Why I Joined the Twitterati: Blogs, Tweets & Talks - Making Entomology Visible

Simon R Leather

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TF10 8NB
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@Entoprof







Overview

- How it all began (pre Twitter)
- What I do
- Why?
- Outcomes



From then to now



NB Butterfly





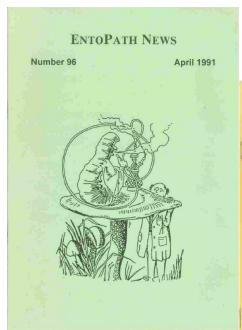
Chinery



Public Engagement - Then





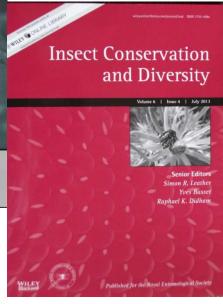


Editing







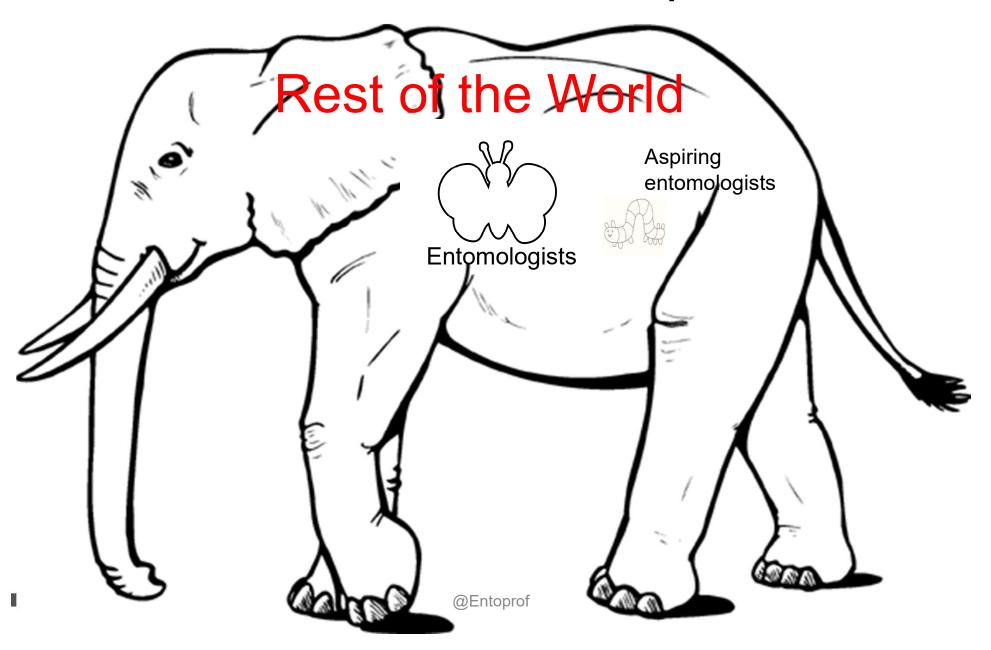




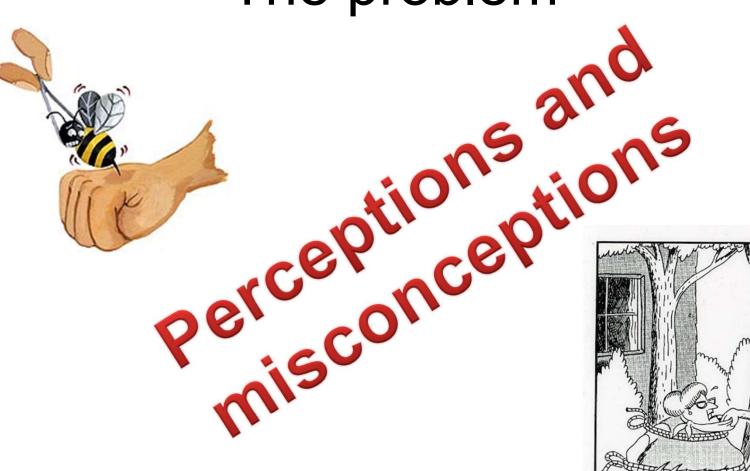
Training - M.Sc Entomology



BUT, limited in scope?



The problem





"Aphids! Aphids, Henry! ... Aphids are loose in the garden!'

Funny, but wrong





Oh dear!







Ignorance

HorticultureWeek

Interview - Dr Mark Spencer, curator, Natural History Museum Department of Botany

By Gavin McEwan Friday, 30 July 2010



"Even if the Government decided to put natural history on the primary curriculum, how would it do so with teachers who don't have the basic skills? They are often terrified of the natural world - they scream at the sight of insects and tell the children 'don't touch'. The whole point is to engage them, but when people are frightened of handling soil, then we have a problem."



No excuse for this!



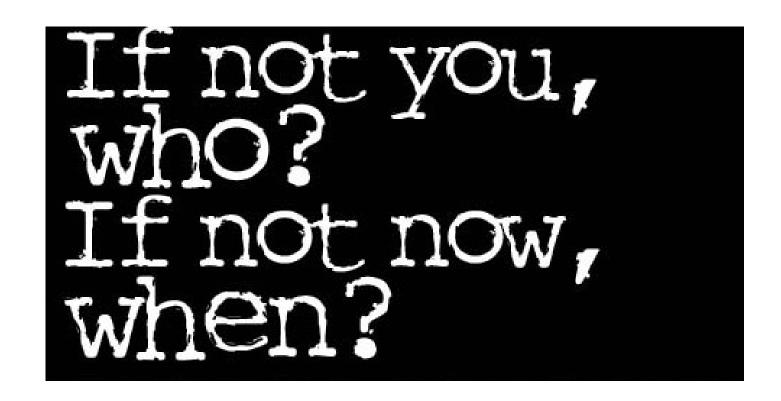


15th August 2010

.....disgusting hoverflies, hoovered them up, despite knowing that the adults are harmless and larvae good for gardens. I really hate insects apart from bumblebees especially in the kitchen



No use just complaining







Biodiversity in an urban setting









Death to polar bears & pandas?

Simon R Leather Division of

Biology, Imperial College London, Silwood Park Campus, Ascot SL5 7PY







Biodiversity: Think small and local?

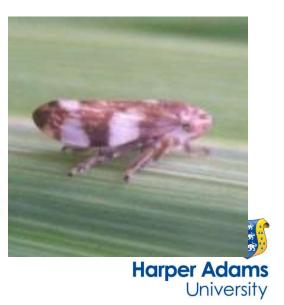




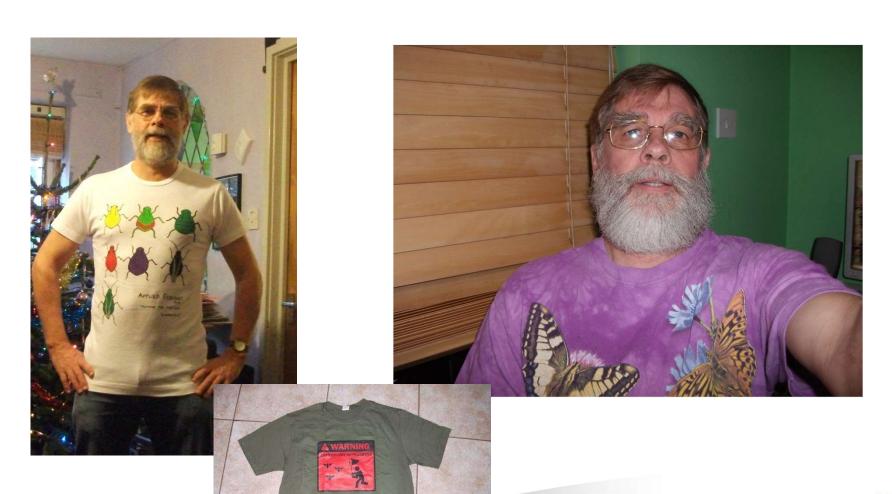
@Fntoprof

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Advertising with T-shirts



@Entopr

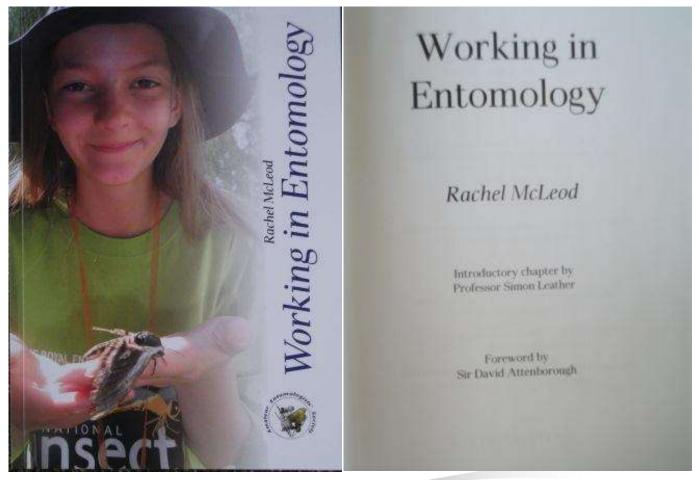


Meeting the public





Supporting the next generation



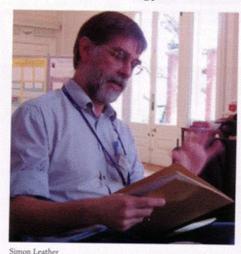


Occasional press coverage



Lots of words but the wrong audience?

British Entomology in terminal decline?



Dear Editors.

Consider a species whose major habitats have all been destroyed, whose ageing and largely non-reproductive adults are widely scattered, eking out a living in suboptimal habitats, and whose very rare juveniles are confined to one highly endangered site. I think that we would all agree that such a species is in urgent need of conservation and given that the number of juveniles is fewer than ten, probably on the verge of extinction.

This is not a fairy tale - this represents the state of formal academic training in entomology in Britain today. There are no Entomology Departments in British

Environmentalist (2010) 30:1-2 DOI 10.1007/s10669-009-9246-0

EDITORIAL

Do shifting baselines in natural history knowledge threaten the environment?

Simon R. Leather · Donald J. L. Quicke

Institutional vertebratism threatens UK food security

Simon R. Leather

Division of Biology, Imperial College London, Silwood Park Campus, Ascot SL5 7PY, UK

As an entomologist, it is tempting to see a deliberate bias against animals without backbones [1], but in reality it is more likely that they are 'not noticed' or fall beneath the radar of research council committees or heads of departments. The evidence for bias, intentional or otherwise, is, however, overwhelming. Insects and allied invertebrates comprise ~78% of the world's macro-biodiversity, whereas vertebrates, even using the most generous estimates, make up less than 3% [2]. Approximately 70% of the papers published by conservation and ecology journals deal with vertebrates [1,2]. Funding for research is similarly biased, and not just in the United Kingdom [3].

Those entomologists and other invertebrate biologists who survive are increasingly ghettoised into specialist niche journals with relatively low impact factors but not correspondingly low acceptance rates. A top entomology journal will typically have an impact factor of less than 3 but still

reject 80% of submitted papers. The funding and impact factor effects have had a noticeable impact on the appointment and retention of invertebrate biologists. When appointments are predicated by the number of papers in Nature, PNAS, Science and other multidisciplinary journals, it is obvious that entomologists working in applied (agriculture and forestry) and niche (taxonomy) areas will be overlooked or dismissed out of hand. By contrast, wholeorganism zoologists working on charismatic mega-fauna, or structural biologists locating vertebrate drug receptor sites, are able to publish in high-impact, high-visibility journals and thus gain additional funding. This of course has a knockon effect, in that as the number of invertebrate zoologists in universities declines, the amount of time dedicated to the teaching of those areas declines correspondingly. It is no wonder that there is a dearth of invertebrate knowledge or appreciation in the current generation of researchers.

Book Review

Conservation entomology in crisis?

Insect Conservation Biology edited by Alan J.A. Stewart, Tim R. New and Owen T. Lewis. CABI Publishing, 2007. £95, US \$190 (457 pages) ISBN 9781845932541

Simon R. Leather

Division of Biology, Imperial College London, Silwood Park Campus, Ascot SL5 7PY, UK



Although insects make up over 60% of the described global biota [1], insect conservation is relatively ignored when compared with the funding and publicity afforded to the conservation of the so-called charismatic mega-fauna [2,3], making conservation entomology a true Cinderella science. Entomologists might be aware of the scale of the problem [4], but as long as advanced

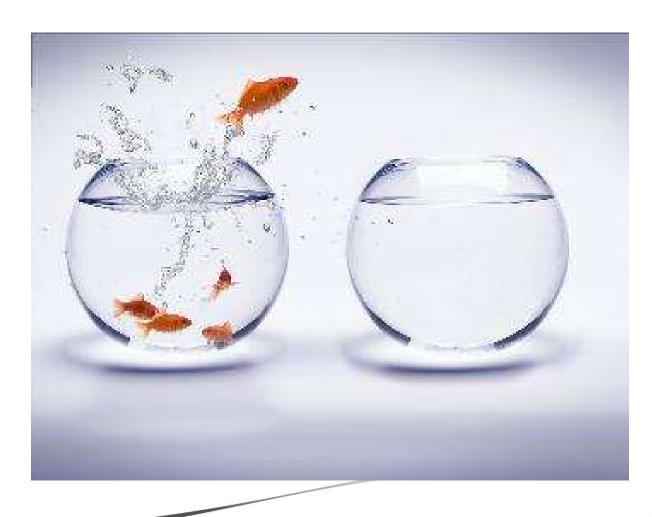
courses in conservation science and biology pass over the existence of arthropods in one or two lectures in favour of vertebrates, the future of insect conservation is bleak [5].

servation in agricultural and managed ecosystems, and Ian Woiwod and Tanya Schuler stress the role of genetically modified crops in improving the conservation of insect

Tim New, in a very optimistic chapter on spin-off benefits to insects from wider conservation agendas, hopes that insect conservation will be unwittingly aided by ecosystem management schemes, in addition to those intentionally aimed at improving habitats for insects. This is complemented by a chapter by Jane Memmott and colleagues examining the conservation of ecological interactions, using food webs (trophic interactions) as the study method. On the theme of landscape-scale inter-

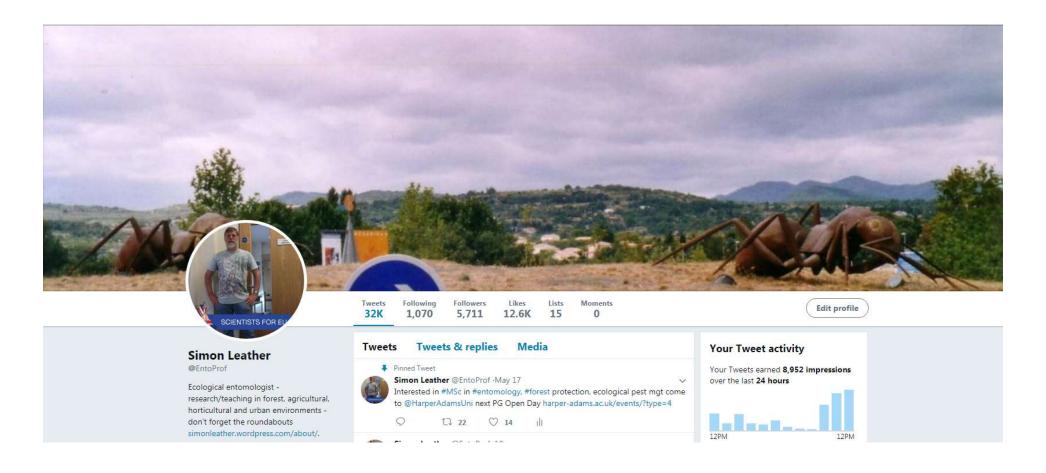


Time for something different





The Tweeter





The blog

Don't Forget the Roundabouts

HOME

ABOUT

APHIDOLOGY

BUGBEARS

ENTONOTES

ROOTS

ROUNDABOUTS AND MORE

TEACHING MATTERS

THE BLOGGY BLOG





My reasons

Outreach



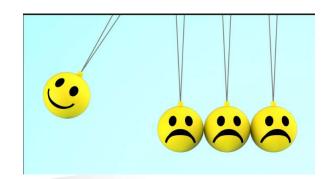
Writing practice



Interactions



Enjoyment



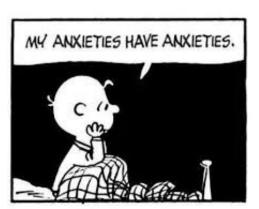


Challenges











Has it been useful?



Outreach





Professional links



















Fighting against the vertebrate bias





Result!

Animal Conservation



Animal Conservation, Print ISSN 1367-9430

COMMENTARY

Institutional vertebratism hampers insect conservation generally; not just saproxylic beetle conservation

S. R. Leather

Department of Crop & Environment Science, Harper Adams University, Newport, UK

Correspondence

Simon Leather, Department of Crop & Environment Science, Harper Adams University, Edgmond, Newport TF10 8NB, UK Email: sleather@harper-adams.ac.uk



Public debate





BBC Wildlife August 2013

SPINELESS WONDERS

Our poll had a single invertebrate candidate. Were we biased?

Some entomologists were unimpressed that a lone spineless candidate – the seven-spot ladybird, championed by Buglife – was standing in our national species poll. They took us to task on Twitter, with one post suggesting that, like much of the media, we are guilty of "institutional vertebratism".

Is this fair? Should we have challenged people's expectations by featuring more insects in the vote? Are all-invertebrate shortlists the way forwards?

"The 'token' invertebrate in palls like this is invariably an insect, terrestrial and arightly coloured," complains Sally-Ann Spence, who runs minibeast roadshows in Wiltshire. Yet of the known animal species on Earth, just 4 per cent are vertebrates. It's the invertebrates

that are tirelessly recycling, fertilising, pollinating and purifying, and creating the food source at the base of myriad food-webs. They deserve better."

Simon Leather, professor of entomology at Harper Adams
University in Shropshire, argues that an anti-invertebrate rhetoric is entrenched in scientific funding podies, as well as in the media. He points out that grants a vour research into vertebrates, especially megafauna. "A minute fraction of the money channelled into nature conservation finds its way into conserving invertebrates," he says.

Here at *BBC Wildlife*, we do our best to celebrate spineless wonders, and in the past two years have published features



The last time BBC Wildlife had an insect cover star was back in September 2009, when a painted lady did the honours.

on harlequin ladybirds, red crabs, insect sign language, purple emperors and bumblebees. But the fact remains that an insect on the cover doesn't sell as many copies as a big cat.

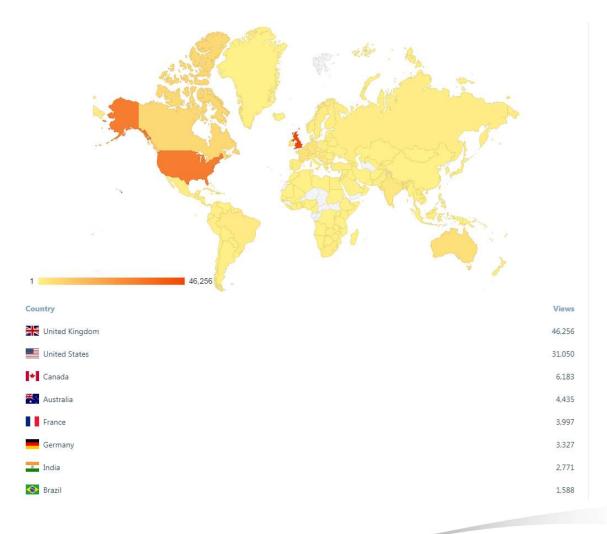
WHAT DO YOU THINK?

Are the media biased against invertebrates, or do they reflect what we want to read? Write to share your views – for contact details, see p94.





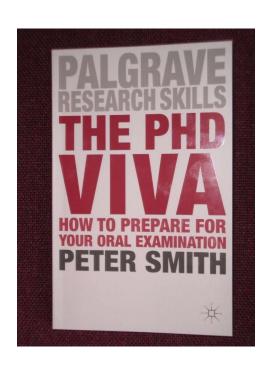
Am I making an impact?



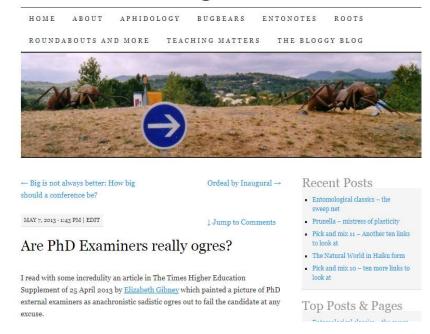
180 articles 88 244 visitors 137 500 views



Am I making an impact?



Don't Forget the Roundabouts



https://simonleather.wordpress.com/2013/05/07/are-phd-examiners-really-ogres/



Benefits

INSECT THREATS TO UK FORESTRY

CURRENT AND FUTURE INSECT THREATS TO UK FORESTRY

Simon Leather, Director of the Harper Adams Centre for Integrated Pest Management, outlines the threats faced by UK forestry from native and invasive insect pests, Department of Crop and Environment Sciences, Harper Adams University, Edgmond, Newport, Shropshire, TF108NB, UK. Correspondence: Professor Simon R. Leather, Department of Crop & Environment Sciences, harper Adams University, Edgmond, Newport TF10 8NB UK. Email: sleather@harper-adamsac.uk

Outlooks on Pest Management - February 2014

DOI:10.1564/v25_feb_07

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Roundabouts can be so much more than just traffic-calming devices | ialeUK - International Association for Landscape Ecology



Enter search terms



Roundabouts can be so much more than just traffic-calming devices

Summer 2016

Simon Leather (http://iale.uk/author/simon-leather)





How Prepared is the UK to combat current and future threats to forests?

> Professor Simon R Leather Professor of Entomology, Department of Crop and Environment Sciences, Harper Adams University Edgmond Newport Shropshire UK





Benefits





IDEAD IN ECOLOGY AND EVOLUTION 7:38-40, 2014 doi:10.4033/iee.2014.7.9.c

© 2014 The Author. © Ideas in Ecology and Evolution 2014 Received 6 May 2014; Accepted 15 May 2014

Сониментенд

How Stephen Jay Gould wrote Macbeth—Not giving credit where it's due: lazy referencing and ignoring precedence

Simon R. Leather

Simon R. Leather (<u>simonleather@harper-adams.ac.uk</u>), Crop & Environment Sciences, Harper Adams University, Edgmond, Newpon UK TF10 8NB

0.7.7.

Agricultural and Forest Entomology

Agricultural and Porest Bitomology (2017), 19, 1-3

DCI: 10.1111/afe.12195

ISSUES IN AGRICULTURAL AND FOREST ENTOMOLOGY

Another look at plant defences against insect herbivores: plant parts that pretend to be insects

Simon Leather

Department of Chep & Environment Science, Husper Advans University, Edgmond, Hemport, TF108HB, U.K.

Annals of Applied Biology ISSN 0003-4746

EDITORIAL

Mind the gap: time to make sure that scientists and practitioners are on the same page

S.R. Leather

Department of Grop & Environment Sciences, Harper Adams University, Newport, UK

52

BR. J. ENT. NAT. HIST., 28: 2015

AN ENTOMOLOGICAL CLASSIC - THE POOTER OR INSECT ASPIRATOR

S. R. LEATHER

Department of Crop and Environment Sciences, Harper Adams University, Edgmond, Newport, Shropshire TF10 8NB

Animal Conservation

ZSL

Animal Conservation, Print ISSN 1367-9430

COMMENTARY

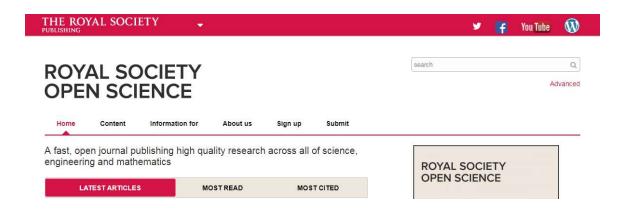
Institutional vertebratism hampers insect conservation generally; not just saproxylic beetle conservation

S. R. Leather

Department of Crop & Environment Science, Harper Adams University, Newport, UK



Full circle!



05-Sep-2017

Dear Dr Saunders.

I am pleased to inform you that your manuscript entitled "Bringing ecology blogging into the scientific fold: measuring reach and impact of science community blogs" is now accepted for publication in Royal Society Open Science.

- 1 Bringing ecology blogging into the scientific fold: measuring reach and impact of
- 2 science community blogs
- 3 Manu E. Saunders^{1*}, Meghan A. Duffy², Stephen B. Heard³, Margaret Kosmala⁴, Simon R.
- 4 Leather⁵, Terrence P. McGlynn^{6,7}, Jeff Ollerton⁸, Amy L. Parachnowitsch⁹



Proof that's it fun!





Accepted for publication! Great fun to work with all these bloggers; coming soon in Royal Society Open Science.

Bringing ecology blogging into the scientific fold: measuring reach and impact of

science community blogs

Manu E. Saunders^{1*}, Meghan A. Duffy², Stephen B. Heard³, Margaret Kosmala⁴, Simon R.

Leather⁵, Terrence P. McGlynn^{6,7}, Jeff Ollerton⁸, Amy L. Parachnowitsch⁹

Royal Society Open Science, in press

4:27 PM - 5 Sep 2017

4 Retweets 15 Likes

















It takes time

Jeff Ollerton's Biodiversity Blog

good things take time.



APRIL 12, 2015 · 6:06 PM

The most important book you'll read this year: *What Nature Does for Britain* by Tony Juniper

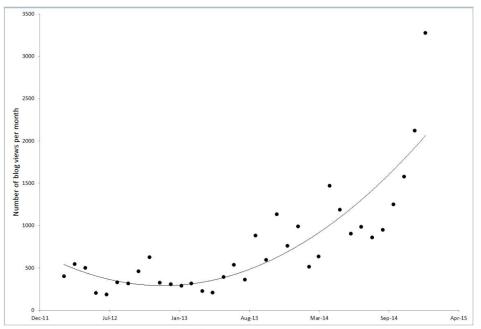


Recent Posts

 The most important book you'll read this year: What Nature Does for Britain by Tony Juniper

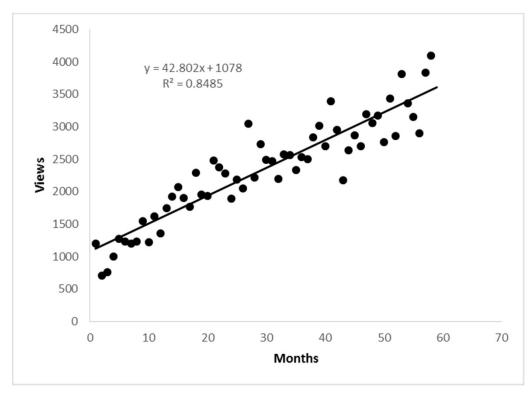
Search

- Should biodiversity scientists be campaigners and polemicists?
- BREAKING NEWS: Living population of the dodo discovered in Mauritius!
- Something for the weekend #5
- The state of bees: the European Red List has been published





Don't Forget the Roundabouts

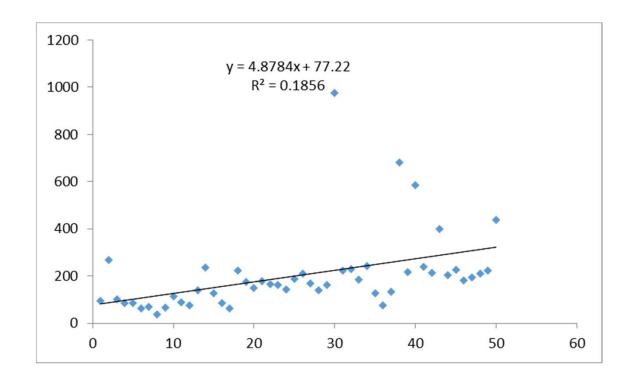




October 2017



Mastering Entomology



Sept 2013

October 2017



A growing trend



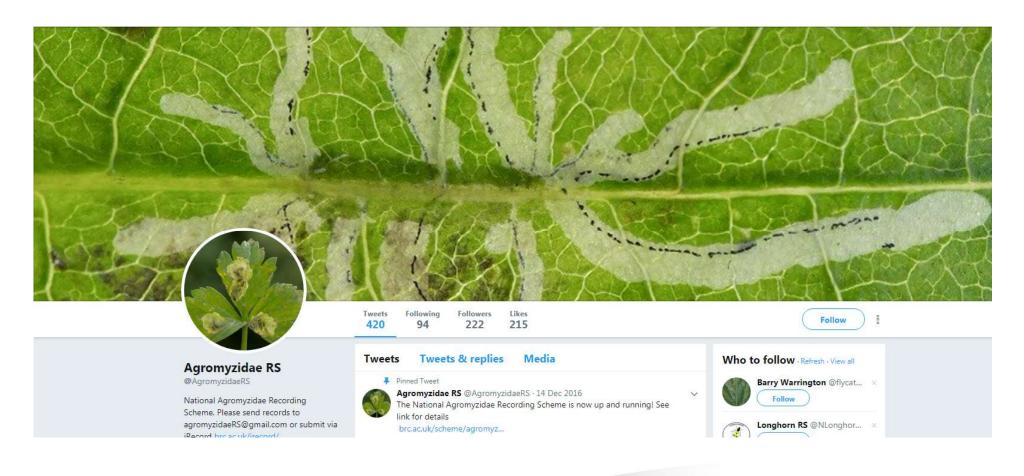


Longhorn beetles





Agromyzid flies





Weevils





Pseudoscorpions

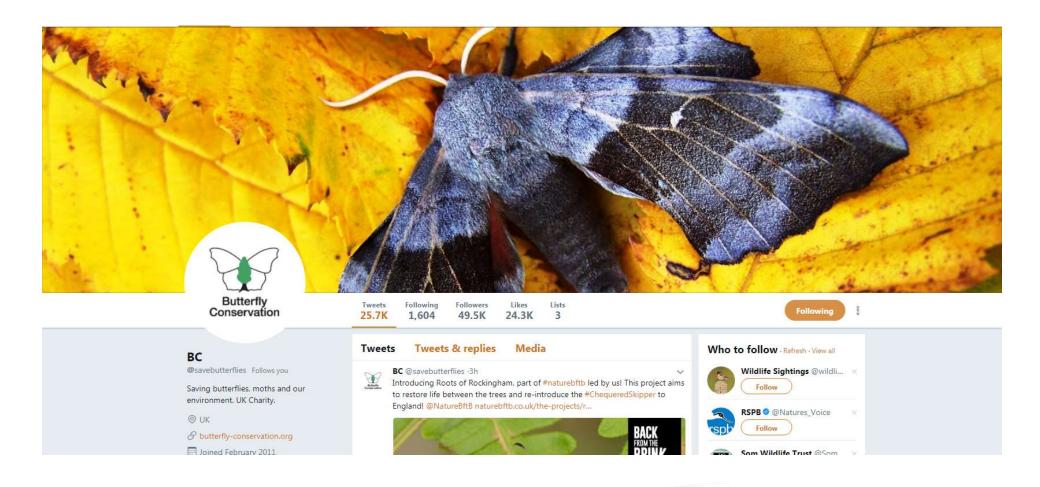


Ladybirds





Butterflies





Fungi



UK Fungus Day

@ukfungusday

UK FUNGUS DAY. The outreach arm of the British Mycological Society. Raising awareness of the amazing Fungal Kingdon. #UKFD. Weekend of 7-8th October 2017.







Phenology





Biodiversity





Help wanted





New initiatives





ArmidaleExpress @ @ArmidaleExpress · 8h

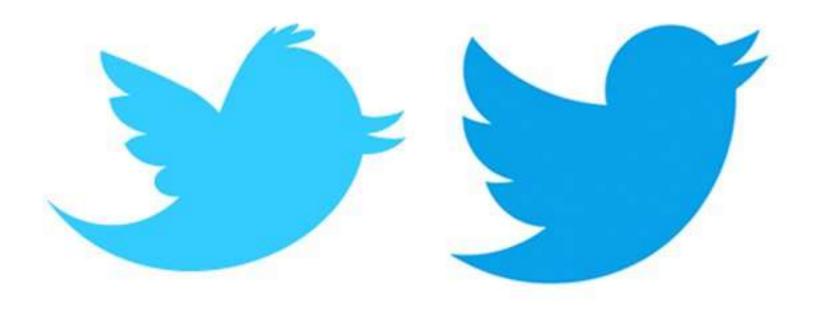
Researcher asks amateur naturalists to get bug-eyed in the backyard



Researcher asks amateur naturalists to get bug-eyed in the backyard Amateur naturalists invited to keep their eyes-peeled for pollinators. armidaleexpress.com.au



Join Twitter!



And use the share buttons





Thanks

- Francisca Sconce
- All my Blog subscribers
- All my Tweeps (5720 as of...





