Lockerbie Wildlife Trust

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

Eskrigg Reserve October 2023 News Bulletin



Scottish Charity No: SC 005538

1. Eskrigg Pond at dawn on the 22nd of October.



2. Confirmed wildlife sightings at the Reserve during October.

a. Birds:

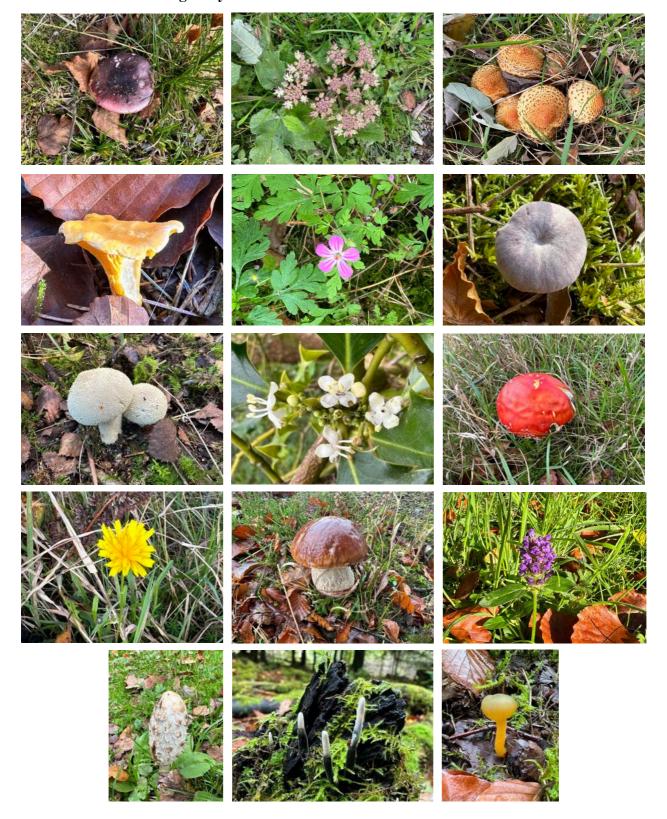
Blackbird, Blackcap, Blue Tit, Brambling, Bullfinch, Buzzard, Carrion Crow, Chaffinch, Chiffchaff, Coal Tit, Crossbill, Dunnock, Goldcrest, Golden Eagle, Goldfinch, Great Spotted Woodpecker, Great Tit, Greenfinch, Greylag Goose, Hooded Crow, House Sparrow, Jackdaw, Jay, Lesser Redpoll, Little Grebe, Long-tailed Tit, Magpie, Mallard, Moorhen, Nuthatch, Pheasant, Redwing, Robin, Rook, Siskin, Song Thrush, Sparrowhawk, Starling, Stock Dove, Treecreeper, Waxwing, Woodpigeon, Wren.

The Reserve Manager spotted a Golden Eagle flying in a south-east direction over the Reserve while he was opening up at 8.34am on Friday 27 October. Unfortunately, by the time he got his phone out, the bird was too far away to get a decent shot.

b. Mammals:

Bank Vole, Fox, Grey Squirrel, Hare, Mole, Rabbit, Red Squirrel, Roe Deer, Stoat.

3. October 2023 Photo-gallery.



Row 1: Purple Brittlegill, Cow Parsley, Golden Scalycap Row 2: Chanterelle, Herb Robert, Amethyst Deceiver Row 3: Puffball, Male Holly Flowers, Fly Agaric Row 4: Autumn Hawkbit, Penny Bun, Selfheal Row 5: Shaggy Inkcap, Candlesnuff, Jellybaby

4. Construction and Maintenance Work during October.

Sun. 01 Jim Rae cut and cleared a larch tree that had come down across the Larch Walk during the previous night.



Wed. 4 Sam Pattinson helped Jim to plant a tree, clear grass cuttings, cut back brambles and remove self-seeded trees.



Fri. 06 In the morning, Sam Pattinson, Gordon Reid and Jim Rae filled in some of the pot holes on the Eskrigg Farm Road, but had to stop early because of the change in the weather.

In the afternoon, a teacher and four students from Lockerbie Academy, who are working towards their John Muir Trust Award, visited the

Reserve to see the place and get an idea of the sorts of maintenance activities they could help with.

Mon. 09 Jim met up with **Joan Tremblay**, an international student and the Glasgow University Campus in Dumfries. **Joan** is currently studying for a Master's in Environment, Culture and Communication. She wants to learn more about the local ecosystems around her by volunteering to help with conservation work directly. She plans to come once a month to help with maintenance work and learn more about the habitats within Eskrigg Reserve and Woodland Walks.



Wed. 11 In the morning, **Sam Pattinson** helped **Jim** remove the moss and weed-covered gravel from around the Eskrigg Centre and replace it with clean gravel. The old gravel was used to fill up some of the pot holes on the forest road.

Thu. 12 Jim finished the laying of fresh gravel around the Eskrigg Centre.

Fri. 13 In the morning, Gordon and Jim filled in the remaining pot holes on the Eskrigg Farm Road.

In the afternoon, the **John Muir Trust students** from Lockerbie Academy, and their teacher helped **Jim** by raking up the leaves and needles along the Honeysuckle and Larch Walks.

LtoR – Aaron Howatson, David Warner (teacher), Ben Karim, Archie Dalgliesh.

Sun. 15 Jim strimmed and raked around the shelter, the picnic tables, the apple trees and 100m of the Reserve path.

Fri. 20 & Sat. 21 On the Friday morning, three members of Lockerbie and District Rotary Club, (LtoR: Ian Sloan, Alan Carmichael and Stuart Martin) came down to the Reserve and helped Jim (who is also a Rotarian) to clear the feeder burn and its banks in preparation for the Annual Nut Race in February 2024. On the Saturday morning, Rotarian Alan Collins also came down to help.









Fri. 27 Jim strimmed the Reserve path and Brian Mauson and Gordon Reid raked up the cuttings to tidy the path.

Tue. 31 Jim and **Sybille Spägele** strimmed and raked two sections of the Woodland Walks and cut down a tree that was leaning over the toilet.



5. Activities involving the Lockerbie Wildlife Trust during October.

Mon. 02 Red Squirrel Walk with Stevie McKillop

At the start of **Mammal Week** and the **Great Scottish Squirrel Survey**, a few people accompanied Stevie round the Woodland Walk next to Eskrigg Reserve, but unfortunately, they did not spot any Red Squirrels until they came back into the Reserve.

Wed. 04 Jim (Eskrigg Reserve Manager) gave a talk about Eskrigg Reserve to members of the Chest, Heart and Stroke Social Group at the Annan Bowling Club.

Wed. 11 Jim gave a talk about Eskrigg Reserve to members of the Heathhall Friendship Club at Heathhall Community Centre in the afternoon.

Thu. 12 Members of the **Corona Group**, from Edinburgh, visited the Reserve and are here photographed behind the Scots Pine they sponsored in memory of the late Queen Elizabeth II.

Mon. 16 Jim met up with **Sandra Proudfoot** to make final plans for the up-and-coming **Halloween Hunt.**



Wed. 25 Eskrigg Halloween Hunt

The event was organized by Sandra Proudfoot on behalf of Annandale & Eskdale Active Schools & Community Sport. Around fifty family groups (175 participants) took part in the popular event. A big thank-you also to Kirsten Jardine, Andy Mair and Anna Newbold (AEASCS) and Gordon Reid, Sam Pattinson and Jim Rae (LWT) for their assistance on the day.



Families checked in and out with Sandra Proudfoot and Kirstin Jardine at the registration table.









Some of the youngsters who dressed up for the occasion.

6. Fleshy Fruits – Their form and function.

A fruit is a structure formed from the wall of the ovary and contains the matured, usually fertilized ovules – the seeds. All flowering plants have fruits. When a flower is pollinated, pollen grains land on a flower's stigma and each produces a tube which tunnels through the style and ovary wall. The ovary contains one or more ovules, each containing a female sex cell. When the pollen tube reaches the ovule a nucleus from the pollen grain, acting as a male sex cell, fertilizes the female sex cell. Once fertilisation has taken place the ovules mature to form seeds, while the ovary wall develops into the fruit. In some plants the ovary wall swells up to become succulent, forming what is often called a fleshy fruit.

Why fleshy? Most fleshy fruits represent a particular adaptation to ensure that their seeds are dispersed. A fleshy fruit is there to be eaten by an animal – including man. Even fruits that are poisonous to us are usually edible to some species. For example, deadly nightshade is eagerly eaten by pheasants with no apparent harmful effects.

Once eaten, the fleshy part of the fruit is digested but the seeds have a resistant coat that protects them against digestive juices until they are voided. Because of the time lapse, this is likely to happen some distance from the parent plant, so the seeds will have been successfully dispersed and, moreover, with a ready supply of fertiliser.

Fleshy fruits come in all sorts of different shapes, sizes and colours, and they can be divided into groups according to which parts of the original flower form the various parts of the fruit. The examples given below are plants found at Eskrigg Reserve and Woodland Walks.



These are fruits in which the entire wall of the ovary becomes more or less fleshy. Within the flesh are embedded one or more seeds. Plants with true berries include: **Bilberry** (1), **Holly** (2), **Honeysuckle** (3), **Ivy** (4) and **Tutsan** (5).

Note: The white-berried **Mistletoe** (6) has sticky seeds that adhere to the beak of a bird as it feeds on the fruits. In the bird's attempts to remove the irritating seeds, it rubs its beak on the branch of a tree, thus depositing the source of its annoyance in crevices - the ideal spot for the seeds of this parasitic plant to germinate and grow.

Drupes

In this group the inner part of the fruit wall becomes hard and stone-like, encasing a single seed, and the outer part of the wall becomes fleshy. Plants with drupes include: Bird Cherry (7), Blackthorn (Sloe) (8), Elder (9), Gean (Wild Cherry) (10).

Compound fruits

These fruits are not true berries but consist of a number of small rounded segments, each of which is a drupe containing a stone (pip) just like that in a cherry.

Example: Wild Raspberry (11), Bramble (Blackberry) (12).

False fruits

The Wild Strawberry (13) is technically not a fruit at all. The fleshy succulent part is the enlarged receptacle at the base of the flower, so the whole structure is known as a false fruit. The actual fruits are the small yellowish achenes scattered over the surface. They correspond to the individual drupes of the bramble, both plants belonging to the rose family.

A plant very closely related to the wild strawberry is the **Barren Strawberry**, also found at the Reserve. However, this plant lacks the fleshy receptacle and has just a head of tiny dry achenes.

Crab Apples (14) also belong to the rose family but in this case the core corresponds to the true fruit while the outer part is formed from the receptacle. The fruits of other members of the rose family are constructed in the same way, including the fruits of the **Dog Rose** (15), known as rose hips, **Hawthorn** (16) fruits, which are known as **haws**, and **Rowan** (17) 'berries', which are not true berries.



































7. Animal of the Month – Common Wasp (Vespula vulgaris). Establishing the colony

The wasp's year starts with the fertilized queen waking up from hibernation in early spring to seek a suitable nest site. She looks for places such as old mouse holes in banks, but other enclosed spaces such as attics and sheds may be selected. When she has found a site, the queen starts to build her nest, laying eggs in the cells as she builds.



Queen common wasp

The first eggs hatch five to six days after nest-building starts and the queen then spends part of the day bringing back nectar and insects she has captured to feed the young larvae.

The larvae take about two weeks to become fully grown, when they spin a silk cap and lining to the cell. During their feeding stage they do not excrete any waste matter, but this is now done and the mass of waste is placed at the bottom of the cells, filling them up so that each cell can only be used two or three times. The larvae change to pupae and emerge as adult wasps after a further ten days or so, by which time the queen has increased the comb to twenty or thirty cells.





Intact wasp's nest

Nest with front removed

The young wasps at this time of the year are all small female workers. They gradually take over all nest operations, leaving the queen solely responsible for egg-laying. Later in the year workers lay some eggs, but as they never mate, their eggs are all unfertilized and produce males only.

As the number of workers increases, so do the nest size, the number of combs, thickness of the envelope and number of larvae needing feeding. Ground-nesting wasps also need to enlarge the size of the hole containing the nest by carrying away balls of earth.

Foraging and feeding

The main food of the adult wasps is carbohydrate in the form of nectar, but other sources include honeydew excreted by aphids and ripe fruit, and they also rob hive bees of honey. Their mouthparts are adapted to biting, licking and chewing. The adults need carbohydrates as a ready source of energy to maintain their active existence. The larvae are also fed on carbohydrate, but their principal food is flesh in the form of masticated bodies of other insects such as flies, caterpillars and spiders. The social organization of the colony is maintained by a constant exchange of food among the individuals, known as 'trophalaxis'. Adults continually elicit drops of fluid from larvae and also have mouth to mouth contact with each other. Adult wasps stimulate one another to pass food from their crops by stroking with their antennae. This is the way the queen obtains her food, supplemented by larval secretions.

New queens

Later in the year, combs of larger cells are built at the bottom of the nest. These are destined to produce new queens. It seems that eggs develop into queens because the larvae have more and better food and are placed in larger cells – male eggs in these cells also produce larger males. Males are produced at the same time as the queens. Males have longer antennae and their sole function is to fertilise the young queens.

Mating takes place from late August and afterwards the queen seeks out a hibernation site. She does not always hibernate immediately after mating and may fly around for several more weeks. Hibernation sites need to be wellinsulated, with moderate humidity.

In late summer, with the appearance of new males and queens, the social organization of the colony disintegrates, the old queen dies, as do the males when the weather gets colder. In the autumn the workers no longer capture prey as there are no larvae to feed, and they spend much of their time eating ripe fruit and nectar.

Photographs by Jim Rae

People count for October = 2163 Average 70 per day, busiest day Wednesday 25th (Halloween Hunt) 200.

Jim Rae (Eskrigg Reserve Manager) Address: Carradale, 12 Douglas Terrace, Lockerbie, Dumfries and Galloway, DG11 2DZ. Home Tel.: 01576 203 314 / Mobile No.: 07739 987 009 Email: jim.rae2012@gmail.com