

THE SOUTH WALES DORMOUSE SURVEY 2007

Organising a nut hunt - a guide for schools and community groups



Dormouse © Kate Merry

The collection of hazel nuts was traditionally a communal affair. Whole villages used to go out and about into the woods to collect hazelnuts to eat and to store. School children even used to get a special holiday from school to go nutting.

Times have changed and hazelnuts are no longer routinely collected for food, however a dormouse hazelnut hunt makes an excellent school or community group activity!

The Dormouse

Dormice are small, nocturnal mammals weighing about the same as two £1 coins. Bright golden in colour, with a thick furry tail and large black eyes, they are easily distinguished from other small mammals.

Dormice are mainly ancient woodland specialists, preferring mature deciduous woodland with a wide variety of tree and shrub species. In South Wales they are often found in other habitats, including mature hedgerows, reedbeds, heathland and scrub.

They feed on flowers, pollen, fruit, insects and ripe nuts, and require a continuous availability of food throughout spring and summer; therefore hazel, honeysuckle and bramble are particularly important sources of food.

Why carry out a survey?

South Wales and the South West of England appear to be national strongholds for this species, although our knowledge of their distribution at a local level in South Wales is still quite poor.

By finding out where the dormice are we can focus action to protect their habitat. We can also try to improve this habitat by carrying out woodland management, linking up existing areas of good habitat or creating new areas.

How to survey

Dormice are nocturnal and elusive so you are unlikely to come across them on a walk in the countryside. The easiest way to survey for them is by looking for hazelnut shells which have been opened by dormice. Although many other animals eat hazelnuts, dormice open them in a distinctive way. A guide to the characteristics of the opened nuts is provided in this survey pack and with little practice you should be able to identify nuts opened by dormice. Don't worry if you're unsure about the identification as you can send the nuts to an expert in your local area to check.

Preparation

- Identify an area of habitat which contains hazel bushes. This may be a woodland, mature uncut hedgerow or scrub area.
- Ask the landowner for permission to carry out the survey. Even if the area has a public footpath you should still ask for permission. We cannot use records obtained without the landowners consent.
- Carry out a site visit before taking your group out, just to check there is sufficient hazel and hazelnuts to make a group activity worthwhile. As long as you find some hazelnuts it should be fine - once you get a group looking for nuts you will be surprised at how many you find. Also look for any specific site hazards which will need to be included in your risk assessment.
- Carry out a risk assessment using your normal procedures for outdoor activities. Particular hazards associated with this activity are; infections picked up from dog faeces and rooting round on the ground (such as toxoplasma and Weils's disease), twigs in eyes, cuts from hidden barbed wire and thorns in hands and arms.
- Gather your equipment
 - *Gloves (or request that people bring their own gloves)*
 - *Bags e.g. freezer bags for collecting nuts*
 - *Labels for labelling the bags of nuts*
 - *Site map*
 - *Identification sheets*

Carrying out the survey

- At your chosen site, divide the group into teams to thoroughly search the ground underneath hazel trees for hazelnut shells. Collect all the shells you can find (children are particularly good at this bit), and bag them up for examination later.
- Please remember to label the bag clearly so you know which site the nuts were from - this is really important.

Sorting out the nuts

- Using the guide and photographs provided, sort your nuts into the different categories. Plastic trays are very useful as they stop the nuts rolling around.
- You can do this in teams as a class activity or just get one or two people to sort through them. If doing it as a class activity use the score sheet provided to record how many nuts of each type have been collected. Add up the class total at the end.
- Start by removing all the acorns you will have inevitably collected by accident! Then remove all the whole nuts and all the nuts with just a tiny insect hole in them.
- Now you are just left with the opened nuts and you have to try and decide whether they have been shattered/broken (by squirrels and birds) or whether something has nibbled a neat round hole in them.
- Once you have removed all the nuts opened by squirrels and birds you are left with those opened by bank voles, wood mice - or if you are really lucky, dormice. Use the guide to try and decide who opened the nuts. You may find a hand lens useful for this.
- If you think any of the nuts collected have been eaten by dormice, send them to us for confirmation. If you are not sure, send them anyway and we will check them and let you know.
- When you post us your opened nuts, put them in something that will stop them getting crushed, such as an old film canister or matchbox. Send the survey form along with the nuts in a clearly labelled container.
- Don't leave the nuts too long before posting them as they will begin to rot.
- We will contact you to confirm whether any of the nuts you sent were opened by dormice.

Dormouse Nut Survey Form

Site details

(If you are sending nuts from multiple sites, please ensure that nuts from each site are clearly labelled)

Date of survey	
Name of survey area	
6 figure OS grid ref	<i>(Please send a sketch map if unable to supply a grid reference)</i>
Nearest town/village	
Habitat: Hedgerow / woodland / other (please describe)* delete as appropriate	

Please tick here to confirm that the landowner's permission was granted

Please note that we can not use records unless consent was given for the survey.

Your details

School/Group	
Contact name	
Address (optional, to help us verify records)	
Postcode	
e-mail/Tel.	

All of our dormouse records will be shared with the South East Wales Biodiversity Records Centre and the West Wales Biodiversity Information Centre. Your personal details will be held on internal databases only and not disclosed.

Please send any hazelnuts you think may have been opened by dormice to:

Caerphilly, Cardiff, Bridgend, Rhondda-Cynon-Taff, Merthyr Tydfil, Neath-Port Talbot, Swansea and the Vale of Glamorgan.

South Wales Dormouse Survey, Sarah Mellor, Bridgend Biodiversity Officer, Civic Offices, Angel Street, Bridgend, CF31 4WB.






Blaenau Gwent, Newport, Brecon Beacons national Park, Monmouthshire and Torfaen.

South Wales Dormouse Survey, Sorrel Jones, Gwent Wildlife Trust, Seddon House, Dingestow, Monmouth, NP25 4DY

Pembrokeshire, Carmarthenshire and Ceredigion

South Wales Dormouse Survey, Wildlife Trust of South and West Wales, Welsh Wildlife Centre, Cilgerran, Cardigan, SA42 2TB.

A guide to identifying nibbled nuts

Picture	Description	Identification
	The hole has a neat inner rim and the toothmarks are at an angle to the hole on the nut surface	Dormouse
	Neat parallel toothmarks on the inner rim of the hole but no toothmarks on the nut surface	Bank Vole
	Parallel toothmarks on the inner rim of the hole and rough marks on the nut surface	Woodmouse
	Nuts opened leaving jagged edges and half shells	Squirrels & birds
	Small hole less than 2mm across ($\frac{1}{10}$ of an inch)	Insect



Hazelnuts opened by dormice © Devon Wildlife Trust/R. Knott



Bottom - squirrel, centre - dormouse, top left - bank vole and top right - woodmouse © Mike Clarke



Hazel © BCBC



Hazel Coppice © BCBC

Dormouse Information

The following information on the ecology of dormice will help you if you want to do any follow - up classroom activities, or provide your group with further information.

Distribution

It is thought that the common dormouse was once widespread, however today they are mostly found south of a line which passes roughly from the Mersey to the Wash. There are isolated populations north of this line but without positive conservation effort their future must be in doubt.

In Wales the picture very much reflects the general British model with the species being relatively rare in North Wales and more common in west and South Wales. The higher altitudes of mid-wales are poor for dormice because of the large tracts of open land, and a lack of broadleaf woodland. Dormice rarely travel far from their place of birth, 100 metres being typical and up to one mile a rare maximum.

Diet

Their diet varies throughout the seasons. Flowers or pollen will be taken in early summer, with fruits including ash keys, berries (e.g. wayfaring tree, blackthorn) and insects later in the year. Hazelnuts, chestnuts, acorns and blackberries are very important prior to hibernation.

Activity

Dormice are nocturnal, leaving their nests around 1 hour after sunset and returning by dawn. During the summer they will rarely venture to the ground and will travel around using interconnected branches or 'aerial' pathways.

During the day they will remain in the nest which is constructed of an inner ball of stripped honeysuckle bark surrounded by leaves from the canopy. Activity will vary according to the time of year. In early summer the morning will be spent in a state of torpor, a state of very deep sleep. By the afternoon they will be awake although still relatively inactive in the nest.

Later in the summer they will be more active in the nest during the day. As summer changes to autumn they will spend more time feeding each night and have the capacity to double their weight in about two weeks. That's the same as a human of 10 stone going to 20 stone in a fortnight!






Hibernation begins around late October or early November depending on the weather conditions. Winter will be spent on the ground under dense moss or leaf litter in a nest similar to the summer type. By late April or early May they will start to use their summer nests, a time of competition with birds for suitable nest sites.

Breeding

Dormice are relatively long-lived (3-4 years) and have a small number of young each year. Dormice can have two litters per year, with the first litter being born around July. The second litter born in late August/September face a race to put on enough weight before hibernation begins in order to survive the winter. Those born as late as October will almost certainly not survive the winter. A typical litter would be 4-5 animals which stay with the mother for 4-6 weeks. It is not uncommon for first litter young to be found sharing the nest with second litter young.

Hazelnut Survey Score Sheet

Group.....

Picture	Description	Identification	Number found
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	Parallel toothmarks on the inner rim of the hole and rough marks on the nut surface	Woodmouse	
	Nuts opened leaving jagged edges and half shells	Squirrels & birds	
	Small hole less than 2mm across ($\frac{1}{10}$ of an inch)	Insect	

Information for landowners (*Optional*)

Thank you for granting permission for a dormouse survey to take place on your land. The cooperation of landowners is crucial to the success of the South Wales Dormouse Survey and your assistance is very much appreciated.

If you would like to receive more information about dormice and how to manage your land to benefit dormice, please fill out this form and return it to one of the addresses below.

Name	
Address	
Postcode	
e-mail/Tel.	

Your personal details will be held on internal databases only and not disclosed.

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