Chairman's Introduction

As I sit here to write this introduction to our Newsletter it is late summer and the sun is shining, most of our field trips are distant memories, but they are very good memories, I think our field trips are probably the best benefit of membership. We had 5 trips this year, all different, and some better attended than others, as is always the case. You can read about them later and enjoy them all over again (even if you were never on them!).

This is now the seventh edition of the Newsletter I have edited and a milestone publication as we reach issue 10. I hope you enjoy reading it as much as I enjoy putting it together. The backbone of our branch is a good Newsletter, it keeps us all up to date with events and binds us together as a branch. We are, as someone once put it, "A loosely-knit bunch of individuals, of like minded thought, who charge around with nets in the pursuit of pleasure". Who can argue with that? On the subject of membership it is very pleasing to report that our branch membership numbers have made steady upward progress over the last few years. Shortly after I took over the running of the branch the membership took a nose-dive, I now think this was coincidental and no way connected with my appointment but it did my confidence no good at all. Happily the fortunes of our branch have changed for the better and we are now a thriving entity in the great Butterfly Conservation movement, indeed we have grown by around 10% to just under 80, long may it continue. Where do we go from here? More of the same? Try something different? A bit of both perhaps? Watch this space…

Our other major commitment is of course – saving butterflies and moths, the whole reason for our movement.

The butterflies on our reserve at Loch Arkaig seem to have had a good year and we continue to keep in touch with those involved. The distance involved in visiting is slightly daunting for us based in the Inverness area and we failed to visit this year but I suspect we will pay a visit next year (2005). I hope to see you there. Just follow the way markers…

Jimmy McKellar

Loch Arkaig, Nature Reserve

Editorial comment

It is the first of December and most of us are now armchair butterfly recorders but all the subjects are fresh in my mind as I start the process of compiling this milestone edition. I have been busy with the camera and would ask you to visit our website for the colour version of this edition, once it is loaded. It looks so much better than black and white.

We have three very different articles by Roy Leverton which as you would expect are all very readable. The usual eclectic mix from myself and some beefy articles from the others.

I should add that the Newsletter is <u>your</u> magazine and if you think you want to put in an article or comment, however short, I am happy to accommodate you. I try to tidy up all the errors without introducing errors but at the end of the day I take responsibility for anything which slips through, so you need not concern yourself with worries like: is it good enough? Or have I written enough? I will do the worrying for you.

If any of you know a youngster, and by that I mean someone under the age of 50 who would like to become a member please encourage them. We need all the young blood we can get. If you know any "even younger" people who have an interest, consider buying membership for them. I wish someone had bought me a gift like that when I was a youngster. The beauty with this type of gift is it lasts the whole year.

Jimmy McKellar

Above Loch Lait

Peacocks

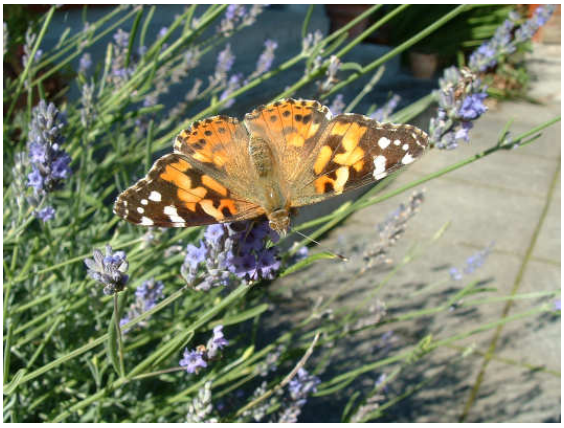
At first I took little notice of the dark butterfly in my garden on 10th June, assuming it was the Red Admiral that had been present for a couple of days. When it settled on the lilac above my head, I glanced up to confirm the identification, only to discover it was actually a Peacock. Admittedly a very worn, faded Peacock, but a Peacock nonetheless. As such, it was the first of its kind to register on my annual butterfly census counts, and also the first I had ever seen here in spring.

Not that there had been many Peacocks here even in autumn: two in 2002 followed by one in 2003. Still, this was three years in a row. Maybe it had now colonised? If so, what a pleasant addition it would be to our impoverished butterfly fauna.

Hopes were raised even further in July, when Tom Prescott and I found literally hundreds of Peacock caterpillars at a site near Grantown in Moray. Great skeins of them, velvet black with red feet, weighing down the sturdy nettles. Surely there were too many to be the progeny of just one female? Barring some disaster, there should be a population explosion in a month or two.

A late Peacock

As autumn approached, I checked the buddleia daily with renewed interest. Sure enough, on 28th August the first perfect Peacock duly appeared. Over the next few days there were more sightings, clearly involving different individuals. Gradually the numbers built, until on 5th September there were 14 at once on the various buddleias spread around our sizeable garden. What sight they were, jostling for the best flower sprays with equally fresh Red Admirals and Small Tortoiseshells, far outnumbering the few Painted Ladies.



Hard to remember that this was Banffshire and not southern England!

Yet had this really been southern England, the Peacocks could already have been over. In Sussex, they emerge in the third or fourth week of July, at least a month earlier than these. Often they begin to hibernate from mid August onwards and all have vanished by the end of that month. September sightings are few, except in cool summers. Thus hibernation can hardly be triggered by low temperatures, since August is often the hottest month of the year. Nectar sources are abundant too. Perhaps the southern Peacocks aestivate to avoid the late summer heat, and their aestivation merges into hibernation? Whereas my Banffshire Peacocks stayed active until cool weather arrived with a vengeance in mid September. The last were three on the 17th.

Personally I am much in favour of global warming. Especially in Scotland, its benefits will far outweigh its disadvantages, whatever the doom-mongers tell us. (Just imagine the fuss if earth's temperature were predicted to *drop* 3°C by the end of the century!) Warmer weather will help most of our wildlife enormously. The arrival of Peacock is one such benefit. Perhaps if we all buy aerosols and aim them at the ozone layer we will gain the Comma too, and thus complete the set.

Roy Leverton

Freshly emerged Peacock

Square-bashing in 2004

2004 was the last year of the five-year update of the Butterflies for the New Millenium project. In 2003 Caithness and Sutherland was targeted for mapping, thanks to financial support from SNH and Butterfly Conservation Highland Members Branch. This year, the area remaining with the most under-recorded squares was Skye. Butterfly Conservation Highland Members Group again generously contributed expenses to allow targeted mapping in this area.

I visited Skye at the end of July, when a period of dry weather was forecast for NW Scotland. I had visited SW Skye two weeks earlier, primarily for distribution mapping of bumblebees, but *Lepidoptera* were also recorded, so this visit concentrated on NW Skye. As many as possible under-recorded squares were surveyed for distribution mapping of any *Lepidoptera* encountered. Special attention was given to 10km squares with no records of the Large Heath and suitable habitat was also visited for the presence of Grayling.

Large heath was only recorded from two 10km squares, although there was much apparently suitable habitat containing the larval food plant, Hare's-tail Cottongrass. It seems to have been a poor year for this species generally, perhaps a consequence of a dry season last year.

Grayling was recorded on coastal heath to the south of Glen Brittle. There were a lot of wet areas and much exposed rock suitable for basking adults. This 10 km square had records of Grayling from the period 1970-82, but no recent records. Other coastal areas were visited but no other Grayling were seen. Much of the coastal land is agricultural, often heavily grazed and not suitable for the Grayling. However the coast to the south of Elgol looked particularly promising, with wet grassy heath with *Erica cinerea* and *E. tetralix* and plenty of exposed peat and flat

rock for basking. This area could be worth looking at in future years for Grayling.

At the end of July, Meadow Browns were very common everywhere and often seen in substantial numbers. However, apart from a few Green-veined White, few other species were observed at this time. Of interest was a group of Painted Lady caterpillars feeding on nettles near Moll. These were presumably the offspring of migrants, which had been fairly widespread in N Scotland earlier in the year. Overall, records of *Lepidoptera* from NW Skye were rather disappointing, with few species recorded. However this probably reflects a rather hostile environment for butterflies, due to a combination of botanically poor terrain and a wet and windy climate.

Elgol – Gill Nisbet

Earlier in the year, I attended a training day led by Tom Prescott for volunteers to look for the Netted Mountain Moth, a BAP Priority species. This was very useful as it is quite easy to confuse this species with the much commoner Common Heath. The Netted Mountain Moth lays its eggs on Common Bearberry (*Arctostaphylos uva-ursi*), on which the caterpillars feed. It can form quite large carpets on the cold dry heaths of the Central and Eastern Grampians. Having learnt to recognise the moth, during the afternoon we spread out across an area of moorland to the east of the A9 near Ralia and found quite a number of the moths. During the next couple of weeks I visited areas with *Arctostaphylos* heath and found the moth in 3 out of 4 places. So perhaps it is not as rare as was previously thought. You need the right people in the right place at the right time! Living in Boat of Garten, I knew that there were extensive mats of Bearberry beside the cycle track, which runs from the village to the school and was very pleased to find the moth there. Incidentally, the margins of this cycle track are also home to another BAP species, the Narrow-headed Wood Ant, two nests of which were discovered there this year.

Another exciting experience I had in Boat this year was a visit to my garden by the Narrow-bordered Bee Hawk-moth (yet another BAP species). I was sitting in my garden enjoying the sunshine and a cup of coffee when I noticed a strange looking bumblebee feeding at flowers on the edge of the patio. 'What on earth is that!' I thought! On closer inspection it turned out to be the Bee Hawk-moth, not a bumblebee at all, but very like one at a distance! It was feeding at flowers of the Fairy Foxglove, (*Erinus alpinus*) and Violas, but unlike a bumblebee it hovered while feeding, instead of landing on the flower. It was wonderful to watch – a very special moment!

Northern Brown Argus – Tony Mainwood

My final significant find of the year was of a Northern Brown Argus on a south-facing bank of the River Findhorn near Ruthven. This butterfly is only found in scattered colonies across S and E Scotland and in the far N of England. This was a new 10km square for the species, just to the north and

west of existing records, but within the known distribution of Common Rock-rose, the larval foodplant. Also new for this square was Peacock, which appears to be consolidating its spread into the heart of the Highlands and succeeding in over-wintering through the recent mild winters.

Gill Nisbet

Change

It is easy to get upset when a favourite butterfly or moth disappears from a site where once it flourished. Inevitably we cast around for the reason, trying to apportion blame. Might it be pesticides or pollution, is it due to habitat destruction, or other human interference?

Sometimes we worry too much. Long-term recording of sites and species gives a different perspective. Not all losses are caused by humans. Change is normal. Colonies flourish or decline; sometimes they die out altogether. That does not really matter, as long new colonies are formed at roughly the same rate. And if a site remains suitable, often it will be recolonised naturally next time the species has a good year.

Tarlair, on the coastal cliffs near Macduff in Banffshire, illustrates this principle. I have been recording here since 1990, long enough to witness several changes in its butterfly population. The first involved Small Blue. This has numerous colonies all along the southern coast of the Moray Firth, including 20 or more in Banffshire. Tarlair seems suitable, with sufficient kidney vetch for foodplant and a topography that provides sheltered, south-facing hollows. Yet I did not see Small Blue there until June 2000, when a sizeable colony suddenly appeared. It did not last. By 2003, it had almost certainly died out. Fortunately the butterfly re-appeared in 2004. This seems to be a regular pattern with Small Blue colonies, perhaps because kidney vetch itself fluctuates in abundance, dependent on erosion to provide the bare ground it needs for successful germination.

Grayling

Grayling is the second butterfly concerned. In our part of Scotland, this is strictly a coastal species, found in localised colonies where the habitat is suitable: dry, grassy areas whether sand dunes or rocky cliffs. Again, Tarlair looked absolutely right, but initially the species was absent. I saw the first two only in July 2003, an exceptionally hot summer. They seemed completely at home, especially when resting perfectly camouflaged on the rocky ledges, tilted over to minimise their shadow. By 2004 they had multiplied and spread further along the cliffs in both directions. Perhaps the only mystery is why Grayling took so long to find a site that so obviously suits it.

Ringlet is the third species to colonise Tarlair during the period in question. Here the situation is slightly different, in that Ringlet has been spreading in north-east Scotland for the perhaps the last 40 years. The first Banffshire record was at Inverkeithny in 1984, 19km from the coast. My home area at Ordiquhill, 11km from the coast, was colonised in 1995. In 2003, I saw the first Ringlet on the coastal cliffs at Tarlair. In 2004, there were dozens, looking somewhat out of place on grassy cliffs without any trees or bushes. The rate of spread works out at about 1km per year, perhaps what one might

expect for a rather sedentary species that makes only short low flights.

Certainly we are lucky to live in Scotland, where habitat destruction caused by agriculture, industry and urbanisation is much less than it is in southern Britain. Also we are benefiting from global warming. Even so, change is natural. Much of it is due to weather, vegetation succession and other factors quite beyond human influence and control. Losses and gains, advances and retreats: these are part of a normal process than has been going on ever since life evolved. Of course we should fight specific threats to important wildlife sites, and do our best to conserve rare species, but let us keep a sense of perspective.

Roy Leverton

Raising awareness of Butterflies and Moths in the Cairngorms

Butterfly Conservation Scotland is pleased to announce a new project running until December 2005 to raise the profile of butterflies and moths in the Cairngorms. An identical sister project will run in Rural Stirling and Lomond at the same time. The projects are being part-financed by the European Community through the Cairngorms and Lomond and Rural Stirling LEADER + programme and Scottish Natural Heritage.

The main aspects of the project are as follows:

1. A programme of “Identification and Recording” workshops for butterflies and moths. These are aimed primarily at volunteers wishing to become involved in survey or monitoring work, regardless of previous skills or experience.

2. A programme of workshops for people working in front-line tourism (e.g. B&B owners, visitor center reception staff, admin staff who take enquiries on the wildlife of the area). These workshops will give an introduction to butterflies of the area and where to see them, and will include a visit to a local butterfly site.

3. A leaflet on the butterflies and some of the day-flying moths of the area and where to see them.

4. "Feasibility studies" for butterfly trails. We will work with local organisations and community groups to help identify potential sites, develop associated interpretation and seek funding.

Julie Stoneman has been appointed the Project Officer, based at Butterfly Conservation Scotland’s office in Stirling. If you would like to get involved or can help advertise workshops, please contact Julie on 0870 7706151 or email jstoneman@butterfly-conservation.org or visit www.butterfly-conservation/bcuk/scotland for the full programme in the New Year.

Julie Stoneman

Food for thought?

How often do we think of one thing and say another, for example, lepidopterists need to be careful not to confuse Green Hairstreak with Green-veined White or substitute Brown-line Bright-eye for Bright-line Brown-eye. Equally when entering data on a spreadsheet beware of the pitfalls of modern technology and the timeless accounting problem of trasposition of numbers. Computers can autofill or copy down and sort but only if the information entered was correct in the first place. I recently wanted to insert a column in a spreadsheet to change six-digit grid references from, for example, NH646459 to NH64 (the ten kilometer square). At first sight this is simple but I soon realised the grid references were not all eight characters long:

NH646459, NH6445 or NH64 for example. So my colleagues at work and I, sat down to agonise over a formula which would avoid human error in converting to 10K squares. It was a labour of love and took us some time but was very rewarding as we were able to solve a few other problems at the same time. Armed with this new tool it dawned on me that we had probably "reinvented the wheel". There are tools and programs for everything. All you have to do is find them. So the next time you have a problem, unless you are as keen as we were, ask around, someone will almost certainly know the answer and be only too happy to help you out.

Jimmy McKellar

Chamomile Shark

Many moths are expanding their ranges northwards, sometimes spectacularly. The first Chamomile Shark for north-east Scotland was caught at Auchnagatt in North Aberdeenshire by Chris Harlow in April 2003. We assumed it was only a stray, but another followed in 2004, with a third caught by Mark Young at Oldmeldrum.

Chamomile is absent up here, but Scentless Mayweed is a more widespread foodplant. It is associated with disturbed ground, particularly new road verges inland and shingle beaches on the coast. There is plenty at Tarlair, near Macduff in Banffshire, so on 13th June 2004 I went there to look for Chamomile Shark caterpillars. This would be a new species for the Banffshire list!

It seemed a long shot. The site was about 40km north of the few existing records. Maybe the moth would not have reached here yet. Even if it had, caterpillars might still be scarce and localised. But I was feeling optimistic, if only because of the fine sunny weather.

In fact, it was all too easy. I found the first Chamomile Shark caterpillar within seconds of getting out of the car. More quickly followed. I stopped my search after counting ten in less than a minute each. Others were easily found on later visits. Little skill was needed. At least when they are young, the caterpillars sit in full view in the centre of a mayweed flower, eating whole chunks of the yellow stamens. The feeding damage is obvious, and the caterpillars themselves are fairly conspicuous despite a reasonable attempt at camouflage. They are greenish white with an intricate dark green herringbone pattern; many are also marked with rose pink. The caterpillar is much more colourful than the grey-brown adult moth, elegant though that is in its own way.

Because they feed so openly, caterpillars in this group are frequently attacked by parasitic flies and wasps. Two of those taken home for rearing succumbed in due course. The parasitoids were sent to Mark Shaw at Edinburgh Museum. As expected, they were generalist species that attack a wide range of hosts; presumably any specialist ones will follow if the moth becomes permanently established here. Hopefully the other caterpillars pupated successfully, inside their strong cocoons of silk and earth, as I am looking forward to seeing the moths next April or early May.

The map for Chamomile Shark in MBGBI vol. 10 shows no dots north of Glasgow, up to 1980. It would be interesting to know how far it has extended its range. Why not try for a new record for your vice-county? Look for caterpillars in June and early July, anywhere there is plenty of mayweed, especially on the coast. If present, they are easy to find and even easier to identify.

Roy Leverton

Peacock Caterpillar

While entertaining a couple of the kids with nets and butterflies on Bunachton Moor on 6 August 2004 we saw a caterpillar moving along the road. Unsure of it's identity we took it home where the girls managed to confirm it as a Peacock. It had been wandering along in the time honoured way looking for somewhere to pupate. It exhibited no signs of the restless behaviour shown by parasitised individuals which I have seen in the past. With a couple of nettle leaves as food we left it for the night. By the following day it had attached itself by a silk thread to one of the leaves. During the morning of the third day it shed its skin and changed into a lovely green chrysalis. It must have done this in the space of a couple of hours as I had just taped the leaf to my desk to allow it to dry off to prevent fungus growing and on returning a short time later it had changed. This change was dramatic and I returned just at the moment when it finally shook off it old skin, it was still wriggling in the fashion they use to loosen the skin. The literature suggested that it would take in the region of two weeks for it to transform into a butterfly. On 19 August I sat down at the computer and became aware that something had happened to the chrysalis, it took a moment to realise that the butterfly had emerged. I took it out for a photo shoot and decided the best thing to do was to leave it in my greenhouse overnight. The following day I left the door open as I could not find it anywhere, I assumed it would find it's own way out. I was then rather surprised to find it still in the greenhouse on the following day (21 August), it flew off strongly when I released it only to have it reappear almost immediately on my buddleia. What was even more surprising was that on 22 August I had three Peacocks at my buddleia. This seems to be a good year for this butterfly.

Jimmy McKellar

Scotch Argus

On 8th August 2004 when the weather was a very warm 24°C we had our second ever visit of a Scotch Argus to Scorguie. The day had been hot and sunny, the heat probably accounts for the visit. I think there is a connection between the heat and the dispersal of this species as I recall it was also fairly hot around the time of the previous visit from this species which was coincidentally on the 8th August 1994.

Scotch Argus

Goat Moth Caterpillars in the Culbin Forest.

On the 26th of September I was out with the family for a walk in the Culbin Forest and went to Cloddymoss and walked down from the car park along the green route. After about half a mile we saw a Peacock butterfly and were aware of a very strong smell of fermenting fruit, or so it seemed. We came to a large old silver birch tree which the smell was coming from and on the side which was open and oozing sap were fifteen Red Admirals.

As we walked away my wife spotted a large pink caterpillar travelling at great speed across the path away from the tree. I picked it up but did not recognise it. I took a picture and put it back down. As I did so I spotted two more of the same type a short distance

away. They were all moving away from the birch tree.

When I got home I checked my Jim Porter book and was delighted to see the very one I was looking for on the front cover. Goat Moth Caterpillar (Cossus cossus) was what we had found and after more reading I discovered it was quite rare, but was known in the Culbin Forest.

Since then I have been made aware that the caterpillars were probably heading away from the birch tree which they had been living in for many years and were about to dig into the ground to over-winter as larvae and later emerge as adult in June or July the next year.

Allan Lawrence

Child's Logic

At the age of 4 yrs my little grandaughter Hilary Charlotte living in Laurencekirk is getting very keen on moths. She found a Quaker on the lawn in the summer and put a stone over it till Grandma should come and see. "Isn't it beeootiful", she said. "And you're the only one who'll like it". Hilary's mum thinks moths will devour her "Next" jumpers and they have 3 cats who appear to devour any moths that dare to come near my moth light at night.

Pru Williams

The Loch Fleet transect

Loch Fleet has for long been recognised as an excellent site for butterflies and over the years SWT rangers have contributed to the national picture by conducting regular counts over a 3km transect. Unfortunately there has not been a ranger since 2001 but this year Helen and I managed to pick up where they had left off and David McAllister also joined in to expand the team of recorders. We didn't start till June so missed the Green Hair Streaks in May but the numbers we encountered went well beyond our wildest dreams.

Part of the Loch Fleet transect.

Our brief was to walk the transect, which goes along the paths from the mouth of Loch Fleet up to the boundary of the reserve at the kart track, once a week in sunny weather without much wind. Our first count on 9th June produced 59 butterflies with 37 Small Heaths and a good showing of 16 of the migratory Painted Lady. By the 22nd the Painted Ladies were up to 72, Common Blues were just starting with 9 counted and the Small Heath count had gone up to 119. We thought that over 250 butterflies recorded on each of the next two counts was pretty good but these figures were totally eclipsed on 29th July when we recorded 744 butterflies including the season's peak counts of 337 Common Blue, 273 Small Heath, 81 Grayling and 30 Dark Green Fritillary. These last two are particular specialities at Loch Fleet. By 22nd August when most of the flowering plants had died down the numbers had dwindled to a mere 44.

Looking back to a few years ago these numbers were not unprecedented. There were for example 651 butterflies recorded on 15th July 1998 of which 392 were Common Blues 122 were Small Heaths and 54 were Meadow Browns (the peak count of Meadow Browns in 2004, however, was only 14 on 18th July). By contrast 2001 was a very poor year had a maximum count of only 59 butterflies – on 1st

August when there were only 2 Common Blues and 33 Small Heaths.

It was undoubtedly a good year for butterflies at Loch Fleet – probably following on from the fine summer weather in 2003 – and it will be very interesting to see how things turn out next year.

Tony and Helen Mainwood

Report from the West Coast 2004

I suppose that the danger of writing an annual "Report from…." article is that it could appear to be very similar from year to year. I think and hope that there have been sufficient differences between the last three years for this not to be the case with my west coast reviews.

The situation is obviously quite different between butterflies and moths. Butterflies tend to be the same species every year and the main interest lies in dates of emergence, population fluctuations and local expansions or contractions of range. On the whole there is little scope for seeing new species although Peacock was an addition to my Lochalsh list in 2003 and Ringlet is a possibility in the future.

By contrast the high number of macro-moth species, ignoring the micros for the present, means that adding new species to one's life list is a constant possibility without having to travel to the far corners of the British Isles or beyond. I must admit that my "twitching" mentality extends only to my local patch and I have little interest in pursuing less common species elsewhere.

Despite having our worst weather since 1998 the year 2004 was another exciting year especially for moths.

BUTTERFLIES

General perceptions can be surprisingly misleading. I was under the impression that it had been a poor year for butterflies and yet on compiling my records to submit to David Barbour I found that my total number of sightings was not far short of the total for 2003 and had only been bettered in one other year, 1997.

My perceptions may have been influenced by the number of people who complained to me that they had seen no, or very few, butterflies during the year. Certainly there was very little good butterfly weather.

I had hoped to visit Kishorn and Applecross to fill in a couple of blank 10km squares for the atlas update but only managed one visit to each square. Brief sunny spells made short visits to local sites feasible but did not encourage long drives to more distant areas. I started a fritillary transect on my local patch and this was only possible because I live on the spot and could dash out for an hour or so during rare sunny intervals. I thought perhaps this had helped to push up my total number of sightings by having a high percentage of my records in or just outside the garden but again this perception was wrong. Analysis of the records showed that 65% of my records were for Carr Brae, exactly the same proportion as in 2003 and significantly less than in 2001 (74%) and 2002 (79%). So the conclusion must be that, despite the weather, it was a good butterfly year!

An extraordinary sighting of a Green Hairstreak near Duirinish by Roger Cottis on

30th March hinted at a continuation of the trend of the previous two years for butterflies to emerge earlier and earlier. However this was not to be and by the end of April two sightings of Green Hairstreak and one Small Tortoiseshell were all that I had managed to record. This contrasts sharply with the eight species recorded during April 2003.

I had not expected to add Orange-tip to my garden list, the garden being at 70m. altitude on steeply sloping ground. However on 12th May a male flew through the garden and had a brief skirmish with a Green-veined White before disappearing into the adjacent woodland. Another surprise was to find three males and two females in open country well away from any woodland and at 161m. altitude near Lochalsh Dam. I had seen a single male Orange-tip at the same site on 2nd May 2002 but had assumed that it was a wandering individual. In fact this was the only site where I saw any females in 2004.

The fritillary transect on Carr Brae produced a record count of 24 Pearl-bordered Fritillaries on 27th May and I had three sightings of singles in the garden. The first 14 Pearl-bordered emerged on 21st May, five weeks later than in 2003, and the last 5 definites were seen on 6th June with one or two possibles on 15th and 22nd June. The area of the Pearl-bordered site is only about one twenty-fifth of a square kilometre. I have never found any outwith this small area yet the population appears to be self-sustaining and viable. The Small Pearl-bordered Fritillary is much more widespread but at the same site the peak count of 20 on 15th June was less than the best Pearl-bordered count. The flight period is longer and this year extended from 31st May to 28th July. The first Dark Green Fritillaries were seen on 28th June and the last one on 25th August, the four on the first date being the highest count. I was disappointed not to record any Dark Green Fritillaries in the garden for the first time since I started keeping records.

It was a better year than the last two for Common Blue sightings despite the poor weather, although I never saw more than three on the one day. A badly worn and faded specimen along the shore at Ard Hill on 6th September was my latest record to date by three days.

Also recorded later than in any previous year were Meadow Brown on 25th August and Small Heath on 14th August.

As usual Green-veined White and Speckled Wood were the most commonly recorded butterflies and once again Scotch Argus was the most numerous butterfly during August.

Painted Lady appeared for the third year running, having only been seen in 1996 and 2000 prior to that, but there were no reports of any large numbers. It was a moderate year for Red Admiral, again with no large numbers involved, and I didn't see any in October, only the second year since 1995 that this has happened. Nevertheless Red Admiral was the only butterfly seen in the second half of September with the last one on the 30th, 15 days later than the last Speckled Wood. The major advance of the Peacock in the Moray Firth area has not been repeated in the west but following on from the first records last year one was seen again at Allt nan Sugh by Rowena and Kenneth Oliver on 1st May.

One of my most interesting site visits was to the Allt Mor Gorge near Kishorn on 14th August. The gorge is included within the Rassal SSSI and is adjacent to Rassal Ashwood, renowned for being the most northerly ashwood in Britain. I accompanied two friends who were visiting the site to look for broad-leaved helleborine. As well as finding a few plants of the helleborine we recorded an impressive nine species of butterfly. Scotch Argus was the only numerous species with more than 50 seen. The other species were 5 Dark Green Fritillary, 3 Common Blue, 2 Painted Lady, 2 Small Tortoiseshell and single Green-veined White, Speckled Wood, Meadow Brown and

Small Heath. There are old records of Pearl-bordered Fritillary at this site and I hope to visit again next May to see whether this species is still present.

MOTHS

If 2004 was a good year for butterflies then it can only be described as sensational for moths.

I added 34 species to my personal checklist of macro-moths taking the total up to 229 and 14 of these were also additions to the Lochalsh list, which now stands at 258. I recorded 195 species during the year, this figure equalling my overall total for the previous eight years.

July was the most productive month with 95 species recorded. This included 40 additions to the overall July list bringing it up to 112 species and so overtaking August, which moved up to 104 with 18 additional species during 2004.

The year started characteristically with lots of Winter Moths and a few Pale Brindled Beauty, Mottled Umber and Chestnut during January. February produced my first records for that month of Clouded Drab on 11th and 12th, an exceptionally early occurrence. The first trapping session of the year on 11th February produced an unexpectedly high catch of 112 moths including 40 Pale Brindled Beauty, 30 March Moth and 36 Chestnut. Roy Leverton has never heard of these moths in such numbers, even in the south of England. He commented that the numbers of Pale Brindled Beauty and March Moth were particularly remarkable bearing in mind that they would all be males. February was also notable for an out of season Silver Y flying indoors in a house in Kyle on the 5th. Whether this was an over-wintering adult or a new immigrant is impossible to know but if it was the latter it could be the earliest ever recorded in Scotland. Inevitably it died a few days later despite being fed on a sugar solution.

Brindled Pug was my first "new" species of the year on 17th March. It was subsequently recorded through the rest of March, April and into May. Presumably I had overlooked this species in previous years but I suspect that it must have been more numerous than usual this year. On 29th March there was a notable count of 28 Small Quaker and on 24th April the Robinson trap attracted my second Lunar Marbled Brown. Perhaps more surprising was an Iron Prominent, a species which I had only recorded in August prior to this year, but in 2004 it was recorded on 24th April, 16th and 27th May, 7th June, 14th and 28th July as well as on 10th and 14th August. Clearly something different was happening, presumably two generations rather than the usual one in northern Britain.

May was a busy month with 52 species recorded, 24 of them being additions to the May list.

The star moth of the month was a Scorched Wing, well to the north of its known distribution.

Like many of the unusual moths attracted by the mv lamp it remained on the ground outside the trap rather than enter the trap and unfortunately it flew off before I could take a photograph. Luckily the Scorched Wing is one of those much-appreciated moths that are unlikely to be confused with any other species so didn't require photographic evidence for confirmation. Amongst the other May highlights were Scalloped Hook-tip, Pebble Hook-tip, Puss Moth, Sallow Kitten and Least Black Arches. I had assumed that the latter was a micro-moth but from my photograph Roy Leverton was able to enlighten me as to its true identity. Roy was also more than a little helpful with identification of the pug species and confirmed the presence of Common Pug, Golden-rod Pug and (in July) Ash Pug from photographs.

The Robinson trap was particularly useful in June when the light nights result in relatively few moths being attracted to lighted windows. 61 species were identified, 22 of them being new for June. A superb Saxon was the highlight but Broken-barred Carpet, Bright-line Brown-eye and Rustic Shoulder-knot

were also new to me. The three trapping sessions during June were interesting for the wide variety of species relative to the total number of moths trapped. All species occurred in low numbers, the most numerous being 10 Brown Silver-line, 7 Peacock, 7 Lunar Thorn and 6 Small Phoenix on 7th and 6 Buff Ermine on 15th.
On 25th June the most numerous species were 4 Buff Ermine and 3 each of Peppered Moth, Mottled Beauty and True Lover's Knot. The trap consistently attracted more Buff Ermine than White Ermine throughout May, June and July. This could explain why I hadn't recorded Buff Ermine before I started trapping last year whereas White Ermine had appeared several times at lighted windows.

As already mentioned July saw the highest number of species. Total moth numbers also increased dramatically with nearly 400 on 14th (including 57 species) and over 300 again on 28th (including an amazing 70 species). Common moths that had eluded me previously were Green Silver-lines on 14th and Peach Blossom on 28th but the moths of the month were V-Pug and Lempke's Gold Spot, both seen on 28th. Again I am indebted to Roy Leverton for guidance on separating *P.festuae* from *P.putnami*. Roy recorded the first Lempke's for Banffshire during 2003 and the two Lochalsh *P.putnami* were almost certainly firsts for Ross-shire and the most north-westerly to be recorded in Scotland. The V-Pug also fell into this category being well north of the distribution shown in Riley and Prior. For once I didn't need help in identifying a pug species as this must be one of the most distinctive of moths. A V-pug was also seen in Kyle by Pat Mucklow at about the same time. Amongst the other new species recorded during July were The Lychnis, The Clay, Light Arches, Gold Spangle, Straw Dot and Small Fan-foot. Nationally scarce moths trapped during July were Barred Carpet and Scotch Annulet, whilst the most numerous moths were True Lover's Knot and Triple-spotted Clay with 58 and 70 respectively on 14th July.

August is a frustrating month for moth trapping. The combination of the large numbers of tricky noctuids and the even larger number of midges that also materialise on good mothing nights takes a lot of the pleasure out of examining the catch. In the end I only operated the trap on two nights compared with five nights during July. However with the daylight hours rapidly shortening, the lighted windows began to come into their own again and it was to


Manchester Treble-bar

lighted windows that the most exciting moths were attracted. A Square-spotted Clay on 8th was followed by a beautiful Manchester Treble-bar on 24th. Yellow-ringed Carpet, another Barred Carpet, Pretty Pinion, two more V-Pugs and a Bordered Beauty were all seen at the windows. The Robinson trap highlights were my second Plain Clay, my first adult Grey Dagger and another Lempke's Gold Spot, all on 14th August, and my second and third Broad-bordered Yellow Underwing on 14th and 30th.

The adult Square-spotted Clay followed on from the discovery of the first ever larvae of this species in Scotland on Carr Brae on 22nd March. This was amazing considering that only one adult had been seen previously, also at our lighted windows, in August 2000. Could I be the only person in Britain to have

Pearl-bordered Fritillary and Square-spotted Clay in the garden?

Square-spotted Clay

September and October were inevitably something of an anticlimax after all this excitement but I had a second generation Striped Twin-spot Carpet on 1st September, my first Lunar Underwing on 5th September, an exceptionally late Green Carpet on 29th October and my only Merveille du Jour of the year on 31st October. Another remarkably late moth was a Double-striped Pug on 2nd November. Waring and Townsend refer to an "occasional and partial third generation in southern England, September-October. One generation in parts of northern Britain, June-July." So what was a Double-striped Pug doing in the north west Highlands in early November?

I had hoped that the Robinson trap would confirm the presence of Scarce Prominent, Brindled Ochre and The Coronet, none of which I had recorded since 1996 or 1997 (Brindled Ochre). I didn't see either of the first two species but it turned out to be a good year for The Coronet. Singles were trapped on two dates in June and three dates in July with two on 28th July. None were seen at the windows, which could explain why I had just the one sighting in eight years prior to the acquisition of a trap.

Away from the garden I failed yet again to locate any Narrow-bordered Bee Hawk-moths or Argent & Sable at former known sites. The big surprise was to find Small Argent & Sable widespread and in good numbers at some sites, especially as I had

The Coronet

not positively identified this species previously. Silver Hook was found at two widely separated sites and some distance from the three other known sites. I also added both Small Argent & Sable and Silver Hook to my garden list during late May/early June. I identified Straw Dot for the first time on 19th July at Nostie but then one also turned up in the garden on 28th July.

It wasn't a particularly good year for migrant moths but a Bedstraw Hawk-moth was found in her garden at Lochcarron by Josephine Dean on 14th August. I saw four Silver Y at the Rassal SSSI on 14th August but otherwise recorded only three singles, all on Carr Brae, including one attracted to light on 24th September. The following day a Dark Sword-grass was attracted by the Robinson trap but settled high up on the wall of the house, only my second record of this migrant species.

An interesting development in 2004 was that Ishbel Cameron started moth-trapping in Drumbuie. As far as I know she is the only other person to do any trapping in Lochalsh except for David Barbour in his 1992 survey of the National Trust for Scotland's Balmacara Estate, which includes Drumbuie. For her first season of serious moth identification Ishbel came up with some superb moths including Map-winged Swift, Barred Carpet, Pretty Pinion, Scotch Annulet and Great Brocade. She also recorded Grey Scalloped Bar and Bordered Grey, but the latter species, being of Nationally Scarce A status, is unlikely to be accepted without photographic evidence. Let us hope that this moth appears again next year.

References:

Riley, A.M. & Prior, G. 2003. British and Irish Pug Moths – a Guide to their Identification.
Harley Books, Essex.

Skinner, B. 1984. The Colour Identification Guide to Moths of the British Isles
Viking, London.

Waring, P. & Townsend M. 2003. Field Guide to the Moths of Great Britain and Ireland,
British Wildlife Publishing, Hampshire.

Brian Neath

Spare a Copper?

I first notice the Small Coppers on the 9th of May in my garden. It's a wild area with some cultivated varieties chosen to benefit bumblebees. The caterpillars of these butterflies feed on sorrels. My garden contains lots of sorrels as they seed easily and I tend not to bother too much trying to weed them out, as they are low growing and unobtrusive. They were around for quite some time in the early part of the year, basking on the lawn or in the border. The border is steep and the topography obviously suites them as it heats up more than the surrounding area due to its sheltered nature. Sadly I did not see fit to record all the dates when they were around though it slowly dawned on me that I had not seen them for some time.

During late summer my wife tried to encourage me to "tidy" this patch but I persuaded her that there may be Small Copper caterpillars in there and we wouldn't want to make them homeless would we? On the 6th of August I recorded another 2 Small Coppers, they must have been the prodigy of my spring visitors. This far north we only get one generation per year (technically known as a univoltine species).

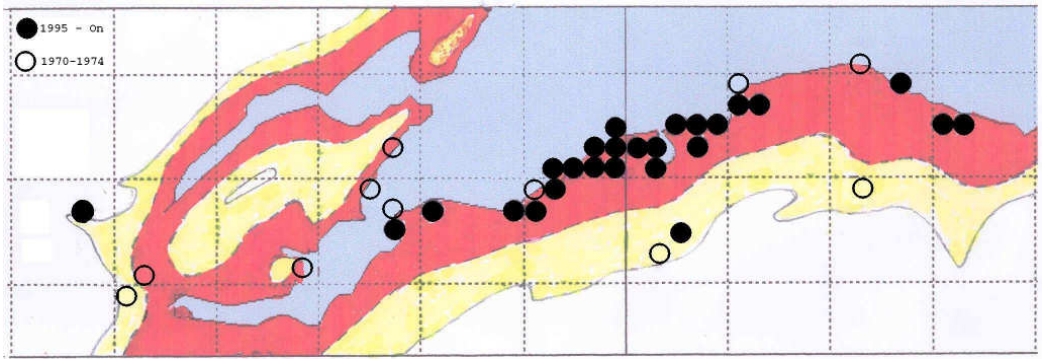
In late summer I saw lots of Small Coppers along the canal tow path but the ones in my garden were mine, I saved their plot and I am very pleased to have done so.

Jimmy McKellar

Dingy Skipper

This distribution map of the Dingy Skipper in and around the Black Isle and Inner Moray Firth area has inspired us to reconsider what constitutes ideal Skipper habitat. Records are shown as solid dots for 1995-onwards and open dots for those 1970-1994.
Map details were copied from a climatic map of Scotland (produced by Birse & Dry, Macaulay Institute, 1970).

The red represents: warm (and fairly warm) dry lowland.
The yellow represents: warm (and fairly warm) rather dry lowland.



Thus the shaded area closest to the shore is the warmest and driest part of our area and the land immediately inland only marginally less so. Dingy Skippers can be found predominantly along the southern shore of the Moray Firth where ideal conditions prevail. It could be argued that this is not the only ideal habitat as they can also be found in Glen Strathfarrar and upper Speyside where topography must be such that it is ideal for the butterflies as they undoubtedly continue to thrive. This leaves us with the problem of reconciling inconsistent facts when you consider these satellite sites do not conform to the same climatic type. Could it be that we are missing some important feature of the areas that is necessary for this species to exist?

There are no recent records from five of the six most westerly sites, which sends out a signal that all is not well there. We checked out the two sites at Muir of Ord but found no evidence of suitable habitat nor any Dingy Skippers. Derek Hulme reassured us that the village site has been built on and the other has become so overgrown that there is now little chance any still remain in the area. On several other occasions we visited the Munlochy Bay headland known as Craigiehowe to discover much the same situation, the area to the south of the headland where Derek Hulme recorded them in the past is now overgrown with bracken, trees and rank vegetation. Neither have we had any reports from Rosemarkie nor Eathie for some number of years, these two sites also look as if they have been deserted.

Where does this leave us? We know that in the normal swing of nature species often contract and expand their range and there is still a lot of coast which could prove suitable if conditions change slightly, so all is not lost just yet. We ought to try checking the southern shore of the Black Isle and possibly even some of the river systems as the sheltered valleys may hold isolated populations yet to be discovered.

Jimmy McKellar and David Barbour