Lockerbie Wildlife Trust

(www.lockerbie-wildlife-trust.co.uk)

Eskrigg Reserve

February 2017 News Bulletin

Scottish Charity No: SC 005538

1. **Eskrigg Pond on the 26th of February - Day of the Grand Nut Race.**

2. **Confirmed wildlife sightings at the Reserve in February.**

   a. **Birds**

   Blackbird, Blue Tit, Buzzard, Carrion Crow, Chaffinch, Coal Tit, Collared Dove, Cormorant, Dunnock, Fieldfare, Goldcrest, Goldfinch, Goshawk, Great Spotted Woodpecker, Great Tit, Greenfinch, Grey Heron, House Sparrow, Jackdaw, Jay, Little Grebe, Long-tailed Tit, Mallard, Mistle Thrush, Moorhen, Mute Swan, Nuthatch, Oystercatcher, Pheasant, Raven, Robin, Rook, Siskin, Snipe, Song Thrush, Sparrowhawk, Starling, Treecreeper, Waxwing, Willow Tit, Woodcock, Wood Pigeon, Wren, Yellowhammer.

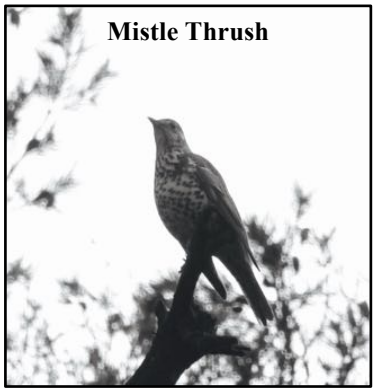
   Also spotted was the very rare "Moss Owl".

   b. **Mammals**

   Bank Vole, Common Shrew, Fox, Mole, Rabbit, Red Squirrel, Roe Deer, Weasel.

   c. **Fish, Amphibians and Reptiles**

   Common Frog.



Mistle Thrush

Moss Owl

Photographs by Jim Rae

3. The Great Spruce Bark Beetle (*Dendroctonus micans*)

The Great Spruce Bark Beetle, ***Dendroctonus micans***, is found on Spruce trees throughout much of Eurasia and was first discovered in Britain in 1982. It was probably introduced in the mid-1970s, by accident, in a load of imported timber. Its range now includes the south of Scotland. Unfortunately, many of the old Sitka Spruce trees near the Reserve have been infected for some time and some have already died.


Adult Great Bark Beetle on a Spruce cone

Life cycle of the great spruce bark beetle

Adult - beetles are 6-8 mm long and 2.5-3 mm wide. They are black when mature with a covering of orange hairs. The large size of the beetles enables the females to withstand the resin flow produced when they bore into the bark of a tree.

Eggs - are laid within a small egg chamber in the cambium of the tree. Each female can produce up to 300 eggs, laid in groups of 50-80, in interconnecting chambers. Eggs are normally laid on one side of the chamber.

Larva - The beetles has five larval stages (instars) which each become progressively larger. All larval stages feed under the bark in a similar manner: larvae feed side-by-side packing powdery wood debris (or 'frass') and diseased or dead larvae behind them into islands away from the main feeding site. The mixture of resin and frass forms a quilted pattern.

Pupa - Pupae are the immobile resting stage of beetle development before larvae can moult to the adult stage. Pupae are found in pupal cells among the larval frass. They are often found in close proximity and give rise, upon emergence, to aggregations of adults under the bark. These stages may be prolonged over several weeks or months depending on the temperature.

Newly emerged adults - The newly emerged adults are light brown in colour. As they mature, the colour darkens to brown and black. Adult beetles move within and between trees mainly by crawling (at temperatures of 12^{o}C or greater), but occasionally fly (at temperatures of 22.5 ^{o}C or greater).

Identifying infested trees

1. **Signs of poor tree health**
   The woods are checked for isolated or small groups of dead or dying trees characterised by browning of foliage over some or all of the crown.
2. **Damage to bark**
   The entry of female beetles into the bark of trees gives rise to characteristic 'resin tubes' on the trunk. Resin tubes and granular resin at the base of the tree are reliable signs of stem or root attack. Resin tubes vary in colour from white and cream to shades of purple and brown. They may be accompanied by copious resin bleeds. Loose bark with exposed beetle galleries usually indicates older infestations that have been attacked by woodpeckers.
3. **Under the bark**
   The area of bark around resin tubes, particularly those that are purple or brown, is inspected. A hollow sound when the bark is tapped often indicates a successful attack. The bark is carefully removed and the exposed area is inspected for signs of the beetle. The most characteristic indicator is the presence of a mixture of insect faeces (frass) and bark packed into 'islands' creating a quilted appearance. All beetle stages, from egg to adult, may be present.

In line with best practice, like the Forestry Commission and other private woodland owners across the country, Castle Milk Estate has already initiated biological control by introducing the predatory beetle *Rhizophagus grandis*. *R. grandis* has the ability to survive for long periods, both under the bark and in the soil and is thus able to exploit effectively its specific host, most stages of which can be found at all time of the year.


R. grandis

Castle Milk Estate will have to extract the infected trees while they still have some commercial value. This will probably be done near the end of the year when the Scots Pines, north of the power lines, are also felled.

There will be no access to the Reserve for a few days while this operation is in progress.

The above information has been has been taken from a number of Forestry Commission publications.

4. Planned Activities in February

Sun. 5th **Marshland survey**

At the end of December 2016 and at the beginning of February 2017, Bob Merritt identified the following invertebrate species in the marshland at Eskrigg Reserve.

Insects:

A water boatman	*Sigara dorsalis*
A mayfly nymph	*Cloeon dipterum*
A leaf beetle	*Galerucella sp.*
Rove beetles	*Stenus bifoveolatus*
	Stenus boops
	Stenus cicindiusculus
	Stenus lastrator
	Stenus nitidiusculus
Water Beetles	
crawling	*Haliplus ruficollis*
diving	*Agabus affinis*
	Agabus bipustulatus
	Hydroporus angustatus
	Hydroporus gyllenhalii
	Hydroporus incognitus
	Hydroporus melanarius
	Hydroporus memnonius
	Hydroporus nigrita
	Hydroporus striola
	Hydroporus tristis
	Hydroporus umbrosus
scavenging	*Anacaena globulus*
	Anacaena lutescens
	Helophorus flavipes
	Helophorus grandis
	Hydrobius fuscipes
small	*Hydraena britteni*
	Hydraena riparia

Molluscs:

The Wandering Snail	*Radix balthica*

Crustaceans:

A freshwater shrimp	*Crangonyx pseudogracilis*
A freshwater shrimp	*Gammarus pulex*

Arachnids

Harvestmen	*Nemastoma bimaculatum*
Spiders	
Foliage spider	*Clubonia stagnatilis*
Money Spiders	*Bathyphantes approximatus*
	Bathyphantes gracilis
	Diplocephalus permixtus
	Drepanotylus uncatus
	Erigone atra
	Gnathonarium dentatum
	Hilaira excisa
	Leptorhoptrum robustum
	Lophomma punctatum
	Porrhomma pygmaeum
	Tallusia experta
	Walckenaeria nodosa

Sun. 12th Members of the **Dumfries and Galloway through the Lens** group visited Eskrigg Reserve.
Some had visited before, others hadn't. Jim gave the group a brief account of the history of the Reserve and what wildlife they might see from the hides.

Fri. 24th **Jim Rae** attended a training course at the Royal Botanic Garden Edinburgh entitled **Lichens - Making the Invisible Visible**. The course was about identifying the main groups of lichens and how the lichens can indicate levels of atmospheric pollution.

Sun. 26th Lockerbie Wildlife Trust held its **16th Annual Nut Race** at the Reserve.
Twenty-four hardy individuals, including the D & G Standard photographer, braved the wet and windy weather to attend the Annual Nut Race. Many thanks to all who helped on the day and all who sponsored a nut. The £610 raised will be used to support the work of the Trust at Eskrigg Reserve.

5. Volunteer Activities


Connor

Tue. 7th **Connor Jardine** helped **Jim** clear two loads of waste timber and one load of waste metal to the D & G Recycling Centres in Annan and Lockerbie.

In the afternoon, Norah Muirhead raked up leaves and twigs from the Reserve path.


Brodan

Sat. 11th **Brodan Gough** helped **Jim** fill in the potholes on Eskrigg Farm Road.

Tue. 21st **Norah Muirhead** raked a section of the Reserve path before helping **Connor Jardine**, **Ross Taylor** and **Jim Rae** fill in the potholes on the forest road.

Wed. 22nd **Ross Taylor** helped **Jim Rae** dig out tree roots on the newest section of Woodland Walk.

Fri. 24th **Ross Taylor** locked up the Centre for Jim after 4 pm.

Mon. 27th **Ross Taylor** locked up the Centre for Jim after 4 pm.


Connor

Tue. 28th **Connor Jardine** and **Norah Muirhead** helped **Jim** to fell a tree, clear some tree roots and make a start on replacing the first sleeper bridge along the first section of the Bog Myrtle Path.

6. Spring Cavalier

In the December 2016 bulletin, I published a picture of an unidentified fungus. The same fungus has appeared in February and has now been identified as the Spring Cavalier - *Melanoleuca cognata*.
Apparently spring is its main fruiting season, with a smaller flush in late autumn. This is the 216th species of fungus identified at Eskrigg Reserve and Woodland Walks.

Also around at the moment are the Scarlet Elfcup, Candlesnuff, Jellytooth and Bleeding Porecrust.

Photographs by Jim Rae

For more information call Jim Rae or visit our website.

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