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# *The Orkney Naturalist*



## Bulletin of the Orkney Field Club 2010

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## Guidelines for contributors

All contributions should be addressed in the first instance to:

By mail:

Orkney Field Club: Naturalist Editorial Sub-Committee  
c/o County Library & Archive  
44 Junction Road  
Kirkwall KW15 1AG.

E-mail:

Dennis Paice [dennis.paice@btinternet.com](mailto:dennis.paice@btinternet.com)

Roger Davies [roger@headweb.co.uk](mailto:roger@headweb.co.uk)

Last date for contributions: 28<sup>th</sup> February 2011, but notice by 31<sup>st</sup> January of intended contributions would be appreciated.

Contributions on all subjects relating to the natural environment of Orkney are welcome.

Presentation of Articles

Electronic copies are the preferred format.

Please help the editor by addressing the following points in reports and articles:

Where appropriate, list islands and parishes alphabetically.

Font style: Times New Roman: Headings 11pt; Subheadings 10pt; Text 9 pt.

Latin names are *italicised* and common names are bold.

Eg. **Poplar Hawk-moth** *Laothoe populi*

Text format: Microsoft or Openoffice products, or as a rich text file.

The current Orkney Naturalist is edited collectively by the editorial subcommittee of the OFC. Any facts or opinions expressed in the Bulletin are the sole responsibility of the contributors.

The editorial subcommittee thank all contributors to this issue of The Orkney Naturalist and all OFC members who assisted in its publication

## AGM and Treasurer Reports

AGM and treasurers reports are now on our web site. Anyone wishing to read them can do so at (<http://www.orkneycommunities.co.uk/fieldclub>).

**Orkney Field Club**

Founded in 1959

Aim: To encourage the study and conservation of the natural and cultural heritage of the County



The Orkney Field Club is a registered Scottish charity, No. SC 012459

**SUBSCRIPTIONS (2010)** are Adults £10, Family £15, Concessionary £6, Student £3. Non-members of the public attending outdoor meetings shall pay for temporary membership at the rate of £2 for individuals (adults only) and £3 for families.

Membership Secretary is Dennis Paice, Ardleigh, Dounby, Tel. 01856 771535.

**CLUB NIGHTS** are usually held in Kirkwall on the third Friday of the month, with talks, demonstrations and discussions. Non-members welcome. Meetings are advertised in *The Orcadian* under the 'Out & About' section, on **Radio Orkney** and on the Club's **Orkney Communities** web site (<http://www.orkneycommunities.co.uk/fieldclub>).

**FIELD MEETINGS** are held approximately monthly to a wide range of locations, including the outer isles.

**ORKNEY FIELD CLUB** was a founding partner of the Orkney Biodiversity Record Centre (OBRC), located in the Orkney Library & Archive, which holds records of Orkney species, sites, habitats etc in a database. This valuable data is available to all interested parties. Records are submitted to OBRC by a network of County Recorders who welcome and encourage amateurs to participate in the collection of data. The Club promotes and is actively involved in conservation by means of tree planting, reserves, study and fieldwork.

**NEWSLETTERS** are normally sent out to members three times per year and are available on the Club's website. They give members news, information and a programme of events.

**RESOURCES** include the Library Folder, located in the Reference Room of the Orkney Library & Archive. This contains copies of wildlife publications as well as other information pertaining to the club. Members also have access to the Club's slide collection and a comprehensive range of reference books and other equipment, including microscopes. Contact the OBRC for details (<http://www.orkneylibrary.org.uk/obrc>).

## OFFICE HOLDERS - 2010-11

President:	Elaine Bullard
Vice-president:	Mildred Cuthbert
Chairman:	Roger Davies
Vice-chair:	John Crossley
Secretary:	Dick Matson
Treasurer:	Dennis Paice
Members:	Anne Gascoigne
	Brian Ribbands
	Chris Booth
	Jess Butler
	John Graham
	Julian Branscombe
	Keith Fairclough
	Penny Martin
	Sydney Gauld

## Chairman's Introduction

Roger Davies

It is a great pleasure to present the Field Club's annual Bulletin for 2010: I should like to thank everyone who has worked hard – and stuck nobly to deadlines! – to make this happen.

The content is a fitting reflection of the range of the Club's purposes. Observation and recording are central to the study of nature, and the annual records for the different taxa are the "bread and butter" of the *Orkney Naturalist* each year; the greatest thanks are due to those who make these records available regularly, but it is also good to see relatively fresh areas covered. Other articles typify an enquiring, thoughtful approach to nature and its conservation; and a classic of past conservation activity, although not strictly under the banner of the Club but of great interest to us, is the remarkable diary of the campaign in the 1970s against the seal cull.

In what is after all a document of record it seems right to include a brief account of what the Club itself has achieved! During the year we have run a substantial programme of indoor and outdoor activities – very many thanks to those who have made this happen:

### The 2009 OFC Talks Programme

- ❖ February: Ask the Experts (panel including John Crossley, Keith Fairclough, Brian Ribbands, Jonathan Side, Alison Skene and Jenny Taylor)
- ❖ March: Orkney's Lepidoptera (Sydney Gauld)
- ❖ April: the How and Why of Bird Song (Prof. Peter Slater)
- ❖ September: Orkney's Bumblebees (John Crossley)
- ❖ October: 1859 - A Voyage of Discovery (Prof. Jon Side)
- ❖ November: Orkney's Birds of Prey (Eric Meek)

### The 2009 OFC Walks Programme

- ❖ January: New Year Ramble to the Roseness peninsula in East Holm.
- ❖ March: Winter Bird Race.\*
- ❖ April: Durkadale Working Party
- ❖ April: "Bag the Bruck" beach clean-up at Marwick Bay.
- ❖ April: "Harrier Sky-dancing" event\*.
- ❖ May: Early Summer Bird Migrants.
- ❖ May: Lichens workshop with Dr Kery Dalby.
- ❖ June: Families Wildflower Day.\*
- ❖ June: Getting to Know Orkney's Wildflowers.
- ❖ July: visit to the Hill of White Hamars on South Walls.
- ❖ August: Families Moth Day.\*
- ❖ August: Rock-pooling event at Yesnaby.
- ❖ September: Farmland Flowers, Insects and Birds.
- ❖ October: annual pilgrimage to the native woodland at Berriedale on N Hoy.
- ❖ November: A Look at Lichens of a Rocky Shore.

\* = held jointly with the RSPB Local Group.

RMofS  
SBRC  
SOC  
Up.

Royal Museum of Scotland  
Scottish Birds Rarities Committee  
Scottish Ornithologists Club  
Update

## General Advice

All records are worthwhile. The essential four pieces of information that must accompany **ALL** records are:

<b>WHAT</b>	<b>WHERE</b>	<b>WHEN</b>	<b>WHO BY</b>
SPECIES NAME	PLACE NAME OR GRID REF (IF POSSIBLE)	DATE	YOUR NAME

Record cards for some groups can be obtained from the County Recorders listed previously or from the Orkney Biodiversity Record Centre. Records, including completed cards, should be sent to the appropriate County Recorder.

If no County Recorder is listed, please send your records to the Orkney Biodiversity Record Centre:

**Orkney Biodiversity Record Centre,  
Orkney Library & Archive,  
44 Junction Road,  
Kirkwall,  
Orkney,  
KW15 1AG.**

Email: [biodiversity@orkneylibrary.org.uk](mailto:biodiversity@orkneylibrary.org.uk) .

A stamped addressed envelope is appreciated if you want a reply, and is necessary when specimens have to be sent for identification. Be sparing in collecting specimens. If in doubt, or you would like more information about records on a particular species (i.e. plants, birds, mammals, invertebrates etc.) ask the appropriate County Recorder.

Both individual County Recorders and OBRC hold details of recording schemes for a large assortment of plants and beasts. Many of the organisers welcome and help beginners, so why not 'take up' something?

Details are also available of helpful textbooks and study courses.

#### MAMMALS (EXCEPTING BATS & CETACEANS)

**Rec. Brian Ribbands**, Queenamidda, Rendall, Orkney, KW17 2PA. DL in N/N. Up. OFC (The Orkney Naturalist).

#### MARINE ALGAE (SEAWEEDES)

**Rec. Prof. Martin Wilkinson**, School of Life Sciences, Heriot-Watt University, Riccarton, Edinburgh, EH14 4AS. DL in N/N.

#### MARINE MOLLUSCA (SEASHELLS)

**Rec. None at present.**

#### MYRIAPODS (CENTIPEDES & MILLIPEDES)

**Rec. None at present.**

#### ODONATA (DRAGONFLIES & DAMSELFLIES BOTH ADULTS & LARVAE)

**Rec. Keith Fairclough**, Viewforth, Swanney, Orkney, DL in N/N. Up. OFC (The Orkney Naturalist). *For species already on the Orkney list, a written or verbal record (to Keith) with full details will suffice. If new species, ideally a photograph, or, at least, a FULL description is required.*

#### ORTHOPTERA (GRASSHOPPERS)

**Rec. Keith Fairclough**, Viewforth, Swanney, Orkney, DL in N/N. Up. OFC (The Orkney Naturalist) & OBRC.

#### SAWFLIES

**Rec. Jenni Stockan**, The Macaulay Institute, Craigiebuckler, Aberdeen, AB15 8QH.

#### STONEFLIES

**Rec. Ross Andrew**, Millfield Cottage, Costa, Evie, Orkney.

#### VASCULAR PLANTS

**Rec. John Crossley**, North Flaws, South Ronaldsay, Orkney, KW17 2RW. DL in N/N. Voucher specimens in Hb.Ed. Up., BSBI (Watsonia), OFC (The Orkney Naturalist). A.Rec. 'critical' species require identification by national referee.

#### WOODLICE

**Rec. Dave Musson**, New House, Herston, South Ronaldsay, KW17 2RH.

BBRC	British Birds Rarities Committee
BSBI	Botanical Society of the British Isles
DL	Definitive Lists
Hb.Ab.	Aberdeen University Herbarium
Hb.Ed.	Royal Botanic Gardens, <i>Edinburgh</i>
Hb.Kew.	Royal Botanic Gardens, <i>Kew</i>
NHM.Lon.	Natural History Museum, <i>London</i>
NMofS	National Museums of Scotland
N/N	The Natural History of Orkney
OBRC	Orkney Biodiversity Record Centre
OFC	Orkney Field Club
OL&A.Kirk.	Orkney Library and Archive, <i>Kirkwall</i>
ONHS.Strom.	Orkney Natural History Society, <i>Stromness Museum</i>
Ork.BRC	Orkney Birds Rarities Committee
Rec.	County Recorder

Finally the Club has been active in conservation, directly through work such as at Durkadale and indirectly in its response to consultation.

If in conclusion I may pick up one theme from what follows, it is from Dave Musson's account of recording Orkney's woodlice. He reminds us all of the huge variety of nature waiting to be explored. There's encouragement there for all of us to learn about something new – and of course to keep Recorders aware of what we find!

Roger Davies,  
February 2010

## The “Thomas Wilson Plot”

**Roger Davies**

The Field Club was founded to encourage the “study and conservation” of the natural heritage of Orkney. Much of what we do is *study*; the other element, *conservation*, is reflected in various ways such as our input to consultation on environmental matters and a range of projects, of which the Durkadale tree plantation is perhaps the most substantial and enduring. That is on RSPB land; but now, thanks to the generous bequest of a local resident, we have become landowners in our own right and have a specific opportunity to do something more.

A Glaswegian by birth, Thomas Wilson was a schoolmaster with long association with Orkney. His teaching career began at South Walls School at Longhope in Hoy and although his work – he would eventually become a headmaster in Angus primary schools - then took him south, on retirement in 1986 he and his wife returned to these islands to live at Midland Cottage overlooking the Bay of Houton. The Club's 2008 Newsletter recorded that he “had a life-long interest in gardening and enjoyed the peace and tranquillity of the countryside.” Mrs Wilson recounts how the cottage and its ground were “our haven.” Mr Wilson acquired plants from Elaine Bullard, and with her support and that of FWAG put in perhaps a hundred trees, rowan and other species, but it is demanding ground and few have survived.

Sadly Mr Wilson died in 1996 but in his Will he generously stipulated that an area of land adjoining the cottage should pass to the Field Club to be managed as a wildlife haven: it was the couple's wish that this special area of ground should be preserved from the threat of development. In the last two years the transfer has taken place.

The land lies alongside the main road. Four-fifths of it is a beautiful area of apparently pristine heather with associated wildflowers; on the side adjacent to Midland Cottage is a thicket of the invasive salmonberry; and the strip that runs parallel to the road consists of coarse grasses in which a very few of the planted trees survive.

The challenge is to carry out Mr Wilson's wishes in an Orcadian context. The Committee have so far decided that the area of heather should remain untouched, that the salmonberry should be progressively eliminated, and that shrubs and trees attractive to birds and insects should be planted in the strip of coarse vegetation by the road.

During 2009 a working party removed redundant tree guards and cleared vegetation from 17 spaces for tree and shrub planting; and (weather permitting!) by the time these notes are published that planting will have been accomplished. The planting list is, indeed, yet to be finalised: there is an obvious case for native species, but shrubs such as Buddleia and Hebe may have their place too for their attraction of insects, given Mr Wilson's wishes that we are asked to fulfil.

In the long term it is hoped we will create something where wildlife can flourish and which the public may enjoy. In due course a notice-board will acknowledge Mr Wilson's generous bequest, and perhaps offer a little interpretation of how we have done as he asked. From time to time further reports will be made in the *Orkney Naturalist*.

Roger Davies,  
February 2010

## Swona Cattle

The island of Swona was evacuated in 1974 and a herd of cattle, derived from Shorthorn and Aberdeen Angus stock, was left behind. Some additional feeding was given up until 1977 when some of the cattle were removed. Since then the remainder have been left unattended (Booth 2005).

The size of the herd has fluctuated over the years with a decline from 33 animals present in 1985 to just 15 in 1995. Since then numbers appear to have been fairly stable with counts of 18, including 5 bulls, in 2004, 11 in 2006 and 12 in 2009.

Of the 12 animals in 2009, 3 were under one year old. There were 8 black, 2 brown and 2 white. Further counts would be worthwhile in the future as these cattle are of particular interest. Apart from the long established herd at Chillingham in Northumberland, they are the only other feral cattle in Britain.

Reference:

Booth, Chris & Jean 2005. Sillocks, Skarfies & Selkies. The Orcadian, Kirkwall



Swona cattle

## CHAROPHYTES (STONEWORTS)

**Rec. Effy Everiss**, Rosebank Cottage, Harray, Orkney, KW17 2JA. DL in N/N. Up. The Orkney Naturalist.

Specimens must be preserved quickly, so please rinse and press until really dry before sending.

## COLEOPTERA (BEETLES)

**Rec. Brian Ribbands**, Queenamidda, Rendall, Orkney, KW17 2PA. DL in N/N. Up. OFC (The Orkney Naturalist). A.Rec. by recognised experts.

*Brian has Vincent Lorimer's beetle collection and notes.*

## CRUSTACEA (MAINLY MARINE)

**Rec. Helen Clarke**, Neidgarth, Evie, Orkney, KW17 2PJ.

## DIPTERA (TRUE FLIES)

**Rec. Ross Andrew**, Millfield Cottage, Costa, Evie, Orkney. A.Rec. by comparison with named material in reference collections and to NHM.Lon.

Also FLESH FLIES, BLOW FLIES and PARASITIC FLIES.

## ECHINODERMATA (SEA URCHINS, STARFISH, ETC)

**Rec. Duncan Clarke**, Neidgarth, Evie, Orkney, KW17 2PJ.

## FISH

**Rec. Chris Booth**, Ronas, 34 High Street, Kirkwall, Orkney, KW15 1AZ. DL in Chris & Jean Booth (2005) Sillocks, Scarfies & Selkies, The Orcadian Ltd, Orkney. Up. OFC (The Orkney Naturalist).

## FRESHWATER ALGAE

**Rec. Eileen Summers**, Easthouse, Toab, Deerness, Orkney, KW17 2QG.

## FUNGI (INCLUDING MYXOMYCETES - SLIME FUNGHI)

**Rec. None at present.** DL in N/N. Current list, OBRC. Voucher specimens in Hb.Ab. & Hb.Kew. A.Rec. Hb.Ed.

## HIRUNDAE (WORMS & LEECHES)

**Rec. Keith Fairclough**, Viewforth, Swanney, Orkney. DL in N/N.

## JELLYFISH

**Rec. Richard Matson**, Dale, Cotsa, Evie, Orkney, KW17 2NL.

## LAND & FRESHWATER MOLLUSCS (SLUGS & SNAILS)

**Rec. None at present.** DL to 1985 in OL&A.Kirk.

## LEPIDOPTERA (BUTTERFLIES & MOTHS)

**Rec. Sydney Gauld**, Quoyberstane, St. Ola, Orkney. DL in N/N and Lorimer, R.I. (1983), The Lepidoptera of the Orkney Islands, E.W. Classey Ltd, Oxford. Voucher specimens in RMofS. Up. OFC (The Orkney Naturalist).

## LICHENS

**Rec. None at present**, but please contact Roger Davies (01856721395) or [roger@headweb.co.uk](mailto:roger@headweb.co.uk) who may be able to arrange identification

Voucher specimens and recording materials are held in the OFC archives, DL on OFC website.

Please read carefully for alterations since the last issue of *The Orkney Naturalist*.

No records should be published until verified by the appropriate Orkney County Recorder. If in doubt, please consult the Orkney Biodiversity Records Centre.

With few exceptions, County Recorders submit copies of their records to their appropriate national specialist society and to the Orkney Biodiversity Records Centre

**AMPHIBIANS & REPTILES (FROGS, TOADS ETC)**

**Rec. Chris Booth**, Ronas, 34 High Street, Kirkwall, Orkney, KW15 1AZ. DL in Booth, C.J. & J. (2005), Sillocks, Scarfies & Selkies, The Orcadian Ltd, Orkney. Up. OFC (The Orkney Naturalist).

**Ants**

**Rec. Keith Fairclough**, Viewforth, Swanney, Orkney

**ARACHNIDA (SPIDERS & HARVESTMEN)**

**Rec. Edward Milner**, 80 Weston Park, London, N8 9TB. DL in N/N.

**BATS**

**Rec. Chris Booth**, Ronas, 34 High Street, Kirkwall, Orkney, KW15 1AZ. DL in Booth, C.&J. (1994), The Mammals of Orkney. Up. OFC (The Orkney Naturalist). A.Rec. NMofS 'if required'.

**BIRDS**

**Rec. Jim Williams** (SOC representative), Fairholm, Finstown, Orkney. DL in Booth, C.J., Cuthbert, M.F. and Reynolds, P. (1985), The Birds of Orkney, The Orkney Press. Up. The Orkney Bird Report (published annually). A.Rec. National rarities, BBRC; Scottish rarities SBRC; Local rarities, Ork.BRC.

**BRYOPHYTES (MOSSES AND LIVERWORTS)**

**Rec. Rosemary McCance**, Braeside, Stenness, Orkney, KW16 3LB. DL in N/N.

**BUMBLEBEES & SOCIAL WASPS, SOLITARY BEES & WASPS**

**Rec. John Crossley**, North Flaws, South Ronaldsay, Orkney, KW17 2RW. Up. OFC (The Orkney Naturalist). A.Rec. John Crossley.

**CADDIS FLIES (ADULTS & LARVAE)**

**Rec. Ross Andrew**, Millfield Cottage, Costa, Evie, Orkney and J. Walker, Twargarn, Harray, Orkney. DL in N/N and Biological Records Centre (BRC) Monks Wood. Up. BRC Monks Wood.

Also MAYFLIES (adults and larvae) and HOVERFLIES (adults).

**CETACEANS (WHALES, DOLPHINS & PORPOISES)**

**Rec. Chris Booth**, Ronas, 34 High Street, Kirkwall, Orkney, KW15 1AZ. DL in Booth, C.J. & J. (2005), Sillocks, Scarfies & Selkies, The Orcadian Ltd, Orkney. Up. OFC (The Orkney Naturalist). A.Rec. NMofS (if required).

The Redpoll and the Siskin are frequent autumn visitors to Orkney and one of their favourite natural diet items at this time is the seed of the common Stinging Nettle. It is a charming sight to see these delicate and beautifully marked finches clinging, often upside down, to the heads of nettles, picking out the seeds. But in the natural world this plant is not only of benefit to small seed-eating birds but also to many different insects. For us humans the nettle has a wide range of uses, - medicinal, culinary and in the garden.

In Orkney the leaves are a primary food source for the larvae of the Small Tortoiseshell and the Red Admiral and, more rarely the Peacock. They are a secondary food source for the Painted Lady. The larvae of many moth species also benefit from the presence of nettles – the Angle Shades, Burnished Brass, Beautiful Golden Y, Buff Ermine Moth, Lesser Broad-bordered Yellow Underwing and The Spectacle, to mention but a few. Also the larvae of the Ghost Moth feed on the roots of this plant.

While the seeds provide food for finches and smaller buntings in autumn, early in the year the roots and emerging leaves harbour aphids and these are a valuable early food source for these bird species (and on mainland Britain for Ladybirds and Blue Tits). Another species which benefits from the nettle is the Corncrake which sometimes uses nettle-beds as early cover on their arrival in Orkney from Africa before they move into their nesting habitat.

*Urtica dioica* is widespread in Europe; it occurs more sparsely in North Africa and has been introduced to North and South America. Closely related sub-species occur across Asia. It is a vigorous, hairy, perennial and is dioecious (the male and female flowers occur on separate plants). We are all familiar with the characteristic short-stemmed coarsely-toothed leaves, the green or greeny-white flowers and the catkin-like seeds and, unfortunately, we are inevitably familiar with the sharp, painful, sting. The stinging medium is contained at the base of the hairs on the stem and the leaves. These hairs are hollow and are reinforced with silica which makes them brittle. When an animal brushes against them the tips snap off unsheathing a sharp point which injects a mixture of pain-inducing chemicals, including histamine, acetylcholine, serotonin and formic acid. The ability of the leaves to sting can be eradicated by heating, drying or crushing them.

Nettles thrive in areas of high rainfall and in soil rich in phosphates and nitrogen. They are often found in derelict gardens or areas where farm animals have been kept and the presence of nettles at a site often indicates that there was once human habitation there. This provides a valuable clue to surveyors of old settlements.

Beer made from nettle leaves used to be a popular drink up until Victorian times. The leaves can also be used to make wine and soup and as a vegetable resembling spinach. They are high in vitamins A, C and D and are a source of calcium, manganese, iron and potassium. However they should not be used after the flowers start to form as from this stage a chemical forms which can irritate the kidneys.

Preparations from nettles can be employed in the treatment of urinary and prostate disorders as well as arthritis; and a nettle-based shampoo is effective in the treatment of dandruff.

This versatile plant can also be put to good use by the organic gardener. Fill a hessian sack with leaves and place it in a plastic barrel or dustbin full of water to steep for 2 weeks. Remove the sack and the liquid remaining makes a very effective foliar feed. It also acts as an insect repellent and will deter garden pests. When you smell the liquid you will understand why! An additional use is as an activator and accelerator in the garden compost heap.

Thus the common Stinging Nettle is not merely to be feared and despised, but should be viewed as beneficial to a wide variety of wildlife, as a source of nutritious food and drink and as an asset to the organic gardener. So next time you reach for the strimmer, scythe or clippers, think twice. And if you don't already have one you might even consider assigning a corner of the garden to the cultivation of a nettle bed!

My thanks to Brian Ribbands for proof-reading this article

## Orkney Wildlife Explorers Group

Jess Butler

The journey began when my family and I moved from Cannich, Strathglass in the Highlands, to Orkney in December 2008. We always thought of ourselves as enthusiastic amateur naturalists being members of both the RSPB and the British Trust for Ornithology and enjoying the outdoors and learning about the flora and fauna that we discovered along the way. In the years that we spent there I became involved with the Local RSPB Wildlife Explorers Group as an assistant leader so it seemed a logical thing to do when we came here to do something similar. After joining the Field Club and seeing that they did do some family events I met up with staff at the RSPB office in Stromness and decided that I would start a RSPB Wildlife Explorers Group in Orkney. After mailings asking for volunteers to come forward, a team was assembled and the preparations began. In the meantime I met up with Dick Matson who is involved with the Field Club and the RSPB local group and through him I came to be invited to be a co-opted member of the Field Club committee for a "youth input".

One of the things for me as a newcomer which has been a real breath of fresh air is the great respect that the environmental organisations (whether environmental or national) have for each other on Orkney and how they work together through groups such as OCEAN (the Orkney Communities Environmental Awareness Network). To me this is what it's all about, whatever background you are from, the aims are in many cases the same, that is, to encourage the public to take an interest in, appreciate and to care for their environment for future generations. In order to run the Wildlife Explorers Group I had to go away for a weekend of intensive training at Kindrogan Field Centre in Perthshire.

Finally, after nearly a year of preparation and planning Orkney's first ever RSPB Wildlife Explorer group was finally launched at the Birsay Outdoor Centre in September. Orkney Wildlife Explorers is aimed at children aged 8-12 years old; however, younger children are welcome as long as a responsible adult stays with them. This free event was a taster for

## Mammal Report 2008

Ray Hallam

### *Sorex minutus* (Pygmy Shrew)

One record was received of a single animal seen in Kirklands Road, Kirkwall on the 27<sup>th</sup> March.

### *Lepus capensis* (Brown Hare)

Twenty-seven records were received with a maximum of 4 animals seen at Marwick on the 2<sup>nd</sup> April. All sightings were on Orkney Mainland.

### *Lepus timidus* (Mountain Hare)

Eight records were received with a maximum of 5 animals seen on Ward Hill, Hoy on the 24<sup>th</sup> June.

### *Microtus arvalis* (Orkney Vole)

One record was received, from Surrigarth, Westray in May.

### *Mus musculus* (House Mouse)

Two records were received of single animals in Kirkwall, St. Ola,

### *Apodemus sylvaticus* (Wood Mouse)

Two records were received of single animals found dead on the road on Hoy.

### *Rattus norvegicus* (Common Rat)

Three records were received of single animals seen in St.Ola and at Marwick, Birsay.

### *Lutra lutra* (Otter)

Nineteen records were received with animals (both live – 30 and dead - 5) being seen on Orkney Mainland (Birsay, Sandwick, Stenness, Harray, St. Ola, Tankerness and |Evie), Hoy, Stronsay, Gairsay and North Ronaldsay. Possible breeding was reported from North Ronaldsay and ,sadly, one of the dead otters was reported as drowned in an ell trap in the Peadie Sea, Kirkwall, St. Ola.

Additionally, Otter spraint was recorded at 10 sites on Orkney Mainland (Deerness, Sandwick, Holm, Orphir), South Ronaldsay and Hoy.

Monthly sightings:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8		6	8	1	3	1	1	1		1	3

NOTE – The month is not known for two of the animals seen.

### *Phoca vitulina* (Common Seal)

Nine records were received with a maximum of 57 animals seen on a walk around the shore of North Ronaldsay on the 20<sup>th</sup> May. Other locations were Loch of Stenness (March to December), Holm of Rendall (June), and Hen of Gairsay (June).

*Halichoerus grypus* (Grey Seal) Six records were received with a maximum of 142 animals seen on a walk around the shore of North Ronaldsay on the 20<sup>th</sup> May. Other locations were Hen of Gairsay (June), Hoy (October) and South Ronaldsay (November).

My thanks to the following observers

L. Bain, C.J. Booth, Mrs Franks, R. Goodwin. , P. Hollinrake, A.K. & A. J. Johnson, R. E. Matson, D. McGill, R. Mitchell, J. Philby, D. Rosie, L. Shields, R. Simpson, A. Tait, SNH.



Otter spraint was recorded at 36 sites on Gairsay, Hoy and Mainland (Birsay, Deerness, Holm, Orphir, St Ola and Sandwick ). It was noted from 1st January to 21st May and 11th September to the end of the year.

Unfortunately there were several road deaths:

4<sup>th</sup> January A female the north end of No 4 Barrier  
15<sup>th</sup> February A female near the Mill Dam Shapinsay  
26<sup>th</sup> March An adult male Tankerness  
23<sup>rd</sup> December An adult male the south end of No 1 Barrier

#### **Common /Harbour seal *Phoca vitulina***

These were the highest reported haul out counts:

57 at Skerry of Ness, Stromness on 21<sup>st</sup> December; 50 North Ronaldsay on 19<sup>th</sup> May; 35 on 6<sup>th</sup> May, Ve Ness, Orphir; 30 on 6<sup>th</sup> August, Holm of Rendall and 27 on 6<sup>th</sup> October, North Ronaldsay

It is not unusual to see 1-3 Common seals hauled out on the Loch of Stenness but there was an exceptionally high count of 18 around the loch on 12<sup>th</sup> October.

The first pup reported was from Deerness on 21<sup>st</sup> June.

#### **Grey seal *Halichoerus grypus***

The maximum haul out counts were from North Ronaldsay with 51 on 19<sup>th</sup> May and 59 on 11<sup>th</sup> October.

#### **Pup counts**

On 19<sup>th</sup> October there were 12 on the east side of South Ronaldsay from Newark to Windwick. On the west side of South Ronaldsay 113 were counted between Burwick and Green Head on 11<sup>th</sup> November.

In November a count around Gairsay found 5 on Boray Holm, 195 on Gairsay and 260 on Sweyn Holm.

Grateful thanks to the following observers for their records:

J Booth, N Craigie, R Flett, S V Gauld, L Graham, R. Hallam, P Hollinrake, A K & J H Johnson, R E Matson, V Mc Gill, E R Meek, North Ronaldsay Bird Observatory, J B Ribbands, M Rinder, D Rosie, E J Rosie, G Rosie, R J Simpson, M Thomson, A Woodbridge.

## **Bryophytes Report 2008**

**Rosemary McCance**

A recent record of interest is the liverwort *Plagiochila britannica*, a new County record, found at New Head, South Ronaldsay by John Crossley on 9 April 2008. It is an uncommon plant that was first described as a species in 1979.

children and their families to come along and see what the volunteers had planned for the next 12 months. 34 children and various parents, siblings and grandparents all descended on the centre making around 70 people all told and for the next two hours there was a flurry of activity starting with a drawing competition. The children were then split into three groups, the Gannets, Puffins and Seals. Each group then rotated through various activities including bug hunting in the outdoor centre's garden and hedgerows, outdoor activity games and indoor guessing games. The afternoon was rounded off with tea and cakes plus the presentation of the prizes for the drawing competition by Judy Paul, the Youth Officer for

the RSPB in Scotland who had come up from Edinburgh for the launch



**Picture:** Playing outdoor wildlife action games at Birsay.

In October, the Wildlife Explorers met at Rendall Hall to go Batty at Halloween. Here 28 children made lots of tasty bird treats as part of the RSPB Feed the Birds Day Campaign. They also made baty kites and finger puppets and learnt about the bats and owls of Orkney and beyond. After some games of "Bat and Moth" where the

children learnt about echolocation, the afternoon was rounded off with a game of Batty Bingo where the children could test their knowledge.

In November we were blessed with a lovely autumn afternoon for our Autumn Treasure Hunt in a walk which took us from the Firth Community hall in Finstown up to Binscarth Woods and back. Ages ranged from 6 years to 60+ with some parents and grandparents coming along. The children explored and found fungi, lichens, ferns, seeds, leaves, animal tracks and birds and lots of lovely mud! We were also fortunate as a delightful common buzzard decided to give us a spectacular aerial display just as we were entering the woods. After a spot of tree climbing we all headed back to the hall with rosy cheeks and tired legs.

December saw some brave souls braving the winter weather to attend the Christmas Party in Kirkwall. The children started off by playing an "iceberg" game which teaches about the effects of the melting ice caps. Then teams were formed, two of children and one of adults to play an animal relay game whereby 6 clues each for seven animals are provided and the teams have to work out what the animals are based on the clues before them which they can only access one at a time. Clues included statements such as

- I'm protected under the Wildlife and Countryside Act,
- my young are called hoglets,
- males are called "jacks" and females "jills"
- my home is a drey



Animals to be identified included *Scottish wildcat, reindeer, hedgehog, hare, red squirrel, otter and red deer*. This really tested everyone's knowledge and nerves with tensions running high but in the end the children shone in this one beating the adults "expert" team hands down. The children then made Robin Christmas cards and Robin tree decorations using recycled materials and after food and more games the party ended and everyone made a slow journey home as it was snowing heavily.

January 2010 saw the Wildlife Explorers taking part in the RSPB Big Garden Birdwatch in Costa, Evie. During our hour of watching, the children spotted the following species: Blackbird, house sparrow, starling, twite, reed bunting, robin, wren, rock dove, linnet, greenfinch and a show stopping display by a fantastic water rail which left the group hushed and enraptured. Following that we all took a stroll to view the flocks of several hundred twite twittering busily on the wires and found rat, pheasant and snipe tracks clearly visible in the mud. A busy but hugely rewarding session.

Plans for the rest of 2010 include many outdoor meetings across the whole of Orkney to investigate Orkney's sandy beaches, rockpools and cetaceans, wild flowers, hen harriers, freshwater burns and minibeasts amongst others. We (the volunteers) wish to help the children learn about identification and recording so that they can appreciate the importance of such records in the local and national context which fits in very well with the Field Club's aim. The group are also working towards their bronze RSPB Wildlife Action Award which they earn through the completion of set activities such as recording, recycling and spreading the word. All of these are about action for wildlife and the children are to be congratulated for all the hard work they have already put in.

We may be in our infancy but the Orkney Wildlife Explorers with 45 registered children has the potential to be one of the biggest and best groups in Scotland. I think this is due to the hard work of the volunteers of which there are 7 at present and also because of the unique collaboration between the group with, in particular, the staff of the RSPB, the RSPB local group and the Orkney Field Club plus other Environmental Organisations in the county who have been so generous with their advice and help to the Wildlife Explorer Team.

*All photographs by Jess Butler*

## Mammal Report 2009

Chris Booth

### Hedgehog *Erinaceus europaeus*

Most hedgehogs are preparing to hibernate in late October so the following November records from Dale, Birsay are of interest. An adult and juvenile were seen on 11<sup>th</sup> and an adult was found at the corpse of a freshly dead Greylag goose on 22<sup>nd</sup>. There was a possibility that it might have been going to scavenge the body of the goose.

### Pygmy shrew *Sorex minutus*

One was found dead on the road near the bridge at Rackwick, Hoy on 16<sup>th</sup> June. In October single shrews were seen on Wideford Hill, St Ola on 18<sup>th</sup> and Rackwick, Hoy on 26<sup>th</sup>

### Rabbit *Oryctolagus caniculus*

Very little information available, but sightings from the following islands: Gairsay, Hoy, Mainland and Swona. There have been suggestions that the Rabbit has declined in some areas so records would be welcome.

### Brown hare *Lepus europeaus*

Confined to Mainland, there were reports from the following parishes: Birsay, Deerness, Firth, Holm, Orphir, St Ola, Sandwick and Tankerness. The maximum count was of 19 seen north of Stromness on 19<sup>th</sup> March all other reports were of 1 to 5 animals.

### Mountain hare *Lepus timidus*

This species is only found on Hoy. All reported sightings were from The Bring northwards. The highest counts were: 17 on the east side of Ward Hill on 28<sup>th</sup> March, 6 seen between the Cuilags and Sui Fea on 8<sup>th</sup> September, 5 on the summit ridge of Ward hill on 11<sup>th</sup> May and 4 Stourdale on 12<sup>th</sup> May.

### Wood Mouse *Apodemus sylvaticus*

Two records from Kirkwall, St Ola with a maximum of 7 animals seen. One was found dead on the Rackwick road, Hoy on 26<sup>th</sup> May

### House Mouse *Mus domesticus*

One was reported from North Ronaldsay on 20<sup>th</sup> May, 2 were seen in Kirkwall on 21<sup>st</sup> August and 1 on 28<sup>th</sup> September. In addition 1 was found dead in Kirkwall.

### Otter *Lutra lutra*

There were the following monthly sightings:

J	F	M	A	M	J	J	A	S	O	N	D
5	4	7	-	1	-	4	1	-	-	3	-

These sighting were reported from: Eday, Flotta, Glimps Holm, Mainland (Birsay, Deerness, Orphir, Sandwick, St Ola and Tankerness), North Ronaldsay and Sanday.

The majority of sightings were of single otters but 4 were seen together on Eday on 10<sup>th</sup> November, 3 in Birsay on 4<sup>th</sup> January and 29<sup>th</sup> March and 2 on Sanday 2<sup>nd</sup> May.

In early February, at a farm on North Ronaldsay, a male Otter was reported to have killed a duck and attacked another. There were also signs of teeth marks on the door of the hen house where the ducks were kept at night.

seen off Noup Head Westray on 10<sup>th</sup> May and off Stronsay on 11<sup>th</sup> May. There were 15 off North Ronaldsay on 11<sup>th</sup> May and this pod included an adult male that had previously been seen near St Kilda, Shetland and the Faeroes. Five were reported from North Ronaldsay on 15<sup>th</sup> June while 1 was seen off Papa Westray on 13<sup>th</sup> July. August sightings were of 5 off Black Craig on 7<sup>th</sup> then 2 off there on 13<sup>th</sup> and 24<sup>th</sup>; 4 were present off North Ronaldsay on 30<sup>th</sup> and 31<sup>st</sup> and a similar number were seen from Marwick Head on 14<sup>th</sup> September.

**Long-finned Pilot Whale** *Globicephala melas* Formerly common now uncommon  
The only record was of a school of 50 seen from Black Craig on 6<sup>th</sup> August.

**Risso's Dolphin** *Grampus griseus* Common  
The first sighting was of 4 from Black Craig on the early date of 8<sup>th</sup> April. In May 1 was off Noup Head, Westray on 10<sup>th</sup>, 7 off Black Craig on 19<sup>th</sup> and 3 on 26<sup>th</sup>. In June at least 2 were seen off Grimness, South Ronaldsay on 10<sup>th</sup> and 2 from Black Craig on 16<sup>th</sup> while 12 were present in the St Mary's Bay/Scapa area between 27<sup>th</sup> and 29<sup>th</sup>. July reports were of 10, including 2 juveniles, in Warness Sound, Eday on 11<sup>th</sup>, 1 off North Ronaldsay on 13<sup>th</sup> and 2 from Black Craig on 22<sup>nd</sup>.

Then in August 12 were seen from Black Craig on 6<sup>th</sup> and a similar number were watched in Eynhallow Sound on 7<sup>th</sup> when 6 were seen from Black Craig; six were seen off Black Craig on 11<sup>th</sup> and 2 on 13<sup>th</sup>. September sightings were of 1 from Black Craig 14<sup>th</sup>, at least 5 Warness Sound on 15<sup>th</sup> and 2 there on 24<sup>th</sup>. The last sightings were of 2 off Black Craig and 2 in Warness Sound on 1<sup>st</sup> October.

#### Unidentified Cetaceans

There were a number of reports where identification could not be made with absolute certainty:

#### Sightings:

4 <sup>th</sup> June	5 dolphin sp Bay of Ireland
20 <sup>th</sup> July	1 possible Killer whale Eynhallow Sound
29 <sup>th</sup> August	6–8 Porpoise/dolphin sp Gloup, Deerness
9 <sup>th</sup> -13 <sup>th</sup> Sept	1 dolphin sp St Margaret's Hope/Water Sound area
5 <sup>th</sup> October	30–50 possible Pilot whales off Papa Westray

#### Stranding:

A male Common/Striped dolphin, dead sometime, Graemeshall, Holm. Length 2.2 metres

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My special thanks to Jenny Norris for arranging access to the sightings from the EMEC site at Black Craig.

## The great yellow bumblebee *Bombus distinguendus* – a nest-finding challenge! Bob Dawson

The great yellow bumblebee *Bombus distinguendus* was formerly widespread across Britain and Ireland, but is now found only in parts of north and west Scotland. Great yellow bumblebees are seen mainly between June and August, but there have been records from as early as April, and into late September. The nest is the effective unit of the population, and breeding success (i.e. nest success) is defined by the rearing of a new sexual generation, the males and daughter queens. The numbers and proportions of these reared vary considerably between nests. The first males can be seen in late July, which is likely to be before the first queens emerge, e.g. 9<sup>th</sup> August at a South Uist nest (Hughes 1998). However, large workers overlap in size with queens, so it is harder to establish when daughter queens emerge, and some nests may be active into September. Mating pairs are very rarely seen, and three reported in recent years (all in Outer Hebrides) have been between 10<sup>th</sup> and 22<sup>nd</sup> August, with one at the entrance of an active nest (Neill 1999, N Redpath pers comm.).

Very few nests have been described, but since initial summary reports (Edwards 1997a, b, 1999) more work has been undertaken (e.g. Edwards 1999). Discoveries of at least 12 nests have been reported, mainly from the Outer Hebrides, with others known of from Tiree. In four instances, nests have been monitored and been the subject of further research. Information from other nests would be extremely valuable. Duncan (1935) visited South Ronaldsay and Burray between 3<sup>rd</sup> and 8<sup>th</sup> August 1933, to study small mammals. However, he found that “*It was impossible to search along the grassy sides of the broad ditches for runs of Microtus orcadensis* [Orkney vole] *without coming across nests of Bombus distinguendus.*” Remarkably, he found 18 nests, all placed on the surface of the ground, below the rank summer herbage and in one instance, below a disused drinking trough, reflecting a presumed strong association with Orkney vole there.. The only two recent nests of great yellow bumblebee described in Orkney were in Marwick Bay in 2006, at the land edge of the bay among rocks, presumably in old small mammal nests, but perhaps the possibility should not be excluded that great yellow bumblebees can adopt the nests of ground-nesting birds such as the wheatear *Oenanthe oenanthe*.

Finding bumblebee nests is undoubtedly a challenge, usually relying on a chance encounter with a returning queen or worker. However, there may be an opportunity to utilise male behaviour to find nests. In 1999, Bill Neill found nests of great yellow bumblebee and moss carder bee *B. muscorum* by locating groups of males at nest entrances (Neill, in Edwards 1999). This approach had been successful for *B. muscorum* in 1997 (Edwards 1997b) but these observers found that males of *B. distinguendus* instead “*would fly fast and low through the vegetation, stopping occasionally to climb up isolated grass stems, rubbing their mouth parts along the stem.*” It is now evident that groups of males at nest entrances is observed for great yellow bumblebee, and that this behaviour is also seen in one of the sister species of the great yellow, the short-haired bumblebee *B. subterraneus* (Nikki Gammans pers comm.). It is assumed that males gathering at nest entrances are waiting for virgin, daughter queens to subsequently emerge. In the moss carder bee *B. muscorum*, all of a 20-strong group of males were from several different nests, not from the nest under investigation (Darvill et al 2007). Such a congregation has been described as a ‘lek’ (from the Swedish, ‘play’) which has been applied, for example, to males of some birds that display in an arena to advertise for a mate.

However, this term has also been applied to scent-marking males of great yellow bumblebee (Edwards 1997b). The French ‘*attroupelement*’ is the most accurate description for what happens at bumblebee nests, implying more of a rabble, scuffling with one another in anticipation of what is to happen next. Using ‘swarm’ has its own connotations, while ‘aggregation’ is more usually applied to nesting concentrations of solitary bee species, so the jury is still out on the best English word.

Further observations of this behaviour would be invaluable, although there is no guarantee of finding a nest. Commuting workers is ideal confirmation, or guard bee activity at the nest entrance. The males themselves are fairly easy to identify, once you have your eye in! They have longer antennae, longer abdomens and a more conspicuous patch of yellow fur on the ‘face’, like a small ‘searchlight’. They never carry pollen and cannot sting.

Males do no work around the nest, and once they leave do not return. They can easily be found nectaring at flowers, such as thistles *Cirsium* spp. and common knapweed *Centaurea nigra*. It is expected that very few of these males successfully mate with a daughter queen, and males appear to employ two strategies to maximise their chances of mating. One is to congregate at nest entrances, as described above, and the other is to ‘scent-mark’ patches of vegetation and patrol these on a regular basis. In other bumblebee species, this latter activity is often highest in the morning, so there is the opportunity for a single male to perform both strategies.

During two August visits to Orkney (2008 and 2009) I have twice found congregations of male great yellow bumblebees that have suggested the presence of a nest – perhaps it will be third time lucky for me? The details of these follow. The males attracted to nests or the scent of a queen are taking a chance on there being a queen present, and active congregations of males have been noted 10 days before the emergence of a daughter queen. It could be a risky strategy, as they have only a few short weeks to live, are vulnerable to the elements without the relative security of the nest, and there are other males to compete with.

Both these observations were made close to abundant nectar sources. It could be that neither observation was associated with a nest, although the observations at Ring of Brodgar were repeated a couple of days later, and the same behaviour noted, albeit by fewer males. Perhaps this was a failed nest, retaining a chemical signature. An alternative is that these were both resting areas for old queens, seeing out their remaining days close to a useful energy source. Excavation of the sites was not done, and this would be recommended in future, where permitted, for indeterminate cases.

#### Site 1. Ring of Brodgar

I visited this site on 16<sup>th</sup> August 2008 to look at some of the RSPB management at the site, including an uncut red clover margin and a ‘*Birds & Bees*’ crop containing cultivars of brassica spp. and California bluebell *Phacelia tanacetifolia* hereafter referred to simply as ‘*phacelia*’. There are a few small mounds on the east side of the Ring, and one of these had conspicuous ragwort and spear thistle. Both are recorded nectar sources for great yellow bumblebee, and I noticed two great yellow bumblebees keeping to the leeward side of the mound, but circling over quite a small area, occasionally dropping down to the vegetation and also interacting with one another. I caught these bees to confirm they were males, and after release they were soon back to carry out this circling behaviour. The mound had a series of

#### Strandings:

21<sup>st</sup> February, 1 north of Burroughston Broch, Shapinsay, length 1.65 metres  
14<sup>th</sup> March, 1 freshly dead, Sanday Sound, length 1.04 metres, weight 14.5 kgs

#### Short-beaked Common Dolphin *Delphinus delphis* Uncommon

A minimum of 20 was seen in Scapa Flow, off Greenigoe, Orphir on 2<sup>nd</sup> September and 1 was watched in Hoxa Sound on 5th September.

#### Strandings:

12<sup>th</sup> May 1, not fresh, Glimps Holm, length 1.2 metres  
25<sup>th</sup> November, 1 freshly dead, Lower Vestlabanks, Toab, length c2 metres.  
13th December 1 freshly dead at Rennibster, Firth. Length c 2 metres

#### Striped Dolphin *Stenella coeruleoalba* Very rare

#### Stranding:

A male, that had been dead sometime, was found at the Bay of Skail, Sandwick on 9<sup>th</sup> November, length 1.85 metres.

#### Bottle-nosed Dolphin *Tursiops truncatus* Very rare

One was seen off the Brough of Birsay on 5<sup>th</sup> August.

#### Stranding:

20<sup>th</sup> July 1 female, freshly dead, Bay of Tafts, Westray, length 2.5 metres

#### Atlantic White-sided Dolphin *Lagenorhynchus acutus* Uncommon

All sightings were from Black Craig with 8 on 19th May and 1 on 20<sup>th</sup> July. Then in August 2 were seen on 6<sup>th</sup>, 5 on 13<sup>th</sup>, 1 on 17<sup>th</sup> and 8 on 19<sup>th</sup>.

#### Strandings:

9<sup>th</sup> October 1, freshly dead, Elsness, Sanday, length 2.45 metres  
5th November 1 live stranded on Scapa Beach but was eventually persuaded back out to sea

#### White-beaked Dolphin *Lagenorhynchus albirostris* Formerly common now uncommon

Unfortunately no live sightings reported this year

#### Strandings:

20<sup>th</sup> April 1, freshly dead Bay of Cubbigoe, Westray, length 2 metres  
16<sup>th</sup> October Adult male, Point of Buckquoy, Birsay, dead some time, length 2.85 metres.  
15th November 2, at Stywick Sanday.

#### Killer Whale *Orcinus orca*

Now common April to July, uncommon at other times

Fewer reported sightings this year.

Three, including an adult male, were seen in Manse Bay, South Ronaldsay on the early date of 14<sup>th</sup> January. No more sightings until 4 (incl. 1 adult male) were watched off Seal Skerry, North Ronaldsay on 9<sup>th</sup> May. Four were also



Photo K. Woodbridge

Among the highlights of the year were sightings of Humpback whale and Fin whale also a Bottle-nosed dolphin. There is a resident pod of Bottle-nosed dolphins in the Moray Firth but it remains a rare species in Orkney waters. To have a sighting as well as a stranding of this dolphin in one year is unusual. Killer whale reports were fewer than last year and the lack of sightings of White-beaked dolphins was disappointing.

**Humpback Whale** *Megaptera novaeangliae* Very rare  
On 18<sup>th</sup> February one was seen passing along the east side of Shapinsay. It was estimated to be about 12 metres in length.

**Fin Whale** *Balaenoptera physalus* Very rare  
One was seen to the north of Swona, moving east in the Pentland Firth, on 9<sup>th</sup> June. It was in the company of 2 smaller cetaceans. This is the first live sighting of this species for several years.

**Minke Whale** *Balaenoptera acutorostrata* Common  
First report was of 1 in Warness Sound, Eday on 2<sup>nd</sup> January. No more sightings until May when single whales were seen from North Ronaldsay on 21<sup>st</sup>, between Westray and Papa Westray on 22<sup>nd</sup> and in Warness Sound on 24<sup>th</sup>. There were further sightings of 1 to 2 whales in the Westray /Papa Westray area during the rest of May and throughout June. Also in June singles were seen off Cantick Head, South Walls and Grimness, South Ronaldsay on 10<sup>th</sup> while 2 were off Noup Head, Westray on 14<sup>th</sup> and singles in Warness Sound on 20<sup>th</sup> and 21<sup>st</sup>. July sightings were of single whales from Black Craig on 1<sup>st</sup>, 2<sup>nd</sup> and 21<sup>st</sup> and there was also 1 in Warness Sound on 17<sup>th</sup> and 1 off Mull Head, Deerness on 21<sup>st</sup>. Then in August singles were seen in Eynhallow Sound on 3<sup>rd</sup>, off Black Craig on 6<sup>th</sup> and 7<sup>th</sup> with 2 there on 17<sup>th</sup> and singles again on 19<sup>th</sup> and 27<sup>th</sup>. September sightings were of singles from Black Craig on 2<sup>nd</sup>, off Marwick Head on 13<sup>th</sup>, North Ronaldsay and Hoxa Head, South Ronaldsay on 14<sup>th</sup> and Black Craig on 21<sup>st</sup>. The only October report was of 1 seen from Black Craig on 2<sup>nd</sup>.

**Stranding:**  
17<sup>th</sup> August, 1 dead some time, at the north end of Egilsay, length c6 metres

**Sperm Whale** *Physeter macrocephalus* Uncommon  
The body of an immature male stranded in Fersness Bay, Eday on 17<sup>th</sup> March. It was about 10 metres in length and was already starting to decompose.

**Harbour Porpoise** *Phocoena phocoena* Common  
Recorded in every month with a peak of sightings in July and August.

#### Monthly distribution of sightings for 2009

J	F	M	A	M	J	J	A	S	O	N	D
1	3	2	6	13	12	15	21	8	6	4	4

Highest counts were in September with a maximum of 38 in Switha Sound on 17<sup>th</sup>. Other high counts in that month were 18 off Hoxa Head, South Ronaldsay and 10 off North Ronaldsay on 14<sup>th</sup>. Most other records throughout the year were of 2-7 porpoises.

A cow and calf were seen in Warness Sound, Eday on 14<sup>th</sup> July

holes and I was hopeful that this would be a nest. This was at 10 a.m. so I returned at midday and over the next hour a maximum of five males was present, but there was no worker activity. There were fresh small mammal droppings present, presumably of Orkney vole *Microtus arvalis orcadensis*. Although great yellow bumblebee queens found nests in the old nests of small mammals, these same small mammals can depredate nests. Occasionally a male would rest and 'preen' on low vegetation next to a particular hole, or land and walk a short distance down into the hole before returning. Interactions between males were mid-air 'disputes', with one male bee flying at and sometimes hitting another. Chases in the past have also been interpreted as attempts to catch and mount and a potential mate. I do not recall if males climbed up vegetation and scent-marked with the mandibles as described elsewhere (Neill, in Edwards 1999).

Site 2. Bockan Farm  
I visited this site at 2 p.m. on 9<sup>th</sup> August 2009 to check two 'Birds & Bees' mixes. These were a mix mainly of cereals and phacelia. Most time was spent at the crop with more phacelia, and a total of 29 great yellow bumblebees were recorded from the perimeter. Almost all foraging great yellow bumblebees were at phacelia. On one side of the crop was a shallow dry ditch, with tussocky vegetation. I noticed great yellow bumblebees flying low up and down this, with at least one male stopping in the vegetation. I believe that this and one or more other males were scent-marking or patrolling, suggesting that patrolling areas of individuals overlap. On the other side of the crop, I came across a male showing particular interest in an area of uncut grass, where there were one or two holes or burrows. I waited here and noted at least two other males, including a modest level of interaction. Occasionally a male would go down the hole, and listening with my ear over the entrance, I could hear occasional brief bursts of short, low-pitched buzzes. Usually a male would then leave by the same hole, but sometimes from elsewhere within the tussock. There was less persistence by individual males here than I had noted at Brodgar the previous year. One almost entirely bald male was seen to arrive and depart, and it was felt that over an hour the site had seen a steady turnover of 6-10 males. After some time, a worn queen emerged from the hole and flew up, circled at some distance and then flew off. It was felt that this wasn't a nest, but instead a resting area for a queen who had either not founded a nest, or lost dominance in her nest and left. There was no worker activity, so if there was no nest then the males were locating this old queen presumably by smell, unless they were simply checking out any suitable hole. The frequency with which males arrived suggests the former. This implies that males are unable, chemically, to distinguish a presumed previously mated queen from a virgin daughter queen. However, given other cues from more direct contact the males quickly correct their error. An added complication was that, at the end of the observation, a worker Heath Bumblebee emerged from a nearby hole. There had been no suggestion that this was an active nest, but if it was, there may have been mingled queen and nest smells, albeit from different species, that may have affected male behaviour.

Acknowledgements. My thanks to Andy Knight of RSPB, and James Gowing of Bockan Farm, for information and access. Many thanks also to John Crossley for providing invaluable information about the great yellow bumblebee in Orkney, and Audrey Wayolle for French interpretation.

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**Bob Dawson**

**Conservation Officer for Scotland with the Bumblebee Conservation Trust,**

## Great Yellow Bumblebee Project

The project involving volunteers in surveying for Great Yellow Bumblebees, as explained in last year's Bulletin, has had a successful first year. Eight to eleven keen volunteers plus Andy Knight from the RSPB attended two training sessions and learned about the bumblebee species to be found in Orkney. These people and any other volunteers who are confident of their identification skills are invited to take part in the surveys planned for summer 2010. A comprehensive 'Handbook for Surveyors' is currently being produced by the Species Action Framework partnership. Anyone interested please contact me, tel. 01856831507, email [john.crossley@uku.co.uk](mailto:john.crossley@uku.co.uk) or Andy Knight at RSPB Orkney Office, tel. 01856850176, email [Andy.Knight@rspb.org.uk](mailto:Andy.Knight@rspb.org.uk) .

**Photo:** A selection of frog bones found in an otter spraint, Hundasaeter Birsay on 6th March.



Reference: Booth, C.J. (2001). *The diet of the Otter*, Orkney Field Club Bulletin 2001 pg 16

## Bat Report 2009

**Chris Booth**

### Common Pipistrelle *Pipistrellus pipistrellus*

Bats were reported from 3 different localities in Finstown from 26<sup>th</sup> May to end of August. (E Everiss, C Gourlay, M Russell).

On 10<sup>th</sup> August 1-2 were seen at Melsetter, Hoy and appeared to be calling at 50-55 khzs. (E.Everiss).

### Bat sp.

Elsewhere there were the following sightings of bats that could not be specifically identified: Singles at High Street, Kirkwall on 24<sup>th</sup> and 26<sup>th</sup> July and at Cairston Road, Stromness from 3<sup>rd</sup>-8<sup>th</sup> August (R J Simpson).

One was found dead behind boards in a barn at Millhouse, Twatt on 18<sup>th</sup> November (Stuart West).

**Palmate Newt** *Triturus helveticus*

Newts were first introduced into a garden pool at Harraborough, South Ronaldsay in 1988. There have been occasional sightings since, but this year they had a very successful breeding season. Breeding also took place in some small hill pools here and at Grimness, South Ronaldsay (G Anderton).

**Common Toad** *Bufo bufo*

The only report of breeding was at the large pool near the Rackwick bridge, Hoy where Lee Shields saw 50 adult toads on 3<sup>rd</sup> April and counted an incredible 5,100 tadpoles on 22<sup>nd</sup> April, which was a warm sunny day. Hundreds of tadpoles were also seen here on 16<sup>th</sup> June. An immature toad, only 5gms in weight, was found at Hundasaeter, Birsay on 20<sup>th</sup> July, an adult toad was there on 22<sup>nd</sup> July and 2 adults on 1<sup>st</sup> September (AK&JH Johnson). One was seen at School Ha, Evie on 29<sup>th</sup> August (G Steven).

Single adult toads were found dead on the road in Rackwick, Hoy on 21<sup>st</sup> July and 7<sup>th</sup> October.

**Common Frog** *Rana temporaria*

The first reported sighting of a frog this year was on 16<sup>th</sup> February at Blackhammar, Rousay (S Scott). Single freshly dead frogs were found on Eday on 18<sup>th</sup> and 20<sup>th</sup> February (M Cockram) and on the latter date a live one was seen near Kirkwall Fire Station (L Shields).

First spawn was found at Hundasaeter, Birsay on 24<sup>th</sup> February (AK&JHJ) followed then at Quindry, South Ronaldsay on 25<sup>th</sup> (H McKenzie), Blackhammar, Rousay on 27<sup>th</sup> (SS), Dale, Birsay (R E Matson) and Skail, Eday on 28<sup>th</sup> February (MC) and Braesdene, Holm on 2<sup>nd</sup> March (M Rinder).

2 pairs were in amplexus at Sunny Bank, Deerness on 25<sup>th</sup> February (P Wilson), at least 40 frogs were present in a pool near the school, Eday on 7<sup>th</sup> March (MC).

Later spawning's reported were from Round House, Berstane Road (D&S Walls) on 17<sup>th</sup> March and quarry pond Kirkwall Golf Course on 20<sup>th</sup> March (J Booth).

Away from spawning sites there were reports of single frogs from the lower end of the Garson burn, Stromness on 12<sup>th</sup> May (E R Meek), Clay Loan, Kirkwall 21<sup>st</sup> July (E J Rosie).

A dead frog was found on the road in Victoria Street, Kirkwall on 6<sup>th</sup> October.

The largest frog found at Hundasaeter, Birsay was 78.6mms in length and weighed 80gms. The last sighting also came from Hundasaeter on 26<sup>th</sup> October, but on 16<sup>th</sup> November, which was a mild day, one was heard croaking at Dale, Birsay (REM).

**Otter predation**

Otter predation of spawning frogs was noted at a number of sites: Birsay - Dale with at least 30 killed and Hundasaeter; Eday - the Kirkyard pool; Rousay at Blackhammar, where at least 10 were found predated around a pool on 4<sup>th</sup> March and Quindry, South Ronaldsay. Spawning frogs obviously provide an easily accessible food source for otters at this time of the year. Two spraints found near a pool at Hundasaeter consisted entirely of frog bones. A previous analysis of Otter spraints in Orkney found mainly fish bones (Booth 2001).

Fumitories are colourful annual plants that may be found in many an Orkney field margin, the occasional garden and even the odd rubbish dump. Six of the ten species that occur in the British Isles can be found here, including two relatively scarce ones: only Cornwall has more. The aims of this article are to provide information about the species found in Orkney, a simple key and some tips to identification.

Fumitories favour disturbed and rich soils, grow quickly, produce masses of flowers and seeds then die off completely in autumn leaving little or no trace behind (at least this is the scenario in Orkney: in warmer and drier climates in England and even more so around the Mediterranean they are winter annuals, germinating in autumn and flowering in spring; I have seen Common Fumitory *Fumaria officinalis* flowering in a neglected greenhouse in spring in Orkney). Many of them compete with surrounding vegetation by means of scrambling growth, by which they often overtop their plant rivals. They are thus well adapted to growing among crops as 'weeds'. Rather surprisingly for opportunistic annuals there is no apparent means of seed dispersal, but seeds can lie dormant in the soil for many years, waiting for the next disturbance event. The derivation of the word fumitory is given<sup>1</sup> as from the Old French and meaning 'earth-smoke', referring presumably to the appearance of smoke lying close to the ground given by masses of the plant seen from a distance. Flowers are distinctive and unusual in form and come mainly in shades of pink, sometimes pink-purple, white or red. Leaves are from grey-green to pea green, small and finely divided. For anyone looking for more information, the Botanical Society of the British Isles has recently published a detailed account of the genus in Britain and Ireland<sup>2</sup>.

The following descriptions of sections of the genus and individual species apply only to those so far found in Orkney: it will not serve to differentiate all the species found in the British Isles (and it is possible that one of these species could turn up in Orkney).

The genus can be divided into two sections: section *Fumaria* and section *Capreolatae*. Members of section *Fumaria* (two species in Orkney) have small flowers and obviously spoon-shaped lower petals and leaves with narrow and flat or channelled segments. There is evidence that they were introduced to the British Isles in the distant past. Members of the section *Capreolatae* (four species in Orkney) have larger flowers, near-linear lower petals and leaves with broader and flat segments. They are considered native.

Fumitories have a reputation for being difficult to identify, mainly because variation within some of the species can make them appear to 'overlap' with others, and also because plants of a single species can vary depending on where they are growing – especially in their reaction to the amount of sun or shading they are getting and the fertility of the soil. In Orkney we do not have the first of these problems: our 'versions' of each species are consistent in form. The other main source of variability is not restricted to fumitories and can with a little experience be allowed for, whilst odd and poorly grown specimens – especially plants still flowering into early winter – should be ignored. Armed with this knowledge it is relatively easy to name

<sup>1</sup> In the Concise Oxford Dictionary

<sup>2</sup> R J Murphy. 2009. *Fumitories of Britain and Ireland*. BSBI Handbook No.12. London

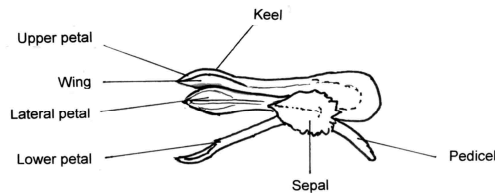
four of the six local species. The other two are not difficult to separate from the first four, but are alike to each other: nevertheless at least one distinguishing feature is nearly always visible.

The most important features to examine in naming fumitories are parts of the individual flower. Shape of the lower petal differentiates the two sections (see above). For differentiating species, sepal shape and size are the single most useful features: others are colour and size of the flower and shape of the upper petal.

The appearance of the fruiting inflorescence is quite distinctive for some species, depending on the angle at which the pedicels (stalks of the individual flowers and fruits) spread out from the stem of the inflorescence: they can be strongly recurved, patent (held more or less straight out), or pointing upwards (NB - this feature is usually different when the plants are in flower).

Fruits are mostly not necessary for naming fresh (rather than dried) specimens, though are helpful for one species.

Length of inflorescences, pedicels and bracts (leaflets at the base of the flowers) vary too much according to environmental conditions to be of much use in naming species.



### KEY to Fumitory *Fumaria* species found in Orkney.

This key does not include sub-species and varieties, of which there are several for most species in the British Isles. Only one sub-species of each species has so far been recorded in Orkney, and these are given in the section following the key.

- 1a. Flowers less than 9 mm long; lower petal spoon-shaped; leaf segments channelled or flat, narrow 2. Section *Fumaria*
- 1b. Flowers 9-14 mm long; lower petal linear or only slightly widened at the tip; leaf segments flat, broad 3. Section *Capreolatae*
- 2a. Sepals inconspicuous, 2.5-3.5 mm long, narrow; fruits obviously flat-topped ***F officinalis***
- 2b. Sepals very conspicuous, 2.5-3 mm long, nearly round; fruits rounded ***F densiflora***
- 3a. Flowers 10-14 mm; sepals large, 4.0-6.5 mm long, weakly toothed or toothed at the base only; flowers white when young, becoming at least partly pink or pinkish-purple after fertilisation, with very dark tip 4
- 3b. Flowers 9-12 mm; sepals smaller, 3-5 mm long, more strongly toothed; flowers pink, with or without dark tips 5

## Fish Report 2009

Chris Booth

The following are some of the more unusual fish reported in 2009:

### Basking shark *Cetorhinus maximus*

Fewer reported sightings this year.

In June, singles were seen off North Ronaldsay on 1<sup>st</sup> and 23<sup>rd</sup> (North Ronaldsay Bird Observatory) and two were off Burwick, South Ronaldsay on 27<sup>th</sup> (B Flett). Singles were reported off Saviskaill, Rousay on 1st July (S Sankey), Warness Sound, Eday on 14<sup>th</sup> and 17<sup>th</sup> July (M Cockram), in Eynhallow Sound on 6<sup>th</sup> August (K McCullen) and also in August between Westray and Papa Westray (T Dodman & T Rendall). One was off North Ronaldsay on 13<sup>th</sup> September (NRBO) and the last sighting was of one off the west side of Holm on 19<sup>th</sup> October (T Dean).

### Red Gurnard *Aspitrigla cuculus*

One was caught in Widewall Bay, South Ronaldsay on 25<sup>th</sup> July by Rick Thompson and 2 were caught during a sea angling competition off Yesnaby, Sandwick on 6<sup>th</sup> September. These were the first definite records since 1965.

### Bass *Dicentrarchus labrax*

One was hooked by an angler fishing for sea trout at Dingieshowe, Deerness in early October. It escaped before it could be landed but was estimated to be about 3lbs in weight (per R E Matson).

### Scad or Horse Mackerel *Trachurus trachurus*

Two were caught during a sea angling competition off Yesnaby, Sandwick on 6<sup>th</sup> September. This species is infrequent inshore.

### Ray's Bream *Brama brama*

There were at least 11 strandings of this usually rare fish in 2009, with the following reports, all of single fish:

26 <sup>th</sup> September	Elsness, Sanday, length 54cm (Bill & Sue McArthur per Rod Thorne)
1 <sup>st</sup> October	Lopness, Sanday (Irene Hardgrieve per Rod Thorne)
11 <sup>th</sup> October	Sands o' Wright, South Ronaldsay, length 55cms (Roddy & Sarah Harper)
17 <sup>th</sup> October	Sands' o Wright, South Ronaldsay (Jenny Bambridge)
1 <sup>st</sup> November	Point of Baits, Scapa, length 56cm (R G Adam)
2 <sup>nd</sup> November	East side Scapa, (Alan Wilson)
14 <sup>th</sup> November	Waulkmill Bay, Orphir (E J Rosie)
16 <sup>th</sup> November	Kirkhope, South Walls (Deborah Jaques)
18 <sup>th</sup> November	Dingieshowe, Deerness, length 60cm (Jess Butler)
3 <sup>rd</sup> December	Ore Bay, Hoy (Angus Budge & Lee Shields), length 60cms
Mid December	One was caught alive by a dog, in a pool on a beach at Grimness, South Ronaldsay (G Anderton)

There were probably others that went unrecorded.

### Triggerfish *Balistes capriscus*

One was found by Tristan Thorne on the east side of Tresness, Sanday on 29<sup>th</sup> October. It was 37cm in length.



*Elaphrus riparius*



*Gastrophysa viridula*



4a. Flowers white with dark pinkish-purple tips when young, becoming more purplish-pink after fertilisation; fruiting pedicels variable, mainly recurved but few if any strongly recurved; wings of upper petal concealing keel when viewed from the side *F purpurea*

4b. Flowers white with contrasting blackish-red tips, usually becoming pink-tinged and streaked after fertilisation; fruiting pedicels always strongly recurved: wings of upper petal not concealing keel when viewed from the side *F capreolata*

5a. Sepals broadly oval, 3-5 mm long; flowers pale to dark rose pink, with dark tips; fruiting pedicels patent or recurved *F muralis*

5b. Sepals smaller, narrowly oval, 2-3.5 mm long, with teeth forward pointing; flowers pale pink, with no dark tip to the upper petal; fruiting pedicels upward pointing *F bastardii*



*F. purpurea*



*F. densiflora*



*F. bastardii* var *bastardii*



*F. officinalis* ssp *officinalis*



*F. capreolata* ssp *babingtonii*



*F. muralis* ssp *boraiei*

The nationally rare leaf beetle *Chrysolina intermedia* was recorded in the usual area south of Yesnaby, between 2nd April and 13th May. The related *Chrysolina staphylaea* was found in Rendall on 17th September at the same site as the only other recent record, in 2006.

Green tiger beetles *Cicindela campestris* were seen in good numbers at the usual sites on the Rackwick footpath, but one near the Dwarfie Stane on 2nd July seems to be the first recent record from that valley.

*Brosicus cephalotes* is a large and distinctive ground beetle adapted for burrowing, usually living on sandy beaches. It was found under stones on Birsay beach on two occasions in 2009, the first records for several years.

*Loricera pilicornis* is a small ground beetle with peculiar bristly antennae, it is supposed to use these to catch springtails (I wonder if anyone has ever seen it doing this!). It sometimes turns up in moth traps. There are a number of older records for Hoy, Burray and Auskerry but all recent ones have been found in the west Mainland until 2009 when one was found for the first time in east Mainland. It is probably widespread but overlooked, though I have never yet found it here in Rendall.

There were the usual records of *Nicrophorus investigator* from moth traps, numbers do vary between years so more records are always welcome. The similar *N. vespilloides* was recorded twice but not in moth traps. It seems to be the less nocturnal of the two and can be distinguished by its all-black antennae. I have only one record of the larger *N. humator* for 2009.

Devil's coach-horse *Ocypus olens* was recorded only once in 2009, one was found dead on Pentland Skerries on 5th July. Most records seem to be from coastal or built up areas.

Green dock beetles *Gastrophysa viridula* are very familiar on Orkney Mainland. There is a good scatter of records over the West Mainland and some older ones from Hoy. Another Hoy record came in 2009, also one in the East Mainland. There are no records for any of the north isles though I'm sure I have seen it on Rousay. I searched for it on Westray without success on 10th June, but it is usually more conspicuous a few weeks earlier. Are there really no small bright green beetles on dock leaves in the north isles?

Contributors of records and specimens: Chris Booth, Bob Adam, Keith Fairclough, Lee Shields, Julian Branscombe, Ellis and Jenna Tait. I apologise if I have missed anybody out.

*Coccinella septempunctata*



There were 16 reports of Tree Wasps *Dolichovespula sylvestris* from Kirkwall and St Ola, Harray and Herston, South Ronaldsay (CJB, RGA, B & J McC). RGA's record for Harray is the first for the parish, though there are previous records from Feold, Firth in the same 10 km square.

#### Solitary bees and wasps

There were reports of Mason Wasps *Ancistrocerus scoticus* from Rackwick, Hoy (CJB), Hestily, South Ronaldsay (AM) and Head of Work, St Ola (SG). Also at Head of Work, in early spring and before adult wasps would have been active, SG found the remains of mason wasp nests: they probably belonged to the same species though possibly to *A oviventris*.

Two *A oviventris* were reported, both from Kirkwall and new for 10 km square. One was building a nest on 22/23 June (CJB) and another was on a *Cotoneaster* bush outside the Orkney Library (JEC).

Many thanks to all contributors: Bob Adam (RGA), Chris Booth (CJB), Lindsay Campbell (LC), Roger Davies (RD), Dave Jones (DJ), Sandy Kerr (SK), Bobbie and John McCutcheon (B & J McC), Andy Mitchell (AM), Brian Ribbands (BR), Eileen Summers.

#### Beetle Records 2009

Brian Ribbands

80 records of 22 beetle species have been reported in 2009. There was no systematic recording by visiting experts so these are casual records of relatively conspicuous species.

One new species was added to the Orkney list. On 9th May I found an unfamiliar beetle running rapidly over damp mud by a pond in Rendall. A closer look showed a very distinctive pattern on the elytra, unique to the genus *Elaphrus*. There were two of the four British species on the Orkney list so I assumed it was one of these, photographed it and let it go. When the photograph was enlarged I started to have doubts so went back for another specimen to key out and it proved to be *Elaphrus riparius*. This species seems to be common further south and the habitat is right for it. On 19th May there were at least 10 of them at the same site. The pond was dug about 10 years ago, before that there was probably no suitable habitat there.

There were no further reports of the harlequin ladybird *Harmonia axyridis* this year but no doubt this highly invasive alien will be accidentally imported to Orkney again sometime in future as it continues to increase further south. Two species of ladybird were reported in Orkney in 2009, one was 10-spot ladybird *Adalia decempunctata*, again in the Kirkwall area for the third successive year, so it really must be breeding there now. There was a single record of 7-spot ladybird *Coccinella septempunctata*, the first in Orkney since 2004. It was found by Ellis and Jenna Tait, at the Kirkwall power station on 3rd November. It is tempting to suggest that it may have been brought to Orkney hiding in equipment for the power station. This is the familiar ladybird which everyone would recognise, but it is the first one of this species that I have seen alive in Orkney!

#### First spawning dates of the Common Frog in Orkney 2000 – 2009

Chris Booth

Since the mid 1970's there have been many attempts to introduce the Common Frog *Rana temporaria* into Orkney with spawn, tadpoles and adult frogs.

This species has now become established in various parts of Mainland, as well as some of the outer isles, and is breeding regularly at a number of sites. Over the last 10 years the dates when the first frogspawn was found have been recorded annually and are shown in Table 1.

#### Dates when frogspawn first found 2000 – 2009

2000 12/3	2001 9/3	2002 28/2	2003 1/3	2004 8/3
2005 26/2	2006 6/3	2007 23/2	2008 24/2	2009 24/2

The dates given are the actual dates when the spawn was found but spawning could have occurred earlier and not been noticed. As can be seen from the Table the dates range from 23<sup>rd</sup> February to 12<sup>th</sup> March with a mean first date of 2<sup>nd</sup> March. This mean first date is earlier than that for the North of Scotland of 9<sup>th</sup> March (range 1<sup>st</sup> – 18<sup>th</sup> March) (Frazer 1983). However, it is much later than the 10 year mean (1990-1999) of 22<sup>nd</sup> January for Devon (range 13<sup>th</sup> January – 5<sup>th</sup> February) (Tyson and Smith 1999).

It has been found that the time at which a colony of frogs breeds depends on both temperature and rainfall. The rainfall of the preceding month affects the algal growth on which emerging tadpoles would feed. The mean first date for Orkney for the next 10 year period will be of interest.

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Chris Booth, 34 High Street, Kirkwall

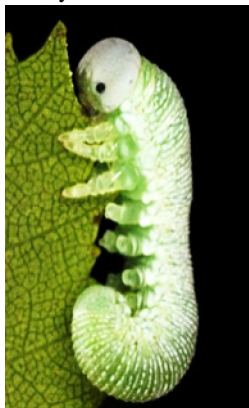
## Sawflies

Jenni A Stockan

Sawflies (sub-order Symphyta) are considered to be the most primitive members of the insect order Hymenoptera, which includes the bees, wasps and ants. They are so called because of the modified saw-like ovipositor of the females which is used to cut slits in plants and leaves in which to lay eggs. Those of the family Siricidae, the 'wood wasps', have to bore through bark and have evolved a needle-like ovipositor. The ovipositor is never used as a stinger although some species will attempt to bite if handled.

The larvae of sawflies are caterpillar-like but with legs on nearly all segments. They are largely phytophagous and restricted to one or two plants. Some are gall makers or parasitic, and a few species can be serious pests. When disturbed the larvae of most species adopt an S-shaped pose, often raising their rear ends and waving them about. After four to five weeks the larvae pupate either within a gall or on the ground in leaf litter or soil. They hibernate in this state emerging as adults in the spring.

Sawfly larva



Recognising the adults is fairly easy. They share the long slender antennae of bees, ants and wasps, but have a stouter body lacking a 'waist' and the head is more fly-like. All sawflies, with the exception of the family Cephidae, possess two cenchri (raised bumps) behind the scutellum on the hind end of the thorax. They range in size from 2 to 28 mm. Some species are dark-coloured and inconspicuous while others are a vivid green or patterned with black and yellow. The following key is taken from Wright (1990) and determines whether an insect is an adult sawfly:

1. Has the animal got three pairs of legs? (If yes, go to Q2; if no, not an adult sawfly)
2. Has it got two pairs of membranous wings? (If yes, go to Q3; if no, not an adult sawfly)
3. Are there cenchri present on the thorax? (If yes, it is an adult sawfly; if no go to Q4)
4. Is the 1<sup>st</sup> abdominal segment divided on the mid-dorsal line? (If yes, this is an adult sawfly; if no, not an adult sawfly.)

Adult sawflies are most commonly seen on warm spring and summer days visiting flower heads, particularly umbellifers, to feed on pollen and nectar, and sometimes on other flower-visiting insects. The lifespan of the adult ranges from a few days for some species to about four weeks. Sawflies play a part in the wider ecosystem as an important component of the diet of some of our birds such as chiffchaffs.

As a group, sawflies receive relatively little attention compared to their more familiar relatives and this is partly due to the difficulty of species identification. There are around 500 species in Britain of which 34 have been recorded in Orkney; nearly all from the family

I have not included in the above summary of records some estimated numbers of several species in a field of improved grass and white clover at North Flaws, South Ronaldsay on 27 July. The totals are calculated from three transect counts across the 2.5 hectare field. At this date most bees would have been workers, with a few queens and males of some species. Results (for all known *Bombus* species in Orkney) were as follows:

Heath <i>B jonellus</i>	1119
Great Yellow <i>B distinguendus</i>	254
Moss Carder <i>B muscorum</i>	72
White-tailed <i>B lucorum sens. lat.</i>	48
Common Carder <i>B pascuorum</i>	48
Garden <i>B hortorum</i>	0
Gypsy Cuckoo <i>B bohemicus</i>	0

The results invite extensive comment, but I shall restrict myself to a few remarks. Numbers of most species peak for a short time in late summer, and it is only when some form of organised survey is carried out that the numbers involved become apparent. Such surveys are difficult in practice except where site conditions are favourable – in this case an extensive, more or less uniform and attractive food source where the insects could easily be seen and counted. It is known that bumblebees travel some distance to especially attractive food sources, so large numbers in one place will be drawn from a much larger area (though note: this was only one of several fields with abundant white clover). Heath bumblebees are associated with heather moorland, but do forage more widely and are known from some flower-rich grasslands sites with no moorland nearby. White-tailed Bumblebees and Common Carders are both very common and widespread species: but because they are non-specialists, and able to utilise a great variety of forage plants, it may be that they are less drawn to particular high-reward sites when alternative forage is available in the vicinity. Garden bumblebees, though equally common, are so specialised in feeding from flowers with long corollas that white clover is simply not on their menu. Cuckoo bees do not produce a worker caste and are never very numerous, but it is surprising that none were seen at all.

### Social wasps

There were more records of social wasps than in previous years.

Reports of Common Wasps *Vespula vulgaris* numbered 17 (BR, CJB, RGA, B & J McC, LC, JEC), in the usual haunts in Kirkwall, Rendall, St Margarets Hope and Herston/Widewall, South Ronaldsay.

Red Wasps *Vespula rufa* were reported from Herston, South Ronaldsay (B & J McC) and Queenamidda, Rendall (BR). New sites, though not far away from previous ones, were in St Margarets Hope, Hestily (5 queens) and North Flaws, South Ronaldsay (both JEC). Most reports from the new sites were of queens in spring, but oddly no wasps were seen there later in the year. No Cuckoo Wasps *Vespula austriaca*, the social parasite of the Red Wasp, have been reported in Orkney since two were seen in the Widewall area, South Ronaldsay in 2006. Does this species survive in Orkney?

Norwegian Wasp *Dolichovespula norvegica* though a widespread species was recorded only 9 times from Kirkwall and St Ola, Rendall, Firth on Mainland (BR, CJB, RGA), Burray (RGA, new to the island) and Rousay (JEC). The Rousay wasps were the first seen there since a nest was found in Trumland wood in 1997. On this occasion there were many of them at *Fuchsia* flowers.

Aug (JEC), both in 'bird crops'. Great Yellows though well distributed are few in numbers except on Mainland and linked South Isles, but can usually be found in other islands with careful searching of good stands of plants to which this (and most other) species are attracted. 'Bird crop' plots with *Phacelia* and Fodder Radish *Raphanistrum sativus* are especially worth a look, as are Spear Thistle *Cirsium vulgare* close to the sea shore and Woundwort *Stachys* spp along roadsides and ditches. In all cases the important factor is an abundance of forage, to which bees will return again and again. Red and White Clover in abundance can be very attractive too. Red clover can flower very late in autumn, and the last record of the year was of 12 queens on a field plot grown especially for bumblebees at Windwick, South Ronaldsay (JEC) on 18 Sept. Garden flowers and even vegetables, especially but not exclusively in rural areas (there was a single record from Kirkwall [CJB]) are often visited, with bees seen at *Rosa rugosa*, *Buddleia*, Lupin, Broad Bean, Tutsan, *Escallonia*, Cornflowers and *Sedum*, the first three more than the others.

Garden Bumblebees *Bombus hortorum* were reported from Mainland, South Ronaldsay Hoy and Sanday (BR, RGA, JEC, B & JM) – a total of 19 records for this very common species. The highest count was of approximately 150 on *Fuchsia* at North Flaws, South Ronaldsay on 24 Aug (JEC). The last sighting was of 7 queens and 3 males on 18 Sept at Windwick, South Ronaldsay, at the same plot of red clover that attracted the last Great Yellow Bumblebees of the year.

Heath Bumblebees *Bombus jonellus* were reported from Mainland, Burray, South Ronaldsay, Shapinsay, Eday, Sanday and Gairsay (CJB, RGA, JEC & MC) – a total of 17 records. This is the 'heather bee', and typical high counts were from the Eday hills ('100s', JEC), Hobbister, Orphir (35) and Klondyke, Burray (60) (both RGA).

There were widespread reports of the White-tailed Bumblebee *Bombus lucorum sens.lat.* (aggregate of three critical species) from Mainland, Hoy, South Walls, South Ronaldsay, Burray, Sanday, North Ronaldsay, Gairsay, Fara, Cava and Rysa Little (BR, CJB, RGA, B & J McC, JEC) – a total of 40 records. There are none previous from the smaller Scapa Flow islands. In spite of the fact that queens of this group of species are so common in spring large aggregations are seldom seen, so approximately 150 on Perennial Sowthistle *Sonchus arvensis* at Tofts Ness, Sanday on 30 Aug (JEC) is unusual. A visiting naturalist (DJ) identified a queen in Papa Westray as *B. cryptarum*. have little doubt that the great majority of the Orkney bumblebees identified to aggregate level only as *B. lucorum sens. lat.* are indeed *B. cryptarum* (the remainder probably being *B. lucorum sens. str.*; the occurrence of *B. magnus* is more doubtful): the position should become much clearer by next season as a result of some DNA sequencing of a sample of Orkney *B. lucorum sens. lat.* currently being carried out by researchers from the University of Dublin.

Moss Carder bees *Bombus muscorum* were seen on Mainland (rather few reports), South Ronaldsay, Burray, Swona, Hoy, South Walls, Cava, Sanday, Papa Westray and Gairsay (BR, CJB, RGA, DJ, RD, JEC). One at Brims South Walls on 17 March (SK) had emerged extraordinarily early in the year. There were 32 records in all, fairly reflecting the species' distribution – more common on the coastal fringes and islands than elsewhere. The Cava record is new for there, and the South Walls one is new for 10 km square ND28. A high count was of approximately 30 at Tofts Ness, Sanday on 30 Aug (JEC).

All Common Carder Bee *Bombus pascuorum* sightings (23) were on Mainland, except one in Hoy (BR, CJB, RGA, B & J McC, JEC). A high count was of approximately 100 on *Phacelia* in bird crop nr Cutpool, Deerness on 6 Sept (JEC).

enthredinidae. However, most of these records are from single specimens with some dating back to 1878 (Liston, 1983)!

The majority of sightings are from students of Aberdeen and Newcastle Universities whilst on field trips to Orkney (Sheppard, 1986). The most commonly recorded species has been *Tenthredo atra*, which is known from Birsay, Finstown, South Ronaldsay and Hoy. The best time to see sawflies in Orkney is between May and July. Many can be found in tall grassland in sheltered areas but some are associated with shrubs and trees and several species have been found in Binscarth and Berriedale.

#### Sawfly

Sawflies are, in general, understudied and further information on their status, distribution, and habitat preferences will help towards our understanding of them. In view of this I would welcome any verified records or specimens from Orkney for verification. Please send records or specimens to the recorder with details of location, OS reference, date, number seen, habitat type, behaviour, and the plant the insect was found on.



#### Acknowledgements

Thanks to Gabor Pozsgai ([www.photogabor.com](http://www.photogabor.com)) for the photographs contained in this article.

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## Transcript of the diary kept by Margaret Cardno during October 1978, when taking part in a seal protection campaign

**Introduction:** *this remarkable diary was written by torchlight in a wet tent on an uninhabited Orkney island, during a period when pressure from fishermen had led to plans for a significant seal cull. Many thanks to John Graham for his careful transcription from the original! He writes, "Considering the conditions under which the work was written it is in excellent condition. Again taking those considerations into account I have left all Margaret's spelling and punctuation as it was written in her wet tent, by torchlight" Green Holm is situated on OS map 5 Landranger series. Ref. 527273 for the centre of the island.*

*The diary is now in the possession of the Orkney Field Club – we are grateful to Margaret and her son Billy for this generous gift.*

### Tuesday 9<sup>th</sup>. October:

Received a 'phone call just after I got home from work at dinner time. They want me to be ready to go out to the Green Holm at 2. Went back to the hospital and got my holidays, left Tingwall at ten past two with Mr. Flaws, two Welsh boys going to Faray. Arrived at Green Holm somewhere about 6 or 6:30. Mr. Flaws got me a sleeping bag a loan of from someone on Wyre as I have left mine & the tent at home in the rush to get away. I have plenty of food and warm clothes so will just have to manage until the rest get here Two Irish boys are here have been from last week, Bryan and Colin. Colin went back in when I came out. Bryan and I will share the tent meantime. We had a cup coffee that was my second cup today I have had nothing else at all but am not hungry I am so glad to get out here to try and help the seals.

We went down to have a look at the seals, Bryan wants to show me where they all are. We can see the main colony from the tent but there are a lot more over the hill on the other beach and in the Geo's. How anyone can kill these poor helpless beautiful pups I will never understand surely there is more to life than money. It is a true saying that "Money is the root of all Evil" Well we are writing up all this now as it is dark outside and the seals are all crying what a lovely sound.

### Wednesday 10<sup>th</sup>. October:

Didn't sleep very well the ground is sure very hard but will get used to it. I am so happy to be here among the seals nothing else matters. I got up about 7:15 am. Had a cup of coffee then went to see the seals and count them all. Had a walk all over the island no birds here except black backs and pearfie's [?]. There is a stone building on the other side with half the roof blown away. Rather misty but no sign of any ships. Maybe it will clear up later on.

2:30 pm. Sun has come out a lovely day for this time of the year. I have been sitting here watching the seals for over an hour a lot of mothers ashore and some bulls they are almost human. I have counted about 65 pups across the burn and 8+10+11 on one beach a good long stretch of beach. 12 in the deep Geo and around 30 on the nearside of the burn. This is as much as I can make out today. Bryan has told me Colin and him had the reporters down among them yesterday morning that was why the seals were making such a noise when we came out yesterday. I thought that there was something wrong. Well that will be the end of that so long as I am here the seals will not be disturbed again, if they want photo's they can take them over at the Geo where they won't be disturbed.

Bryan sleeps a lot, he will get a rude awakening if the *Kvitungen* comes.

6:30 pm. *Rainbow Warrior* and *Kvitungen* back again we can hear their engines.

## Ant Records (with notes on earlier records) 2009

Keith Fairclough

### **A Red Ant: *Myrmica ruginodis***

This is 'our' ant. The one that is found all over Mainland and on many of the islands. The one that is found at sea level and up on hilltops; in heathland, grassland and along the coast.

Four records were received, two of which reported large numbers of winged ants on the same day but at totally different locations. On 6<sup>th</sup> August, Brian Ribbands had at least 1,000 winged ants along a 700m stretch of his track to Queenamidda, Rendall. (HY3720, a new 1-Km square). On the same day, E.J Rosie had hundreds of winged ants along the footpath to the Old Man of Hoy, a site from where ants had already been recorded in previous years.

Four ants on the upper track of the RSPB Hobbister Reserve, Orphir on 22<sup>nd</sup> July were from a known site, but one on the recorders notebook on the north face of Mid Hill, Birsay on 18<sup>th</sup> May was from a new square (HY3325), although they had already been recorded from the south face of this hill.

This means that this species has now been recorded in 65 different 1-Km squares in Orkney.

### **The Common Guest Ant: *Leptothorax acervorum***

Up until recently, this ant had only been confirmed from one site on Hoy, where it was found in a pitfall trap on the summit of Ward Hill in 2001. There was also an unconfirmed record of one from Ve Ness, Orphir in 2006.

I have however received notice of specimens in a collection at the British Museum which pre-date these records. One record was from the Sandy Loch area on Hoy (HY2102) in 1998; whilst another was from South Ronaldsay, the details of which I am attempting to obtain.

## Bees and Wasps 2009

John Crossley

I have received 265 records for 14 species – a very good year, with reports from many parts of Orkney. The Great Yellow Bumblebee *Bombus distinguendus* was once more a focus of attention, as the subject of a recording programme due to its national status as a Species Action Framework species.

### **Bumblebees**

The Gypsy Cuckoo Bee *Bombus bohemicus* was recorded on 22 occasions, from Mainland and Burray (BR, CJB, RGA and JEC), with most reports from the Scapa/Crantit area, St Ola (RGA). An unusual sighting was of at least 11 males at Orkney College on 15 Sept (JEC).

There were 43 records of the Great Yellow Bumblebee *Bombus distinguendus*, the first being on 26 May at Crantit (RGA), the last on 18 Sept at Windwick, South Ronaldsay (JEC). There were many more records than last year and later into autumn. All sightings were from Mainland, Burray and South Ronaldsay (AM, CJB, RGA, B & J McC, JEC, ES, LC), except for 3 males at Bay of Greentoft, Eday (MC & JEC) and a single queen at Trumland, Rousay (JEC). 17 were at Hestily, South Ronaldsay on 19 Aug (AM) and 25 at North Flaws on 7

2188 *Orthosia incerta* **Clouded Drab** (R); 78 taken by traps, 24 between 11 April-19 May Bayview, Herston, South Ronaldsay (J & R McCutcheon), 4 between 12-25 April Northolme, St Ola (RG Adam), 6 between 12-29 April Quoyberstane, St Ola (SV Gauld) 24 between 11-19 April Bayview, Herston, South Ronaldsay (J & R McCutcheon), 43 between 13-20 April Queenamidda, Rendall (B Ribbands) and 1 on 18 May Smyril, Stenness (ER Meek & A Hall).

*Aporophyla nigra* **Black Rustic** (C?); one taken by trap 20 September Viewforth, Swannay, Birsay (K Fairclough).

*Xylena vetusta* **Red Sword-grass** (R?); one taken by trap 20 September Northolme, St Ola (RG Adam).

*Eupsilia transversa* **The Satellite** (RI); one seen on 12 November Queenamidda, Rendall (B Ribbands)

*Agrochola lota* **Red-line Quaker** (V); one taken by trap 20 September 34 High St, Kirkwall (CJ&J Booth). This will be the second record for this moth, the first record being on 29 September 2003 Quoyberstane, St Ola (SV Gauld).

*Amphipyra tragopoginis* **Mouse Moth** (U); one taken by trap 17 September Greens, Toab (J Branscombe).

*Apamea lithoxylaea* **Light Arches** (U); one taken by trap 22 July Northolme, St Ola (RG Adam).

*Rhizedra lutosa* **Large Wainscot** (RD); six taken by traps, one on 17 and 19 September Viewforth, Swannay, Birsay (K Fairclough), two 17 September Northolme, St Ola (RG Adam) also one Bayview, Herston, South Ronaldsay (J & R McCutcheon). One 19 October Smyril, Stenness (ER Meek & A Hall), and one seen at the window 28 October Nearhouse, Toab (J Branscombe).

*Schranksia costastrigalis* **Pinion-streaked Snout** (R?); two taken by traps, one each 15 July Bayview, Herston, South Ronaldsay (J & R McCutcheon) and 8 August Quoykea, Tankerness (S Gauld).

### Unresolved Identifications

At the time of writing this report there were two unresolved identifications. The first is *Ochropleura plecta*/*Ochropleura leucogaster* **Flame Shoulder/Radford's Flame Shoulder** taken by trap on 3 July Quoyberstane, St Ola (SV Gauld).

The second is an *Oligia* possibly *strigilis* **Tawny Marbled Minor or versicolor Rufous Minor** taken by trap 7 July Bayview, Herston, South Ronaldsay (J & R McCutcheon). if it is either of these two it will be a new species to Orkney.

My thanks to everyone who supplied records during 2009.

7:30 pm. We can see them both from the tent now. I don't think that they will start anything at night, better be up early just in case they come in tomorrow. Wind getting up and rather cold. 8:30 Boats back again, cat and mouse game this: Engines started up again about 10:30 moved away a bit. Heard them again at 12.30 and 2.45. I think that they went away about 4.30 as this was the last time I heard the engines.

### Thursday 12<sup>th</sup>. Oct:

Got up at 6.30 am still dark went up to the top of the hill no mast lights to be seen so both ships must be away.

Marion, Kevin Mark came out around 8 o'clock. We had some coffee and then put Marion's tent up. Mine hasn't come out yet. I will use Marion's one now. We got some reporters out as well. One German woman asked Bryan to take her back down amongst the seals to see her little 'Goldie' and he was going to do this: I wasn't nasty as we need the reporters but I told them that they couldn't go down but to go over to the Geo. I gave her my glasses to look for her Goldie. Little Goldie indeed damn cheek to think that they can disturb our seals no chance. Bryan should have had more sense but this is the end we were told not to upset the seals and we will do as we've been told: Bryan is away back in and no wonder as he is not getting his photo taken for the papers again (ha ha). We are not here for the papers but to help the seals.

Not much shelter here from the weather but never mind we never died a winter yet. And it will be worth it if we win.

5.30 pm Both boats back again. Couldn't have done much without Greenpeace, They are both lying off now.

It is wonderful to watch the seals, I am getting to know some of them now. There is one mother a great big bad tempered old thing. I think I will call her Big Bertha, she look after her pup well though.

### Friday 13<sup>th</sup>. October:

Boats back again last night but away this morning. I suppose the *Kvitungen* is trying to get away from the *Rainbow Warrior*.

A lot of reporters here today and Norwegian TV. We have had a time of it trying to keep them from disturbing the seals, after all were getting the blame. So why should we let a lot of cheeky reporters disturb them. One of the Norwegians asked me if I had a feather sleeping bag. Hell he must be joking. I am lying on the ground in a thin sleeping bag and no blankets when I showed him he said it was great for someone to sleep rough for the seals. Marion has had time to come with everything she has blankets foam mattress and everything to keep her warm. But I like to say I am happy just to be here.

He also asked what I intended to do if the Norwegians started to cull so I said I would go down to where most of the pups were and stand between them and the guns. At least that was my plan but as I told him when the time came no one really knew what they would do but I think I would have the courage to do this or at least I will try though I know I will be afraid.

After they all went away Marion and I counted the pups again this time we got

Far side of burn	68
Near side of burn	55
Pups in 1 <sup>st</sup> . Geo	39
Along the beach – 2 <sup>nd</sup> . Geo	21
Total	183

Hope I will be warmer tonight was just frozen last night this tent is not very good if I had had my own one it would have been better.

#### Saturday 14<sup>th</sup>. October:

Heard boats through the night they seemed to be going around the island. Heard them again at 5.30 am. Got up and went up the hill at 6.30. Still dark, everyone asleep, both boats over at the small Holm. Wish we had a wireless so as we could know what is going on. Went back and got everyone up, had breakfast in case this was the day for the start of the culling we had better be ready.

*Rainbow Warrior & Kvitungen* in front of us now also two launches. Something is sure going to happen today. The *Enterprise* is hanging about as well.

Sue and Alister are here now so very glad to see them both. We have received letters from Selkie [see note at end] telling us not to interfere if the cull starts just to take photo's and notes. They are saying there are 50-150 pups without mothers, but this is not true as we have been watching all of them since we came out and there is not one pup that a mother has not been at sometime of the day or night just before dark and first thing in the morning the mothers are there. I am always up first and we check up on all the pups + mothers at first light. This will be the only way to get started with the culling.

Well we spread out so we could watch all the seals and take notes and photo's. The DAFFS launch went to the *Kvitungen* put some people on board and after a while they left her again and a rubber dingy was launched from the *Kvitungen* with men in orange oilskins in her who we thought were Norwegians. They came ashore and went up to our camp. Marion and Kevin were up there but no one came to tell Sue or I what was going on so we stayed there like a couple of damn fools. Ages after I had to go up and ask Marion what was happening, it turned out that they were from World Wild Life and I think BBC or ITV to check on distressed pups she might have come and told us. There are no distressed pups or we would have noticed as we have been watching them all every day since we came out. Not one pup is without its mother at sometime during the day. What's the use no one listens do they think we have just been sitting here staring into space all the time we've been here.

I don't know if I'm right or not but half the mothers seem to go down to the sea for a while and when they come back the other half go down.

Well everyone has looked over the colony W.W. Life, RSPCA, SSPCA, Sea Mammal Research and they have told us that we have a very healthy colony and only four dead pups which they think died at birth. Nature takes care of itself that's for sure. Colin, Mark & Kevin are all away in and three Belgians have come out now, they are very polite and one thing they won't know when Marion and I are swearing. It has cost them £750 to get here to help us. This is the kind of people who should be written about in the papers along with Alister, Sue, Frances, Neil, Jan. It is always the same all the really good people who do all the work are never mentioned. They are all marvellous I think so anyhow.

We have one mother seal who has been shot three times or so two Kirkwall men have told us. This is the one I call Big Bertha no wonder she is bad tempered. Question – How did an adult seal get shot three times and how do they know about her if they didn't shoot her. Someone must be shooting adults as well as pups. This should be enquired into and stopped. I suppose this would be impossible unless every boat was checked to see that they didn't have a gun on board. No one cares this much to go to all that bother. I also think that no one should be allowed to cull without the RSPCA being there at all times. Though I am an Orcadian myself I wouldn't trust them as far as I could throw them I bet they always take more than their quota. Money is more important than the law to these people.

*Perizoma flavofasciata* **Sandy Carpet** (R?); was recorded from traps and the field from five locations between 28 May-22 June, the locations were Viewforth, Swannay (K Fairclough), Brig'o Waith, Stenness (SV Gauld), Northolme, St Ola (RG Adam), Gillbreck, South Ronaldsay (L Campbell & N Fairbairn) and Bayview, Herston, South Ronaldsay (J & R McCutcheon).

*Trichopteryx carpinata* **Early Tooth-striped** (R); four taken by traps, three between 13-20 April Queenamidda, Rendall (B Ribbands), one as *T carpinata fasciata* 25 April Northolme, St Ola (RG Adam).

*Macaria wauaria* **V-Moth** (R?); two taken by traps, one each 30 July 34 High St, Kirkwall (CJ&J Booth), and 8 August Northolme, St Ola (RG Adam).

*Campaea margaritata* **Light Emerald** (R); one taken by trap 24 June Ley House, Hoy (L Shields).

*Laothoe populi* **Poplar Hawk-moth** (R); Was seen in 4 traps, 46 times between 22 May-7 July Bayview, Herston, South Ronaldsay (J & R McCutcheon). One 18 June Quoyberstane, St Ola (SV Gauld) and two between 22 June-2 July Smyril, Stenness (ER Meek & A Hall). Three between 24 June-3 July Ley House, Hoy (L Shields), one was also seen 21 June Stromness (Kennedy).

*Macroglossum stellatarum* **Hummingbird Hawk-moth** (I); two seen, the first 1 July and the second 14 September Dundas Crescent, Kirkwall (J Finlay) the second one was seen in the greenhouse.

*Hyles gallii* **Bedstraw Hawk-moth** (I); one taken by trap 12 August Northolme, St Ola (RG Adam).

*Agrotis ipsilon* **Dark Sword-grass** (I); eight taken by traps, one 19 May and four 4 September Quoyberstane, St Ola (SV Gauld), three between 22 August-24 September Bayview, Herston, South Ronaldsay (J & R McCutcheon).

*Diarsia brunnea* **Purple Clay** (R); two taken by trap 14-24 July Viewforth, Swannay, Birsay (K Fairclough).

*Xesria triangulum* **Double Square-spot** (U); two taken by traps, one each 4 July Quoyberstane, St Ola (SV Gauld), and 15 July Northolme, St Ola (RG Adam).

*Naenia typical* **The Gothic** (U); two taken by traps, one each 6 August Northolme, St Ola (RG Adam), and 14 August Viewforth, Swannay, Birsay (K Fairclough).

*Cerastis rubricosa* **Red Chestnut** (R); 12 taken by traps, 9 between 13-20 April Queenamidda, Rendall (B Ribbands), one 23 April Ley House, Hoy (L Shields). And one each on 25 April and 24 May Smyril, Stenness (ER Meek & A Hall).

*Ceramica pisi* **Broom Moth** (R); Three taken by traps, one each 19 June Viewforth, Swannay, Birsay (K Fairclough), 8 July Smyril, Stenness (ER Meek & A Hall) and 20 July Queenamidda, Rendall (B Ribbands).

*Orthosia cerasi* **Common Quaker** (R); 21 taken by traps, 20 between 13 April Queenamidda, Rendall (B Ribbands) and one 24 April Viewforth, Swannay, Birsay (K Fairclough).



*Eucoxia campoliana* (U); one taken by trap 5 July 34 High St, Kirkwall (CJ&J Booth). This is the fourth record for this moth, the other three locations it has been seen are. 1992 Scorradales, Orphir (RI Lorimer), 2003 Dingys Howe, Tankerness (K Bland) and 2004 Quoyberstane, St Ola (SV Gauld).

*Alucita hexadactyla* **Twenty-plume Moth** (U); one taken by trap 25 August 34 High St, Kirkwall (CJ&J Booth). This is the fourth record for this moth, the other three locations it has been seen are 2002 Quoyberstane, St Ola (SV Gauld), 2006 Orcadia, Willow Burn Rd, Kirkwall and Northolme, St Ola (RG Adam).

*Crambus pascuella* (U); two taken by traps, one each 5 August Northolme, St Ola (RG Adam) and 6 August Quoyberstane, St Ola (SV Gauld). It was also seen up the Nowt Bield, Hoy 21 June (K Bland). First recorded on 23 July 1973 Scorradales, Orphir (RI Lorimer) it was not recorded once more till 27 July 2004 Quoyberstane, St Ola (SV Gauld) and has been seen each year since except 2007 at various locations.

*Udea uliginosalis* (R?); one taken by trap 17 July 34 High St, Kirkwall (CJ&J Booth). This is the third record for this moth, the first record was 1973 Orphir (B Goater) as *U alpinalis*. And 10 June 2004 Echna View, Burray (T Dean).

*Colias croceus* **Clouded Yellow** (V); one seen 2 August Quoyburray, Tankerness (D Yule). The next nearest record to Orkney recorded this year was in Inverness on the 30 June.

*Inachis io* **The Peacock** (V); four seen during mid-May and five more were seen from mid August–September. All the records so far received are from the East mainland and linked south Isles.

*Coenonympha tullia scotica* **Large Heath** (R); recorded from Hoy, West and East mainland, with 19 being recorded from the Pegal Burn area on Hoy on 3 July.

*Idaea biselate* **Small-footed Wave** (V); one taken by trap 7 August 34 High St, Kirkwall (CJ&J Booth).

*Orthinoma design* **Flame Carpet** (V); five taken by trap between 25 June-13 July Bayview, Herston. South Ronaldsay.

*Scotopteryx chenopodiata* **Shaded Broad-bar** (R); 13 taken by traps, 12 between 10 July-17 August Northolme, St Ola (RG Adam), and one 6 August Quoyberstane, St Ola (SV Gauld).

*Eulithis pyraliata* **Barred Straw** (C?); one taken by trap 27 July Northolme, St Ola (RG Adam).

*Thera obeliscata* **Grey Pine Carpet** (R); one taken by trap 2 June Smyril, Stenness (A Hall & ER Meek).

*Perizoma alchesillata* **Small Rivulet** (R); eight taken by traps, three between 9 July-1 August Queenamidda, Rendall (B Ribbands), and five between 10 July-6 August Quoyberstane, St Ola (SV Gauld).

*Perizoma albulata* **Grass Rivulet** (R); nine taken by traps, five between 1-23 July Quoyberstane, St Ola (SV Gauld), and four between 16-29 July Northolme, St Ola (RG Adam).

I wish that more people could watch the seals like I have done since I came out last Tuesday. I have always loved them but now I am more for them than ever before. What fun they have in the sea and they take their pups beside them on shore and put a flipper over them just like a mother with her baby. Oh God it is terrible to think that by the end of November most of them will be dead. What can we do? I listen to them at night crying to their pups and I have never heard such a lonely sad sound in my life it is as if they knew what is going to happen to them.

What writing but it will have to do after all I don't suppose this will be for any use anyway.

#### Sunday 15<sup>th</sup>. October:

Terrible day of rain today, up early as usual. Marion wants to go home today I think that she has had enough. No one wants to stay for more than two or three days at a time. I will stay to the end if possible. I could stay out as long as the seals are here as every day you learn something more about them. The two pups way up the hill are down a bit today. I saw their mothers with them early this morning, they seem to be left alone most of the day but the mothers are always back at night with them maybe they are a bit older and don't need so much attention. I would like to know about this, pity there wasn't someone here who could tell me.

Some new pups today. I saw two today in the deep Geo a golden colour at least they look new born.

Plane away over now, we have been well looked after and Billy Dass has been so kind keeping his eye on us to see that we are O.K.

I know all this island now even all the rabbit holes without the rabbits ha ha I have walked all over it about four times every day and sometimes more, even in the rain.

Boat here from Kirkwall Marion away home. I am on my own once more except for the three Belgians they are very nice but it isn't the same as someone to speak to at night. Raining hard and wind getting up. Gale warnings force 9. My boots are wet rather cold when they are damp. One of my small gas cylinders is leaking and the tent is stinking with gas. Hells bells what next on top of rain and gales. Better not light a match now or I will be home before Marion. Honestly I must be nuts sitting here laughing my head off and not even a cup of coffee all on my own but it is funny. Put the cylinder away at the other side of the dike. Got the forecast again still force 8 or 9 gale and heavy rain. The only thing left to happen now is for my tent to blow away. The seals have started crying again what a racket they are making they must know that the bad weather is coming.

8.30 pm Blowing a gale now an pouring with rain. Tent will be away if this keeps up.

10pm Have just been outside putting stones around the tent some of the guy ropes have snapped so had to do something to keep the tent here. The rain is coming straight down, never seen such rain.

#### Monday 16<sup>th</sup>. October:

What a night everything inside the tent is soaking wet and I have been up and out nearly every half hour through the night putting the stones back on the tent as it kept blowing from under them first from one side and then the next. Between rain and wind and the torch kept going out and had to get a bang on my leg to get it on again it has been a night to remember that's for sure. But believe it or not I still think its worth it all. A lot of water inside this morning as well. I can wash my dishes inside today that's something I suppose I won't have to go down to the burn and no gas smell today. I don't feel tired though I haven't slept much. News says that they will start culling today at 12 noon. I wish I had a better wireless as this one is not

much use. I don't think that they will cull here today as there is a big sea running and they couldn't land a small boat.

A lot of seals have moved up from the shore because of the sea crashing in, any pup caught in that will be had it. No boats to be seen they must be sheltering somewhere. I am very cold today maybe for the lack of sleep but the tent is soaking wet all of it roof, sides the lot so cannot get warm.

I have been for a walk round the island again so I feel much warmer now.

48 mothers down below as well as all the pups, maybe some who I think are mothers are older pups I am not very sure.

I am sure this must be one of the worst islands as there is no shelter apart from the wet tent ha ha. Never mind if we are helping to stop the cull I don't care about anything else. Hope we don't get any more rain tonight or I will get a much needed bath no kidding. I don't mind the wind but hate the rain. Gale force winds and getting stronger. Poor Belgium boys they must be wondering what is going to happen next. It is different for me as we are used to the gales but this is the first time I have really been out in it. Will try and get settled down for the night, but don't think there will be much sleep again as the wind is getting worse. The tent is cracking and it is pouring rain. Surprised the tent is still here.

Have walked a lot today in spite of the weather. I am more concerned about the seals than myself. I hope none get lost in this awful sea as there were a lot of pups very near to the sea. The wireless says that divers have been down at the *Kvitungen* as they thought someone was trying to damage her. I don't think this can be true as no Orcadian would do such a thing.

#### Tuesday 17<sup>th</sup>. October:

Have been up and down all night again, thought the tent was going to take off but still here though there is a lot more water inside today, news at 7 Selkie and Greenpeace had a celebration last night the cull has been called off we have won Thank God. We were all sitting out here last night in a force 9 gale and heavy rain while everyone in town were enjoying themselves lucky I don't suppose they even gave us a thought. Hope we get home today but a very heavy sea running don't think a boat could get near us. Mark came but in a helicopter with a reporter and two fish. He wanted this photo taken for a paper with a seal pup. He was going to lay the two fish in front of the pup, I ask you who ever heard of a pup eating fish, this from someone who is helping to bring up a seal pup. Damn fool he should know better they won't eat fish for ages yet. We told him that there wasn't a dead pup so then they wanted to (go) down amongst the seals but the Belgians and I said no and that was that. What a faceful I got from the reporter he asked me by who's authority I had to keep them from the seals. Well that did it No Man is going to curse at me like that, after all we are only doing what we were told to do. I was so mad I could have belted him after the last two nights we have had here I was some mad but instead said my authority came from being here for eight days and nights in gales and rain flooded out and nearly blown away so he could go to Hell but no disturbing our seals. Well with three men to back me up that was the end of that. I gave Mark a telling off. They went back the same way as they came out minus two fish and no photo's Ha Ha disturb our seals on our last day here no chance.

Started to pack as Mark said someone would be out for us at two o'clock. Four o'clock now and no sign of any boat yet. Heavy rain still and rough seas all round the island, the tide is very strong. I suppose we will be here another night yet. Oh well we will get back sometime. We are all frozen the boys have lighted a fire the smoke is some black but we are getting a heat. Mark will be laughing I bet at us still here. Get his own back. He is a nice boy though.

## Orkney Lepidoptera Report 2009

S V Gauld

In the list that follows the following abbreviations are used:-

R - Resident: I - Immigrant: U - Status Uncertain: V - Vagrant: RI - Resident + Immigrant:

R? - Probably Resident: C? - Probable Recent Colonist

### New to Orkney

*Phyllonorycter quinqueguttella* (R); one swept from *Salix repens* Creeping willow 21 June White Glen Plantation, Hoy (K Bland). A very locally distributed moth around the Great Britain, but can be common in areas where its foodplant *Salix repens* is found. The larva feeds in mines on the lower side of the leaf. Bivoltine flying May and once more in August.

*Pseudargyrotoza conwagana* (V); one taken by trap 2 July Quoyberstane, St Ola (SV Gauld). Recorded throughout Great Britain up to Sutherland, food plant Ash and Privet. On the wing May-July.

*Eurrhynx hortulata* **Small Magpie** (V); two taken by trap, one each 21 June 34 High St, Kirkwall (CJ&J Booth) and 29 June Bayview, Herston, South Ronaldsay J & R McCutcheon. A common moth in the south of England becoming less common the further north you come. Food plant *Urtica dioica* Nettle, on the wing June-July.

*Phlyctaenia perlucidalis* (V); one taken by trap 26 June Northolme, St Ola (RG Adam). A scarce moth in Great Britain mainly being recorded from the fen country in the south east of England. Little is known about the habits of this moth. On the wing June and July.

*Triphosa dubitata* **The Tissue** (V); one 29 July Northolme, St Ola (RG Adam), found resting on the front door. Widely distributed in the south of Great Britain. Food plant *Rhamnus cathartica* Buckthorn and *Frangula alnus* Alder Buckthorn, on the wing August-October and after hibernation, April-May.

*Eupithecia tripunctaria* **White-spotted Pug** (V); one taken by trap 29 June 34 High St, Kirkwall (CJ&J Booth). Found locally throughout Great Britain except in the far north. Food plant, ripening seeds of *Angelica sylvestris* Wild Angelica *Solidago virgaurea* Goldenrod and the flowers of *Sambucus nigra* Elder. On the wing May-June.

*Antitype chi* **Grey Chi** (V); one taken by trap 30 July Gillbreck, South Ronaldsay (L Campbell & N Fairbairn). ID confirm from a photo by K Bland. Found common throughout central Great Britain less common in far south and far north, recorded from both Sutherland and Caithness. Food plant various low growing plants. On the wing August-September.

### Other Sightings of Interest

*Yponomeuta evonymella* **Bird-cherry Ermine** (I); two taken by trap, one each on 2 and 8 August Northolme, St Ola (RG Adam).

*Ypsolopha dentella* **Honeysuckle Moth** (R); was taken regularly by traps between 2-18 August at 34 High St, Kirkwall (CJ&J Booth), Northolme, St Ola (RG Adam) and Quoyberstane, St Ola (SV Gauld).

## Flight Period for Orkney Dragons and Damsels.

Relatively detailed records for Orkney's *Odonata* have been maintained since 1984. The table below shows the earliest and latest dates on which insects have been recorded on the wing over a 26-year period.

On examining the dates for all of the individual years, there do seem to be some trends. In general, the emergence date for damselflies seems to be becoming earlier, particularly in the last decade. This is most obvious with the Large Red Damsel, which is the most numerous of our damsels. May emergences were not recorded in the Blue-tailed Damsel until 2008 (25<sup>th</sup>) and emergence was three days earlier in 2009. As well as this, all three damsel species seem to be staying on the wing to a later date in recent years. Records are too few for the scarce Golden-ringed Dragon and the 4-spotted Chaser to enable relevant comparisons. The Common Hawker on the other hand, which is relatively common on Hoy, doesn't appear to show any trends. None of the data have, as yet, been analysed statistically so my suggestions are somewhat subjective, but it does appear that perhaps climate change may be having an effect on the period on the wing for Orkney's damsel flies.

**Table 1. Earliest and Latest Dates on the Wing, over a 26-year period, for Seven Species of *Odonata* in Orkney.**

Species	Earliest on wing	Latest on wing	Comments
Common Hawker	May 17 <sup>th</sup>	Oct 5 <sup>th</sup>	No obvious trends.
Golden-Ringed D'Fly	June 22 <sup>nd</sup>	Sep 4 <sup>th</sup>	
4-Spotted Chaser	May 5 <sup>th</sup>	Aug 17 <sup>th</sup>	The next latest date was June 28 <sup>th</sup>
Black Darter	July 8 <sup>th</sup>	Sep 26 <sup>th</sup>	Next earliest date on Jul 19 <sup>th</sup> , so just 1 yearly date
Large Red Damsel	May 11 <sup>th</sup>	Aug 30 <sup>th</sup>	Late records of Sep 9 <sup>th</sup> & 17 <sup>th</sup> unconfirmed
Common Blue Damsel	May 15 <sup>th</sup>	Sep 6 <sup>th</sup>	Next latest date Aug 25 <sup>th</sup>
Blue-Tailed Damsel	May 22 <sup>nd</sup>	Sep 9 <sup>th</sup>	No May records until 2008

18<sup>th</sup>. Oct. (Wednesday):

Well I suppose I had better finish this off. We got home after all thanks to Cordock [?]. He came out for us, so very good of him as no one else would come because of the weather. There were three seals and a big bull to see us off I bet they were pleased to see us go.

Well it has been very rough at times but I would do the same again even with the gales, rain the lot. Anything to help the seals. I have always loved them but now more than ever. It was great getting the chance to help.

PS. I have just remembered that there was part of an old fishing net on top of one of the cliffs with what was left of part of a seal's flipper in it. I wonder if they are setting nets to catch the seals in?

Like I've said over and over I have loved every minute of my time on the Green Holm and thank everyone for letting me go.

## Selkie

### Save Orkney Seals Campaign

To Selkie Campers Saturday 14/10/78

S.S.P.C.A. Inspectors are being sent out today to kill 'humanely' 50-150 allegedly abandoned seal pups.

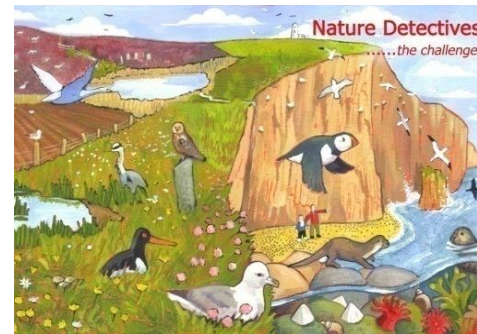
You may be interested to know that the RSPCA representatives has refused to be involved and will not be present.

However, there will be many press reps. And photographers likely to cause disturbance. We do not wish to add to the stress.

## Calling all Nature Detectives....

Christine Skene

OCEAN (Orkney Community Environment Awareness Network) has issued a challenge to all



of Orkney's budding young naturalists. The group has produced a booklet called 'Nature Detectives – the Challenge' which invites young people to explore Orkney, find out about its wildlife and habitats and answer questions about our heritage. For each animal or plant they see, or each question they answer, the youngsters earn points towards a Nature Detectives Award – Bronze, Silver or Gold. They can also gain points by collecting shells and grasses or by making

a detailed study of a 'special place' for wildlife. Each year the beautiful 'Silver Lapwing' Trophy is awarded for the best study of a special place.

The booklet is based upon the very successful Orkney Field Club booklet – 'Young Naturalist Challenge' – produced for use by the OFC Juniors some years ago. Like the original version, Nature Detectives covers a wide range of topics – birds, minibeasts, seashore life, wild flowers, trees, mammals and archaeology – and is beautifully illustrated with drawings by Anne Bignall.

Young or old, there may be some challenging questions for all of us in Nature Detectives. See if you know the answers to the ones below:

Which bird particularly enjoys eating butterfish?

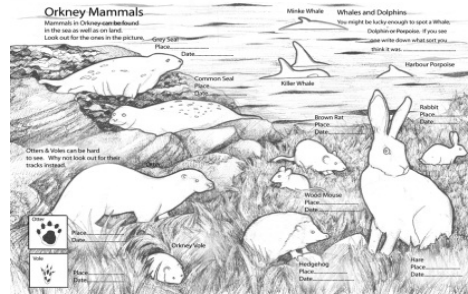
Which insect produces the foamy bubbles of cuckoo spit on plant leaves?

Name 4 types of geese that visit Orkney during the winter.

OCEAN aims to coordinate, promote and provide environmental education throughout Orkney. The group is comprised of a range of organisations including SNH, RSPB, OIC, Visit Orkney, all Orkney's Rangers, OFC, SEPA, Aquatera and the Orkney Woodland Projects.

Nature Detectives booklets can be obtained free of charge from Christine Skene, OIC, Tel:873535 or E mail

[christine.skene@orkney.gov.uk](mailto:christine.skene@orkney.gov.uk)



## Plant Constituents of Bird-crops in Orkney

Dick Matson

Since the 1950s there have been sweeping changes in farming practices which have threatened the survival of many farmland bird species, particularly in the marginal northern areas of Britain.

In the preceding decades the harvesting of cereals had been carried out with the inefficient binder which cut the straw, tied the straw with the grain still in the ear into bundles (sheaves) and ejected the sheaves onto the ground. The sheaves were gathered into stooks to dry and ripen in the field and then carted to the stack-yard where corn-stacks were built and remained until the farmer was ready to take them in for threshing to separate out the grain. Thus at all stages in the harvesting operation there was considerable spillage of grain which was available to farmland birds.

## Large Red Damselfly. *Pyrhosoma nymphula*.

Taking all records into account, the flight period was from 11<sup>th</sup> May (a relatively early date at Button, Stenness) to 6<sup>th</sup> Aug at Queenamidda, Rendall. Again, the population is said to be declining at the former site but is thriving at the latter site, which holds at least three breeding ponds. Records were received from two other West Mainland sites: the dependable roadside pond at Brookfield, Rendall and from the loch pond at Dale, Evie, where rather worryingly, only one insect was seen on one day.

Three of the four records received from East Mainland were from new 1-Km squares, the one known breeding site being in ponds along the Wideford Burn. Surprisingly, this damsel has never been recorded from the Graemeshall Loch in Holm, which looks an eminently suitable breeding loch. Breeding has still not been proved, as just a single fly was seen on one day in June, but this is certainly a site worth keeping an eye on. Another of the new squares (ND5202) was at the Ocklester Moss, but this large site is already a known site, with breeding proven in an adjacent square. The third new site was on Mull Head (HY5909), where two damselflies were seen along drainage on 28<sup>th</sup> June. This is the first record for Deerness, so it would be good in the future to locate the breeding site from where these insects came.

Records were received from a few known breeding sites on Hoy, but ND2692 was a new site along the Heldale Burn, where copulating damselflies were seen on 5<sup>th</sup> July.

## Blue-Tailed Damsel. *Ischnura elegans*.

This season, damselflies were seen on the wing from 22<sup>nd</sup> May to 21<sup>st</sup> August, a very respectable flight period for Orkney. Breeding was proved at four known breeding sites on West Mainland: Button, Stenness; Queenamidda and Brookfield, Rendall; and at Dale, Evie. However, breeding was proved at a new site: the Loch of Banks RSPB Reserve (HY2623), where insects were seen in tandem in June. The nearby Loons RSPB Reserve is already a known breeding site, and is linked to Banks by a series of drainage ditches. Breeding was confirmed at the Graemeshall Loch, Holm for the first time in five years. Records were received for only one site on Hoy, the ever-dependable pool along the Rackwick Road as one approaches the village. However, a new, confirmed breeding site was found on South Walls, where at least 15 damselflies were seen, some in tandem, on the farm pond at Snelsetter (ND3288) on 5<sup>th</sup> July.

## Common Blue Damselfly *Enallagma cyathigerum*.

Records were received from three 1-Km squares on Hoy, all known breeding sites. Four other records were received, and amazingly, they were all from new 1-Km squares: two from Rousay and one each from East and West Mainland. On Rousay, a number of adults were seen on the Loch of Wasbister, Rousay (HY3933). Although breeding was not proved, this is a very suitable breeding loch. Also on Rousay, three adults were seen on Loomachun (HY4030) on 17<sup>th</sup> July and again, although breeding was not proved, the recorder "presumed they had bred" perhaps because this too is a very suitable site. At the Graemeshall Loch, Holm (HY4801), breeding was proved, with adults seen in tandem and egg-laying. HY2623 was a new square at the Loch of Banks, Birsay. However, this is already a known site, with breeding proved in an adjacent square of this large site.

**Acknowledgements:** I would like to thank the following people for their records: Adam.R.G; Crossley.J; Crichton.R&P; Hollinrake.P; Jennings.E; Matson.R; Meek.E.R; O'Dowd.B; Ribbands.B; Riches.A; Sankey.S&S; Shields.L; Williams.S.J.

## Odonata Records: Dragonflies and Damselflies 2009. Keith Fairclough

### Common Hawker. *Aeshna juncea*.

There were a few records from Hoy, the breeding stronghold for this species, most from known breeding sites. However, adults were seen hunting in two new 1-Km squares. Three were watched hunting over heather between Heldale and Hoglin's Water (ND2691) on 5<sup>th</sup> July. They are known to breed along the Heldale Burn and on Hoglin's Water and so were probably just hunting well away from their breeding grounds, although the upper reaches of the Heldale Burn are found in this square. The other site was north of St John's Head (HY1803), where two insects were seen sunning themselves on the footpath on 11<sup>th</sup> July, a cold day. This was about 600m west of the known breeding pool near the Sui Fea Trig Point.

A very interesting record, the first for the island of Shapinsay, came from the RSPB Mill Dam Reserve. A dead male was scooped off the water on 13<sup>th</sup> Sep. This is not a particularly late date, as wanderers or migrants have been recorded into October. However, the specimen was sent to the author for identification and was found to be long dead, in fact, just a shell, with all the abdominal contents long gone. It could therefore have been present during the heart of the breeding season, which raises (slim) hopes of this species being a potential breeder on what is a suitable breeding site.

There were two records of late wanderers on West Mainland. One at Queenamidda, Rendall on 9<sup>th</sup> Sep was not the first record at this site. One on 2<sup>nd</sup> Sep at Burnbraes, Evie was probably this species, and was recorded in a new 1-km square.

The short flight period of 30<sup>th</sup> June to 21<sup>st</sup> July probably reflects the low number of records received rather than unfavourable weather conditions.

### Golden-Ringed Dragonfly. *Cordulegaster boltonii*.

There were just two records of this scarce species, which is found only on Hoy. One along the Rackwick Road on 30<sup>th</sup> July was very close to the South Burn, a known breeding site. Another insect was seen hunting high up on the south side of the Knap of Trowieglan, in a new 1-Km square and about 1.5 Km to the SE of the nearest breeding grounds, along the Trowieglan Burn.

### Black Darter. *Sympetrum danae*.

Records were received from just one site on Hoy, but this turned out to be a potentially new breeding site, in a new 1-Km square (ND2098). Just one insect was seen on 21<sup>st</sup> July, near pools just south of where the Rackwick Burn flows into the bay. Although these pools are ephemeral, breeding does occur on similar pools elsewhere on the island. The record was however, just less than 1 Km to the SE of a very successful breeding pool behind the Rackwick car park, and so may have simply involved a wandering individual.

The only other records came from two well-established breeding sites on West Mainland. Sadly, there are concerns about the man-made pond at Button, Stenness, where the breeding population is said to be declining rapidly. Hopefully, some remedial management work might help to improve breeding conditions.

Egg-laying was witnessed at three different ponds at Queenamidda, Rendall, where numbers peaked at 17 insects. The flight period (all records) for this season was 19<sup>th</sup> July to 20<sup>th</sup> Sep.

The modern combine leaves very little grain un-harvested in the fields and separates the grain from the straw as it is cut, so stack-yards and threshing areas have been rendered redundant. Not only was there little in the way of cereal grain left in the fields but also the use of herbicides to kill off nuisance weeds have become standard agricultural practice. The seeds of many weed species had hitherto been a valuable source of winter bird food. These weeds flourished particularly well when they grew among turnips which afforded them protection from the elements. Again changes in winter cattle-feeding techniques have meant that there are now far fewer fields of "weedy neeps" in the countryside.

It was no surprise that in two decades the yellowhammer and the corn bunting went from being common breeding birds in Orkney to rare vagrants to the County. Their numbers also plummeted throughout the rest of UK and they were soon put on the red list of conservation concern. Numbers of Orkney's once very common moorland finch, the twite, also declined drastically as did the reed bunting, and again both became red-listed species.

When my wife and I came to Orkney 16 years ago and bought the defunct farm of Dale on the east shore of Swannay Loch, included in the property was a field of nearly 10 acres. My farming neighbour to whom I initially let the field for grazing needed little persuasion to turn half the field into Set-aside under the Wild Bird Cover Option while taking a barley crop from the other half. The barley stubble that first year incidentally provided a fine bird-watching spectacle for a few days with a thousand geese of five different species (including bean goose) coming in to feed, preceded by a large flock of whooper swans. The following year the whole field was turned over to bird crop production and the farmer has continued to provide unstinting support by carrying out the cultivation and drilling of the field each year. Orkney RSPB have kindly provided the seed and fertiliser.

Over the years I have been experimenting to find out what crop constituents are the most beneficial to finches and buntings at the time when food in the countryside is most scarce. Obviously a snow covering and/or sub-zero temperatures will make finding food difficult for birds, but in the average Orkney winter such conditions are short-lived and the time of greatest shortage is in late February, March and even early April. So not only do the crop plants have to reliably produce seed but this seed must be capable of surviving the elements until early spring (when seedlings start to germinate and are taken by birds).

To be available in the spring, crop constituents must not only have to withstand gales, rain and sub-zero temperatures but must not be too attractive to geese, rock/feral doves and rodents.

What follows is an assessment of the various plant species with which I have experimented.

**Cereals.** Oats and barley are obvious candidates for a bird crop but have a number of drawbacks. Like all cereals they attract geese, doves and rodents. Geese will reduce a field of cereals to mud in a matter of days and doves will pick up the leavings. Rodents are not appreciated by most folk and can cause a health hazard as well as doing serious damage if crops are close to habitation. However they are predated by some of Orkney's birds of prey, so that a compromise which benefits harriers, kestrels and owls is to include a cereal as a small percentage of the total crop, if the crop is away from habitation. Barley tends to stand better than oats and is not so prone to premature germination if it comes into contact with wet ground. Both oats and barley are very attractive to buntings.

Another cereal grown at Dale was triticale (a cross between wheat and rye). Initially it was successful. It possessed a long stiff straw that withstood the wind and kept the seed head clear of even moderate blankets of snow, so that it was still available to birds. After a few years the

original variety of triticale available from seed merchants must have been replaced by one which had an inferior straw and failed to produce a good seed head, so this crop was discontinued.

**Kale.** In the first few years Keeper kale and Caledonian kale were grown and did well. They provided valuable structural support and protection for other crops, particularly cereals. Sturdy kale plants helped to keep the geese out and finches, buntings and thrushes liked to forage among its stems. Although crop rotation has been practised at Dale, and the ground has been limed, the kale plants became progressively less robust each year, so kale was discontinued. The two varieties of kale mentioned are recommended for new bird crops, but in subsequent years kale should not be sown anywhere near previous plantings. Caledonian kale is immune to club-root and some other brassica diseases.

**Mustard and Oilseed Rape.** Both these plants grow well and the seed is extremely attractive to both finches and buntings but there is one major drawback; the seed ripens too soon and the seed-pods are virtually empty by mid-November, too early to be of use when food is scarce. However some seed is spilled on the ground and is still available there.

**Linseed.** Linseed grows moderately well in Orkney but its seed seems to hold little attraction for birds.

**Quinoa.** This is a food plant grown in the high Andes, usually for making a type of biscuit. It is widely used in UK as a constituent of game-cover crops, its plumes providing large quantities of seed. Although it will grow in Orkney it does not yield sufficient seed to be of value here.

**Millet.** We have had no success with germinating millet and assume we are too far north for this plant to succeed.

**Buckwheat.** Although flowering well buckwheat provided insufficient seed to be of use.

**Fodder Radish.** In spring 2002 I was glancing through the seed catalogues with Richard Shearer, the Kirkwall seed merchant, looking for alternative crops when I happened to notice that fodder radish, a crucifer, was described as a good game-cover plant, suitable for Scotland. We decided it was worth a try. Although a relative of the garden radish it bears little resemblance. It is a tall but strong, multi-branched plant which produces dozens of seed pods which resemble small green chilli peppers. The shell of the seed pod turns brown by early winter and becomes quite tough providing a weather-resistant case for the seed. After a few years of trial at Dale both finches and buntings grew acclimatised to the seed of this plant and (the only drawback) so did rock doves. As well as retaining some seed in its tough seed pods until the spring, fodder radish has many other advantages: it is unattractive to geese; it requires only a small amount of fertiliser; it can be sown late (late May or even very early June) and still produce good seed; it tolerates poor soil; it does not suffer from brassica diseases so it can be grown repeatedly on the same land and its strong stem keeps the seed above moderate coverings of snow. The ability of late sown fodder radish to produce late ripening seed which is available to birds at the end of the winter was demonstrated this winter by a neighbouring farmer's crop.

Fodder radish has become a standard constituent of bird crops throughout Orkney.

**Chicory.** Chicory, *Cichorium intybus*, grows in the wild in some lime-rich areas of northern Europe and is cultivated in various strains for various purposes. For example, its leaves can be

And finally, a significant non-record: Curved Sedge *Carex maritima*. Three searches of a locality where this 'Nationally Scarce' plant was previously recorded, at Newark Bay, Deerness, HY5604, 1984, were unsuccessful (EE, U3A botany group). Most of the previously known sites have been searched in recent years with the exception of the following:

Links, Manse Loch, Egilsay, HY478298, 1976;

Behind Linklet Bay, North Ronaldsay, HY7650, 1980;

Skaill, Sandwick, HY232187, 1985;

Bight of Matpow, Stronsay, HY643243, 1979; and

Bea Loch, Sanday, 1898!

It is quite a challenge to find this little sedge (look for it from May onwards), and it will be a great contribution to the recording and conservation of plants in Orkney if anyone can re-find it at any of these sites in 2010.

Many thanks to all contributors:

Chris Booth (CJB); Mike Cockram (MC); John Crossley (JC); Tim Dean (TD); Effy Everiss (EE); Barry Jones (BJ); Derek Mayes (DMa); Rosemary McCance (RMcC); Kenny Meason (KM); Eric Meek (EM); Dave Musson (DMu); Barry O'Dowd (BO'D); Brian Ribbands (BR); Graham Smith (GS); U3A botany group

## Jellyfish Report 2009

Ray Hallam

### *Cyanea capillata* (Lion's Main Jellyfish)

Seen around Orkney in August/September. Four records were received for this species from the following locations: Deerness (Sandside), St. Ola (Scapa Bay) and Evie (Sands of Evie). The specimen reported from Evie had a crown diameter of approximately 4 feet

### *Cyanea lamarckii* (Blue Jellyfish)

Seen around Orkney from May to September. Four records were received for this species from the following locations: St. Ola (Scapa Beach), Orphir (Waulkmill Bay – count of 85 plus), Glims Holm and Stromness Marina.

### *Aurelia aurita* (Moon Jellyfish)

Seen around Orkney in May. A single record was received of approximately 15 animals of various sizes in Stromness Marina.

### *Pelagia noctiluca* (Mauve Stinger)

Seen around Orkney in October. A single record reported several thousands on the beach at Newark Bay, Deerness.

My thanks to the following observers:

R. G. Adam, C. Corse, K. Fairclough, E. Pawley

Yellow Bartsia *Parentucellia viscosa*. Eday, 2009



Photo: John Crossley

#### Other observations

There is much of interest besides rarity in the plant world; for instance unusual sites for plants, unusually large stands of species, small survey results – the possibilities are almost endless and the entries in this section will hopefully be a stimulus for more such items in the future.

Bog pimpernel *Anagallis tenella*: a carpet of these tiny plants in flower at Loch of Moan, Rousay HY383332, 2 Aug 2009 (BO'D).

Arctic Bearberry *Arctostaphylos alpinus*: plants in fruit (difficult to find in Orkney), Lounders Fea, Hoy, HY207038, Sept 2009, photographed (DMa)

Slender Parsley Piert *Aphanes australis*: huge quantities of this usually cryptic little plant in a stubble field on RSPB Reserve, Brodgar, Stenness, HY296132, 31 Oct 2009 (EM)

Downy Birch *Betula pubescens*: a single tree, c. 1 metre high, in moorland, Langa Skeo, Stenness, HY3220108746, 14 May 2009 (EM). A rare occurrence outside Hoy of what is almost certainly a self-sown native tree species - though possibly not of native provenance?

Wild Thyme *Thymus polytrichus* ssp *britannicus*: South Ronaldsay, Burn of Stane, ND455869, 28 June 2009, OFC group. First for island and 10 km sq. A plant that is widespread and locally common in Orkney, but which I had come to think was absent from this island.

used in salad and the root as a coffee substitute when roasted. It is a biennial or short-lived perennial with dandelion-like leaves (being of that family) and produces blue flowers at intervals up its tough, hairy, branching stem.

Andy Knight of the RSPB mentioned that a few years ago a crop in a field on Hoy which he thought was chicory had been attracting fair numbers of twite. So a strip was sown at Dale in May 2008 but by autumn there was no sign of life and it was assumed to have failed. Then in early spring 2009 dandelion-like shoots started to appear and with the advent of summer the plants grew rapidly, some reaching a height of 6 ft and bearing good clusters of seeds against the stem. The crop proved to be exceedingly attractive to reed buntings, twite and other finches. As at mid-February, the time of writing, most of the seed on the plant stems has been consumed but finches, buntings and redwings still go into the strip regularly, presumably to feed on chicory and weed seeds spilled on the ground. Also there are good numbers of young chicory plants in evidence which should provide food for next winter.

Some agri-environment schemes allow farmers to leave a bird crop for two years without re-seeding, - in Orkney an extremely wasteful practice. Here, in general, bird crops in their second year are of little value to birds, because the only plants that provide a useful amount of seed in the second year are brassicas and their seed is consumed by mid-November. Furthermore in the second year a mat of coarse vegetation usually forms at ground level which prevents birds accessing any spilled seed. It is likely that the value of these 2-year bird crops in their second year could be greatly enhanced by the inclusion of chicory as a constituent. (It is worth noting that second-year brassicas which flower early do provide an early source of nectar for bumblebees at a time when other flowers are scarce.)

**Arable Weeds.** An advantage of using the same land for bird crops year after year without recourse to herbicides and using reduced levels of fertiliser is that the seeds of arable weeds still present in the seed bank will germinate and flourish providing a significant extra source of winter bird food. At Dale such weeds as hemp-nettle, dead-nettle, fumitories, wild radish, charlock, sorrel and corn spurrey all contribute, with the last mentioned being particular popular with skylarks.

**Conclusions and Future Plans.** The winter of 2009/10 has seen record numbers of twite and linnets using the Dale bird crop and, significantly, numbers have remained much higher in January and February than in previous years. (Factors which might have affected these results are the unusually long, cold winter and the presence nearby of another bird crop).

However I think that the results have been sufficiently encouraging to continue with a similar formula for 2010/11. For seed production and retention of seed through the winter until early spring, my primary choice is fodder radish. This will be mixed with mustard and a small amount of barley. Some of this mixture will be sown in mid-May and some at the beginning of June. Mustard will be included as it will draw the birds into the crop initially. Chicory will be my secondary seed provider and, experimentally, strips of this will be left without re-cultivation for at least four or five years. In view of its usefulness as a soil-conditioner and as a rotation crop (and its value to bees and other insects) I will continue to plant red clover although it doesn't appear to produce seed attractive to birds. Ensuring crop rotation on land which is used year after year for the same purpose is viewed as vital.

Thus the current plan for the next few years is for strips of the fodder radish/barley/mustard mix to be rotated with strips of red clover while the existing chicory strip is retained and a further chicory strip sown.

**Post-script. A Helping Hand for Bumblebees.** While fodder radish is grown for bird seed and red clover for soil improvement they are both valuable food plants for bumblebees (on a fine summer's day fodder radish can also attract large numbers of butterflies, particularly the small tortoiseshell). Many farmers who grow bird crops include in their seed mixtures the attractive blue flowered *Phacelia* for the benefit of bumblebees. Like red clover phacelia is particularly attractive to the red-listed great yellow bumblebee. A strip planted at Dale last summer held up to a dozen of these insects last August with others being found in the fodder radish and red clover.

My thanks to Brian Ribbands and Andy Knight for proof-reading this article and making suggestions.

## Adoration of Aspens

Jenny Taylor

I am not sure whether it is truly ethical for the Orkney Woodland Project to have a 'favourite' in the tree world, but I must confess to my adoration of our native Aspen!

Firstly, they have really beautiful leaves - rounded, with those very special and unusual fluted edges. Then, just to show them off, they have flattened stalks which mean the leaves flutter beautifully in the breeze. In the shelter of Berriedale, they have even been known to go into full autumn colour - gorgeous reds and yellows - the like of which Orkney rarely sees. Furthermore, they seem to grow in some of the most stunning locations in Orkney and this undoubtedly adds to my appreciation of them.

They are also survivors of the highest order. Many are located clinging onto remote cliff edges in the full force of lashing salt spray and the harshest of winds. Sometimes they are so severely challenged by this, that they remain only knee high. Aspen is very palatable to animals and they may have been driven out to these inaccessible locations by grazing pressure. There are very few trees that can compete with them for sheer tenacity.

In 1995, Eric Easton did some excellent work in testing our Aspens and established a list of 11 different clones (9 on Hoy, one at Waulkmill Bay in Orphir and one at Hoxa Head in South Ronaldsay). Like most Aspen in the far north of Scotland, our trees do not set seed and instead confine themselves to spreading by sending out suckering roots, sometimes for 30 or 40 metres from the parent tree, with young, genetically-identical trees popping up at various points along each root. The resulting 'stands' can be very extensive and as older individual trees fall, the younger, identical trees are already there to replace them. Therefore, Aspen can be described as both our oldest surviving tree and also our largest tree.

Aspen have, however, proved temperamental to propagate and although hundreds of new, small woodlands have been planted in Orkney in recent years, sadly few of them include any Aspen at all. Hopefully this will soon change. During spring 2009, we started to collect root

Northern Yellow-cress *Rorippa islandica*. Burray Ness, Burray, ND501963, 27 Aug 2009: new for square but not island (EM). East Hill, Shapinsay, HY53251688 and HY52971659, 21 July 2009 (JC): new for square and island.

Oysterplant *Mertensia maritima*. Mae Banks, Egilsay, HY479300, 15 July 2009 (BO'D): update for square and island.

## BSBI Threatened Plants Project 2009

Again in 2009 BSBI ran its *Threatened Plants Project*, and the species occurring in Orkney were Heath Cudweed *Gnaphalium sylvaticum* and Frog Orchid *Coeloglossum viride*. The survey procedure is based on re-visiting sites where species have been recorded previously. The sites are randomly chosen in all counties of the British Isles by the survey organisers.

Brough of Deerness was the designated survey site in Orkney for Frog Orchid, and it was found at 10 places near there (though not exactly at the previous site), HY5908, on 14 July and 8 Aug (RMcC and U3A botany group). Other records were:

Northside, Birsay, HY265288, 5 July (CB);

Snelsetter, South Walls, ND32148861, 5 July (OFC);

Ramnageo, Sandwick, HY229175, 29 July (CB);

North of Yesnaby, Sandwick; HY230219, 17 July (CB).

These records add substantially to the number of known sites in Orkney. The species is easy to overlook (several records in the past have been made by people sitting down next to a plant!) and is almost certainly commoner in its rather specialised habitat (short, species-rich, grassland, almost without exception coastal) than the number of records suggests.

Heath Cudweed was re-recorded close to the chosen survey site at Queenamidda, Rendall, HY37172064, 22 Aug (BR). The only other record was at Lyrawa Hill, Hoy, ND285997, 10 Aug (EE & local BSBI group). It is a much less common plant nationally and locally than Frog Orchid. The habitat appears to be disturbed acid grassland or grass/heath.

Dog's Mercury *Mercurialis perennis*. Gyre, Orphir, 2009



Photo: Tim Dean



Yellow Saxifrage *Saxifraga aizoides*. Skecking Gill, Hoy, HY21050409, 11 July 2009 (JC): update for site (last record 1925) but not for square.

Hedge Woundwort *Stachys sylvatica*. Kirk Burn, Bu, Hoy, HY23560390, 16 Oct 2009 (BR & JC): update for site.

Bog Bilberry *Vaccinium uliginosum*. Fara, ND336229549, 2 Aug 2009 (JC): new for square and island. At 10 m above sea level this is the lowest altitude recorded for this plant in the British Isles.

Stag's-horn Clubmoss *Lycopodium clavatum*. Lyrawa Hill, Hoy, ND28729878, 25 Aug 2009 (BJ): new for square but not for island.

Field Bindweed *Convolvulus arvensis*. Mill Bay, Stronsay, HY6525, July 2009 (EE & U3A botany group): update for square and island.

Wood Anemone *Anemone nemorosa*. Firth, Binscarth plantation, HY350140, 5 May 2008 (EE & U3A botany group): update for its only known site In Orkney, and square.

## 2. Selected records for species of national rarity and importance <sup>2</sup>

(This category comprises species that are important at national or higher level but are not 'Rare' or 'Scarce and declining' in Orkney. A very few species in the category are so common in Orkney [e.g. Corn Spurrey *Spergula arvensis*] that I have excluded from the selection.)

Eyebright *Euphrasia foulaensis*. Holm of Burghlee, Shapinsay, HY53511586, 21 July 2009 (JC): update for square and island.

Eyebright *Euphrasia micrantha*. Cava, ND328995, 9 Aug 2009 (JC): update. East Hill, Shapinsay, HY511, 21 July 2009 (JC): update for square and island.

Purple Ramping-fumitory *Fumaria purpurea*. RSPB Office garden, Stromness, HY25609, 8 Sept 2009 (EM): new for square. In arable crop, Dale, Eday, HY53273285, 2 Sept 2009; in arable crop, Sealskerry, Eday, HY52323246, 2 Sept 2009: both new for square and island.

Autumn Gentian *Gentianella amarella* ssp *septentrionalis*. Golta, Flotta, ND39S, 23 June 2009 (EM): new for island, update for square. Lyrawa Hill, Hoy, ND285997, 10 Aug 2009 (EE & local BSBI group): update for square but not for island.

Allseed *Radiola linoides*. Cava, ND328995, 9 Aug 2009 (JC): update for square and island.

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<sup>2</sup> Criteria follow BSBI guidelines except that one category, 'International Responsibility' (comprising species which are endemic to the British Isles or of restricted distribution internationally), has not been used because it includes plants that are nationally common.

cuttings from the various locations and send them off to be grown on and prepared for micropropagation. The resulting plantlets will be grown on by a mainland Scotland nursery and sent back to Orkney to be planted out in some rather more benign sites. This process will continue this year and we hope to eventually get all the 11 clones into cultivation. This is a project under the umbrella of the Scapa Flow Landscape Partnership Project and it is a happy coincidence that the surrounds to Scapa Flow seems to be the natural habitat of our Aspen.

It will be fascinating to see how some of these clones develop in more 'normal' sites ie in good soil, set back from the shore, in far less exposed locations. (In the shelter of Berriedale, the Aspens reach about 10 metres in height and are clearly visible from the top waterfall as three separate 'stands' rising above the other trees in the wood. They clearly have potential!).

The Orkney Woodland Project will soon be contacting owners of young woodlands in the project area to discuss adding some Aspen into their woods. If sufficient plants are available, other locations may be considered, so please contact us if you think you may have a suitable site. You too, may find that you develop adoration for Aspens!

Jenny Taylor runs the Orkney Woodland Project which is funded by Orkney Islands Council and the Forestry Commission. Funding for the Aspen project comes through the Scapa Flow Landscape Partnership Project.

## Plant colonisation of ground abandoned by breeding Cormorants Jean and Chris Booth

A colony of Great Cormorants *Phalacrocorax carbo* was first established on Boray Holm in the late 1950's (Balfour, Anderson & Dunnet 1967) and breeding has taken place at this site fairly regularly since then.

Plant growth on ground of former Cormorant colony.

In 2007 c90 pairs formed a colony on maritime heath on the Hen of Gairsay, directly opposite the Boray Holm site. The birds again nested at this site on the Hen in 2008, with over 100 pairs being present, but it was deserted in 2009.

On a visit on 1<sup>st</sup> July 2009 it was noted that the former nesting area, which measured approximately 20 x 18 metres, was almost devoid of vegetation and was covered in dead Ling *Calluna vulgaris* and seaweed that had been used as nesting material.



Further visits on 6<sup>th</sup> August and 17<sup>th</sup> September 2009 found that a variety of plants had colonised the site and the following species were recorded:

Buttercup *Ranunculus acris/repens*  
Common Nettle *Urtica dioica*  
Orache *Atriplex sp* (probably *prostrata*)  
Common Chickweed *Stellaria media*  
Lesser Stitchwort *Stellaria graminea*  
Common Mouseear *Cerastium fontanum*  
Sea Pearlwort *Sagina maritima*  
Curled Dock *Rumex crispus*  
Broad-leaved Dock *Rumex obtusifolius*  
Thrift *Armeria maritima*  
Common Scurvygrass *Cochlearia officinalis*  
Tormentil *Potentilla erecta*  
Common Bird's-foot-trefoil *Lotus corniculatus*  
Broad-leaved Willowherb *Epilobium montanum*  
Marsh Willowherb *Epilobium palustre*  
Rosebay Willowherb *Chamerion angustifolium*  
Sea Plantain *Plantago maritima*  
Ribwort Plantain *Plantago lanceolata*  
Monkeyflower *Mimulus sp*  
Spear Thistle *Cirsium vulgare*  
Autumn Hawkbit *Leontodon autumnalis*  
Prickly Sow-thistle *Sonchus asper*  
Marsh Cudweed *Gnaphalium uglinosum*  
Daisy *Bellis perennis*  
Pineapple-weed *Matricaria discoidea*  
Sea Mayweed *Tripleurospermum maritimum*  
Yorkshire Fog *Holcus lanatus*

A particular feature was the unusually luxuriant growth, the leaves and plants being much larger than similar plants elsewhere on Gairsay. This was no doubt due to the enrichment of the soil by the birds' droppings. Many of the plant species were not present in the immediate surrounding maritime heath and Rosebay and Monkey Flower do not occur elsewhere on Gairsay.

We hope to be able to continue monitoring this site in the future.

#### Acknowledgement

We wish to express our gratitude to the McGill family for the opportunity to visit the site.

#### Reference

Balfour, E., Anderson, A and Dunnet, GM. 1967. *Orkney Cormorants – their breeding distribution and dispersal*. Scottish Birds 4:481-493

Heath Dog-violet *Viola canina ssp canina*. Fitty Hill, Westray, HY44H, 10 June 2009 (BR, EM & JC): new for square and island. Only the second definite record for Orkney. There is another new record by a visiting botanist, almost certainly correct but requiring confirmation, in Egilsay, HY4728, 21 June 2009 (GS), also new for square and island. As well as being rare locally, Heath Dog-violet is Red Data Listed as 'Near-Threatened'.

Thale Cress *Arabidopsis thaliana*. Old Academy, Stromness, HY25250920, 31 May 2009 (JC): not new for square (which includes the northernmost part of Hoy), but apparently new to Stromness. Thale cress is a nondescript little annual, a member of the crucifer family. It is common in Kirkwall where it may be found growing in cracks at the bottom of walls and in Tankerness House gardens..

Stiff Sedge *Carex bigelowii*. North slope of Mid Hill, Orphir, HY33560880, 19 Sept 2009 (EM): re-find of plants recorded in 1987 by a visiting botanist. Elsewhere in Orkney recorded only from hilltops in Hoy and Rousay.

Long-bracted Sedge *Carex extensa*. Old Head, South Ronaldsay, ND4683, 30 Aug 2009 (EM): re-find. Burray Ness, Burray, ND50189620, 10 Nov 2009 (JC): new for square and island.

Smooth Hawk's-beard *Crepis capillaris*. In arable crop, Sealskerry, Eday, HY52323246, 2 Sept 2009 (EM): update for square and island.

Hay-scented Fern *Dryopteris aemula*. Roan Head, Flotta, ND3895, 23 June 2009 (EM): update. Calf of Flotta, ND382967, 9 August 2009 (JC): update. Rysa Little, ND312977, 2 Aug 2009 (JC), new for island, update for square.

Common Stork's-bill *Erodium cicutarium*. In arable crop, Measer, Sanday, HY69554005, 22 June 2009 (JC): update for square and island.

Wild Strawberry *Fragaria vesca*. East Hill, Shapinsay, HY5285617151, 21 July 2009 (KM): new for square and island.

Tall ramping-fumitory *Fumaria bastardii*. In arable crop, Voy, Sandwick, HY259153, 21 Sept 2009 (EM): new for square.

Bifid Hemp-nettle *Galeopsis bifida*. Ness of Voy, Sandwick, HY258150, 18 Sept 2009 (EM): new for square.

Water-purslane *Lythrum portula*. Cava, ND328995, 9 Aug 2009 (JC): update for square and island.

Black Medick *Medicago lupulina*. Oil terminal area, Flotta, ND39M, date (EM): new for square and island.

Long-headed Poppy *Papaver dubium ssp dubium*. In arable crop, Measer, Sanday, HY69554005, 22 June 2009 (JC): new for square but for not island.

Pale Persicaria *Persicaria lapathifolia*. In arable crop, Dale, Eday, HY53273285, 2 Sept 2009 (EM): new for square and island.

Aspen *Populus tremula*. Calf of Flotta, ND382967, 9 Aug 2009 (JC): update for island but not for square.

Records included are of alien as well as native plants, except those of cultivated origin found close to gardens and unlikely to reproduce in the wild. In total, 2018 records of all species were received and entered into the local MapMate database in 2009. In order to make this annual account of manageable size, I have had to limit it to reports of new County records and selected records of locally rare or scarce and declining plants.

### New County Records

Dog's Mercury *Mercurialis perennis*, Gyre woodland, Orphir HY343044, 18 April 2009 (TD). Well established in a small area of this old policy woodland, probably since it was planted about 100 years ago. Not native to Orkney, and a rare plant in the north of Scotland, though common in broad-leaved woodland from Inverness southwards.

Yellow Bartsia *Parentucellia viscosa*, north of Greentoft Bay, Eday HY5610829105, 10 September 2009 (MC). Well-established in marshy grassland on both sides of the public road. A most surprising find. Yellow Bartsia is native in the south and west of the British Isles, where it is generally uncommon and local; elsewhere it is assumed to have been introduced with seed mixtures. Even as an introduction it is uncommon in Scotland, and there are just two records from the north, one in Shetland and one on the Moray coast. The species has probably been at the Eday site for a considerable time, because it has spread over quite an area and introduction via seed mixtures has become unusual in recent times.

Night-flowering Catchfly *Silene noctiflora*, Herston, South Ronaldsay, ND421917, 16 July 2009 (DMu). A single plant, in a garden, but not planted or knowingly sown. An alien but long-established weed of cultivation in the British Isles, always rare in the north of Scotland, now declining everywhere and Red Data Listed as 'Vulnerable'. An annual, it could possibly reproduce and spread, though this seems unlikely.

Perforate St John's-wort *Hypericum perforatum*, found by Chris Vasey in waste ground in Lyness old naval base, Hoy, ND31159468, 8 September 2004. Record confirmed after specimens collected in 2009 were sent to the national referee. A common species in suitable habitat from central Scotland southwards, but rare in the far north. Now well-established at this site. The referee suggests that this is a natural extension of range (seed carried by birds?), but introduction by human agency seems more likely.

### 'New for 10 KM Square and/or Island' and 'Updates'

(Updates are records at previously known sites where they have not been seen for many years.)

#### 1. Selected records of plants that are 'Rare' or 'Scarce and Declining'<sup>1</sup> in Orkney.

Small Adder's-tongue *Ophioglossum azoricum*. Lyrawa Hill, Hoy, ND285997, 10 Aug 2009 (EE & local BSBI group): update for square but not island. As well as being scarce locally, Small Adder's-tongue is 'Nationally Scarce'.

<sup>1</sup> Criteria follow guidelines issued by the Botanical Society of the British Isles (BSBI) for compiling 'County Rare Plant Registers'

I first became aware of the need to document and record wildlife in 1968. At that time the "Conservation Movement" as we know it was just beginning to come together. Naturalists recognised that the countryside around was changing rapidly. We needed a system of documentation to record what we saw: one that future naturalists could use as a standard baseline measurement against which future records could be viewed to highlight changes and flag up warnings.

In 1969, in my native Warwickshire, a large document was published entitled "A Computerised Flora". Computer mapping was then in its infancy. This system of ½ mile squares where all recorded locations of every wild plant in the county could be seen at a glance was a revelation to me as a fledgling wildlife recorder. Naturalists soon recognised that this format would provide the ideal medium for documenting the population of any species. We soon began searching for, and computerising, every living thing in the County. We enthusiastically filled in blank squares whenever and wherever we found the time to search for missing species. 42 years later we are now "future naturalists". This process is rolled out across the UK. The "½ mile square" has now become "one kilometre" and computer systems have advanced beyond all expectations. The principle remains the same. Our old records are now an invaluable conservation tool.

Birds, plants and butterflies are very well documented whilst some other groups are grossly under recorded. Right across the UK there are still lots of blank squares to be filled.

Woodlice (Oniscidea) are a prime example of one of these under-recorded groups. There are 37 species that live outdoors in the UK with a few more living in hothouses etc. This is a conveniently easy number of species for amateurs to get to grips with. A good woodlouse book, "A Key to the Woodlice of Great Britain and Ireland" (ISBN1851532048), is relatively inexpensive at £6.99 from Field Studies Council.

Most woodlouse species can be identified in the field with the aid of a 10-times hand lens; added to this they are reasonably slow and easy to catch. They are so under-recorded that every species record is a potential new species for that area. It is also important to record them as they are increasingly being recognised as effective biological indicators of environmental problems; thus all records are valuable - in my opinion much more valuable than bird twitching.

I have so far documented six species from South Ronaldsay. These differ in adult size from 3mm to 30mm+. I expect these to be present across all of Orkney. British woodlice do not have traditional English names, as do birds, plants and butterflies for instance. Recently attempts have been made to give the most common British woodlice English species names. As far as possible these are used in this short description.

**The Common Shiny Woodlouse** *Oniscus asseus* is abundant in the area. In fact there will be few stones that do not have at least one of this species along with some of Orkney's most ubiquitous woodlouse **The Common Rough Woodlouse** *Porcellio scaber* (name means 'Rough Little Pig'). The Common Shiny Woodlouse is a large shiny woodlouse with a pattern of lighter markings running from head to tail either side in the middle of its back. This one will attempt to curl up but can only manage a half curl. Adults of this species can reach a length of 16mm.

The Common Rough Woodlouse is probably the most numerous species in Orkney. It is definitely the one that is found in the most habitats and the one that will be most frequently encountered by the casual 'stone lifter'. As the name suggest the shell of this species is rougher than that of the Shiny Woodlouse as well as the adults usually being a uniform grey in colour. (Uncommonly some other colour forms are found including brick red). This is the one most likely to come into your house and the only Orkney woodlouse that is really likely to be encountered on sand dunes. It may reach a length of 17mm.

Many people do not realise that **The Common Sea Slater** *Ligia oceanica* is in fact a woodlouse. At up to three centimetres it is the UK's largest species of woodlouse. Big and very fast, Seas Slaters or "Granny Grays" live on or around the tide-line where they eat decaying plant matter washed up by the sea. The colour varies considerably from a nearly translucent grey to a lovely tawny colour with a black diamond shape on the back that I found well above the tide-line among dry rocks by Earls Palace in Birsay. This is mainly a summer species, quite difficult to find outside of the warmer months of the year.

At the other end of the scale at 2mm is **The Pygmy Woodlouse** *Trichoniscus pusillus*, possibly even more numerous than *Porcellio scaber* but being a tiny, soil dwelling species is rarely noticed. Tiny, shiny and brown is a good description, among rotting vegetation, in soil between stones and rocks, pygmy woodlice can be seen scurrying across the surface looking for a dark, damp hiding place when disturbed. I find it easiest to spot them among old roofing slates or under stones that have been lying in damp places for more than one year.

There is one other species of woodlouse that is quite noticeable when 'mooching' around looking for 'mini-beasts'. At 12mm with no common name *Porcellio spinicornis* is slightly smaller than the Common Shiny Woodlouse with which it may be confused. This one is a bit slower, still shiny but very attractive (for a woodlouse), having two broken, lemon yellow stripes running from neck to tail along its back with a black head and a pinkish fringe along the base of its body. Unlike the previous species this one is not one that one could go out and 'just pick up' but it is often encountered among mossy stones and rocks.

There is just one other species of woodlouse that I have positively identified in the area. *Miktoniscus patiencei* is a tiny 4mm max, white, soil dwelling species. The books say that it is most likely to be encountered on salt marshes and in soil filled cracks between rocks near the sea.

There are at least 3 more species that could well be present in Orkney. None of them has a common name.

- ***Androniscus dentiger*** is a species that lives in dark, damp places - drains, culverts etc. They are very distinctive, at 6mm quite small and a lovely salmon pink colour.
- Another likely resident is ***Porcellio pruinosus***. These live in groups, and are quite fast running being grey with a 'plum-like bloom' – hence *pruinosus*. Around 10mm, they live in rotting vegetation where they thrive in the warmth generated by decay. Round the edges of straw bedded byres and warm, old silage are often good spots.
- The other one is ***Philoscia muscorum***. Around 9mm, quite shiny, mottled brown and long legged for a woodlouse. A fast runner, likes moss. Very common in suitable habitats but I have yet to find it in Orkney.

To confirm ID, buy the book or just "Google in" the scientific name of the likely species and wait results. -amazing thing, the internet – or you can contact me on 831710 or [herstonmussons@btinternet.com](mailto:herstonmussons@btinternet.com)

*Philoscia muscorum*



*Porcellio pruinosus*



*Androniscus dentiger*



*Porcellio spinicornis*



*Oniscus asellus*

