated with woodlands of various types, open hill areas and pastures.

## **Droppings:**

The droppings of red deer are black-brown in colour, about 2cm long. Fallow deer droppings are about 1.5cm long and black in colour. Droppings of sika deer are black and small - less than 1.5cm. (Goat and sheep droppings are similar; but are about 1cm in length with flattened ends).

## Signs:

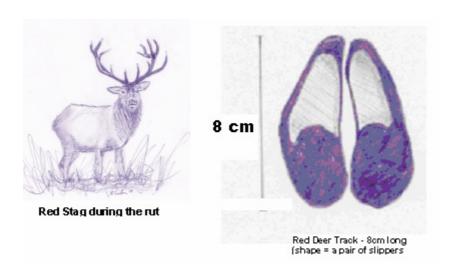
Flattened areas of vegetation may be found where deer would have been lying up during the daytime. Regular paths/trails through undergrowth are often visible. Stags will thrash and fray tree branches and bole score (antler gouging) tree trunks. Sometimes shed antlers may be found and small mammals and deer will eat these, as they are a good source of calcium during the winter months.

### **Vocalisations:**

Usually both sexes of all deer are silent, with the exception of alarm and rutting (mating) calls. The rutting calls of the males are very different. Red stags emit an impressive roar, which can be repeated several times and may be heard some distance away. Sika stag calls can be very loud with piercing whistles and squeaks. Fallow bucks emit a groaning sound – like a deep 'belch' that is repeated frequently.

# European red deer (Cervus elaphus) As Gaeilge – Fia rua

Red deer Adult stags ~220kg, shoulder height ~1.5m Adult hinds ~140kg, shoulder height ~1m Newborn calf ~6-9kg Life span up to 15 years



The native red deer is Ireland's largest land mammal. The earliest record of red deer in Ireland is 26,000 years ago, and it is believed that the red deer inhabiting the Killarney Valley are the closest living population to the post-glacial native Irish red deer. The rest of the red deer in Ireland were introduced in the 1800-1900s from Scotland, England and France. Males are known as stags, females as hinds, and offspring as calves. During the summer months, the coat is a deep chestnut-red colour, whereas in winter the coat dulls to a brown. The underbelly is a cream colour and faint beige spots may be seen along the flanks. The rump patch is a creamy-beige colour and extends onto the back of the deer, above a very short tail. Only the males have antlers, which are U-shaped when viewed head-on. Antlers are shed between March and April annually and new growth on the next set begins immediately. The rut begins in late September and lasts until November. During the rut, the stags become very vocal and emit characteristic deep roars. They also become very aggressive and fights between males are quite frequent. The hinds deliver a single calf after a pregnancy of 7.5 to 8 months. The calf is born between mid-May and early June. It is born with a spotty coat, which remains until about 2 months of age, acting as a camouflage against predators (e.g. fox). The mother will return to feed it every 2-3 hours. Calves are weaned between the ages of 5 and 10 months. The calves stay with their mothers until approximately 2 years of age.

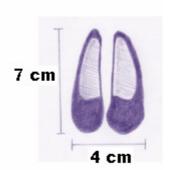
## **Key Identification features for Red deer:**

Largest Irish land mammal
Very short tail
Red-brown coat with cream underbelly
Cream rump patch, extends onto back
U-shaped, multi-pointed complex antlers
Tracks: shaped like pair of slippers, 8cm long

# European fallow deer (Dama dama dama) As Gaeilge - Fia bui.

Fallow deer
Adult bucks 80-110kg, shoulder height ~1m
Adult does 40-55kg, shoulder height ~85cm
Newborn calf ~3-5kg
Life span up to 18 years





Fallow Buck during rut, just after thrashing long grass with antiers

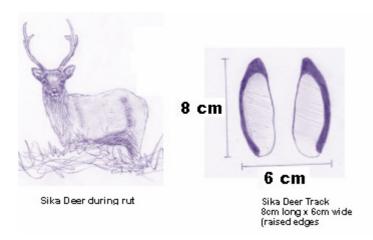
A medium sized deer, non-native to Ireland. The Normans introduced fallow deer to Ireland in 1244 from England to Glencree in County Wicklow. Males are known as bucks, females as does, and offspring as fawns. There are several different coat colours in fallow deer, they do not make them different species; the different colours are like our hair colour. The summer coat colours (glossy black, chestnut browns, ginger browns) are very vibrant and may/may not have white spots. During the winter months the animals grow a thicker shaggy duller version. The rump patch is a clear white colour, surrounded by a black edge. The tail is very long. The antlers in fallow bucks are palmate. The bucks only carry antlers. Antlers are shed each spring (March to April) and the new set begins to grow immediately. The rut occurs during October and November, where bucks will engage in fights and they become more vocal. After a pregnancy of 7.5 to 8 months, a single fawn is born during the month of June. The fawns are born with a spotty coat. The mother returns every few hours during the day and night to feed it. Fawns are weaned between 7 and 9 months of age.

# Key Identification features for Fallow deer

Medium sized deer Prominent 'Adam's apple' Has brush on penile sheath Has a very long tail Buck has broad flattened antlers (palmate) Rump patch is white, black bordered & heart-shaped Tracks: long pair of slippers, 7cm long & 4cm wide

# Japanese sika deer (Cervus nippon nippon) As Gaeilge - Fia Seapánach

Adult stags 50-60kg, shoulder height ~80cm Adult hinds ~35kg, shoulder height 65-70cm Newborn calf ~2-3kg Life span up to ~18 years



Ireland's smallest non-native deer species. Lord Powerscourt introduced Japanese sika deer to Ireland in 1860 to his estate in County Wicklow. These deer originated from the Japanese island of Kyushu. Some of these hybridised with red deer and then escaped or were released into the Wicklow hills where they flourished. Males are called stags, females are hinds, and offspring are calves.

The summer coat is a light reddish brown colour with faint/clearly visible spots along the flanks. The belly is a light grey or beige colour. In contrast, the winter coat is a dark grey brown with no spots, with a greyish belly. In both coats, a distinctive black dorsal (back) stripe is clearly seen extending from the head to the tail. The rump patch in both coats is bright white, heart-shaped and bordered by a black edge. Antlers are only carried by the stags, and are V-shaped in outline when viewed head-on. They are shed annually, in April, and new growth begins immediately. Stags hold territories and defend their areas during the rut (September to October), with fights occurring. After 7 to 7.5 months, the hind will give birth to a single calf. The coat of the calf is white-spotted deep chestnut colour. Its mother will return to feed it every couple of hours. Calves are weaned between 6 and 8 months of age. If you find a fawn/calf, please do not pick it up or touch it. They are not abandoned. Their mothers are often not far away and will return to feed it when no humans are around. Deer have a strong sense of smell, and can smell the human scent off a fawn/calf if it has been touched and may reject it.

### Key Identification features for Sika deer

Smallest Irish deer Rump patch is white, black bordered & heart shaped Black back stripe from head to tail Tail is medium (intermediate between red and fallow deer) V-shaped simple antlers (6-8 points) Tracks: large and splayed, 8cm long & 6cm wide

### **Economic factors and Conservation issues**

All deer can be a threat to woodlands (native and nonnative) due to their feeding habits, which can prevent regeneration when deer populations are too dense. They may cause damage in plantation forests by uprooting newly planted trees, browsing shoots and buds of young trees and bole scoring. They can strip bark from the trunk and branches of older trees. Foresters should leave open spaces within a plantation scheme, as this would encourage deer to feed on these patches instead. Hybridisation between red and sika deer poses a threat to both species, as well as between escapees from deer farms. In County Wicklow, there has been extensive hybridisation between sika deer and red deer, and all deer in this area are considered to be hybrids.

Deer will occasionally browse and damage agricultural crops. Farmers should consider planting a 'sacrificial' stand of fodder crops to encourage deer away from the main crops. Six to eight foot fencing may be erected to exclude deer, but well maintained traditional hedge and ditch systems are equally suffice. Additionally, farmers should consider leaving the top strand of barbed wire off fencing where there are known deer trails, as this allows younger deer to jump the fence as deer may be passing through to access water sources

# **Protection & Deer Management**

All deer are protected under the Wildlife Acts 1976, 2000 in Ireland. In the absence of natural predators, e.g. the wolf, since wolves were persecuted to extinction during the 18th Century, it is necessary that deer numbers be managed to protect habitats and to ensure the welfare of deer by protecting them from starvation due to overgrazing. Thus, they are humanely culled at certain times of the year, under licence by National Parks and Wildlife Service (Department of Environment, Heritage and Local Government).

# **Culling in Ireland**

Approximately
4,500 wild sika deer or sikahybrids,
2500 wild fallow deer,
500 red deer and 400 red-like
Hybrids are legally shot and reported annually.