



BULLETIN OF THE
Dipterists
Forum

Bulletin No. 65

Spring 2008



Affiliated to the British Entomological and Natural History Society

Bulletin No. 65

Spring 2008

ISSN 1358-5029

Bulletin Editor	Darwyn Sumner
Chairman	John Ismay
Vice Chairman	Malcolm Smart
Secretary	John Kramer
Treasurer	vacancy (temp. Malcolm Smart)
Membership Sec.	Mick Parker
Field Meetings Sec.	Roger Morris
Indoor Meetings Sec.	David Heaver
Publicity Officer	Judy Webb
BAP species Officer	Barbara Schulten

Ordinary Members

Chris Spilling, Alan Stubbs, Peter Boardman, **vacancy**

Unelected Members

BENHS rep.	Ken Merrifield
Dip. Digest Editor	Peter Chandler
co-opted	Alan Stubbs
JCCBI representative	John Dobson

Recording Scheme Organisers

Crane fly	Alan Stubbs
Fungus Gnats	Peter Chandler
Hoverflies	S. Ball & R. Morris
Larger Brachycera	Simon Hayhow
Tephritid	Laurence Clemons
Sciomyzidae	Ian McLean
Conopid	David Clements
Empid & Dollies	Adrian Plant
Anthomyiid	Michael Ackland
Dixidae	R.H.L. Disney
Culicidae	K. Snow
Sepsidae	Steve Crellin
Tachinid	Chris Raper
Stilt & Stalk	Darwyn Sumner
Pipunculid	David Gibbs



Contributions to this Bulletin

Please note the following deadlines for the next two bulletins:

Spring bulletin

Aims to be on your doorstep in the first two weeks of March, contributions by the end of December, this is printed in February in time for the March workshop meeting.

Autumn bulletin

Aims to be on your doorstep in late September, contributions by the end of June. Printed around the time of the Autumn field meeting and in time to provide details of the Annual Meeting.

Would contributors please note that it takes a **minimum** of 4 weeks to compile, edit, reproduce, collate and distribute each issue.

Minor amendments or insertions may be negotiated during the 2 weeks following these deadlines but major items must be in by the deadline.

Website

www.dipteristsforum.org.uk/

Forum

www.dipteristsforum.org.uk/index.php

PUBLISHED TWICE YEARLY

Obtainable via subscription to Dipterists Forum: **Annual Membership**

Forum - £6 (includes Dipterists Bulletin)

Subscription to Dipterists Digest - £9

Contact Mr M. Parker, 9, East Wyld Road, Weymouth, Dorset, DT4 0RP

- to whom all enquiries regarding delivery of this Bulletin should be addressed

Editor: **Darwyn Sumner**

122, Link Road, Anstey, Charnwood, Leicestershire LE7 7BX. 0116 212 5075 Darwyn.sumner@ntlworld.com

Articles submitted should be in the form of a word-processed file on disk (3.5", CD or USB Flash) or via E-mail which should have the phrase "DF Bulletin" in the Subject line; Email text alone will not be accepted. Do not use "all capitals", underlining, blank lines between paragraphs or double spaces. Scientific names should be italicised throughout and emboldened only at the start of a paragraph, place names should have a grid reference. Please submit in native format and Rich Text Format (.rtf). An accompanying print-out would also be useful. Line artworks are encouraged, colour pictures and illustrations are welcome, they will be printed in black and white (uncorrected) and so it would be wise to see what a B&W photocopy looks like first. The Bulletin will also be made available in colour pdf via our website. Please note the width of the borders used in Dipterists Bulletin, for conformity with style would newsletter compilers please try to match this format.



BULLETIN OF THE **Dipterists** Forum

Affiliated to the British Entomological and Natural History Society

Contents

Forum news	4
Editorial	4
News from the schemes	5
Conopid Recording Scheme	5
Crane fly Recording Scheme	5
Fungus gnat Recording Scheme	5
Hoverfly Recording Scheme	5
Larger Brachycera Recording Scheme	5
Sepsid Recording Scheme	5
Stilt & Stalk Fly Recording Scheme	6
Other news	6
Notice board.....	7
Biodiversity Action Plans.....	7
Budget cuts threaten biodiversity.....	12
Inquiry on systematics & taxonomy	15
You Say Potato, I Say <i>Solanum tuberosum</i> , Lets Call the Whole	
Thing Off	17
International Simuliidae Symposium	19
Buglife news	19
Membership matters.....	19
Regional Membership List.....	21
Review	23
Microscopy.....	23
Technique	24
Publications	26
Meetings.....	27
Reports	27
Forthcoming	43
And now... ..	46
Crane fly Recording Scheme Newsletter	
Fungus Gnats Recording Scheme	
Hoverfly Newsletter	
Larger Brachycera Recording Scheme	

Forum news

Editorial

Slovakian death metal band

It's a very "human being" activity, editing some sort of publication such as this Bulletin. Not the sort of thing one would entrust to an automated system. Consider: few things are more satisfying to the committed naturalist than the handling of a real three-dimensional book. A piece of work that has been carefully thought through and constructed, something that draws upon the skills of a long tradition of compilation so as to present the subject matter in a readable manner which caters to a wide range of potential readers and stimulates them to take an active interest in the subject. Classics such as the Warne series, John Clegg's "Pond Life" and the two BENHS Diptera books that have been on all our shelves for a long time now.

Why are such books even remotely related to our sphere of interest so immensely rare? The latest well-produced books that are of temptation to naturalists do not include any on the subject of Diptera and lavishly illustrated books that provide actual pictures of actual flies are a great rarity.

Are such books a possibility in this day and age? Is it at all likely that we shall ever rush to buy the three volume colour illustrated series on world Asilidae or have the delight of finding British Tachinidae with every species in colour in our Christmas stocking. Will Ian Johnson (Pemberley Books) ever walk away from one of his book sales a rich man and leave all us dipterists with empty pockets?

Or are we forever stuck with trawling through the junk yard¹ of the internet to find abandoned or costly snippets of information.

Some automated internet publishing systems are constructed completely without checks on validation such that errors are copied and recopied from website to website like Chinese whispers or some sort of twisted evolution in which ease of copying is a far greater selective pressure than validity, until scientific accuracy and factual observations become buried amongst fantasy. Such publishing systems are currently one of the biggest challenge to scientific progress that we face in this day and age. The reason being that policy-makers treat such distributed information as factual. For example sites such as ZipCodeZoo list all taxa within a group no matter how long ago such taxa were sunk into synonymy (e.g. *Tylus* is listed within Micropezidae despite the fact that it became a Myriapod a century ago), such sites are used to calculate biodiversity statistics and these statistics are then used to inform international conservation policies.

(1) http://zipcodezoo.com/Key/Micropezidae_Family.asp#_note-McAlpine1998 "Phantasma is a Slovakian death metal band"

Photography titles for Dipterists

I keep bumping into Danny Green, European Wildlife Photographer of the year. He happens to live in Loughborough and he also holds the title of International Bird Photographer of the year.

It occurs to me that here's an opportunity for us less-skilled photographers to earn ourselves some kind of a title. Pick a Diptera group obscure enough and the competition in your chosen area becomes smaller and your chances of obtaining a title rather good. Not much chance with hoverflies, though, plenty of good competition. How about Sciomyzidae? "International Sciomyzid Photographer of the Year" has a nice sound to it. But just take a look at Rafael Estevez's picture of *Pherbina* on the Diptera.info website (http://www.diptera.info/forum/viewthread.php?forum_id=5&thread_id=8702) and your dreams of this title instantly evaporate. Good quality pictures are needed to meet the challenges of Dipterists Forum's rapidly modernising approach to publishing and this Bulletin, now published in full colour pdf on its website needs your efforts too.

Darwyn Sumner

News from the schemes

Questions of how best to help the Recording Schemes and Study Groups have been occupying much of the Dipterists Forum committee's thoughts over recent months. The publication of this Bulletin marks a potential turning point in the fortunes of these groups. They now have a new outlet for debate on a radically redesigned Dipterists Forum website thanks to considerable efforts by Stuart Ball. The format of our website is now much changed and is in the form of a "discussion forum" (the Dipterists Forum Forum!), a format which has proved extremely popular and successful for the debates about Recorder and Checklist issues (NBN Forum at <http://forums.nbn.org.uk/index.php>). Stuart's arrangement is rather neatly done with a batch of general topics followed by a separate section for each of the Recording Schemes and Study Groups - each moderated by the Scheme or Study Group organiser. This becomes a website for regular visits rather than a "now and then to see if there's anything new" approach; once debates and discussions get started there can be something new on some topic or other pretty well every day.

It rather relies on the Recording Schemes and Study Group organisers to kick-start their topics. I placed an introduction to the Stilt & Stalk scheme straight away and within a fortnight there were over 80 viewings of one little contribution at a time when only 38 members were registered with the site:

<http://www.dipteristsforum.org.uk>

Darwyn Sumner

Conopid Recording Scheme

David contacted me in January. He's rather busy and told me he would do his best to send a little something when he gets time. Unfortunately he wasn't able to do so in time for this Bulletin but rest assured that the Conopid scheme is alive and we shall see David's distribution maps in due course.

David Clements

Crane-fly Recording Scheme

Crane-fly News # 16 is included in this Bulletin. The contents include thoughts about crane-flies and climate change, notes on the biogeography of some crane-flies, a report from the Beinn Eighe Field trip, and information about the Catalogue of the Crane-flies of the World (CoCoW).

John Kramer

Fungus gnat Recording Scheme

Peter's Newsletter is appended towards the end of this Bulletin.

Peter Chandler

Hoverfly Recording Scheme

Newsletter # 44 included with this Bulletin

David Iliff

Larger Brachycera Recording Scheme

Newsletter # 27 included with this Bulletin

Simon Hayhow

Sepsid Recording Scheme

Since taking over the Scheme last year, I have received records from Richard Underwood and Martin Drake which has added just over 2,800 records to my database – many thanks to both of you. If anyone has any more records please send them to me, and, if you are out recording during the rapidly approaching new season please don't forget to record some sepsids too.

Steve Crellin

Shearwater, The Dhoor, Andreas Road, Lezayre, Ramsey, Isle of Man, IM7 4EB, steve_crellin1@hotmail.co.uk

Forum News

Stilt & Stalk Fly Recording Scheme

There's now a discussion group for this scheme (and all the others) on the the new Dipterists Forum website. I've started the SSF discussions with a short introduction and a checklist linked to UK distribution maps. After a few checks on some of the incoming data from the last couple of years, the dataset published on the NBN Gateway is about to be updated. For those who find the Gateway a little tricky to use I'm pleased to tell you that the discussion group on the Dipterists Forum (<http://www.dipteristsforum.org.uk/df/f20-Stilt-Stalk-flies.html>) now makes viewing these maps supremely straightforward. Please take the time to register on this site, it's a superb means of exchanging comments and exchanging little snippets of information.

Darwyn Sumner

Other news

Keys on the Dipterists Forum website

As promised, I have uploaded the draft family key onto the Dipterists Forum web-site as PDF files. It is in three parts and they are quite large because of the illustrations:

- http://www.dipteristsforum.org.uk/documents/Families_part1_figs_glossary.pdf (1.58 mb)
- http://www.dipteristsforum.org.uk/documents/Families_part2_key.pdf (3.42 mb)
- http://www.dipteristsforum.org.uk/documents/Families_part3_descriptions.pdf (8.26 mb)

You should be able to open them by clicking on the links above. You should only need your normal browser and the free Adobe Acrobat reader installed on your computer. If you haven't got Acrobat, you can get it at <http://www.adobe.com/products/acrobat/readstep2.html>

If anyone has the time, I would appreciate it if you could glance through the family descriptions and check/improve the identifications attributed to the illustrations. I need to get copies made tomorrow or Friday for the course at the weekend, so there is not much time! But clearly they can be worked on before March.

Stuart Ball

An early start

Whilst visiting the Hillier Gardens near Romsey Hampshire on Sunday 27th January I noted several *Eupeodes luniger* feeding around *Daphne bholua* flowers. Weather was sunny but cool after an early frost. Numbers of *Melanostoma mellinum* were also present.

Chris Spilling

Notice board

Biodiversity Action Plans

Update

In the last Bulletin I mentioned that the list of BAP species had been decided upon, but still needed to be signed by the ministers. This has happened in the meantime and the new list can be found or downloaded from the BAP webpage (www.ukbap.org.uk). Also, some of the results of the review of the targets for the existing BAP species, which was conducted parallel to the BAP Review I have reported on so far, can be found on the BARS webpage (<http://www.ukbap-reporting.org.uk>). Currently, the actions for all BAP species are being drawn up and decided upon and I hope to have more news in the next Bulletin.

Barbara Ismay

Adopt a species

You might recall that I appealed for volunteers to come forward for this scheme in the last Bulletin. I repeat a summary of this call below in case you missed it last time. Please also note my change of email address.

Summary

Do you feel that we should stop talking and rather start to help our threatened species? If yes, then please get in contact – you might be able to help!

If you feel that you would like to work on one or a group of BAP species or RDB species, please contact me. You could adopt a species or a group of species and thus resolve some of the open questions about these species. Some possible tasks you could do and a list of BAP species and their crude distribution were mentioned in the last bulletin. Should you have missed this, please get in touch with me and I will forward this information to you.

Some BAP species are already being worked on and have lead partners coordinating the work. This project is not intended to duplicate on-going work, but to find people willing to take on additional tasks, to continue previous work or to work together with the lead partner. Also, as the co-ordinator of this project I will bother you from time to time to remind you to share your progress or problems encountered with more dipterists, so please let me know if you take up a species or group of species.

You could work on a BAP species, but also on species that have a conservation status. Please contact me and I will forward all the information on the BAP species that I have gathered or inform you where you can get hold of it (if it's a report). However, I might have to refer you to other dipterists for information on RDB species.

Please don't hesitate, our species need you and you don't need to be an expert on them. Others are there to help!

Barbara Ismay

News from 'Adopt a Species'

I would like to thank all of you who already adopted a species. Currently nine of our 35 BAP species have been adopted and below you can find information supplied by several 'adopters' on 'their' species. Thank you very much for these contributions and good luck with your quests. Some more will follow in the next Bulletin. So far *Salticella fasciata*, *Dorycera graminum*, *Empis limata*, *Odontomyia hydroleon*, *Blera fallax*, *Hammerschmidtia ferruginea*, *Clusiodes geomyzinus*, *Lonchaea regnari*, and *Rhamphomyia hirtula* have been adopted.

Please help our threatened species by getting involved in their active conservation and adopt a species. I hope to hear from you soon.

Barbara Ismay

Notice board

News from the adopters

Salticella fasciata - Sand Dune snail-killing fly



Known in the UK from what I surmise to be just two loci. On the South Wales coast records are centred on the Kenfig dunes with records extending westward to Tenby. On the East coast its stronghold is the north west tip of West Norfolk, extending in both directions along that coast and across the Wash to Gibraltar Point.

With the exception of a recent strong colony of at least 15 individuals at Holme Dunes (West Norfolk) in October 2007 all records are quite old. Its habitat is very straightforward, it inhabits the sparsely populated fore dunes which do not become inundated at high tide and which therefore have strong colonies of land snails of the Family Helicidae. No snails, no *Salticella*. Whilst adapted for such exposed conditions by a marked hairiness, strong legs and a habit

of clinging to larger fixed objects (snail shells, flotsam & jetsam), it seems clear that this species is blown along the coastline occasionally as some of the records are from less than optimal habitats. Loss of suitable habitat may result from the construction of sea defenses and other developments in the vicinity, excessive disturbance of fore dunes by holidaymakers and sea inundation sufficient to destroy land snail colonies. Scarce hosts have been cited in the past as reasons for its scarcity but I would suggest that the scarcity of the particular habitat is sufficient to account for the few records and that it may well be more general in its choice of host. Land snails from the Holme Dunes site were identified (by Judy Webb) as *Cernuella virgata* (very widely distributed) but only Sarcophagidae have so far emerged from the handful collected at the site.

Like several species of Sciomyzidae which also inhabit sand dunes (e.g. *Dichetophora obliterata* & *Pherbellia cinerella* were observed in more sheltered dune situations on my October 2007 visit), *Salticella fasciata* has a long season. Presumably their activity is related to the activity of the host snails. In an environment where host populations are relatively small and of a high mortality, evolutionary pressures would favour those individuals which oviposited on the last active snails in each season, that is before the snails aestivate.

The suggested course of action is to determine the locations and extent of the appropriate habitat in the most likely dune systems (Kenfig and West Norfolk) using a combination of modern aerial photography (Google Earth) and field visits in early summer and (particularly) autumn. This same methodology could perhaps identify other areas around the country with potential (and actual) colonies. Any observations would be gratefully received, either through the Sciomyzidae Recording Scheme forum on the Dipterists Forum website or directly to myself.

Darwyn Sumner

Empis limata – The Borders Dance-Fly (Empididae)

Empis limata Collin is a small (3.5 mm) black empidid known only from the Welsh / English borders of VC 35, 36 & VC 33. There are 12 post 1980 records in 3 10Km squares & 2 pre-1980 records from 2 separate 10Km squares. Essentially, the species is confined to the region of periglacial sand deposits around the Monnow & Usk valleys. Although until recently thought to be a British endemic it has now been con-

firmed from the Mara Basin of Romania and there is an unconfirmed record from Hungary.

We know little about its habits and most of the following is conjectured from scanty capture data and comparative structure – function relationships with other *Empis* spp. There is no real evidence for association with the rivers themselves and we might expect it in other places well back from the river if ‘suitable’ habitat is available. They likely need a mosaic of habitats which could be different for display, immatures, feeding etc. The immatures will be terrestrial:- presumably in periglacial sands. Availability of appropriate swarm sites is likely to be very important for this species. It probably forms epigamic swarms and morphology suggests that when female:male numerical ratios are high, these could involve role-reversed mate selection with females swarming, probably in edge shade situations, and males entering swarms with prey. Edge shade situation could include river marginal shrubs, hedgerows and old woodland (judged from the data). Flower visiting has been noted and hot weather activity is suggested. Recent records are all in a two week period in late June and early July suggesting a short adult emergence period but there are historical records as late as 12 August.

Any course of action needs to first assess its distribution in the Usk & Monnow, paying particular attention to swarm sites and searching for any flower use. Once swarm sites have been identified, commonalities might emerge. Swarms will have to be watched to find out who is leading in the display and if prey swapping happens. The prey can easily be identified which should give indications of the hunting range of whichever sex is presenting the prey (are they hunting over the river, in shade or the fields for example). Mating almost certainly occurs in the air and mated pairs will need to be followed back to a ground resting site which will probably be close to eventual oviposition sites. Having done this we will have a much better idea of mosaic usage and then be able to investigate similar sites in more detail and get a better idea of the species’ true status.

Adrian Plant

The following five species have been adopted by the Malloch Society

They kindly granted permission to reproduce part of their texts from their webpages. I have only included the latest news, so you might want to check their webpages for additional information (www.mallochsociety.org.uk).

***Blera fallax* – The Pine Hoverfly**

SNH Species Action Framework: Pine Hoverfly Management Actions and Achievements, October 2007 . In July 2007, after formalising an agreement with the four partners and SNH, the Malloch Society, appointed a Project Officer to implement first year’s actions in the agreed action plan to conserve the Pine Hoverfly, *Blera fallax*. In July survey began to assess the presence and location of *Blera fallax* at all sites in Strathspey. All known breeding sites were surveyed by September and *Blera fallax* larvae were found inhabiting the artificial holes created in pine stumps. The progression and survival of these early stages will be monitored, and further searches of all potential sites in Strathspey will continue.

Thorough examination of the holes and pots will be undertaken in October to assess the potential to remove some individuals for rearing in a controlled environment. This will enable: secured survival for these individuals; observations on their behaviour over the winter period; and the creation of a potential translocation population for transfer to historical breeding sites in Strathspey.

In order to increase the amount of breeding habitat at known locations as well as to prepare new localities, 31 breeding sites have been created by cutting holes in pine stumps and placing out pots and filling with pine chips. Partnership working continue to develop with the site owners and managers, RSPB, SNH and FC, advice is being provided on habitat management for *Blera fallax* as required.

Notice board

Hammerschmidtia ferruginea – Aspen Hoverfly

Conservation status:

- endangered UK status confirmed
- restricted to just 12 localities in north-east Scotland
- few of these localities are protected
- breeds in wet decay under the bark of recently fallen trees and branches of aspen, *Populus tremula*
- this breeding site is temporary and disappears in 1-3 years as the fallen aspen tree or branch ages, so regular input is required to ensure survival
- the amount of fallen aspen wood entering the system has decreased since the 1990s which threatens survival
- fallen aspen is the breeding site of 15 other red-listed Diptera, making it one of the richest *saproxylic* Diptera communities in the UK.

Actions being taken to ensure the survival of *Hammerschmidtia ferruginea*:

- working in partnership with owners of core aspen localities
- annual monitoring of the quality and quantity of fallen aspen at all core localities
- encouraging recovery of aspen woods by fencing and removal of rabbits
- covering selected pieces of fallen wood with wire netting to prevent grazing animals eating the bark
- where this does not threaten existing aspen woodland and there is a clear need, cutting down selected trees to increase the amount of breeding resource.

Summary of 2006 survey work

- All key sites visited for the first time since 2000
- Individual management reports are completed or are being completed for key sites – these to be passed to owners
- The amount of suitable trees available for *Hammerschmidtia* larvae is higher than we have recorded
- Estimated of larval numbers are the highest we have recorded – almost 4x the 2000 figure
- The current amount of fresh dead wood in the system is high – but action is needed to ensure that best use is made of it for *Hammerschmidtia*
- At present only a small % of the population is in logs created by active management
- With a small amount of cutting this year there is the potential for further population growth in the next 4-5 year period

The trapping / mark / release study is already producing a significant amount of new information on the autecology of this species which in future can be incorporated into management actions.

Estimated *Hammerschmidtia* population size in Scotland between 2000 and 2006

year	sites	suitable trees	est. population
2000	7	27	295
2003	6	28	525
2005	6	15	325
2006	8	28	1115

Key reference:

Rotheray, G.E. and MacGowan, I. 2000. Status and breeding sites of three presumed endangered Scottish *saproxylic* syrphids (Diptera, Syrphidae). *Journal of Insect Conservation* 4, 215-223.

***Clusoides geomyzinus* - Pine Heart-Wood Fly**

This species has shown a marked decline during 20th century with only two known recent records from Strathspey. It is closely associated with Caledonian pinewoods and old pine plantations, where the larvae are believed to develop in decaying pine stumps.

Contrary to a common assumption many native pinewoods are not optimal for saproxylic insect populations - there is often not enough natural input of dead wood and cutting and felling have virtually ceased. Many populations occur in plantations outwith protected areas. *C. geomyzinus* is a flagship species for conifer stumps where a range of other rare invertebrates and lichens are found. Again these mainly occur in plantations but are often destroyed by forestry machinery or are treated with antifungal agents. We consider that after a period of research management actions could be identified.

Survey is needed to find any new sites, monitoring is needed to understand the status of the species at existing sites, research to understand the autecology and to develop any possible management treatments. This data is needed to allow reporting against success criteria.

***Rhamphomyia hirtula* - Mountain Dance-Fly**

Rhamphomyia hirtula - the mountain dance-fly - is only found on the highest of the Scottish mountains. It is one of **the most vulnerable species** in the British Isles with respect to the potential effects of climatic change, in particular to any rise in annual temperatures. Mountain insects, with their annual life cycles and ability to move to higher altitudes relatively quickly, are likely to be one of the most sensitive indicators of change in upland habitats. This species also has the potential to act as a flagship species for monitoring climate change due to the fact that there is detailed baseline data on distribution and altitude range available from work carried out in the Scottish Highlands during the 1990s.

The adult is a typical dance-fly, almost entirely grey in body colour with long legs and long, narrow wings. Males have a club ended abdomen whilst females have a slender tipped abdomen.

Biodiversity Action Plan proposals include survey, which is needed to find any new sites, monitoring is needed to understand the status of the species at existing sites and determine if there has been any change in altitudinal distribution during the past 15 years. This data is needed to allow reporting against success criteria.

Species Data :

Flight period - mid June to mid July

Altitudinal range - 800 - 1100m

Known British specimens - about 40

Number of 10Km square records - 6

Vice counties - Argyll, S. Aberdeen, Banff, Easternness, Forfar.

***Lonchaea ragnari* - The large birch lance-fly**

This species is considered as a flagship for saproxylic insects which occur in ancient boreal birch woodland. Most woodland types have Species Action Plan species - for example inclusion of the aspen hoverfly has done a huge amount to focus attention on the importance of boreal aspen stands. Mature or over mature birch woods in the Scottish highlands are a neglected resource and are in need of further attention, protection and management. This species is important both in UK and European terms.

It might be possible to tell how much birch woodland there is in Scotland but there are no estimates of the area of "high quality" old birch stands. There are many saproxylic insects primarily associated with ancient boreal birch woodland and these will benefit from an increased focus on this habitat type. Several rare or restricted species of beetle, flies and moth also utilise these ancient birches.

Work required:

- determining the location of key populations in Scotland.
- Research into the autecology and life history of this species.

Notice board

- Knowledge about the insect's life history and requirements needs to be translated into management advice and action.
- Survey is needed to establish the extent and condition of these ancient birchwoods and to find any new sites for *Lonchaea ragnari*, monitoring is needed to understand the status of the species at existing sites. This data is needed to allow reporting against success criteria.

Iain MacGowan, Malloch Society,
c/o Iain MacGowan, Scottish Natural Heritage, Battleby, Redgorton, Perth PH1 3EW, Scotland; e-mail:
iain.macgowan@snh.gov.uk

If after reading all this you feel that we should stop talking and rather start to help our threatened species, then please get in contact – you might be able to help!

Barbara Ismay

Budget cuts threaten biodiversity

The following self-explanatory protest letter was published in the *Guardian* on Thursday January 17, 2008 (<http://www.guardian.co.uk/letters/story/0,,2241916,00.html>) under the signatories of eight of Britain's most influential wildlife conservation organisations.

It is barely a year since the government established Natural England as "a powerful new champion of nature". This commitment has quickly evaporated. Defra now seeks cuts of over 15% to Natural England's core budget, threatening the loss of up to 150 highly experienced staff or major cuts to core conservation programmes. Even more cuts are planned for 2009-10. Our country has suffered relentless biodiversity loss over recent decades. The government has promised both the EU and its own electorate that this will be halted and reversed by 2010. It will not be possible to meet this goal and do other vital work mitigating climate change, if it cuts its frontline delivery agency.

Our groups have pledged hundreds of thousands of hours of volunteer labour and millions of pounds to help the government meet this biodiversity target. To have the rug pulled from under us at this late stage would be the bitterest of setbacks. We urge the government to reverse these damaging cuts and to honour its commitment to conserving the natural world and the UK's wildlife.

Dr Martin Warren, Chief executive, Butterfly Conservation

Amy Coyte, Chief executive, Bat Conservation Trust

Matt Shardlow, Director, Buglife

Dr Tony Gent, Chief executive, Herpetological Conservation Trust

Victoria Chester, Chief executive, Plantlife

Dr Mark Avery, Director of conservation, RSPB

Stephanie Hilborne, Chief executive, The Wildlife Trusts

Glyn Davies, Director of programmes, WWF-UK

Budget cuts of the kind which are described above have a 2-pronged effect on nature conservation in Britain. On the one hand, the loss of experienced technical staff in a government conservation body limits the ability of that body to monitor biodiversity and to plan, initiate and evaluate activities to maintain it. Replacement of such staff at short notice is likely to be well-nigh impossible. On the other hand, the reduced budget means that significantly less money is available to sponsor those activities which are planned. Such activities are to a large extent performed by Non-Governmental Organisations (NGOs) such as those signatory to the letter above.

Government sponsorship via the statutory conservation bodies such as Natural England are not the only source of income for the conservation NGOs, they also receive income from private membership subscriptions, bequests, donations and grants for funding specific projects from the Heritage Lottery Fund. However, in the current economic climate with its threat of recession, and with heavy demands for financial support arising from the impending London Olympics, significantly less money can be expected to be available to support causes such as wildlife conservation projects than in the past.

So the financial outlook for wildlife conservation and maintenance of biodiversity in the short term appears grim. To obtain some understanding of the way in which the current funding situation is effecting

the operations of a typical NGO, Buglife (The Invertebrate Conservation Trust) was asked to explain its role in biodiversity conservation and how it is coping with funding ongoing projects. Their reply is set out in the following article.

Malcolm Smart, Vice Chairman

Dipterists Forum (DF) is a member of Buglife, meaning that DF is a stakeholder in that organisation with AGM voting rights. We have worked together with Buglife on a number of BAP themes, including the special species of BAP Priority Habitats and the selection of the recent tranche of BAP Priority Species. Various DF members have been participating in Buglife projects on BAP Species Action Plans and on the fly faunas of Exposed Riverine Sediments (ERS) and Ditches of Grazing levels.

How the budget situation effects Buglife and the delivery of invertebrate conservation

Conservation delivery is via government (and its agencies) and the non-governmental organisations (NGOs). Buglife, and indeed the Dipterists Forum count as NGOs. The agencies administer statutory functions and the NGOs are free of government constraints. That has been a complementary partnership all along, and enshrined in the government Biodiversity Action Plan.

In better financial times, the agencies had various budgets to fund or contract projects by NGOs and others, and in total that included an impressive array of invertebrate work. The agencies for Wales, Scotland, and now England embrace what used to be Countryside Commission roles in the wider countryside, including public amenity. In Wales and England farm payments for sympathetic land management are included. There are pros and cons to embracing these wider remits, but there can be big problems when policies and budgets are tied in to broader country or national government demands. Natural England and The Countryside Council for Wales in particular have very tight budgetary limitations, now resulting in little or no scope to fund outside work. In subjects such as invertebrates, where internal expertise is sparse, the budget restraints hit particularly hard.

So how do NGOs tap into other funding sources? It depends on objectives. There are numerous charities but nearly all are 'people' focused (health, the poor, children and the aged etc). A small proportion of them regard environment or environmental education as within their realm. A wildlife trust may find funding for nature reserve management (planting trees, or kids bashing down bushes) and for education (nature trails, visitor centres). Buglife is off-centre (not birds or mammals) and very few trusts support the more serious end of conservation. We could possibly find plenty of funding for introducing primary school kids to invertebrates (secondary schools too preoccupied with curricula), but that does not address the urgent issues relating to halting the decline of invertebrates.

The Heritage Lottery Fund has been a major source of funding for the conservation movement, especially for land purchase and the management of reserves. Again, most funding streams are geared solely to people, and the environmental examples mentioned are also people orientated. Thus funding bids have to be carefully designed around involving lots of people, with the risk of deflecting from the best scientific outcome. But the deflection of £2-3 billion to the London Olympics has massive consequences for all charities, decreasing the odds for a successful bid, and especially for the sort of work that Buglife regards as truly worthwhile.

There are other factors. The trend has been towards matching funding, typically 10-50%. That means a successful bid for any source of funding is just a start to the problems. The race is then on to squeezing blood out of stones before a dead-line for deployment of the original sum. In practice one has to have lots of balls in the air at once. And planning becomes more difficult when bid decisions are postponed yet again 'until the next panel meeting'. Industry and commercial sources take years to tap into (they already back longer established organisations) or their pound of flesh demanded in return carries unacceptable conditions/ethical conundrums.

Buglife was established to fill a big gap in conservation NGOs. The first staff were appointed in early 2002. By last December it had 10 staff, including one based in its Scottish Office in Stirling. The first five years were make or break, since the new boy on the NGO block had to establish its credentials. By that measure,

Notice board

hitting the ground running to rise to the BAP challenge has been a success.

The immediate project was to review the special invertebrate faunal and its management needs for the BAP Priority Habitats. That was via Defra 50% funding. That is so often the rub since to find matching funds to close the gap can be ghastly (and not fully achieved in that project), but it was a one-off opportunity Buglife had to take to get street credibility. More recently Buglife managed a project on the revision of BAP Priority Species, with Dipterists Forum taking a major role on the flies. Buglife's 'All of a Buzz' project in the Thames Gateway is partly English Nature funded, a last ditch stand to save the special brownfield faunas in the face of government policy to selectively build on brownfield land: and now there are 2 categories of brownfield accorded BAP Priority Habitat Status, all be it that Natural England has no formal policy for this habitat. Other habitat based projects have included ones on the faunas of soft rock cliffs, exposed riverine sediments and aggregate quarrying. Buglife achieved the impossible by getting a sheep-dip chemical withdrawn for sale, having assembled evidence that 1000 miles of river per year were being stripped of invertebrate life. Buglife interceded on the Clean Neighbourhoods Bill, as the only organisation that spotted that if anyone could complain about nuisance insects coming from businesses, that applied to farmland and land being managed for conservation (practically all wildlife NGOs run as businesses). What started as an innocuous horse welfare bill turned out to be a camouflaged campaign to eradicate ragwort, which Buglife pointed out was the sole foodplant for 30 species of invertebrates, including some flies, let alone the value of it's flowers for pollen and nectar. Defra guidelines take that into account.

SNH has contracted the Initiative for Scottish Invertebrates to draw up a priory programme for Scottish invertebrates; the project is run by Buglife in conjunction with the Initiative for Scottish Invertebrates (ISI). Buglife also appointed a water projects officer last year to increase the focus in that area.

However, with a heavy dependence on the flow of new project funds, we enter an uncertain phase. Continuous growth cannot be expected as the norm, but it will be essential to build-up reliable funding streams that see us through the hard times as well as the good. As is apparent above, a very rough patch in funding lies ahead and that includes the curse of gaining matching funding in time. The formula requires a meaningful element of predictable income on which to plan.

It would not have been possible to launch Buglife as a fully functioning organisation without starter core funding. That came with two initial legacies, and two others since, amounting in total to over £350,000 (making government contribution to 'partnership' look very uneven). The level of support has since decreased, making it necessary for Buglife to look for further sources of funding.

This is where a large number of subscriptions come in handy: from Friends (= individuals) or Members (= societies, at a minimal sub). After 6 years, Buglife only has about 740 Friends (and that is after a lot of effort trying different methods of approach). Curiously, about half the Friends are ladies of Saga age, yet ladies interested in invertebrates are hugely out-numbered by men. Names identifiable as entomologists or other invertebrate adherents are only about 10% of the total.

Some NGOs spend much of their membership subscription on glossy magazines. Buglife uses E-mail newsletters (with colour pictures) or black and white paper copy so that subscription income can be used where it is needed.

Please reflect on the above. You may not agree with every nuance. However, the underlying question is whether there is a need for a strong Buglife to carry thorough the NGO commitment towards BAP invertebrates, in association with akin NGOs. And, of course, it is more than BAP, as the legislative and policy examples above indicate. Buglife needs more entomologists (and others) to join as a Friend. Agencies cannot row the boat alone, funding is getting ever tighter, and the NGOs have to weather through and try to keep the invertebrate agenda in prominence and take the actions required.

The Buglife website (<http://www.buglife.org.uk/>) Buglife, 179A, Peterborough PE1 4DS.

Alan Stubbs, Buglife Chairman

Inquiry on systematics & taxonomy

Matt Shardlow circulated the following invitation to submit evidence to the follow-up inquiry on systematics and taxonomy. Unfortunately the closing date was too short for the Bulletin to act as a vehicle for informing members in time but it has been widely circulated by email and I trust the following is still of interest to members. Mike Wilson of Cardiff Museum responded to my circulation, telling me that it was the first time he had received full details. Other known respondents to the inquiry are Paul Harding on behalf of the National Federation for Biological Recording (specifically to parts of questions 2, 7 & 8), Trevor James on behalf of the National Biodiversity Network and John Newbould for the Yorkshire Naturalists Union. If Dipterists Forum has missed an opportunity for its own specific response I think we can be reasonable certain that appropriate comments have been made by others.

The second part of the following notice, detailing methods by which evidence should be submitted, has been omitted.

Darwyn Sumner

House of Lords Science and Technology Committee

Call for evidence: Systematics and taxonomy

The House of Lords Science and Technology Committee, chaired by Lord Sutherland of Houndwood, is announcing a follow-up inquiry on systematic biology research and taxonomy. The inquiry will provide an assessment on the state of the field five years after the Committee's last report (*'What on earth? The threat to the science underpinning conservation'*) in the context of new scientific, technological and policy developments.

The Committee invites evidence on the following questions. Witnesses are encouraged to focus on those issues of which they have particular knowledge or experience - submissions are not required to cover all questions.

The state of systematics and taxonomy research

- 1 What is the state of systematics research and taxonomy in the UK? What are the current research priorities? What are the barriers, if any, to delivering these priorities?
- 2 What is the role of systematics and taxonomy and, in particular, in what way do they contribute to research areas such as biodiversity conservation, ecosystem services and climate change? How important is this contribution and how is it recognised in the funding process? How is systematics integrated in other areas of research?
- 3 Does the way in which systematics research is organised and co-ordinated best meet the needs of the user community? What progress has been made in setting up a body to lead on this? What contribution do the leading systematics research institutions make both nationally and internationally?
- 4 What level of funding would be needed to meet the need for taxonomic information now and in the future? Who should be providing this funding?
- 5 How does funding in other countries compare? Could there be more international collaboration? If so, what form should this collaboration take and how might it be achieved?
- 6 What impact have developments in DNA sequencing, genomics and other new technologies had on systematics research? In what way has systematics embraced new technologies and how can these research areas interact successfully and efficiently?

Data collection, management, maintenance and dissemination

- 7 Does the way in which taxonomic data is collected, managed and maintained best meet the needs of the user community? What is the state of local and national recording schemes?
- 8 What is the role of the major regional museums and collections? How are taxonomic collections curated and funded?
- 9 What progress has been made in developing a web-based taxonomy? How do such initiatives fit

Notice board

in with meeting demand for systematics and taxonomy information? How do UK-led initiatives fit in with international initiatives and is there sufficient collaboration?

- 10 What needs to be done to ensure that web-based taxonomy information is of high quality, reliable and user-friendly?
- 11 How does the taxonomic community engage with the non-taxonomic community? What role do field studies play?

Skills base

- 12 What are the numbers and ages of trained taxonomists working in UK universities and other organisations?
- 13 What is the state of training and education in systematics and taxonomy? Are there any gaps in capacity? Is the number of taxonomists in post, and those that are being trained, sufficient to meet current and future needs across all taxonomic subject areas?

For further information on the inquiry please contact Cathleen Schulte, Committee Specialist, either by telephone: 020 7219 2491 or email: schultec@parliament.uk