



North East England Branch



President Sir David Attenborough CH FRS

Dedicated to saving wild butterflies and their habitats

Newsletter No 19

April 2009



Butterfly Conservation
Company limited by guarantee, registered in England (2206468)
Registered Office: Manor Yard, East Lulworth, Wareham, Dorset, BH20 5QP
Charity registered in England & Wales (254937) and in Scotland (SCO39268)

Thank you to all who have contributed to this edition of our Newsletter. Our new members might like to know that there are two Newsletters each year and we are always delighted to include any articles, letters, photos or drawings that any member cares to submit.

If you have a question or observation on a butterfly or moth related subject, how about writing to our LETTERS PAGE; or if you are electronic, send an e-mail.

Copy dates are unquestionably:

1st MarchApril Edition

1st September.....November Edition

Contributions should be sent to the Editor at this address:

21 West Acres, Alnwick, Northumberland NE66 2QA

E-mail jacquelinebeaven@btinternet.com

The Committee of North East England Branch would be very interested to hear from any Members who have ideas and suggestions for site visits, conservation opportunities or anything of interest within the Branch area.

Any Member of the Branch who has a particular skill to offer, and feels able to give their services, would also be welcomed.

A list of Committee members can be found on the back page of this Newsletter

Cover Photograph: The Competition Winner: Bob Mawson's photo of a Marbled White.

Acknowledgement to Jim Asher: Butterfly Conservation Trustee, for use of his Pictures

Contributions wanted for the website

Contributions to the website (www.northeast-butterflies.org.uk) are welcomed. In particular we would welcome the following:

- details of sightings of butterflies (not necessarily rare ones and as soon as possible after you have seen the butterflies so that the 'Recent Sightings' page can give users an indication of what is currently on the wing and where as the season progresses);
- photographs of butterflies and moths in all life stages (first and foremost from North East England, but if there is a demand we may consider also having a gallery of pictures from further afield);
- any news items likely to be of interest to BC members.

Other types of contribution are also welcome. We would also welcome any suggestions members may have about additions or improvements to the website. Please send any contributions to **Jonathan Wallace** (contact details on back page).



URGENTLY REQUIRED

There is a desperate need for someone to fill the post of Conservation Officer for County Durham on the Committee of North East England Branch of Butterfly Conservation.

Please talk to David Stebbings (contact details on back page) who will explain what the role entails.

As expected, the results for 2008 were not very good but one ray of sunshine was that overall they were slightly better than 2007. Compared with 2007 results, of the twenty-five transects monitored, thirteen had an increase in the total number of butterflies seen, with increase varying from 10% to over 100%. The average for all transects was an increase of 10%.

The two butterflies which probably improved the figures for 2008 were the relatively good numbers of Ringlets and the continued increase in the numbers of Speckled Wood.

The figures for comparison with our best year in the past five years, which was 2006, are rather poor, with fifteen of the twenty-one transects monitored showing a decrease in the total numbers recorded. The average for all transects was 46% of those recorded in 2006. The worst loss was one transect which only recorded 17% of those recorded in 2006. Only six transects showed an increase with the maximum increase being 33%.

There has been an increase in the number of sightings of Gatekeeper on transects, so this could be one to watch out for in 2009 – could it be the next Speckled Wood.

All in all 2008 was not all doom and gloom but lets hope 2009 is better.

I know it's a bit early for this request but it would help me and headquarters if you could get your transect records in by the end of October 2009.

Thanks for your help in 2008 Brian Denham: Transect Co-ordinator.

The Wider Countryside Butterfly Survey Goes Ahead in 2009. Dr Katie Cruickshanks, (WCBS co-ordinator)

After two years of pilot testing, a new method of monitoring butterflies in widespread habitats, such as farmland and upland moorland, is to be rolled out nationwide this year.

The Wider Countryside Butterfly Survey method has been developed by Butterfly Conservation and the Centre for Ecology and Hydrology as part of the UKBMS project.

The existing Transect network provides invaluable data on the status of butterflies, yet widespread habitats are under-recorded. More information on the fate of butterflies in these areas is needed. The new survey is intended to fill these gaps by complementing, rather than replacing, the existing Transect network.

The pilot testing has thrown up some interesting information. Last year, despite the unsettled weather, nearly two thirds of the 1km squares visited in 2007 were revisited by volunteers. In total forty species were recorded. Importantly all twenty-three target species were detected in both pilot years. Which means that trends can be analysed to test whether classic Transects provide a truly representative picture of butterflies in the UK landscape as a whole. Volunteers who have participated in the pilot testing have shown considerable enthusiasm and it is hoped this will continue to grow.

There has been close involvement with the British Trust for Ornithology and the method is based on the highly successful Breeding Bird Survey. We hope that many BTO recorders will be returning to their bird sites this summer to collect butterfly data as part of the survey along with many new surveys completed by BC recorders.

The new method involves making a minimum of two visits to a randomly selected square near to your home between May and August to count butterflies along two 1km survey lines running roughly north-south through the your square. The survey will be co-ordinated centrally by BC but we aim to find a Champion in each Branch to help find willing volunteers. We are aiming for twenty squares per Branch.

Please email survey@butterfly-conservation.org or call 01929 406036 to register interest in taking part and you will be contacted in early spring with instructions and the location of your random 1km survey square. Keep an eye on www.butterfly-conservation.org/wcbs for more information.

Photographic Competition 2008

See the Centre Pages for the results.

**The 2008 experiment was very successful, so much so, that
the Committee have decided to run it again!**

Thank you to everyone who entered a picture.

The standard was very high.

**Watch for details of the 2009 competition
further on in the newsletter**

You will no doubt have read in the recent Butterfly magazine that Butterfly Conservation are asking for volunteers to survey one or more selected 1km squares in their locality (see also page 5 of this newsletter). The requirement is to make a minimum of two visits July - August with optional visits from May until August. North East England Branch has been allocated twenty 1 km. squares that have been chosen randomly to gain a representative sample of the branch regions and their habitats.

The survey is **NOT** designed to replace transects, but to compliment them by collecting different data on common and widespread species that we suspect are fairing differently outside nature reserves and SSSI's and therefore the survey has to be random to get a representative picture of the countryside.

The basic requirement for surveying a 1km square is to create two survey lines approx. 1km long, 500m apart and approx. 250m in from the edge of the square. Pairs of survey lines are to run N-S or E-W. It is appreciated that this is the ideal situation and most sets of survey lines will be an approximation of this requirement. The two survey lines are to be divided into five 200m. long sections, and the butterflies seen, identified with the 200m section in which they were seen.

It is important not to reject squares on the grounds that they appear uninteresting. Squares containing few species are just as valuable as squares with many species. It is intended that the recorded data will be sent electronically to Butterfly Conservation via the website. However if you do not have access to a computer the data can be recorded on paper record sheets, which will be supplied. At the end of the recording period the completed paper record sheets are to be forwarded to Brian Denham (See below for address) who will enter the data.

The above is a very broad outline of the survey method. If you decide that you would like to help in this survey then please provisionally select a suitable 1km. square from the following list and inform Brian Denham of your decision and choice. We will then arrange for more detailed instructions to be sent to you. Only when you have studied the detailed instructions and confirmed that you wish to carry on with the survey will we finally allocate the 1km square you have selected

Should you decide, after studying the detailed instruction, that you do not wish to carry on with the survey, we would be sorry, but we would hope that you would continue recording a transect and/or sending in casual records.

Continues...

The following is the list of Ordnance Survey four-figure grid reference numbers of the twenty 1km. squares we have been allocated.

NT 9222 - 9935.

NU 0436.

NY 6662 - 6859 - 6869 - 7189 - 7482 - 8583 - 8974 - 9085 - 9796 9971

NZ 0825 - 0953 - 2024 - 2075 - 2159 - 3934 - 4234.

In a case where the survey work proves impossible in a large part of the square you have been allocated, e.g. because it is physically impossible to visit or access is not granted please contact Katie Cruickshanks who will provide you with a replacement square. (See below for address etc.)

Contacts: -

Survey Co-ordinator

Katie Cruickshanks

Butterfly Conservation

Manor Yard, East Lulworth

Wareham, Dorset, BH20 5QP

survey@butterfly-conservation.org

Mobile: 07990 591483

Survey Champion

North East England

Brian Denham

1 Swaledale Ave

Darlington DL3 9AJ

brian.denham@ntlworld.com Tel: 01929 406036

Tel: 01325 263449

Mobile: 07969 459597



Adult butterflies and moths lay large numbers of eggs, far more than can ever survive to reach maturity and breed themselves. So what happens to all these eggs?

The eggs themselves are usually laid on the under surfaces of leaves, they are small, camouflaged and well concealed. The predation rate of eggs is small and most will survive to hatch out into caterpillars. It is in this larval stage that they are most at risk.

The following is an extract from Butterfly Conservation's annual review 2007/08. "Butterflies and moths are beautiful and worthy of conservation in their own right but, because of their sheer numbers and diversity, they also play a crucial role in the health of the food chain."

The last part of this statement explains what happens to most caterpillars; they are at the bottom of the food chain and are on the menu for a variety of creatures. Birds, spiders, beetles and small mammals will all eat butterfly and moth caterpillars. To counter this, butterflies and moths have evolved a wide range of strategies to avoid being eaten. Here is a flavour of some of them.

The most obvious is camouflage giving them some protection against birds. Some such as the Small White, Green-veined White and the Hairstreak group rely on colour to avoid being seen. They are the same shade of green as their food plants. Swallowtail and Comma caterpillars resemble bird droppings and so may be overlooked. Some moth caterpillars such as Bordered Beauty are stick mimics: the caterpillars look exactly like a small twig attached to the stem of a bush.

A defence shown by caterpillars of the Skipper family is to construct a tube out of grass leaves by drawing together the edges and sticking them together with silk. It then lives inside this tube only coming out occasionally to feed and in this way tries to avoid being seen.

The Small Heath caterpillars try to avoid predation by birds by feeding at night. They spend the day hidden in tufts of grass and emerge at night to climb up the grass blades to eat the tender tips.

Some adopt chemical defences. The caterpillars of the Large White absorb poisonous oils from the Brassica plants they eat and concentrate them in their bodies making them unpleasant tasting or even poisonous to birds and small mammals. Similarly caterpillars of the cinnabar moth feed on Ragwort and absorb poisons to deter predators. The caterpillars that adopt this strategy are usually brightly coloured, they advertise the fact they are poisonous. The Cinnabar is particularly striking; the caterpillar has bright orange and black bands around its body. Small Tortoiseshell caterpillars have the added protection of spines as well as poisons to deter predators.

A most remarkable strategy is that adopted by the butterflies of the Blue family. Many of the caterpillars of this group, including the Common Blue, have the ability to secrete a sweet honeydew like liquid, which is attractive

to ants. The caterpillars are often attended by ants, which lick the sweet liquid from the caterpillars' skin. The ants apparently become very protective of these caterpillars and deter predatory spiders and beetles from attacking them. The ants also prevent parasitic flies and wasps laying their eggs on the caterpillars. There is also some suggestion that the ants afford protection against small birds, which dislike the ants' spray.

Another major cause of death among caterpillars is the activity of parasitic flies and wasps. These insects attack the caterpillars and inject dozens of their own eggs into the living caterpillar. The larvae of the parasitic fly then grow by eating the host caterpillar from the inside eventually killing it as the parasites mature and burst out. The Large White, Peacock, Red Admiral, Painted Lady and Marsh Fritillary are particularly susceptible to attack from parasitic wasps. In some years over half of all caterpillars can be affected. In recent years the decline of the Small Tortoiseshell in southern England has been attributed to a parasitic tachinid fly called *Sturmia bella* which only arrived in Britain

around the year 2000. Butterflies seem to have few defences against attack from these parasites. The Blues with their ant guardians seem to be the exception. However, parasite numbers themselves are cyclical as parasitic fly and wasp numbers tend to crash in some years and then take a number of years to build up again.

Despite all the hazards faced by the developing caterpillars enough survive to pupate, emerge as adults, mate and start the whole process off again.

The strategy of laying large numbers of eggs means only a small percentage need to survive to ensure the continuation of the species.



Cinnabar Moth Caterpillar

Garden Butterfly Update

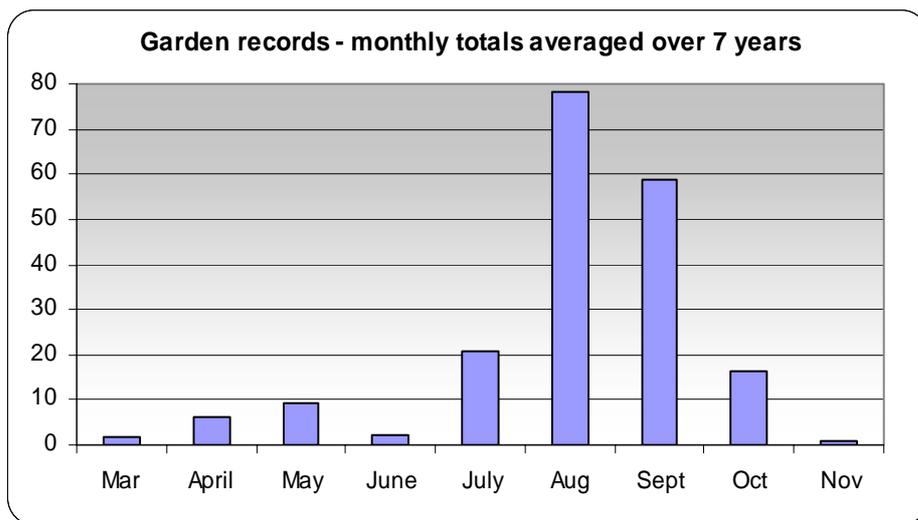
Roger Norman

Four years ago I wrote a short article on my garden butterflies and how I became interested in recording. This is an update on the state of play, with four more years of recording, a bit of possible climate warming in the meantime and the arrival of a couple of new residents to Northumberland's list. (I take a broad view of Northumberland and include Tyneside north of the river in that definition!

My garden is fairly typical plot attached to a 1932 semi in Newcastle with the front garden about sixteen feet by twenty-two feet, with one conventional *Buddleia davidii*. The rear garden is thirty feet by sixty feet

and has a Black Knight Buddleia and a very old *Buddleia globosa*, which has yellowish golf-ball shaped flowers. It has to be acknowledged that the flowers are not as attractive to look at as the standard Buddleia, but it more than makes up for this with its later flowering which runs from mid August right through to mid October. This covers the main period for all five of our large, colourful 'garden' butterflies, (Red Admiral, Painted Lady, Small Tortoiseshell, Peacock and Comma), including September, when several species can hit their peak numbers. The Black Knight has virtually given up flowering by early August and the front garden *dauidii* by the end of August. The chart below shows how the numbers of records, i.e. species-days, varies over the year, using my counts from the last seven years and how worthwhile it is to have butterfly-attracting flowers in late August and through to the end of September.

When I wrote the first article, the garden 'list' stood at eleven species. Apart from the five above, there were three whites, Large, Small and Green-veined, plus Small Copper, Meadow Brown and Wall. Since then, in the hot summer of 2006, the next two new species first appeared, Holly Blue in the May and July and Small Skipper also in the July.



Then in 2007, with a warm dry spring Orange-tip turned up in the May. Finally in 2008, a couple of Speckled Wood appeared briefly in late September on the *Buddleia globosa* to take the 'list' to fifteen species.

The current county total for Northumberland is thirty-one species. This shows that it is possible to see up to almost half of the county species (48 % at the moment) in a small suburban garden. With no decent stretches of rough grassland nearby, the chances of the next most common butterflies, Small Heath, Ringlet and Common Blue turning up are probably fairly remote but I will keep hoping.

Apart from pruning all the Buddleias very hard late in the spring, in April, to try and encourage later flowering, the only other particular thing we do is to have a large wall calendar as a very convenient way to note the totals of

each species seen each day. By the time this newsletter arrives on your doormat, it should be spring and local garden centres should be starting to stock Buddleias. My suggestion is to buy, or perhaps order, a *Buddleia globosa* and extend your flowering period right through September.

Although I now notice and record butterfly records when out and about in the north-east, the garden butterfly records still make up about half of my observations each year. Having been helping out with the Branch's recording for the last few years, I have come to appreciate that we need lots of records of all our species. Some people send in their garden records, but I am sure many members think they are not important and do not bother. Gardens are a key habitat for many of our wider countryside species and indeed, are possibly either the best or as good as anywhere else to see some species. Speckled Wood and Holly Blue are moving north and could well turn up in your garden. With Speckled Wood established in the Detchant area, north of Belford, they could now turn up anywhere up to the Scottish border. Holly Blue are now well into Northumberland as well with several records in 2008 in the Alnwick area. So please record your garden sightings and send them in. Our membership is spread quite thinly, especially away from the main conurbations and you may be the only person recording for miles around. Even in town that might still be true. Wherever you live, your records are all valuable and will be appreciated by the Recorders, and will go into the Branch's annual report and the national database where they will help support Butterfly Conservation's work.



Male Orange Tip

Photographic Competition 2009

As last year, photographs taken during the 2009 season will be judged by the Committee, (who would not be eligible to enter) and the results will be announced at the AGM in February 2010. Small prizes will be awarded, and the winning pictures will be published, in colour, in the April 2010 edition of the newsletter.

The picture categories will be as follows:

Adult British Butterfly

Adult British Moth

Immature Stages, Butterfly or Moth

And Finally - Best Overall Photograph

Entries to Jaci - details on the back page.

Good luck and good shooting!

Volunteers Sought for Large Heath Surveying

For many years Harry Eales has surveyed the bogs and mires of Northumberland and in the process has greatly increased the number of sites known to harbour the Large Heath butterfly. Unfortunately, Harry is unable now to continue this work and is keen to hand it on to someone younger. The large area over which the sites are spread and the difficulty of accessing many of them mean that the job is best covered by several recorders and Harry has suggested a possible division of labour as follows: one recorder could cover sites in the north of the county (north of the Coquet) where there are relatively few sites; another recorder could cover the area south of the Tyne-Solway gap; and a couple of recorders could cover Kielder, Redesdale and Wark Forests.

Harry would be happy to provide any assistance required to anyone taking up this challenge, including all the information he has on localities and how to access them as well as putting them in touch with the relevant land owners. The Large Heath is without doubt one of the true butterfly specialities of the County which has more sites for this species than anywhere else in England and Wales; hopefully we can continue to monitor the fortunes of this important species. If anyone is prepared to take up this challenge we will be happy to put them in contact with Harry.



Large Heath

Photo: Jim Asher

North East England Branch Photographic Competition Winners for 2008



Winner of the British Moth Category
Angle Shades by Bob Mawson

Winner British
Butterfly
category and
Overall Best
Photograph

Marbled White
By Bob Mawson



Winner of the Immature
stages category

Orange Tip egg

By Bob Mawson



Some Highly Commended Photographs



Clockwise from the top left: Drinker Moth Caterpillar, Mike Hunter; Speckled Wood, Mike Coates; Small Skipper, Alan Davis; Wall Brown, Mike Richardson.

Congratulations to everyone. The standard was very high and the Committee had a hard time judging the entries. I hope you will be encouraged by the response, and all have a go this year.
Jaci: Ed.

I am a butterfly man who has long been daunted by the sheer numbers, perplexing names and confusing similarities of moths. So it was in summer 2008 I decided to make an effort to get to grips with at least some of our more common moths. I had some success with the day flying species and now feel confident that I can identify about twenty to thirty moths. A bonus is that I found them easier to photograph than butterflies as they generally stayed still. When tackling the nocturnal ones my first thought was I needed a moth trap. The Internet was an obvious place to start. A search for 'moth trap' in Google reveals plenty of sites, which offer products guaranteeing to trap, kill, poison or otherwise get rid of moths in a variety of novel ways! Not exactly the things I had in mind. However, there are, of course, sites offering catch and release type traps. These varied in price from tens to hundreds of pounds. Being reluctant to shell out much money I found a site with a DIY guide to making a Skinner trap. Therefore I thought a cardboard box with the top flaps folded in to form a slope into the box and a 60watt bulb suspended over it would do the trick. No such luck! It was in the garden from about 10pm to midnight for four nights in July and the only things it attracted were lots of midges. It was time for a change of strategy.

I have always been amazed that moths seem to find their way into our bathroom in summer even though the window is closed. What would happen if I left the window open and left the bathroom light on through the evening? What happened was my wife got very upset with me for inviting the local lepidoptera into the house. She only agreed as long as I promised faithfully to catch and release them all before she went to bed. This method proved moderately successful. About ten to twenty moths made their way in over an hour of 'bathroom trapping'. They were pretty docile so I could examine them in good light and photograph them too. I managed to identify about ten species with another half a dozen, which I could not positively identify because I could not separate out the species from three or four similar ones. Among the ones I identified were Dark Arches, Double Striped Pug, Garden Carpet, Garden Dart, Riband Wave, Small Square-spot, and my particular favourite the spectacular Swallow-tailed Moth.



Dark Arches



Swallowtail Moth



Riband Wave



Garden Carpet

Membership Matters

Welcome to the following new members of North East England Branch of Butterfly Conservation.

Mr D J Curran	Newton Aycliffe
Dr F G Hardy	Gosforth, Newcastle-upon-Tyne
Mr p ad Mrs V Hargreaves	Teesville East, Middlesbrough
Mr P Harris	Stanley
Mr M Hawking	Newcastle-upon-Tyne
Dr I Kille	Berwick-upon-Tweed
Mr E J Lawson	Carlton, Stockton-on-Tees
Mr I Martell	Shotley Bridge, Consett
Ms K A Melvin	Slaley, Hexham
Mr D W Nicol	Corbridge
Ms L Thompson	Durham
Mr M Thurner	Alnmouth

No space for a chat – I just hope you enjoy the newsletter.

Jaci; Ed

Butterflies and the Law

Jonathan Wallace

Introduction

There have been laws relating to wildlife since at least the time of William the Conqueror but for most of that time these laws have been concerned either with protecting the property – i.e. game species - of the landed gentry or with encouraging the killing of species that have at one time or another been considered vermin. In the last century or so, however, we have become conscious that human activity can be harmful to wildlife and even threaten its very existence and so, gradually, legislation has been enacted which seeks to protect plants and animals for their own sake. In this short article I summarise some of the main legal requirements relevant to the modern lepidopterist so that, whether armed with camera or net, he or she is broadly aware of the rights and obligations, which apply to his/her hours in the field

Protection of species

The Wildlife and Countryside Act of 1981 (and its subsequent amendments) is the principal piece of legislation intended to protect wildlife in this country. Section 9 of the Act provides explicit protection for a wide range of named species of plant and animal. Protected invertebrates are listed in Schedule 5 of the Act and these include a number of butterfly and moth

species. Two levels of protection are specified, namely full protection and prohibition of sale or trade in a species. Full protection makes it an offence to intentionally or recklessly carry out a wide range of actions with respect to a species including killing, injuring or taking it, possessing it or parts of it (dead or alive) or destroying, damaging or obstructing access to any structure the animal uses for shelter. It would therefore be an offence, for example, to net a fully protected butterfly species without a licence even if the intention was to release it again afterwards.

Schedule 5 is subject to review and revision every five years and it currently includes twenty-five butterfly species of which six have full protection and the remainder are protected from sale only. There are eight moth species with full protection. None of the fully protected species normally occurs within our region (a full list is given at the end of this article) but several of our species have the lower level of protection against trade or sale. These are the Northern Brown Argus, Large Heath and White-letter Hairstreak. Fully protected species that occur in neighbouring regions are the High Brown Fritillary and the Marsh Fritillary.

The Wildlife and Countryside Act is enforced by Natural England and offences under the Act may be punished with fines or custodial sentences. The enforcement powers available under the Act were reinforced by the Countryside and Rights of Way Act of 2000.

The protection afforded to species under the Wildlife and Countryside Act is intended to outlaw actions that may be harmful to species that are rare or vulnerable. A more proactive approach to species protection is provided by the UK Biodiversity Action Plan (BAP). This implements the UK's commitments under the 1992 Convention on Biodiversity and it identifies priority species and habitats. The BAP is implemented through a partnership of contributing bodies and the aim is to evaluate the threats to the priority species and habitats, to identify and implement actions to counter these threats and to monitor the status of the species and habitats. Full Species Action Plans are established for some but not all of the Priority Species (currently less than four hundred of the one thousand, one hundred and forty-nine species listed, although at least some actions have been defined for all species on the list). These plans include targets to be met (e.g. in terms of maintaining or extending species' ranges) and define actions to promote the species' conservation. Such actions can include legislative and policy measures (e.g. agri-environment schemes), habitat protection, habitat enhancement or creation and so on.

Biodiversity Action Plans are established at national, regional and local (county) levels. North East England hosts a number of butterflies that are on the current BAP Priority Species List. These are: Dingy Skipper, Northern Brown Argus, White-letter Hairstreak, Small Pearl-Bordered Fritillary, Wall, Grayling, Small Heath and Large Heath.

Protection of habitats

Successful conservation of biodiversity depends on protection of sites, habitats and ecosystems as well as actions aimed at individual species. The basic unit of site protection under UK law is the Site of Special Scientific Interest (SSSI). Under Section 28 of the Wildlife and Countryside Act, areas of land that are of special interest by virtue of their fauna, flora or geological or physiographical features shall be designated as SSSIs. There are more than four thousand SSSIs in England covering many of the best examples of natural or semi natural habitat and about 7% of the land surface.

The protection that is afforded to a site that has been designated as a SSSI is not absolute. Rather, when the site is notified, a list of activities with the potential to harm the scientific interest of the site is compiled along with other details of the site. If you are lucky enough to own or occupy a SSSI you may not carry out any of these activities without prior consultation with and consent from Natural England (or their counterparts in Wales, Scotland and Northern Ireland for sites in those countries). As well as obviously harmful activities this can include potentially beneficial activities such as grazing which may be necessary to maintain the biological interest of a site but which may also cause damage if not properly controlled. It is an offence to carry out an activity listed as potentially harmful to a site without obtaining consent or if consent has been denied.

Local authorities are required to include policies for the protection of SSSIs in establishing their Local Development Frameworks/Development Plans and must consult with Natural England when any planning application is likely to have an impact on a SSSI (even if the development site is outside the boundaries of or distant from the SSSI). Planning permission may in some cases be granted against the advice of Natural England, in which case the carrying out of activities for which permission has been granted is a valid defence if that activity is also listed on the SSSI notification as a potentially harmful activity.

As with the measures for the protection of species, the provisions within the Wildlife and Countryside Act relating to SSSIs were strengthened by the Countryside and Rights of Way Act 2000 (CRoW). Additional measures included stronger powers to the regulatory bodies (Natural England and its counterparts) and tougher penalties. Two of the new provisions are of particular interest. First, CRoW adds protection against neglect to the list of other potentially harmful activities and processes from which SSSIs are protected. This is important as neglect can be one of the most important causes for deterioration in the biological interest of SSSIs.

Secondly CRoW closed a rather odd loophole under the Wildlife and Countryside Act, which provides powers to stop the owner or legal occupier of land from carrying out harmful activities on the site but not third parties. Under CRoW it is now an offence for anybody to carry out harmful activities on a SSSI. This provides powers to the regulatory authority to take action against

damaging activities such as fly-tipping and trail biking, that may take place without the owner/occupier's consent or knowledge.

In addition to SSSIs a number of other site designations may be applied to ensure the protection of natural habitats. Special Protection Areas (SPA) and Special Areas for Conservation (SAC) are areas that are deemed to be of biological interest at a European level under the European Wild Birds Directive and the European Habitats Directive respectively. These Directives are transposed into UK law by the Wildlife and Countryside Act (for birds) and the Conservation (Natural Habitats & c) Regulations 1994 (for habitats and for fauna and flora other than birds). Generally, these designations are overlain on sites that are already designated as SSSIs. Designation as a SPA or a SAC provides an additional layer of protection and amongst other things provides powers for consents and planning permissions granted with respect to a SSSI to be reviewed and potentially revoked.

SSSIs, SACs and SPAs are sites that are considered of great importance for nature conservation but they are not necessarily managed primarily for that purpose. The protection offered is designed to ensure that their value for nature conservation is maintained alongside the other uses to which the land is put. National Nature Reserves, established under Section 35 of the Wildlife and Countryside Act are areas that are managed as nature reserves and are considered to be of national importance for the fauna and flora they contain. National Nature Reserves are often owned and managed by the statutory nature conservation authorities (i.e. Natural England in England) but may be owned and/or managed by other bodies. National Nature Reserves benefit from the highest level of protection available under UK law for sites. There are two hundred and twenty-two national Nature Reserves in England, representing over half a percent of the total land surface.

Within North East England there are numerous SSSIs, several of which include butterfly interest amongst the reasons for their designation, as for example, Bishop Middleham Quarry. Details of individual sites can be obtained from Natural England's web site. There are eleven National Nature Reserves in the region, several of which have significant butterfly interest. These include Lindisfarne NNR whose riches include the populations of Dark Green Fritillary and Grayling found amongst its dunes, as well as the magnesian grassland sites of Cassop Vale, Castle Eden Dene, Thrislington and Durham Coast NNRs.

Introductions into the wild

The introduction of species into areas in which they are not native is widely viewed as a serious threat to biodiversity. If the introduced plants or animals, become established, they can greatly disrupt natural ecosystems, particularly if their populations are able to explode because of the absence of the predators and parasites that keep their populations in check within their natural range. For this reason Section 14 of the Wildlife and Countryside Act makes it an offence to release any plant or animal into the wild that is not normally resident in or a regular migratory visitor to Great Britain.

The Natural Environment and Rural Communities Act 2006 and the Countryside and Rights of Way Act include amendments that reinforce this prohibition.

For whatever reason, occasional deliberate, clandestine releases of butterflies are made into areas where they are not already present. Except where carefully planned and carried out under licence (which would normally only be granted where a species is being reintroduced into an area from which it has gone extinct and where the causes of the original extinction are believed to be no longer acting) such releases should not be considered. If the livestock used is of a species or even a race that is not normally present in the UK then this will very likely constitute an offence under the above legislation.

Importation of wildlife from overseas

Whilst the legal requirements described so far have been concerned with protecting biodiversity within Britain, the law also reflects concerns about harm to biodiversity overseas. Where species are exploited for commercial purposes this can put populations under pressure and cause serious declines and even threaten extinction. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) seeks to address this problem by restricting the international trade in endangered species or in products derived from such species where trade is considered to be a significant factor in the threats facing the species.

CITES has three Appendices listing species of animals and plants. Appendix I includes species that are either threatened with extinction or are so rare that any level of trade in these species or their derivatives is likely to imperil the survival of the species. Importing an Appendix I species into a signatory state requires an import permit. Such permits will only be granted in exceptional circumstances and for restricted, non-commercial purposes, where the import is judged to not be harmful to the conservation status of the species. An export permit from the country of origin is also required in order for the import permit to be issued. This, in turn, should only be granted if the material in question has been obtained legally.

Appendix II includes species where the level of international trade might not be compatible with the survival of the species or with certain populations of the species. Trade in these species is controlled and, as for Appendix I species, an export licence from the country of origin is required. In the UK and in the EU an import licence from the destination country is also required for Appendix 2 species (although this is not required by CITES itself).

Appendix III is comprised of species listed at the request of individual CITES member states. Importing these species requires an export licence from the country that has requested the listing if the specimen originated in that country or a certificate of origin if the specimen was obtained in another country within the species' range.

CITES is implemented in the EU through the European Commission Regulation (EC) No. 338/1997 (amended by the Regulation (EC) 318/2008, which in turn are implemented in the UK by the Control of Trade in Endangered Species (Enforcement) Regulations 1997 (as amended). The European Regulations are slightly stricter than CITES itself.

For most readers of this article the most likely situation in which they would be affected by CITES would be when holidaying abroad and buying souvenirs. Products made from reptile skins, sea shells, marine turtles, ivory and such like, as well as some plants are all likely to be affected by CITES listings. Aside from the ethical considerations of buying these products, there is a significant risk that they will be confiscated on entry into the UK with the further risk of a fine. Butterfly species are traded internationally both as livestock and as pinned specimens and decorative objects and a number of butterflies are listed in one or other of the Appendices. These include tropical species such as Birdwing butterflies and various tropical Swallowtails but also the Corsican Swallowtail and the Mountain Apollo.

Access to countryside

The study and enjoyment of butterflies and moths requires access into the habitats where they occur and this, of course has implications with regard to trespass and private land.

It is against the law to trespass on land (i.e. to enter land without the permission of the owner or occupier) although this may be difficult to enforce in practice. There are in practice, three main ways in which one can explore the countryside legally. First, the countryside is criss-crossed by a network of public rights of way, including footpaths, bridle paths and roads and anyone has the legal right to use such rights of way to travel through the countryside. Secondly we can enter land where the owner or occupier has given permission either tacitly or explicitly. Happily, many of the places that people may wish to go in order to hunt for butterflies will fall into this category, for example nature reserves, country parks and such like.

Finally, the Countryside and Rights of Way Act introduced the so-called 'right to roam'. This created the right for anyone to walk on certain categories of land without being forced to stick to paths or other rights of way. This right applies to land above 600 metres above sea level, heathland, moorland, downland and registered commons. Access areas are designated on maps and there are many potential restrictions. These can include permanent or temporary exclusions from some areas (for example during the grouse shooting season), restrictions on dogs (which may need to be kept on a leash where sheep are present) and so on. More information on the 'right to roam', including maps of the areas that are accessible, is given on the government's countryside access web page www.countrysideaccess.gov.uk.

There is a generally recognised right to take wild fruit, flowers (but not to uproot plants), foliage and fungi where this is for personal use only and not for commercial purposes. This of course presumes that you have a legal right to be on the land from which they are collected. However, removal of anything else may be construed as theft and this could potentially apply to insect specimens. Any use of butterfly nets or insect traps should be carried out with discretion and you should carefully consider the need to obtain permission for the land owner before doing so, even if the intention is only to inspect the insects caught before releasing them back where they were captured.

* * * * *

Table: Butterfly species protected under Schedule 5 of the Wildlife and Countryside Act

Species	Level of protection	Species	Level of protection
Heath Fritillary	Full	Brown Hairstreak	Sale only
Marsh Fritillary	Full	Silver-spotted Skipper	Sale only
High Brown Fritillary	Full	Chequered Skipper	Sale only
Large Blue	Full	Lulworth Skipper	Sale only
Large Copper	Full	Glanville Fritillary	Sale only
Swallowtail	Full	Pearl-bordered Fritillary	Sale only
Silver-studded Blue	Sale only	Duke of Burgundy	Sale only
Chalkhill Blue	Sale only	Purple Emperor	Sale only
Small Blue	Sale only	Large Tortoiseshell	Sale only
Adonis Blue	Sale only	Large Heath	Sale only
Northern Brown Argus	Sale only	Mountain Ringlet	Sale only
Black Hair-streak	Sale only	Wood White	Sale only
White-letter Hairstreak	Sale only		

DISCLAIMER. The information provided here is intended to provide a layman's overview of relevant wildlife legislation. Whilst every effort has been made to ensure it is accurate, the article does not constitute legal advice and neither the author nor Butterfly Conservation can guarantee the accuracy thereof. Anyone using the information does so at his/her own risk and shall be deemed to indemnify Butterfly Conservation from any and all injury or damage arising from such use.

Butterfly Conservation Safety Note

As with any other activity, there are hazards in the countryside and everyone taking part in a Field Trip or Working Party has a responsibility, for their own safety and that of others. We always ensure that our events present no greater hazard than any other walk in the countryside, but please note and act on the following:

1. The leader will provide a briefing on the trip before setting out, with details of any known hazards, and will give advice on what to do in an emergency. Please listen carefully.
2. At the briefing, let the leader know if a) you have a mobile telephone and are able to take it with you on the walk, and b) if you have a first aid qualification.
3. Wear appropriate clothing and footwear. Stout shoes are a minimum requirement for any walk.
4. In sunny weather take a hat, use sun cream or protection for exposed skin. Make sure that you have adequate food and liquid to drink with you.
5. When on a walk, look out for any hazards – rabbit holes, fallen or hanging branches, barbed wire, boggy areas etc.
6. Children are welcome on our walks, but if under the age of 16 must be accompanied by at least one adult for two children. It is the responsibility of the accompanying adult(s) to ensure that the trip is within the children's capability.
7. Dogs are normally welcome on our walks, but must be kept under control.
8. If you are uncertain about any details of the trip, ring the leader/ contact in advance. If you decide to leave the trip early, please tell the leader.
9. Take care at all times and above all ENJOY YOURSELF

Submitting Butterfly Records 2009

Records are the bedrock of conservation and the North East Branch welcomes records of all species, for all dates and places, and of course for all forms.

As for 2008 there will be two ways of sending your records in. For those without a home computer, the existing yellow paper casual record sheets will continue unchanged. However, if you have a PC, the Branch would strongly urge you to send in your records using a spreadsheet such as Microsoft Excel or Lotus 123. Each record should occupy one line and the format of the spreadsheet should look something like the following example:

	A	B	C	D	E	F	G
1	Name/s		Palace	22-Aug-2008	Large	7	
2	Name/s of re-	NZ19685	Morpeth (riverside)	24-Sep-2008	Peacock	2	Very worn
3	Name/s of re-corder/s	NZ2514	Baydale Beck Darlington	1-Jul-2008	Comma	1	<i>Hutchinsoni</i> form

Column A – Recorder/s names.

Column B - Grid reference, which should be two letters, (NT, NU, NY or NZ), followed by four or six numbers. The first two (or three) numbers are the Easting, read from the top or bottom of OS maps, the last two, (or three) numbers represent the Northing, read from either side of the map.

Column C - Site name. For obscure place names please include a nearby town or village.

Column D – Date (please try to follow the format shown) **This is really important**

Column E - The name of the species seen.

Column F – Please give the actual number seen if possible, **We no longer use letters for abundance.** (A, B, C etc.) For larva (L), ova (O), pupa (P) or mating (M) records, please use the code letter provided, optionally adding numbers seen.

Column G - For any comments you may wish to add.

Optionally, you can add a habitat code to column H if you wish.

A blank spreadsheet, with the date formatted, is available by contacting the recorders or from the website. Electronic records are most easily sent as an email attachment. However, you can also send them in by post on CD, Floppy disc or Memory stick. The deadline for records to be included, and credited, in the 2009 Annual Report is 30 November 2009. Depending on where you live, please send records to:

DURHAM
 Steve Le Fleming
 7 Albert Street
 Durham,
 DH1 4RL
 tel 0191 386 7309
 E-mail lsklef@aol.com

NORTHUMBERLAND
 Roger Norman
 1 Prestwick Gardens, Kenton
 Newcastle-upon-Tyne,
 NE3 3DN
 tel 0191 2858314
 E-mail r.norman@clara.net

North East England Branch Serving Committee Members for 2009

Branch Organiser, Secretary and Treasurer

Steve Kirtley, 7 Mowden Walk, Darlington
DL3 9DJ Tel: 01325 460198
Email: stephen@skirtley.fsnet.co.uk

Butterfly Recorder

Dave O'Brien, 30 Appleton Road, Linthorpe
Middlesbrough, Cleveland TS5 5JE
Tel 01642 290379
Email: d.obrien6@ntlworld.com

Assistant Butterfly Recorder Northumberland

Roger Norman, 1 Prestwick Gardens, Kenton
Newcastle-upon-Tyne NE3 3DN
Tel: 0191 285 8314 Email r.norman@clara.net

Assistant Butterfly Recorder Durham

Steve le Fleming, 7, Albert Street, Durham
DH1 4RL, Tel: 0191 386 7309
Email: lsklef@aol.com

Transect Co-ordinator

Brian Denham, 1 Swaledale Avenue
Darlington DL3 9AJ, Tel: 01325 263499
Email: brian.denham@ntlworld.com

Web Master

Jonathan Wallace, 50 Cherryburn Gardens
Fenham, Newcastle upon Tyne NE4 9UQ.
Email: jonathan@cherryburn.com

Chairman

Cliff Evans, 10 Pentland Grove, Darlington
DL3 8BA Tel: 01325 466471
Email: cgevans@talktalk.net

Moth Recorder

Terry Coult, 4 Officials Row, Malton,
Lanchester, County Durham DH7 0TH
Email: tcoult@durham.gov.uk

Membership Secretary & Newsletter Editor

Jaci Beaven, 21 West Acres, Alnwick
Northumberland NE66 2QA
Tel: 01665 510713
Email: jacquelinebeaven@btinternet.com

Conservation Officer (Durham)

Vacant

Conservation Officer (Northumberland)

David Stebbings, 20 Purley Gardens, Kenton
Newcastle-upon-Tyne NE3 3DJ
Tel: 01912 859097 Email:
david.stebbing@blueyonder.co.uk

Committee Member

Ken Dawson, 7 Hagg Bank Cottages, Wylam
Northumberland NE41 8JT
Tel: 01661 852928
Email: ken.dawson@ukonline.co.uk

Butterfly Conservation Regional Office (Northern England)

Dave Wainwright, Butterfly Conservation, Low Barns, Witton-le-Wear
Bishop Auckland, County Durham DL14 0AG
Tel: 01913 789216 Email: dwainwright@butterfly-conservation.org.uk

Website

www.northeast-butterflies.org.uk