# AGROMYZIDAE NEWSLETTER

# LATEST NEWS FROM THE NATIONAL AGROMYZIDAE RECORDING SCHEME

## A SPECIAL EDITION TO MARK THE FIRST YEAR OF THE NATIONAL AGROMYZIDAE RECORDING SCHEME

# THE START.....

## LAUNCH OF THE SCHEME

The National Agromyzidae Recording Scheme (NRS) was launched back in December 2016 after much deliberation by its organiser, Barry Warrington.

In the weeks before the launch of the scheme, discussions with the good people at the Biological Records Centre (BRC), Dipterists Forum and the known recorders of *Agromyzidae* took place, all of which were extremely positive and certainly underlined the need for such a recording scheme.

After these talks, the (rather daunting!) decision was made to get the scheme up and running. On 14<sup>th</sup> December 2016, the scheme was officially launched via the schemes Twitter account and has gone from strength to strength ever since.



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This newsletter will discuss various aspects of the scheme, from the verification process to which are the most recorded species, as well as hopefully providing some insight into the ins-and-outs of running a recording scheme!

## AIMS OF THE SCHEME

## KEY POINTS

When the decision was made to start the NRS, the following key aims were identified;

1) Collate historical and current datasets;

- gather records from Local Record Centres, Wildlife Organisations and the general public
- work with the BRC (iRecord)
- verify all records were possible
- store all records in a master database

2) Increase public awareness of Agromyzidae;

- utilise the power of social media to increase awareness of the NRS and its work
- produce a monthly newsletter which appeals to anyone interested in Agromyzidae

3) Provide help and support to recorders;

- respond to all queries within 24 hours
- provide different means of contact (email, twitter, telephone)
- Offer training/ID workshops

Although all three aims are equally as important when it comes to running the NRS, providing help and support to anyone interested in *Agromyzidae* is the driving force behind the scheme.

All too often, stories are heard of people been put off contacting 'experts' due to a lack of responses, a feeling of inadequacy or a worry of wasting their time.

The NRS actively encourages people to get in touch and would like to think that everyone who has been in contact with the NRS, by whatever means, for whatever reason, is greeted with a prompt, helpful and friendly response <sup>(iii)</sup>.

Long-term aims include the NRS been able to produce an Atlas or possibly a field guide to Agromyzidae, along with the first training course/ID workshop taking place (this is been discussed for 2018).

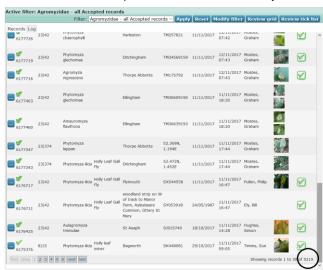
A website (*Descriptive & illustrative guide to UK Agromyzidae*) is currently under development but due to the time and effort required to complete this, the site will not be ready for the foreseeable future.

# IRECORD

#### SOURCE OF CURRENT RECORDS

At the time of the NRS been launched, there were almost 4,000 unverified *Agromyzidae* records within iRecord!

Needless to say, it took *many* hours to go through each and every one but eventually, these were cleared and as it stands, at the time of writing, there are over 5,000 'accepted' records within the system.



As regular contributors will know, the NRS stipulates that all records must be supported by an image of the leaf mine. Unfortunately, many of the initial 4,000 records were not supported, therefore been rejected and not been incorporated into the NRS Database.

The requirement for supporting images is of course in no way casting doubt over a recorders ability, it is purely to aid the verification process and help build our ever increasing knowledge of *Agromyzidae*.

If records were accepted 'blindly', the door is wide open for erroneous data to creep into the database. Thankfully, most contributors are in total support of this requirement, which is very much appreciated indeed.

The NRS receives notifications from iRecord when records have been submitted and these are then scrutinized (usually) the same day.

If a record is incorrect, the NRS will always let the recorder know the reason why and if appropriate, the correct determination.

Although iRecord has standard templates for dealing with records in terms of accepting/not accepting or querying records, the NRS feels it's important to apply the personal touch and will endeavor to type a personalised message to the recorder. During the twelve months the NRS has been active, the following 'accepted' records were submitted via iRecord;

Month	No. accepted records
December '16	171
January '17	130
February	139
March	105
April	102
Мау	134
June	106
July	172
August	168
September	241
October	347
November	169
TOTAL	<u>1,984</u>

The records received during December 2016 were boosted by a request put out via the NRS Twitter account for sightings of the Holly leaf-miner, *Phytomyza ilicis*.

Despite the NRS been active for only a few days, this resulted in almost 100 records been received in just a week, which really did exceeded expectation.

With regards to incorrect/not accepted records, a total of 82 records were received during the year, the majority of these were able to be re-determined and then accepted.

An increase in awareness of the NRS, along with the production of the monthly newsletter, is hoped to have influenced the increase in number of records received and the number of species recorded during the year!

Records are received from England, Northern Ireland, Scotland and Wales, from the West Cornwall (VC1) to Shetland (VC112).

Naturally, there are some areas of the UK which records are not received from and this will be discussed later in the newsletter.

Over 150 individuals have submitted records via iRecord, with approximately a third of these being regular contributors.

They range from retired folk with allotments to professional ecologists but each one is really helping to build our understanding of *Agromyzidae*.

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Here is a comprehensive breakdown of each iRecord contributor to the scheme and the number of records they have submitted (as at 20.xi.2017);

they have submitted (as at 20.xi.2017);		Andy Godirey	
Recorder	No. of records	Peter Smith	8
Recorder	submitted	Lynn Read	8
		Elaine Wright	8
Andy & Melissa Banthorpe	158	Mike Higgott	7
Graham Moates	112	Christian Owen	7
James McCulloch	108	Stephen O'Donnell	6
Sam Thomas	106	Adam Parker	6
Bill Ely	96	Sarah Bebb	5
Robert Homan	91	David Brice	5
James Emerson	86	Sue Byrne	5
Graham Watkeys	64	Paula Lightfoot	5
Graham Bell	62	Pete Mella	5
Gary Hibberd	50	Alice Parfitt	5
Sally Luker	47	R. H. L. Disney	5
Ryan Mitchell	47	David Slade	5
Richard Comont	41	Geri Thomas	5
Rodney Monteith	38	Helen Bell	4
Stuart Ogilvy	35	Paul Bowyer	4
Mike Shurmer	31	Paul Challinor	4
Kate Wright	31	D. de Courcy Henshaw	4
Geoffrey Wilkinson	29	David Gould	4
Jacob Everitt	28	Gary Hedges	4
Kevin Rylands	27	Wil Heeney	4
lan Andrews	24	Annie Irving	4
Laurie Jackson	21	Lee Johnson	4
Neil Gregory	19	Steven Lewis	4
Mike Lush	19	David Nicholls	4
Jon Mortin	18	Paul Parsons	4
Graham Calow	17	Pem'shire Rec Group	4
Harry Rutherford	16	Hilary Perry	4
Richard Shillaker	16	Phil Playford	4
Andrew Watchorn	15	Philip Pullen	4
Graeme Davis	14	Mark Steer	4
Saharima Roenisch	14	Sue Timms	4
David Fotheringham	13	Aaron Woods	4
Peter Hall	13	Andy Musgrove	3
Tim Hodge	13	Pete Boardman	3
Martin Harvey	12	Patrick Bonham	3
Annie & Bob Haycock	12	Howard Burt	3
Malcolm Jennings	12	Liam Crowley	3
Calum Urquhart	12	James Harding-Morris	3
Neal Gates	11	Glamorgan Botany Group	1
Dave Higginson-Tranter	3	David Inward	1

Simon Hughes

Andy Godfrey

David Basham

Edward Jackson

Stephen Foster

Robert Jaques	3	Jane Gilbey	1
Craig Mabbett	3	Keith Fowler & Jim Cresswell	1
Steve Mathers	3	Simon Knott	1
Claire Mayhew	3	Mariel Lubman	1
Liam Olds	3	Marco McGinty	1
Andrew Skotnicki	3	Samuel Millar	1
Stephanie Tyler	3	Richard Moyse	1
Karen Wilkinson	3	David Notton	1
Abdon Wildlife Group	2	Laura Palmer	1
Alan Cann	2	Robert Pennington	1
Ryan Clark	2	Phoebe & Candice	1
Derek Whiteley	2	Annie Pickering	1
Rich Edwards	2	John Pitts	1
Mark Evans	2	Jonathan Sadler	1
Sharon Flint	2	Chris Shortall	1
Gail Quartly-Bishop	2	Richard Shotbolt	1
Gary Lowe	2	Ali Shuttleworth	1
Ted Gaten	2	Bob Simpson & Lee Johnson	1
Cliff Henry	2	Mark Skevington	1
lan Parker	2	Terry Slattery	1
Christopher Iles	2	Robert Smith	1
Keith Kerr	2	Catherine Thomson	1
Ben Mapp	2	Paul Tinsley-Marshall	1
Stephen McWilliam	2	Stuart Warrington	1
Kate Nightingale	2	Stephen Weeks	1
Mark Peacock	2	Sarah West	1
Mark Pollitt	2	Steve Whitbread	1
George Reiss	2	Emma Williams	1
Brad Scott	2	Steve Williams	1
Peter Sturgess	2	Graeme Wilson	1
Susan Ansell	1	Richard Wilson	1
Ashleigh Whiffin	1	Russell Wood	1
Martin Bell	1		
Suzanne Belshaw	1	A <b>huge</b> thank you to every single p	erson and group
L Jackson & M Blencowe	1	who has and continues to contribut	
Simon Braidman	1	iRecord. Your records really do hel	p us to gain a
James Calow	1	much greater understanding in tern	
Pauline Campbell	1	and distribution trends of these fase	-
Charlotte Haylock	1	The images you include also help o making determinations, something	

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I he images you include also help other recorders with making determinations, something which has been mentioned by many of the people just starting out in recording Agromyzidae.

Keep up the good work folks and keeping sending in those records - next year, maybe you could aim to beat your 2017 number of records submitted!!?

As mentioned earlier in the newsletter, the NRS receives records from all over the UK via iRecord (as at 20.xi.2017);

VC	County	No. of	41 12	Glamorganshire
vo	County	records	42 45	Breconshire Pembrokeshire
1	West Cornwall with Scilly	55	45 46	Cardiganshire
2	East Cornwall	1	40 47	Montgomeryshire
3	South Devon	47	47 48	Merionethshire
4	North Devon	5	40 49	Caernarvonshire
5	South Somerset	1	49 50	Denbighshire
6	North Somerset	9	50 51	Flintshire
7	North Wiltshire	4	53	South Lincolnshire
, 8	South Wiltshire	1		North Lincolnshire
9	Dorset	26	54 55	
у 10	Isle of Wight	4	55 56	Leicestershire (with F
11	South Hampshire	- 21		Nottinghamshire
12	North Hampshire	17	57 59	Derbyshire
13	West Sussex	79	58	Cheshire
13 14	East Sussex	79 76	60 61	West Lancashire
14	East Kent	5	61	South-east Yorkshire
15 16	West Kent	15	62 62	North-east Yorkshire
17	Surrey	90	63	South-west Yorkshire
18	South Essex	3	64	Mid-west Yorkshire
18 19	North Essex	3 16	65	North-west Yorkshire
		19	66	County Durham
20	Hertfordshire		69	Westmorland (with F
21	Middlesex Berkshire	15	70	Cumberland
22		8	72	Dumfriesshire
23	Oxfordshire	49	73	Kirkudbrightshire
24 25	Buckinghamshire	13	75	Ayrshire
25	East Suffolk	27	76	Renfrewshire
26	West Suffolk	7	80	Roxburghshire
27	East Norfolk	152	81	Berwickshire
28	West Norfolk	79	82	East Lothian
29	Cambridgeshire	19	83	Midlothian
30	Bedfordshire	108	85	Fifeshire
31	Huntingdonshire	7	86	Stirlingshire
32	Northamptonshire	2	87	West Perthshire
33	East Gloucestershire	77	90	Angus
34	West Gloucestershire	7	91	Kincardineshire
35	Monmouthshire	18	92	South Aberdeenshire
36	Herefordshire	58	103	Mid Ebudes
37	Worcestershire	34	107	East Sutherland
38	Warwickshire	11	110	Outer Hebrides
39	Staffordshire	14	111	Orkney
40	Shropshire	39	112	Shetland

VC	County	No. of records
41	Glamorganshire	84
42	Breconshire	49
45	Pembrokeshire	18
46	Cardiganshire	5
47	Montgomeryshire	1
48	Merionethshire	2
49	Caernarvonshire	5
50	Denbighshire	4
51	Flintshire	9
53	South Lincolnshire	2
54	North Lincolnshire	5
55	Leicestershire (with Rutland)	76
56	Nottinghamshire	17
57	Derbyshire	34
58	Cheshire	6
60	West Lancashire	6
61	South-east Yorkshire	58
62	North-east Yorkshire	37
63	South-west Yorkshire	7
64	Mid-west Yorkshire	38
65	North-west Yorkshire	1
66	County Durham	1
69	Westmorland (with Furness)	5
70	Cumberland	61
72	Dumfriesshire	2
73	Kirkudbrightshire	2
75	Ayrshire	2
76	Renfrewshire	9
80	Roxburghshire	1
81	Berwickshire	6
82	East Lothian	1
83	Midlothian	5
85	Fifeshire	2
86	Stirlingshire	2
87	West Perthshire	3
90	Angus	18
91	Kincardineshire	2
92	South Aberdeenshire	7
103	Mid Ebudes	1
107	East Sutherland	1
110	Outer Hebrides	1
111	Orkney	6
112	Shetland	1

Although iRecord does show *Agromyzidae* records for some of the VC's below, these were all before the NRS was launched and were not supported by images or it was not possible to verify based on the information provided. Therefore, based on this, the following VC's have no verified iRecord data for *Agromyzidae*;

	•		
VC	County	VC	County
43	Radnorshire	94	Banffshire
44	Carmarthenshire	95	Moray
52	Anglesey	96	E. Inverness-shire
59	S. Lancashire	97	W. Inverness-shire
67	S. Northumberland	98	Argyllshire
68	N. Northumberland	99	Dunbartonshire
71	Isle of Man	100	Clyde Isles
74	Wigtownshire	101	Kintyre
77	Lanarkshire	102	South Ebudes
78	Peeblesshire	104	North Ebudes
79	Selkirkshire	105	W. Ross & Cromarty
84	West Lothian	106	E. Ross & Cromarty
88	Mid Perthshire	108	West Sutherland
89	East Perthshire	109	Caithness
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93 N. Aberdeenshire

Most of these unrecorded areas are quite remote and most likely have few residents. Nevertheless, it would be fantastic if the NRS could have 'dots' for each VC in the UK! So, if you know anyone living in these areas or are planning a holiday in the VC, please try and gather some records, even *Phytomyza ilicis* would be fantastic!

## THE SPECIES......

#### IRECORD SPECIES RECORDED

Now on to the subject of the actual species of *Agromyzidae* you have recorded and submitted to the NRS via iRecord.

At present, there are around 400 species of *Agromyzidae* which have been recorded in the UK, not all of which are actual leaf-miners.

During the year, 125 species were recorded by iRecord users.

The table opposite shows the top 40 species recorded in the first year of the NRS (as at 20.xi.2017).

Species which have featured in the NRS Newsletter or mentioned via Twitter are highlighted in yellow.

Species	No. of records	% of total records
Phytomyza ilicis	826	43.22
Phytomyza agromyzina	56	2.93
Phytomyza ranunculi	50	2.62
Liriomyza amoena	43	2.25
Phytomyza chaerophylli	41	2.15
Phytomyza lappae	40	2.09
Agromyza alnivora	38	1.99
Liriomyza eupatorii	35	1.83
Agromyza anthracina	34	1.78
Phytoliriomyza melampyga	33	1.73
Agromyza nana	31	1.62
Chromatomyia primulae	30	1.57
Chromatomyia aprilina	25	1.31
Liriomyza strigata	25	1.31
Phytomyza minuscula	24	1.26
Amauromyza verbasci	23	1.20
Amauromyza flavifrons	22	1.15
Agromyza alnibetulae	21	1.10
Aulagromyza luteoscutellata	20	1.05
Phytomyza glechomae	20	1.05
Agromyza flaviceps	19	0.99
Agromyza idaeiana	19	0.99
Amauromyza labiatarum	19	0.99
Chromatomyia lonicerae	19	0.99
Aulagromyza hendeliana	14	0.73
Chromatomyia scolopendri	14	0.73
<mark>Phytomyza hellebori</mark>	14	0.73
Cerodontha denticornis	13	0.68
Liriomyza congesta	13	0.68
Liriomyza flaveola	13	0.68
Phytomyza ranunculivora	12	0.63
Agromyza abiens	11	0.58
Phytomyza angelicastri	11	0.58
Agromyza ferruginosa	9	0.47
Agromyza sulfuriceps	9	0.47
<mark>Cerodontha iridis</mark>	9	0.47
Chromatomyia nigra	9	0.47
Phytomyza astrantiae	9	0.47
Chromatomyia syngenesiae	8	0.42
Phytomyza conyzae	8	0.42

The Holly leaf-miner, *Phytomyza ilicis*, is way ahead in terms of the number of records received. However, during the past three months, its dominance is lessening as other species are been recorded more frequently.

After the monthly newsletters have been sent out to those who subscribe, the species highlighted in the 'what's about' section appear to be well recorded during the following weeks.

At the time of launching the NRS, there were close to two hundred records of the Hogweed miner, *Phytomyza spondylii*, in the iRecord dataset.

The first NRS newsletter back in June, along with the NRS Twitter account, made people aware that these mines cannot be distinguished from those of *Phytomyza pastinacae* unless adult males were reared from collected material.



Phytomyza pastinacae/spondylii mines

To start with, a few people were rather disgruntled that their records were no longer valid as they were not aware that there was another possible causer.

Since the NRS made people aware, no further records have been received for *Ph.spondylii*. As a side note, the NRS Organiser has only ever reared *Ph.pastinacae* from these mines on Hogweed!

The majority (98%) of the total records uploaded to iRecord are of larval mines. However, there are a few recorders who have dabbled in rearing and/or dissecting collected adult material.

Previous NRS newsletters have covered rearing and dissecting adult material and if more recorders were thinking of taking the 'next step', the NRS is always happy to help, answering any queries or issues you may have. In conclusion, iRecord forms a vital part of the NRS in terms of receiving records and interacting with the recorders of *Agromyzidae*.

The initial set up, clearing the backlog of records and having stipulations in place for accepting records has caused a few headaches along the way, with the latter point possibly causing some recorders to be rather aggrieved!

However, as it stands today, the system in place works well and it ensures that the NRS Database contains records which are close to 100% accurate as is possible.

The NRS would like to thank Martin Harvey at the Biological Records Centre for all his help during the past twelve months.

Finally, of course, thank you to all the iRecord users who are providing their data to the NRS. It is hoped that the way in which records are verified and acknowledged is well received by the users but if you do have any issues, please do get in touch.

# RECORDS FROM OTHER SOURCES

# LOCAL RECORD CENTRES, ORGANISATIONS AND INDIVDUALS

The NRS Database currently has over 26,000 records, 65% of which have been collated from Local Record Centres (LRC), Wildlife Organisations, County Recorders (CR) and individual recorders.

At the start of the year, all the known LRC's in the UK were contacted. Some had sadly closed, some never responded to the emails, whilst some were not prepared to provide their datasets.

The end result was that datasets were obtained from twenty-three LRC's, resulting in 12,500 records been received.

Datasets from three wildlife organisations were received, whilst records from nine individuals (inc CR) were kindly passed to the scheme.

Records and datasets continue to be sourced.

Unfortunately, it soon became apparent that a high percentage of the total records obtained from these sources were not verified.

Naturally, some of these will be correct with supporting material if needed, however, a lot were historic with no supporting evidence.

Therefore, a view had to be taken as to the likelihood of a record been correct. Any records which were considered dubious or incorrect were highlighted and removed from the NRS Database.

These are to be queried, if possible, at source, and dealt with on an ongoing basis.

Below lists the LRC's, wildlife organisations and individuals who kindly passed their records to the NRS;

Source	No. of records
LRC's and organisations;	
Bucks & Milton Keynes ERC	324
Bristol Regional ERC	326
CEDaR (NI)	233
Dorset ERC	284
EcoRecord	116
ERIC	52
Essex Field Club	2,965
Gloucester Wildlife Trust	120
Gr. Lincs Nature Partnership	208
Highlands Biological Recording Group	465
LR ERC	186
LWT GiGI	906
Merseyside BioBank	428
North East Scotland BREC	195
NEYEDC	290
Norfolk Biology Information Services	140
RECORD	3,700
RHS	242
Rotherham Records Centre	3,772
SER	168
SEWBReC	405
Sheffield Local Records Centre	47
Suffolk Biodiversity Info Services	122
South West Scotland EIC	31
W & E BRC	29
West Yorkshire Ecology Services	38

Source	No. of records
<u>Individuals;</u>	
Dr Andy Nunn	31
Graeme Lyons	21
Jenny Seawright	17
John Coldwell	419
John Newbould	17
Laurence Clemons (CR)	4,396
Peter Vincent	9
Rob Edmunds	124
Robert Homan	861

The NRS would like to say a massive thank you to all of the LRC's, organisations and individuals listed above who kindly agreed to have their data as part of the NRS Database.

# HELP AND SUPPORT

## A KEY ROLE OF THE NRS

As mentioned at the start of this newsletter, providing help and support to those who record *Agromyzidae* is a key aspect of the NRS.

It can be rather daunting when people first start recording a new subject. They are often fearful of making mistakes, not sure where or who to approach for help or are very wary about asking for help from 'experts'.

Of course, it is not only beginners who may feel like this! People with more experience also need help from time to time and not feeling comfortable asking for assistance often leads to them giving up on recording a particular subject matter.

The NRS is always happy to provide all the help it can, in a way which hopefully makes the individual feel comfortable asking for help or assistance.

Since its launch, the NRS Twitter account has answered almost 300 queries, most of which are responded to within an hour.

The NRS has also received over 150 emails, covering various aspects, again, most of which are answered within an hour.

Hopefully, the speed of response and the friendly, enthusiastic way in which queries are handled is appreciated by everyone concerned. In the previous newsletter, it was mentioned that a training course/ID workshop may be offered in 2018. This is still being discussed and the content of any course would need some careful consideration.

Early suggestions range from a course for total beginners, with the focus being on identifying Agromyzid mines from other causers to one covering dissection of adult material.

Once a decision has been made, the news will be announced via the newsletter and the NRS Twitter account.

## READERS THOUGHTS AND COMMENTS

#### WORDS FROM THE PEOPLE WHO USE THE NRS

In the last newsletter, the NRS asked for people to get in touch to pass on their thoughts, comments and suggestions on how NRS has performed and could be improved.

Here's what you have had to say!

#### James Emerson writes;

## "A league table....

My suggestion is that in the monthly newsletter you could include one or two league tables (number of records received and/or number of species recorded) and rank the counties with the most records from that month.

Depending on how many counties have active recorders this could be a complete list or a top ten.

The reasons for doing this are twofold, linked to increasing recorder motivation and harnessing natural competitiveness.

At one end of the scale you could have people keen to keep 'their' county ahead of a rival county (e.g. Norfolk & Suffolk, Cornwall & Devon etc.).

After a few months it might become apparent which counties contribute similar numbers of species/records, and recorders in those counties may also develop a friendly rivalry.

At the other end of the scale it could highlight counties where you receive very few records from.

This might encourage passive newsletter readers (i.e. those who have an interest but are yet to take the plunge and submit records) to start recording, by showing how valuable any sightings from their part of the country are. Recording Scheme feedback....

Despite having a general interest in wildlife since childhood, until the past few years I had only recorded a handful of leaf miners.

Recording events featuring members of our county moth group had encouraged me to develop an interest in lepidopteran mines a few years ago, but it wasn't until the Agromyzid Recording Scheme was launched that I began to look seriously at dipterous leaf mines.

At the time of writing I have submitted 77 verified records of 37 species (plus several more aggregates) during 2017, as opposed to six records of six species previously.

I attribute my developing interest and knowledge in no small part to the responsive way that Barry has run the recording scheme.

As a beginner it is easy to become discouraged or not seek help when you have made a mistake.

The quick ID help via Twitter and email, very fast iRecord verifications and useful feedback when errors have been made have all contributed to making recording Agromyzids a positive experience.

The introduction of monthly newsletters, in particular the 'what to look for this month' feature has also been a welcome learning aid. I'm now looking forward to spring, when I can look for species that a year ago I didn't even know existed!".

#### James McCulloch says;

"I would most certainly recommend the *Agromyzidae* as a starting point for any naturalist wanting to properly immerse themselves in the world of Diptera.

It's highly satisfying sending records into the Scheme knowing that they'll be used for studies in the future.

It's been brilliant to see how the Scheme has evolved over its first year, and I'm sure it will continue to increase in popularity and increase in volume of records as well!

For me the scheme has been incredibly supportive of me as I learn about this family of flies, and has stimulated me to go out recording even during my current busy school life".

## Graham Calow writes;

"I've found recording Agromyzidae leaf-mines via the Agromyzidae Recording Scheme really rewarding.

Not only does it offer me the means of adding a significant number of new species to my VC55 list, but also extends the recording season into what would normally be the fairly quiet months of September, October and November.

It is so convenient, as almost every lane and hedgerow has potential host plants, even my own garden from time to time.

I was able to use the British Leafminers website to help with identification, but when the possible causer looked like a member of the Agromyzidae family I found that the Agromyzidae Recording Scheme provided both the means of adding my records to the national database (via iRecord) and, equally importantly, the scheme organiser Barry Warrington was willing to check my images to give me the reassurance of expert confirmation before I added the records.

Of course there are quite a number of mines that could not be identified from images alone, but these disappointments were more than offset by the new species that I was able to record".

#### Lynn Read says;

"I now find myself looking at every plant I pass for signs of leaf-mines, I can even identify a couple myself now thanks to the leaf-mine photographs and species information in the newsletter.

I have also collected a few tenanted mines and have had pupariums emerge on a couple of occasions and have passed them on to the schemes organiser Barry Warrington. He has identified several from photographs for me too (which is no mean feat given the quality of my photographic skills!).

The scheme really has helped me develop and learn more about leaf-mines and it is good to know the records I make are being used to gain a greater understanding of leaf-miners".

#### Laurie Jackson writes;

"I can clearly remember flies being one of the groups that really sparked my interest in wildlife as a child.

It is only in the last few years though that I have begun getting to know this fantastically diverse order, so when I stumbled across the Agromyzidae Recording Scheme this summer, I was keen to find out more. Barry has been fantastic in supporting my fledgling recording efforts - sending me photographs of mines for comparison with my own, providing clear explanations of key features, and even answering identification questions when I sneaked over a photo of an *Anthomyiidae*! And all this with gentle encouragement and a sense of humour about the array of dodgy, crumpled leaf photos I have sent his way.

The elements of this scheme that really work for me are the helpful feedback on records that will hopefully refine my skills, as well as the tips in the newsletter about what to look out for in the coming weeks, and updates about the interesting finds that others have made.

It is also great to hear that there are plans afoot for a training workshop next year.

Whilst I never need much encouragement to get outside, this scheme has helped me to notice even more as I wander through the world.

Congratulations Agromyzidae Recording Scheme on such a successful first year!".

#### Sam Thomas emailed in;

"As someone who has dabbled in recording *Agromyzidae* for a few years I was very pleased when the scheme was set up. Barry's rapid and supportive responses to queries and iRecord entries has inspired me to dedicate much more time to recording *Agromyzidae* since the scheme's inception.

Thanks to the scheme's support I've now recorded 70 species of *Agromyzidae* and hope this total will continue to rise as I undertake more dissections and start attempting to rear more material.

I've found the newsletters very helpful both for the features on breeding and dissecting techniques and for inspiration on what to look for when through the well illustrated 'what's about' and occasional 'record request' sections.

October's 'record request' prompted me to look at lots of Ash and turned up my most interesting find to date; a large population of *Aulagromyza heringii* on planted *Fraxinus angustifolia* 'Raywood' in Oxfordshire.

I'll definitely be attending the proposed *Agromyzidae* workshop at Berrycroft Hub (just down the road from me). Personally I'd find some content around rearing and dissection particularly useful.

A few suggestions follow.....

"....Given the often confusing or conflicting information on the major websites and in the books something that I think would be really useful would be a draft list indicating which species can be identified from the mine or examination of the larva / pupa and those that have to be reared.

Something like the miner aspect of the Micro-moth Grading Guidelines

(www.mothscount.org/text/73/Guidance\_notes.html).

This isn't to suggest that this would in any way replace verification but it would be a helpful initial source of information in situations like that of *Phytomyza vitalbae*/*Ph.fulgens* where the websites suggest they can be separated based on mines but scheme experience shows this to be untrue.

The coverage of *Agromyzidae* in the recent Provisional Assessment of the Status of Acalyptratae flies is limited with only two species assigned conservation status and a further ten species mentioned as 'recent additions to the British fauna, some of which may qualify for a conservation status in future'.

In terms of targeting recording effort it would be interesting on an unofficial basis to have an indication from the scheme's perspective of which other species may be genuinely rare or uncommon.

As well as this perhaps an update on the ten recent additions as some seem common (Phytomyza hellebori) or very common (Aulagromyza luteoscutellata) where I record whereas some, I would presume, have been recorded very little if at all since their addition to the UK list.

I'd also be interested to see any information on recording methods and successes / failures relating to finding the non-leafmining species; the stem-borers, gall-causers and wood and seed feeders.

Overall I've been very impressed with the high activity and responsiveness of the scheme and I know that I'm far from the only person to have been inspired to record more Agromyzids".

## Jenny Seawright says;

"I stumbled into recording Agromyzidae mines by accident when I spotted fly-mines on some Gromwell (Lithospermum officinale) I was searching for larvae of the micro moth Ethymia dodecea in Dorset last summer.

Internet research suggested Agromyza lithospermi and I contacted Barry Warrington to confirm it. As a result of his enthusiasm, I now find myself deliberately looking for Agromyzidae mines when recording other taxa and it makes all the difference knowing my (frequent!) mistakes will be rapidly corrected!

The Scheme newsletters are very interesting but not being a fan of Twitter I would find a forum more helpful as it can be very informative to see other people's photographs and identification requests".

Andy Banthorpe has the following to say;

"I have found this scheme very useful. I had been trying to identify some Agromyzid leaf mines myself using on-line resources but when not sure I didn't really have anywhere to go to check.

Having Barry running this has meant that I have someone to go to with queries and it has encouraged me to submit my records which is so easy on my Android phone using the iRecord app or via the web if I have to scan leaves.

The newsletter keeps me up to date and inspires me to look for topical species that I would not think of searching for. I'm looking forward to the 2018 season already (along with looking of Phytomyza ilicis in the winter)".

Thank you to everyone who sent in their thoughts and comments on how they have found the scheme, they are very much appreciated indeed. The feedback is fantastic and it is great to know that how the scheme is being managed is encouraging you to get out there and record *Agromyzidae*.

The NRS will certainly implement some, if not all, of the suggestions you have discussed.

Finally, a big thank you to everyone within this newsletter, keep those records coming!

# CONTACT

IF YOU HAVE ANY QUESTIONS OR WOULD LIKE TO KNOW MORE ABOUT THE SCHEME, PLEASE DO GET IN TOUCH WITH US;



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