



Muntjac

Winter 2011

How many lives does a Polecat have?

Well, one Bedfordshire Polecat seems to have been given a second one, anyway. The creature was spotted by Bob Henry and Rory Morrisey as they were driving through Woburn on their way to see the reported waxwings. Rory's wife Doreen had missed the polecat so the trio turned around to go have a better look. Just as they arrived, however, the polecat dashed into the road where it was clipped by a car. The trio nudged it onto the verge and could see right away that the animal was injured.

The Morriseys took the polecat to Tiggywinkles Wildlife Hospital in Haddenham, Aylesbury. This specialised facility treats over 10,000 injured wild animals every year.

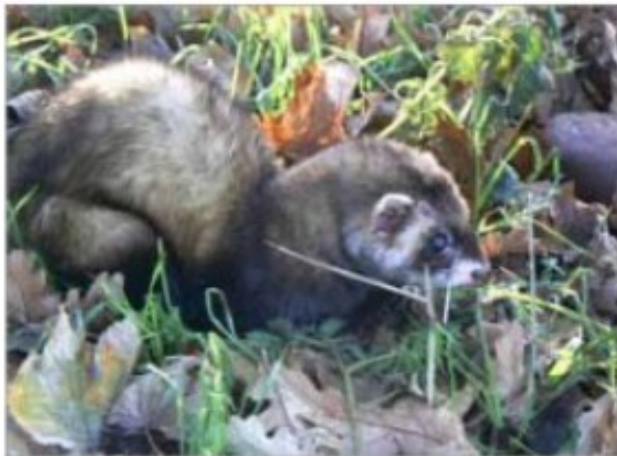


Photo by Rory Morrisey

Update December 6:

The polecat is alive and being treated with antibiotics. Tiggywinkles staff say it has suffered a head trauma, probably a fractured skull, as well as a damaged eye. It is eating and if it survives will likely not be able to return to the wild because of its eye injury.

I'm sure the polecat would wish to thank the Morriseys for the rescue! Thank you to Bob Henry for sending in this great story. We'll publish updates on the polecat if and as we receive them so watch this space!

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Wild About Beds is the newsletter of:



The Bedfordshire Natural History Society
www.bnhs.org.uk
Registered charity number 268659



BedsLife
www.bedsbionet.org.uk

The BNHS

The BNHS was formed in 1946, its main function to record the fauna and flora of the county. It has over twenty active Recorders who cover many branches of natural history study and whose annual reports are published in the *Bedfordshire Naturalist* journal.

Members receive a quarterly newsletter, *The Muntjac*, and programmes of meetings. These meetings include field meetings to Bedfordshire sites and occasionally farther afield. During the winter months, there are illustrated lectures normally held in Elstow, Haynes, Toddington and Maulden.

The Society depends on annual subscriptions which are devoted to its working, as all offices are honorary. Membership is open to anyone, whether resident in the county or not. If you would like to join the Society, please contact **Mary Sheridan**, Honorary Membership Secretary, 28 Chestnut Hill, Linslade, Leighton Buzzard, LU7 2TR. Tel: 01525 378245, www.bnhs.org.uk.

BedsLife

BedsLife - Bedfordshire & Luton Biodiversity Partnership is a consortium of government and non-governmental agencies dedicated to promoting the maintenance and enhancement of Bedfordshire's biodiversity. The Partnership oversees the implementation and monitoring of the Bedfordshire and Luton Biodiversity Action Plan, which can be found online at www.bedsbionet.org.uk.

Editor: Heather Webb

Central Bedfordshire Council, Technology House, 239 Ampthill Road, Bedford, MK42 9BD.
Tel: 0300 0300 6025, email: muntjac@bnhs.org.uk.

Your comments/notes on anything that you have observed in the field, on the road or in a past *Muntjac* issue are welcome/essential for continuity. Please do send articles to me either as an attachment via email or through the post. Pictures are always welcome; material required by **15 March 2011** please.

Thank you in anticipation.

The next *Muntjac* will be published in **March 2011**. Please note that any views are independent of the Bedfordshire Natural History Society

Beds orchard survey: looking for volunteers!

The Bedfordshire and Luton Orchard Group and the People's Trust for Endangered Species (PTES) are calling for volunteers in Bedfordshire to help survey the county's orchards. We know very little about our orchards, which is a shame considering our illustrious orchard history!

people's trust for
**endangered
species**

Roughly 240 traditional orchards have been identified from aerial photos of Bedfordshire. Working with the Greensand Trust and Bedfordshire Rural Communities Charity, PTES is now looking for volunteers to help verify these findings by conducting a field survey of local orchards in our county.

Experience is not required, and training will be provided!

To volunteer for the PTES traditional English orchards mapping project in Bedfordshire, please contact Anita Burrough, Orchard Project Officer on 020 7498 4533 or anita@ptes.org.



Bedfordshire and Luton
Orchard Group
www.bedsorchards.org.uk

From the Editor's Desk

Why can't nature just be 'the right thing to do'?

I couldn't help thinking this as I listened to speakers at last month's UK BAP (Biodiversity Action Plan) conference. The great and the good got up in turn to talk about conservation efforts in each of the four countries. But I'm not sure they were really talking about conservation at all. For the speakers were saying things like:

'We have to engage more closely with the climate change agenda.'

'We need to be able to demonstrate the value of the ecosystem services nature provides.'

'The health benefits of biodiversity need to be highlighted and better appreciated'.

When I arrived in the UK five years ago, the first thing my boss did was take me around the county to see some of our important nature sites. I'm sure I was still jetlagged as I hauled myself up Totternhoe Knolls, while it was patiently explained to me that great efforts had gone into keeping the scrub down. In my North American naïveté I asked why not just let it become forest? That's what it seemed to want to do, after all. The answer was of course that the habitats had evolved through centuries of human management. That management was needed to maintain them today, and who were we to destroy in a generation what had taken a millennium to achieve?

That answer has stayed with me ever since. It had nothing to do with money. Or health. Or 'ecosystem services'. It didn't matter if Totternhoe Knolls was essential to filtering our drinking water, providing recreational opportunities for people or making Bedfordshire an attractive place for business. It was simply an important site and managing it was the right thing to do.

In the past there have been other 'right things to do'. The RSPCA wasn't started because animals provided 'essential companionship services'. Child labour was banned *in spite of* the economic arguments in its favour. And women got the vote because that's what was fair. In fact there have been a lot of causes won because of the moral issues supporting them.

Can't nature conservation be one of them?

These are the bees I know

by Heather Webb

It's a cold December day and I just noticed my Moleskine is getting pretty dusty. Flipping through the pages I see my last bumblebee record was September 30. It was a lonely *B. pascuorum* scrounging through the White Dead-nettle, looking much like I do when I check the freezer for the umpteenth time to see if a tub of Ben & Jerry's has suddenly materialised. Unlike last summer when I was away for five weeks (during which time my garden evolved into a scene from 'Day of the Triffids'), I managed to spend a full six months with the bees — bumble and otherwise — of my garden.

The first visitor was as usual a Hairy-footed Flower Bee *Anthophora plumipes*. Males and females of this small, solitary, active species congregate on the Lungwort from March until May. A pair of Buff-tailed bumblebees *B. terrestris* appeared on April 9: sadly I saw only a few of them this year. They are difficult to distinguish from the White-tailed species *B. lucorum*, which has a whiter tail, so I confess some of my records are '*B. terrestris/lucorum*'.

My main visitors were the orange-tailed Early Bumblebee *B. pratorum* and the Common Carder, *B. pascuorum*. Both species arrived in June and stayed until September, feeding almost exclusively on the patch of Knapweed beside my wheelie bin. On June 9 I rescued a Garden Bumblebee *B. hortorum* from my front window. It was the only specimen I've seen in the two years I've been in this house.

My favourite record, though, has to be a female Red-tailed Bumblebee *B. lapidarius* on August 1. I discovered her near my car, tunneling into the dirt! I do hope she made a nest there so I can record her offspring. If this cold winter ever ends, that is!

Insects in the garden

by Rosemary Spencer, Bedford

This year our small garden has attracted more flying insects than usual. Perhaps some good sunshine in May and June and some acceptable flowers have encouraged them.

Honeybees came first to the Cotoneaster *C. horizontalis* on the fence, and then with great excitement to the large Hebe *H. pinguifolia*. Climbing roses and a Deutzia were also visited as the blooms caught the sun. A *Bombylus* sp. appeared when cowslips came out but it didn't stay around.

Ceanothus 'Puget Blue' attracted a small bee not seen before: it sported a bright yellow middle stripe. Small brown bees came to Hosta flowers and the Philadelphus, but found Alstromeria a disappointment. Some of these bees hatched from tubes put up for the Red Mason Bees, and some were apparently leafcutters but which leaves they were using were not identified.

June: On one hot afternoon, three beautiful White-tailed Bumblebees *Bombus lucorum* were on the lavender bush by the front (west facing) door. Lots of hoverflies visited on the sunny days. Most were small thin ones striped wasplike in yellow and black, but there were also similar sized brown hoverflies which were able to sip from the flowers of nightscented stock. Grown from some Red Cross seeds the flowers released their heady perfume at about 9pm, but the hoverflies came earlier, and had long tongues to reach for nectar. When other flowers were over the hoverflies massed on Goldenrod, but the August cold and rain may well have finished them off.

A couple of 2-spot Ladybirds were seen, but there were very few aphids or blackflies this year.



Southern Migrant hawker *Aeshna affinis*. Photo by Robert Geerts
www.dragonflies.de

The big hawkers came this month, to grandson's delight. One was identified as a Southern Migrant Hawker *Aeshna affinis*.

Only one early damselfly was seen: its tail had a blue tip.

July: Small White Cabbage and Holly Blues appeared. We had few butterflies this year. A Comma in early March hatched on a sunny day, and a Red Admiral was eaten by the cat.

A Common Darter spent some time sitting on a sunny fence, lifting off from time to time but always returning to the sunny patch.

August: Wasps arrived on the 31st. Several smart small ones focused on the bay tree, for wax from the leaves perhaps. A new hoverfly joined them. It has a round body and wasplike stripes but behaves more calmly.

There were spiders of course, mostly little ones. A thrush gobbled up the biggest one, seizing it neatly from the middle of the web.

Having heard about the nasty Brandon fly we were wary of biters. Some bites were extraordinarily red and painful but it wasn't clear what caused them. However there have been no wasps to date at the end of August in spite of dire predictions of a plague of them.

September: On a sunny day in the first week in September three dragonflies danced for about half an hour like the Battle of Britain in miniature. There was one collision, but they seemed to tolerate each other. They might have been Migrant Hawkets *Aeshna mixta*. It seems possible that the wasps were sprayed by a concerned neighbour, as there was a strong smell of insecticide at the end of the garden and they have not been seen on the bay tree since then.

It was good to see a Ruddy Darter *Sympetrum sanguineum* near Longholme Lake on the 12th. It sat in the sun on a dry patch of earth, which is in character.

A bumblebee *B. lucorum* came to the Nasturtium flowers on the 14th but did not stay.

The equinox and a full moon today the 23rd. Our garden will receive very little sun now until March, but there may yet be some moths to see. Warm September days have inspired the big garden spiders to make new webs in unexpected places. One caught in my hair, climbed to the kitchen ceiling and yoyo'd until taken outside again.

Dragonflies seem to have had a good year. The big ones were the real stars; we are fortunate to be so near the River Great Ouse.

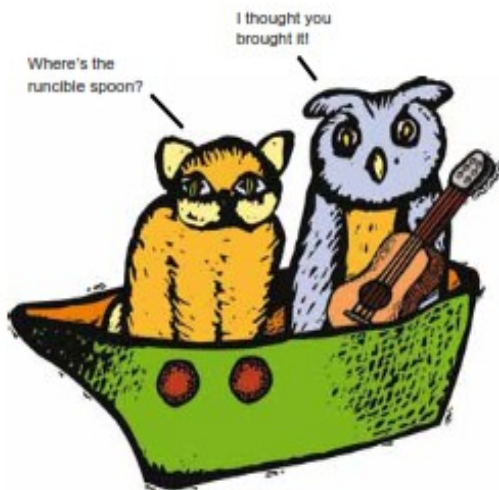


White-tailed Bumblebee *Bombus lucorum*. Photo by Anne Tanne

Dining on mince and slices of quince?

Central Bedfordshire Council Ecologist Liz Anderson recently made an exciting discovery after her husband had cut the grass. Lying on the lawn was a chopped yellow, pear-like fruit. Several others were lying in the garden bed. Looking up over the neighbour's fence Liz spotted a large old tree from which the fruits must have fallen. The fruit has a strong, sweet smell, is a bit fuzzy and has very large sepals. It's a quince of course, and judging from the great age of the tree could well be quite an old variety.

Sadly the site has planning permission and the tree is scheduled to come down. However in this case the economic climate is proving a good thing, as development will likely not start any time soon. This gives us time to take some cuttings which can be grafted onto new root stock, thereby preserving the quince by giving it a whole new lease of life. For quince are like apples: because of the way they reproduce, planting the seeds won't give you the same variety as the parent plant.



The reason is this: an offspring is a random (to all intents and purposes) mix of its parents' genes. Commercial fruit varieties are *specific* combinations of parental genes which have been purposely bred for certain qualities. If you were to plant an apple seed, for example, fruits on the resulting tree would have the same genes as those of the apple's parents. However the genes would be combined differently. This would yield different fruits to what you'd planted. This is also what makes fruit breeding so time-consuming: most of the offspring fruits are mediocre. So the way to reproduce the desired apple is to take a cutting and graft it to another tree. The cutting is genetically identical to the original tree, as are the fruits it produces.

So while we'll be sad to see the demise of such a grand old tree, there's hope for the next quince generation!

Editor's note: Quince might be an old 'folk' fruit, but it still makes lovely jams, chutneys, jellies and pies! Don't be afraid to try cooking with them: just search online for the many excellent quince recipes available. The Owl and the Pussycat loved them, and so might you too!

The BRMC Guide to Grid References

by Rachel Broomfield, Biodiversity Data Officer

At the BRMC we use grid references on a daily basis for our mapping work and for the species records we receive. They are also vital to the County Recorders who require accurate grid references to be supplied with records. Records should always come with a textual description as well, as this helps to make sure that locations are accurate. In some cases the County Recorder will assign a grid reference if one is not provided, however this may result in the location being less accurately recorded.

				HP	
			HT	HU	
	HW	HX	HY	HZ	
NA	NB	NC	ND		
NF	NG	NH	NJ	NK	
NL	NM	NN	NO		
NR	NS	NT	NU		
NW	NX	NY	NZ		
		SC	SD	SE	TA
		SH	SJ	SK	TF
	SM	SN	SO	SP	TL
	SR	SS	ST	SU	TQ
SV	SW	SX	SY	SZ	TV

So if you are unsure of what a grid reference is and how to create one, here is a brief summary to help you out!

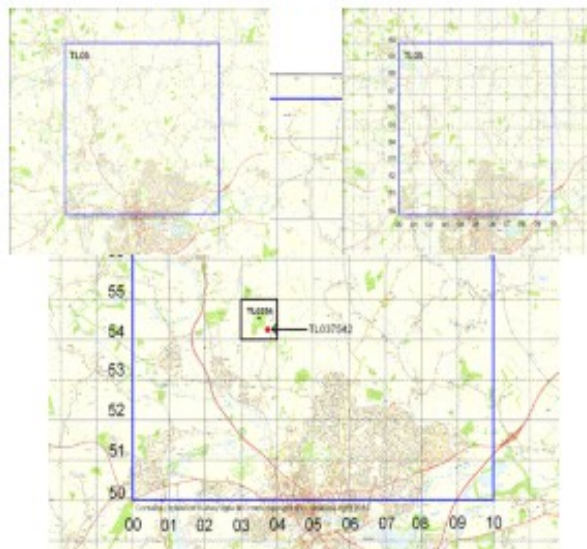
Ordnance Survey provides a variety of maps of Great Britain and uses a reference system based on a National Grid. The diagram to the right shows the National Grid across Great Britain. Each square is 100 kilometres and contains two letters. Bedfordshire is covered by two of these 100km squares, TL and SP.

These 100km squares are then divided, creating 10km squares. The diagram below shows the 10km grid square TL05, this covers a considerable area from Bedford town centre towards Sharnbrook in the north. The 10km squares can be divided up again into 1km squares, for example TL0354.

An important thing to note is that grid references are always written with the letters (e.g., TL) then the 'eastings' (horizontal) then the 'northings' (vertical). One helpful way to remember this is the phrase 'Along the hall, then up the stairs'.

The most common grid references that we use at the BRMC are 6-figure grid references. This allows mapping to 100m accuracy and so we can reasonably pin-point where species or places are on a map.

To determine the 100m grid reference of a location from a map we must first divide its 1km square into a grid of ten columns and ten rows, each numbered 0 to 9. (Columns number left to right. Rows number bottom to top). We then append the column number containing the location to the 1km square's easting (the first two digits), and append the row number containing the location to the 1km square's northing (the last two digits). For example, the red dot below is in the 8th column (numbered 7) and the 3rd row up (numbered 2), of the 1km square TL0354, so its 100m grid reference is TL037542.



Contains Ordnance Survey data © Crown copyright and database right 2010

Some grid references may be more suitable to use in species recording than others. 100m and 10m grid references are ideal for the more static and rarer species. 1km grid references can be used for the more common and mobile species. Where possible, 2km and 10km grid references should not be used as they

are imprecise and cover wide areas.

A few points to remember:

- Always write the easting before the northing.
- Check whether you need SP or TL (SP covers the west side of the county).
- A 100 metre grid reference is not a point location — it is a reference to a square within a grid of squares.
- Always double check it — it can be easy to make a simple mistake which if undetected could locate the record in the wrong place!

Grid references can seem a bit daunting at first, but you can soon get the hang of them! And just to help make life even easier there is a helpful application written by Keith Balmer on the BNHS website (www.bnhs.org.uk) called Grab-a-Grid-Reference. It does exactly as it says, using OS maps or aerials you can find the place you are looking for and then using the right hand options and the marker you can pin-point your grid reference. A very handy helper to save time and effort!

If you would like to find out more about the BRMC you can find us at www.bedsbionet.org.uk, or you can email us at brmc@bedsbionet.org.uk.

A little daub'll do ewe!

by Jane Moore, Ranger, Priory Country Park

Would ewe believe it?

Sheep's fleece is proving popular for all sorts of things, the latest being as part of the daub mix for a replica Iron Age hut being constructed at Priory Country Park. The project, being run by Susannah Oliver of Cecil Higgins Art Gallery & Bedford Museum Education Service, hopes amongst other things to discover the best mix of ingredients. The daub, consisting of clay soil and well rotted manure needs a binder which is usually straw and sometimes animal hair. Laura Downton of Bedfordshire's Nude Ewe project kindly donated a bag of fleece to help with the experiment.



Susannah commented, 'the children have made experimental walls before but we've never had the chance to make a complete hut, or to try out using fleece. With daub it's all a question of proportion, it was easy to add too much fleece at once and then we ended up with spongy lumps that were impossible to work, but just a little wool well drawn out should act as a terrific binder. We will be keeping an eye on the walls to see what happens as they dry out.'



The hut builders, including 15 youngsters from Bedford Museum's Saturday Archaeologists Workshop and staff from Albion Archaeology, first wove a willow fence to form the walls — called 'wattle'. They next literally 'mucked in', mixing the manure, straw, clay and fleece to form the daub which was applied to the walls, worked well in between the willow, and then smoothed off. The hut was transformed from a skeletal structure to a solid-walled shelter in under two hours thanks to everybody's hard work.

The hut will be completed within the next few weeks and roofed with reed or turf — and maybe some sheep's fleece to help with the insulation!

Children from **Saturday Archaeology Workshops**, run by Cecil Higgins Art Gallery & Bedford Museum Education Service and Albion Archaeology, creating the first stages of a wattle and daub hut in Priory Country Park, during a workshop on the Iron Age, 13th November 2010. Photographs © Bedford Borough Council and Albion Archaeology 2010.

A galling oversight!

No matter how hard one tries to avoid them, errors always creep into this and other publications. Last issue was so jam-packed I'd had to edit out of Seán Karley's Maulden Wood Gall Report the actual list of species recorded. Unfortunately I neglected to edit the text accordingly. An eagle-eyed reader spotted the error and asked if the promised list would be in the December *Muntjac*.

The answer is yes, and here it is, although you might need a magnifying glass. Apologies for the small print: fitting long lists onto single pages is just one of an editor's many jobs!

- Ed.

Host scientific name	Host common name	Gall-forming species
<i>Acer campestre</i>	Field Maple	<i>Aceria aceriscampestris</i>
<i>Quercus robur</i>	Pedunculate Oak	<i>Andricus infator</i> f. sexual (09)
<i>Quercus robur</i>	Pedunculate Oak	<i>Andricus kollari</i> f. agamic (09)
<i>Quercus robur</i>	Pedunculate Oak	<i>Andricus lignicola</i> f. agamic (09)
<i>Quercus robur</i>	Pedunculate Oak	<i>Andricus quercuscoriolis</i> f. agamic
<i>Quercus robur</i>	Pedunculate Oak	<i>Asterodiaspis</i>
<i>Quercus robur</i>	Pedunculate Oak	<i>Biorhiza pallida</i> f. sexual (09)
<i>Quercus robur</i>	Pedunculate Oak	<i>Biorhiza pallida</i> f. sexual
<i>Quercus robur</i>	Pedunculate Oak	<i>Neuroleus numismalis</i> f. sexual
<i>Quercus robur</i>	Pedunculate Oak	<i>Neuroleus quercusacanthum</i> f. sexual
<i>Quercus robur</i>	Pedunculate Oak	<i>Trioza remota</i>
<i>Rosa canina</i>	Dog Rose	<i>Bleniocampa phyllocopta</i>
<i>Rosa canina</i>	Dog Rose	<i>Diplolepis rosea</i> (09)
<i>Rubus fruticosus</i>	Bramble	<i>Dasineura plicatrix</i>
<i>Rubus fruticosus</i>	Bramble	<i>Diasiphum rubi</i>
<i>Rumex acetosella</i>	Sheep's Sorrel	<i>Apion frumentarium</i>
<i>Salix caprea</i>	Goat Willow	<i>Itcomyia capreae</i>
<i>Salix caprea</i>	Goat Willow	<i>Pontania bridgmani</i>
<i>Salix caprea</i>	Goat Willow	<i>Rabdoiphaga rosata</i> (09)
<i>Sorbus torminalis</i>	Wild Service Tree	<i>Eriophyes torminalis</i>
<i>Tilia platyphyllos</i>	Large-leaved Lime	<i>Eriophyes axillaris</i>
<i>Tilia platyphyllos</i>	Large-leaved Lime	<i>Eriophyes illiae</i>
<i>Tilia platyphyllos</i>	Large-leaved Lime	<i>Phylloptus tetrastrichus</i>
<i>Ulmus</i>	Elm	<i>Aceria ulmicola</i>
<i>Ulmus</i>	Elm	<i>Janetella lemeei</i>
<i>Ulmus</i>	Elm	<i>Tetraneura ulmi</i>
<i>Urtica dioica</i>	Nettle	<i>Puccinia caribina</i>
<i>Viburnum lantana</i>	Wayfaring-tree	<i>Eriophyes viburni</i>
<i>Populus tremula</i>	Aspen, in old records	<i>Contarinia peilovi</i> K. Palmer, new to site
<i>Acer campestre</i>	Field Maple	<i>Dasineura tympani</i> K. Palmer
<i>Populus tremula</i>	Aspen	<i>Harmandiola globulifera</i> K. Palmer
<i>Carpinus betulus</i>	Hornbeam	<i>Zygobota carpinis</i> K. Palmer

Host scientific name	Host common name	Gall-forming species
<i>Acer campestre</i>	Field Maple	<i>Aceria aceriscampestris</i>
<i>Acer campestre</i>	Field Maple	<i>Aceria eribibus</i>
<i>Acer campestre</i>	Field Maple	<i>Aceria macrochelus</i>
<i>Acer pseudoplatanus</i>	Sycamore	<i>Aceria cephaloneus</i>
<i>Acer pseudoplatanus</i>	Sycamore	<i>Aceria pseudoplatani</i>
<i>Carex pendula</i>	Pendulous Sedge	<i>Wachtliella caricis</i>
<i>Centaurea nigra</i>	Black Knapsweed	<i>Urophora jaceana</i> (09)
<i>Corylus avellana</i>	Hazel	<i>Phylloptus avellanae</i>
<i>Crataegus monogyna</i>	Hawthorn	<i>Aceria crataegi</i>
<i>Eucalyptus europaeus</i>	Spindle	<i>Eriophyes convolvulus</i>
<i>Fagus sylvatica</i>	Beech	<i>Acalitus siliensis</i>
<i>Fagus sylvatica</i>	Beech	<i>Aceria fagineus</i>
<i>Fagus sylvatica</i>	Beech	<i>Aceria nervisequus</i>
<i>Fagus sylvatica</i>	Beech	<i>Hartigiola annulipes</i>
<i>Filipendula ulmaria</i>	Meadowsweet	<i>Dasineura ulmariae</i>
<i>Filipendula ulmaria</i>	Meadowsweet	<i>Triphragmium ulmariae</i>
<i>Fraxinus excelsior</i>	Ash	<i>Aceria fraxinivorus</i> (09)
<i>Fraxinus excelsior</i>	Ash	<i>Dasineura acrophila</i>
<i>Fraxinus excelsior</i>	Ash	<i>Dasineura fraxinea</i>
<i>Fraxinus excelsior</i>	Ash	<i>Dasineura fraxini</i>
<i>Fraxinus excelsior</i>	Ash	<i>Psyllopsis fraxini</i>
<i>Glechoma hederacea</i>	Ground Ivy	<i>Liposthenus glechomae</i>
<i>Malus sylvestris</i>	Crab Apple	<i>Phyllocoptes malinus</i>
<i>Populus tremula</i>	Aspen	<i>Harmandia tremulae</i>
<i>Populus tremula</i>	Aspen	<i>Phyllocoptes populii</i>
<i>Prunus domestica</i>	Plum	<i>Eriophyes similis</i>
<i>Prunus spinosa</i>	Blackthorn	<i>Eriophyes padii</i>
<i>Prunus spinosa</i>	Blackthorn	<i>Eriophyes prunispinosae</i>
<i>Prunus spinosa</i>	Blackthorn	<i>Taphrina pruni</i>
<i>Pteridium aquilinum</i>	Bracken	<i>Chiono grossicauda</i>
<i>Quercus cerris</i>	Turkey Oak	<i>Neuroterus salersii</i> f. sexual
<i>Quercus cerris</i>	Turkey Oak	<i>Andricus grossulariae</i> f. sexual
<i>Quercus robur</i>	Pedunculate Oak	<i>Andricus aries</i> f. agamic (09)
<i>Quercus robur</i>	Pedunculate Oak	<i>Andricus curvator</i> f. sexual
<i>Quercus robur</i>	Pedunculate Oak	<i>Andricus fecundator</i> f. agamic (09)

Stepping stones for Stag Beetles

The People's Trust for Endangered Species is conducting a campaign to create suitable habitat for the charismatic but threatened Stag Beetle *Lucanus cervus*.

As you may know, dead and decaying wood is the ideal home for Stag Beetles and many other insects. Stag Beetles have a long life cycle. Their larvae live for up to seven years in decaying wood like log piles and tree stumps, where they feed on the rotten timber before emerging as beetles to breed during their short spell as adults. These insects don't travel very far and so the number found in an area depends on the availability of habitat when the female laid her eggs several years earlier. An adult female Stag Beetle lays her eggs where she emerges if there is sufficient dead wood, but otherwise she needs to find somewhere else. Our general tendency to tidy the green spaces around us can therefore threaten these vulnerable insects, as places for them to shelter are lost or become isolated, leaving fewer suitable areas for female beetles to lay their eggs.

A simple and effective way of helping stag beetles is to make sure that they have a good supply of dead wood and can travel around easily. You can leave tree stumps *in situ* or create 'stepping stones' by partially burying a vertical log pile. The easy-to-follow instructions for creating 'Stepping Stones for Stag Beetles' are available online at www.ptes.org/?page=353. This can make a great community activity for young people or interested groups of adults. Burying a vertical log pile is something that anyone can do to help increase breeding sites for stag beetles; even a single log can provide shelter and food. You can also download the instructions at www.ptes.org/stagbeetles and register your log pile.



Male Stag beetle *Lucanus cervus*, with the characteristic large mandibles. Photo by Simon A. Eugster

Oh the weather out there is frightful!

Doesn't the recent cold just make you wish you could hibernate for a few months? These photos were taken by a licenced bat worker on a recent hibernaculum check.

These guys sure do seem to have the right idea!



L-R: Natterer's Bat *Myotis nattereri*, Daubenton's Bat *Myotis daubentonii*, Barbastelle *Barbastella barbastellus*. Photos by Danny Fellman.

'You've got the entire curriculum on a table!'

by Heather Webb

On November 12 conservation groups, teachers, students, one renegade parent and an American professor descended on the Marston Vale Forest Centre for the 2010 Bedfordshire and Luton Environmental Education Show. The show was co-hosted by the Beds and Luton Environmental Education Working Group and Lark Rise Lower School.

Teachers and students from lower, middle and upper schools around the county got a chance to see what kinds of environmental education (EE) opportunities are available in Bedfordshire. The event included a series of 'taster session' workshops on everything from map making to willow weaving. The Forest Centre gallery and mezzanine became a vibrant, colourful marketplace showcasing the great programmes on offer from local authorities, businesses, conservation groups and our very own BNHS.



The idea for the show arose in a rather roundabout way. For the past year or so I've been working with Dr Nejem Raheem from Emerson College in Boston, on an economic study of environmental education. We're trying to find out what teachers are most looking for, and what they value most when considering EE programmes to pursue. As part of our research we interviewed teachers from several schools. More than one teacher told us it would be great to have a single place where they could meet EE providers to talk about what they're looking for, and to find out what's available.

And then we met Marcus Ray at Lark Rise Lower School. He immediately said, 'let's have a trade show!' He also had the excellent and cunning idea that every school attending the show should be represented by at least two students. For while teachers will return to their busy jobs and can very easily get sidetracked by other pressing issues, students will talk among themselves and pressure their school to do something that excites them. So that was that: I'd work with the conservation groups, and Lark Rise would work with the schools.



Prototype of the BNHS 'Nature Table in a Box'. It was a huge hit with students and teachers alike!

After months of work, the result was a great event where it seems everyone had fun. The students teased apart owl pellets at the Wildlife Trust stall and stroked a tiger pelt while learning about endangered species from Whipsnade Zoo. Teachers learned about school gardening from the RHS, and how to 'green' their school grounds from Groundwork. During the workshops, the environmental groups got a chance to chat and network with each other. And Dr Raheem flew in just for the event to interview people, getting lots of good information for our research.

It has to be said, a highlight of the marketplace was the BNHS stall with its 'Nature Table in a Box' prototype. Children (and teachers!) couldn't resist stroking the mink pelt and examining a skull while Stephen Plummer talked with them about the impacts of invasive species.

The table was covered in a wonderful display of bones, feathers, fossils, seeds, nests and fungi. One teacher was particularly impressed: 'you've got the entire curriculum on a table!' she exclaimed.

Many thanks to everyone who had a stall, ran a workshop, and/or attended the event! Thanks as well to Natural England for providing 80 decks of 'UK Species Top Trumps', which the children — and adults — snapped right up. We've already been asked about having another show next year. We'd love to if we can: it would be fantastic to keep up the momentum!

In Focus: Environmental Education Show, Millennium Country Park, November 12, 2010

Photos by Heather Webb and Nejem Raheem



'These? Some little pig wants them to build a new place: his brother's straw house was blown down by a wolf or something.'



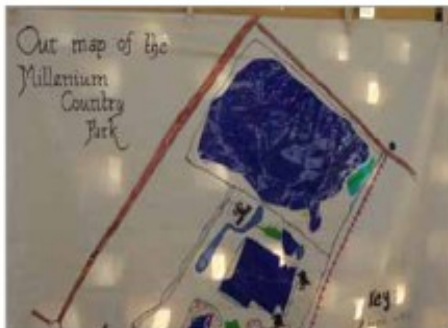
'So I said to the guy, now that's how you tell a Rhamnus from a Cornus, hee hee!!'



The master ventriloquist at work: not only does he not move his lips, he doesn't even open his mouth.



'Did I tell you the one about the —'
'Yes, yes you did.'
'How 'bout the —'
'Yes, that one too.'



As the economic crisis deepens and more staff are cut, the Ordnance Survey starts outsourcing work.

Upcoming events

Jan 25 'The Lost Land of the Dodo' by Julian Pender Hume of the Natural History Museum. Recent research has finally revealed secrets of the Dodo's lost habitat and the other animals that once shared its island home. 8.00pm at Maulden Village Hall, TL049381.

Feb 8 The national status of the Hazel Dormouse and the effects of conservation in Bedfordshire and our neighbouring counties, by Ian White, Dormouse Officer for the People's Trust for Endangered Species. Meet at 7.45pm at the Village Hall, Leighton Road Toddington TL007288.

Mar 8 Joint meeting with the Moth Group to update on 2010 activities, by Andy & Melissa Banthorpe and David Manning. Meet at 7.45pm at the Village Hall, Leighton Road Toddington TL007288.

Mar 13 Morning birdwatching around the RSPB Lodge Reserve, Sandy, for wintering and early spring migrants. Meet at 8.00am in the car park TL191486. Leader: Steve Blain

Mar 22 The BNHS Annual General Meeting will take place at 7.30pm at Maulden Village Hall TL049381, where the Officers and Recorders will present their annual reports.

Mar 29 Richard Grimmett of BirdLife International will present 'Conservation of Migratory Birds'. Includes the problems facing migrating birds on their incredible journeys and the work of BirdLife to address these issues. 8.00pm at Maulden Village Hall TL049381.

Nature nuggets

In July Defra published 'An invitation to shape the nature of England'. This discussion paper asked key questions about how our country's nature and wildlife should be protected and enhanced. The response was overwhelming: **over 700 full responses were received, and over 13,000 online questionnaires were completed.** This is a huge response to a government environment paper, and shows just how much we really do value and cherish nature!

Adders are big news in Leighton Buzzard! The Greensand Trust and the Bedfordshire Reptile and Amphibian Group recently completed our county Species Action Plan for adders. The plan was mentioned in the subsequent GST Highlights newsletter, where it was spotted by Leighton Buzzard Observer journalist Mick King. His article gives a nice, balanced view of this often maligned species, and is available online at http://www.leightonbuzzardonline.co.uk/news/local/snakes_alive_and_let_s_keep_it_that_way_1_1571942 (actually, it's probably easier just to Google it!)

November was an 'award-ful' month for the Nude Ewe Conservation Wools Project. This Bedfordshire-based non-profit conservation business received a national Gold 'Green Apple Award' for Environmental Best Practice (handed out at Westminster, no less!) In the same week the project also received a commendation from the Chilterns Conservation Board!

A well-loved community orchard has become **Bedfordshire's newest County Wildlife Site. Fairfield Orchard** met the BAP criteria as a traditional orchard, a declining resource in the county. It was not only designated but also saved from the bulldozer, thanks to a local action group and the members of the County Wildlife Sites Panel. The orchard fruits include apples, plums and hazel. Not all of the varieties have been identified yet, but the East of England Apples and Orchards Project folks say there appear to be some nice old Bedfordshire varieties in there!

The financial cost of invasive non-native species on the British economy has been unveiled in a new report. The report, entitled 'The Economic Cost of Invasive Non-native Species to the British Economy', suggests that **invasive species cost £1.7bn every year.** The rabbit was deemed the most costly species, followed by Japanese Knotweed. The report is available online from the GB Non-Native Species Secretariat.

The results of the latest national survey show that **the otter is making a dramatic comeback** to our rivers and wetlands. The results of the 5th Otter Survey (2009–2010) now show a significant increase in the distribution of this species, with signs of otters at 58.8% of the sites surveyed. This compares with signs of otters at only 36.3% of sites in the 4th (2000–2002) survey.