October 2011

View of the pond taken at sunrise on the 16th. 1.



Confirmed wildlife sightings: 2.

a. **Birds:**

Blackbird, Blue Tit, Brambling, Buzzard, Carrion Crow, Chaffinch, Coal Tit, Dunnock, Goldfinch, Great Spotted Woodpecker, Great Tit, Greenfinch, Grey Heron, Jay, Long-tailed Tit, Mallard, Moorhen, Nuthatch, Pheasant, Raven, Robin, Rook, Siskin, Sparrowhawk, Tawny Owl, Tree Creeper, Tree Sparrow, Willow Tit, Wood Pigeon, Wren.

b. Mammals:

Bank Vole, Brown Hare, Fox, Hedgehog, Rabbit, Red Squirrel, Stoat, Water Vole, Weasel and Wood Mouse.

- c. Amphibians and Reptiles: Common Toad.
- Butterflies: Red Admiral d.
- Moths: The Chestnut e.

3. Plant notes:

A few, isolated plants were found flowering late in the year – Red Campion, Marsh Ragwort, Creeping Buttercup and Devil's Bit Scabious.

A good number of hazel bushes have become established in the Reserve and neighbouring woods in the last ten years and some are now starting to bear fruit. The picture on the left shows a ripening hazel nut. The picture on the right shows the male catkins of the hazel beginning to form in preparation for fertilising next year's female flowers.



Who will be the first to spot a female hazel flower next spring?









Weasel at Eskrigg by George Trudt

4. Fungi: At the end of October there were still many species of fungi to be seen around the Reserve and neighbouring woodland.



	Common Name	Scientific Name
a	Crested Coral	Clavulina coralloides
b	Common Earthball	Scleroderma citrinum
c	Slimy Milk Cap	Lactarius blennius
d	Yellowish Pleurotus	Panellus serotinus
e		Mycena fagetorum
f	Birch Polypore	Piptoporus betulinus
g	Trumpet Chanterelle	Cantharellus tubaeformis
h		Cortinarius sp
i	Eye-lash Fungus	Scutellinia scutellata
j	Blackening Brittlegill	Russula nigricans
k	Yellow Stagshorn	Calocera viscosa
1	Jelly Hedgehog (Tongue)	Pseudohydnum gelatinosum
m	Snaketongue Truffleclub	Cordyceps ophioglossoide
n	Sand Bolete	Suillus variegatus
0	Wood Hedgehog	Hydnum repandum

5. Hedgehogs

Scientific name: Erinaceus europaeus

Size: Hedgehogs grow to around 25cm from nose to tail, and have a bulky body weighing around 1kg. The tail is between 2 and 3cm long.

Distribution: Found throughout the UK.

Months seen: April to October. Hedgehogs hibernate for the remainder of the year.

Habitat: Hedgerows, grassland and gardens.

Food: Earthworms, beetles, slugs, snails and other invertebrates.



Special features: Hedgehogs are different from every other UK mammal in that they have a coat of around 6,000 spines on their back. Although the spines are sharp, they are not barbed like the spines on a porcupine.

There can be up to 500 fleas on one hedgehog, but the fleas are a specific type which have adapted to life amongst the tough hedgehog spines. Although they sometimes get passed to dogs, cats and humans, they rarely bite. When they do, they usually drop off and go looking for another hedgehog.

Hedgehogs do their hunting at night. They have a strong sense of smell and hearing, but relatively poor eyesight. They're great to have in the garden, since they eat many of the creatures which gardeners regard as pests. They get their name from the pig-like snorting noise they make while snuffling through hedgerows. The males are called boars and the females are called sows.

Hedgehogs can swim, climb almost vertical walls, and run at speeds of up to two metres per second.

They reach sexual maturity in their second year. After emerging from their first winter in hibernation they build up their body weight, and by late April they are ready to breed. The ideal mating time would be on a warm night, usually between May and June.

Mating begins when the male finds a female on his nightly hunting trip. As he approaches her, he makes lots of pig-like snorting noises, and then he shuffles round and round her, trying to gain her attention. This can sometimes go on for hours, as the female is usually more interested in foraging for food than mating. All the male can do is snort louder, and circle closer to her. If he is persistent enough, the female may give in and allow the male to mate with her. Mating only lasts for a minute or two, but the female must completely flatten her back before the male can mount her, otherwise he could be seriously injured on her spines. After the two separate, the male plays no further part in bringing up the family. If the mating is successful, the babies are born four weeks later.

Hedgehogs generally have two litters each year of between five and seven young. The female makes a nest just underground of dry leaves and grass. In gardens they often choose to nest under sheds. Fortunately for the mother, the hoglets are born without spines, but are covered with short white hairs which gradually turn into spines. After one month the young are ready to leave the nest on foraging trips with their mother. After two months they are ready to leave their mother who will then start another brood.

In order to protect themselves from predators, hedgehogs have a row of muscles along the underside of their bodies which allow them to roll up into a tight ball of prickles. Unfortunately this is no defense against the motor car, and thousands of hedgehogs are killed on UK roads every year.

In Britain the hedgehog hibernates between October and April when the weather is cold and natural food supplies are scarce. They shelter somewhere warm and dry, like a pile of leaves or logs. Always check piles of garden waste before starting a bonfire, there may be a hedgehog in there!

During hibernation the hedgehog's heart beat and breathing almost stops. Hardly any energy is used. Chemical reactions are so minimal that the animal survives on just the fat reserves in the body. It has been calculated that a hedgehog burns up around one third of its body weight while sleeping through the winter. If a hedgehog tries to hibernate at less than 500 grams in weight it's unlikely to survive, and could literally starve. Ideally it wants to be 600 grams or more for a healthy hibernation. Some hedgehogs born late in the year simply don't have enough time to build up enough reserves of fat to take them through the cold winter months. These late litters, or as they're sometimes called 'Autumn Juveniles' are possibly the result of our changing climate, and they are becoming much more common.

If you find a small hedgehog out and about in the late autumn or early winter, even at night, it's a good idea to weigh it. If it's under 500 grams, phone your local wildlife rescue centre for advice. It may need to come into care where it can be checked over and perhaps over-wintered. Also check the rest of your garden and alert your neighbours too. Where there is one hedgehog there may be more.

7. Events at Eskrigg:

19th – Den Building with Ross Gemmell

The weather leading up to the Den Building afternoon was very poor and several family groups decided to withdraw from the event. Nevertheless, the event went ahead and the Carey family enjoyed a sunny afternoon and constructed some excellent huts.





24th - Visit by two members of the S1 Environmental Studies class from Lockerbie Academy.

The two boys, Isaac Hann and Connor Jardine, used their first visit to the Reserve to have a look round and think about what practical work they could do to in order to learn some new skills and help the Trust at the same time. They are looking forward to returning next month when they hope to work to improve the paths.



26th - Visit by S2 Environmental Studies class from LA.



Left to right: Christina, Prentice, Jamie, Thomas and Ross raking up the leaves along the path through the Reserve.

27th - Miss Bowker's S3 Science Class came to learn some pond and stream sampling procedures.



The following organisms were identified during the sampling exercise:

Stream samples: Freshwater Shrimps Mayfly nymphs (4 species) Caddis-fly larvae Simulid larvae Fly larva Worm

Pond Samples: Three-spined Sticklebacks Damselfly nymphs Mayfly nymphs (2 species) Pond Snails Greater Water Boatman Lesser Water Boatman **Pond Samples continued:** Caddis-fly larvae (sand case) Red Water Mite Pond Skater Freshwater Shrimps Pea Mussels Dragonfly - Common Darter (male)

The science class spent some time discussing the role of freshwater invertebrates as water pollution indicator organisms. The fact that we have so many species of mayfly in the stream and pond tells us that the water in both cases is unpolluted.

The class also discussed the mutualistic relationship between the fungal and algal components of a lichen and why lichens are good indicators of air quality. The fact that we have the finely branched Usnea species on the trees at the Reserve means that the air is free from sulphur dioxide pollution.

28th - S3 Environmental Studies from Lockerbie Academy.

Teri and Pamela took over from where the S2 class had finished earlier in the week, and, with the help of their leaders Norah Muirhead and Anne Good, completed the clear-up of autumn leaves.





30th - Maintenance Day

On the last Sunday of the month Stuart Roxburgh and John Reid kindly helped to tidy the path by the Dumfries Road. This involved trimming the hedge and cutting and raking up the grass. The path between the Reserve shelter and the field gate was also strimmed and raked.

Volunteers: Thanks to Innes Green, Lewis Carruthers and Ian Dunn for their regular assistance once a week.

The S2 and S3 Environmental Studies pupils have prepared a booklet to show how they went about raising funds for Eskrigg Reserve last session. The booklet is on display at Eskrigg Centre.

6. Visitor Records:

Month	Total number of Visitors	Daily Average Visitors
May	1846	60
June	1504	50
July	1689	54
August	1661	54
September	1515	51
October	1763	57



7. Weather Records:

a. Air temperature

Month	Maximum	Minimum	Average
April	18.1	-2.7	7.9
May	14.5	-2.7	7.9
June	19.8	2.7	10.3
July	19.8	5.4	12.09
August	16.3	4.6	12.1
September	20.2	3.9	12.1
October	17.0	-1.8	9.2

Nature Reserve Temperature October 2011 Maximum 17.0 Minimum -1.8 Average 9.2 Temperature (Degrees C) -3

b. Precipitation

Month	Rainfall (mm)
April	55.8
May	158.9
June	85.4
July	155.65
August	127.6
September	151.6
October	167.6



8. Monitoring Red Squirrel Feeding Behaviour



Thanks to John Riddet for his help in gathering the data.