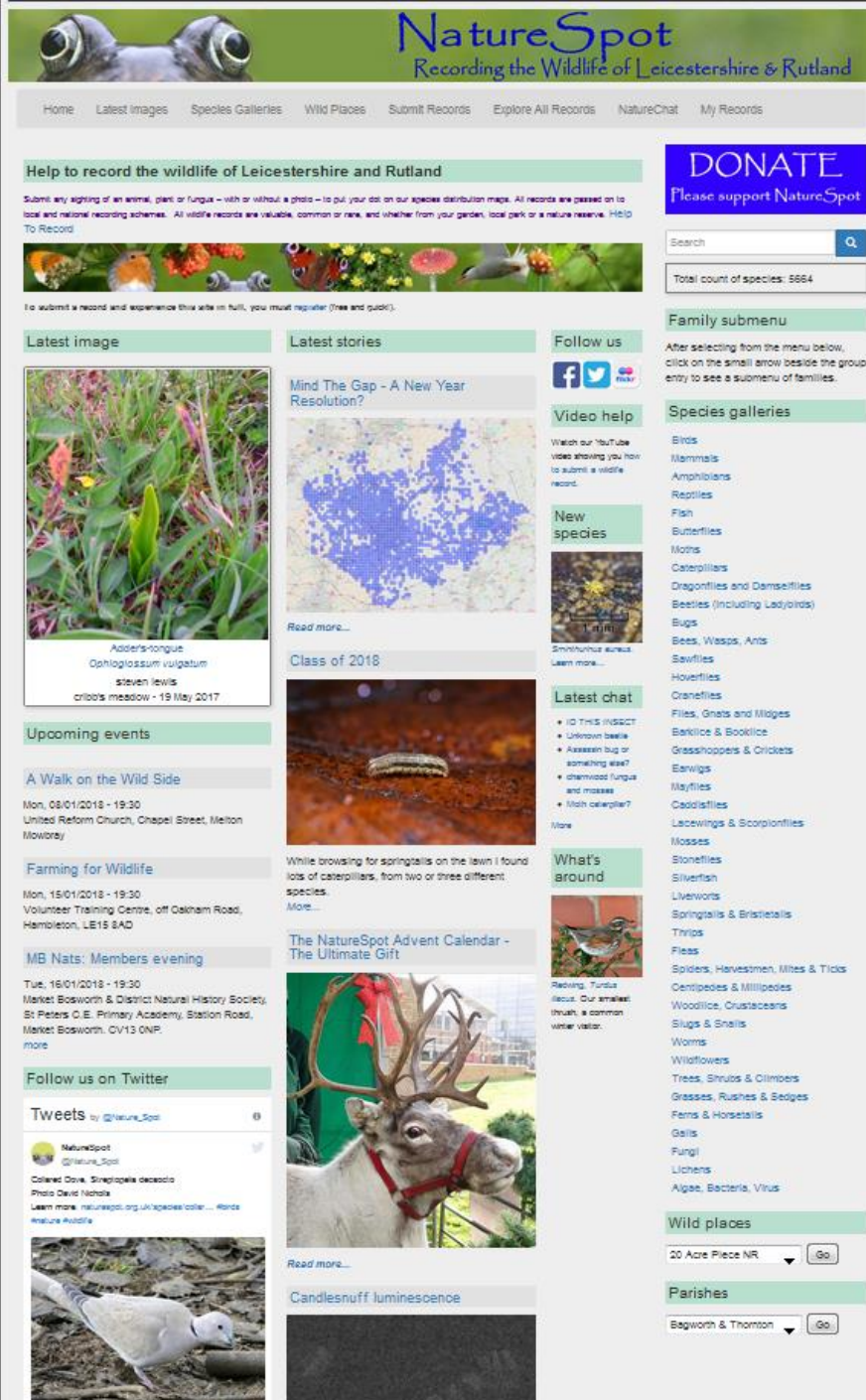


NatureSpot 2017 Annual Report



The screenshot shows the NatureSpot website interface. At the top is a navigation bar with links: Home, Latest Images, Species Galleries, Wild Places, Submit Records, Explore All Records, NatureChat, My Records. Below this is a 'Help to record the wildlife of Leicestershire and Rutland' section with a 'DONATE' button and a search bar. The main content area is divided into several columns: 'Latest image' featuring Adonis-violet (Ophioglossum vulgatum) with a photo and caption; 'Upcoming events' listing 'A Walk on the Wild Side' and 'Farming for Wildlife'; 'Follow us on Twitter' showing a tweet about Colored Dove; 'Latest stories' including 'Mind The Gap - A New Year Resolution?' with a map and 'Class of 2018' with a photo of caterpillars; 'The NatureSpot Advent Calendar - The Ultimate Gift' with a photo of a stag; and 'Candlesnuff luminescence' with a dark image. On the right side, there is a 'Family submenu' with a list of species categories like Birds, Mammals, Amphibians, Reptiles, Fish, Butterflies, Moths, Caterpillars, Dragonflies and Damselflies, Beetles, Bugs, Bees, Wasps, Ants, Sawflies, Hoppers, Craneflies, Flies, Gnats and Midges, Barklice & Booklice, Grasshoppers & Crickets, Earwigs, Mayflies, Caddisflies, Lacewings & Scorpionflies, Mosses, Stoneflies, Silverfish, Liverworts, Springtails & Bristletails, Thrips, Fleas, Spiders, Harvestmen, Mites & Ticks, Centipedes & Millipedes, Woodlice, Crustaceans, Slugs & Snails, Worms, Willowflowers, Trees, Shrubs & Climbers, Grasses, Rushes & Sedges, Ferns & Horsetails, Galls, Fungi, Lichens, Algae, Bacteria, Virus. At the bottom right, there are 'Wild places' and 'Parishes' dropdown menus.



Introduction

NatureSpot is a registered charity (1138852), established in 2009 with the aim of promoting the wildlife and wild places of Leicestershire and Rutland and helping to increase public awareness of, and interest in, local biodiversity. Our aims are:

1. To help the public to identify local wildlife and to learn about the natural environment
2. To create, with public participation, an online showcase of the wildlife and wild places of Leicestershire and Rutland
3. To encourage and facilitate wildlife recording

NatureSpot is a company limited by guarantee and has a Board of Trustees (see appendix 1) comprising local naturalists involved in wildlife conservation, biodiversity recording and local natural heritage. We are also supported by experts and professionals such as the County Recorders and officers of the Leicestershire and Rutland Environmental Records Centre (LRERC), Leicestershire County Council, Leicester City Council and the Leicestershire and Rutland Wildlife Trust.

We are funded by grants and donations and supported many volunteers as a community 'citizen science' initiative. Its main activity is the NatureSpot website which profiles wildlife species found in Leicestershire and Rutland and facilitates wildlife recording by the community, and local naturalists in particular.

2017 in summary

2017 was another growth year for NatureSpot, with the expansion seen in previous years continuing. There were increases in the number of records submitted, the number of recorders, visitors to the website and the species profiled.

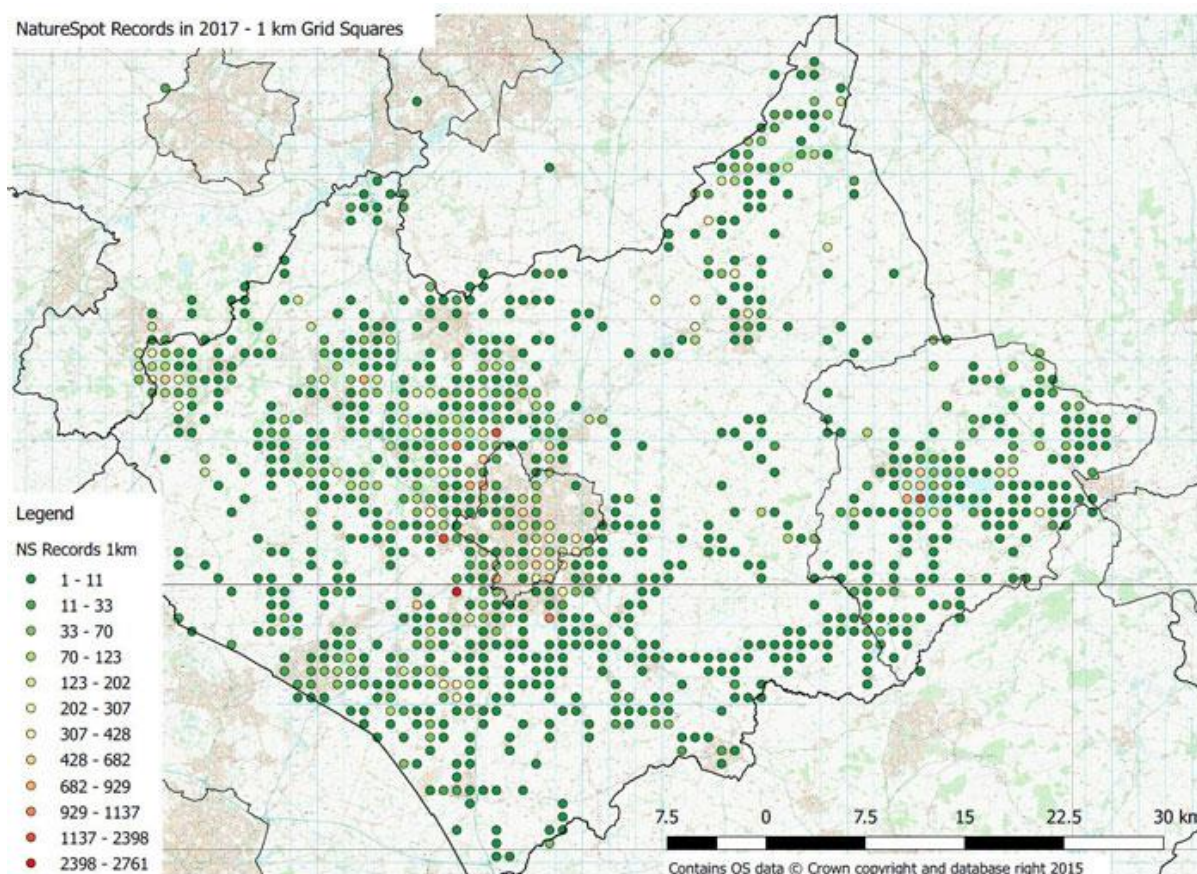
Records

47,392 records were submitted in 2017, a 9% increase on the previous year.

Year	Accepted	Plausible	Not accepted	Total
2010	3,999	16	10	4,025
2011	8,877	102	68	9,047
2012	9,549	307	171	10,027
2013	15,532	352	212	16,096
2014	28,654	696	510	29,860
2015	23,474	674	449	24,597
2016	42,268	682	591	43,541
2017	45,407	1,079	906	47,392
Grand Total	177,760	3,908	2,917	184,585
	96%	2%	2%	100%

Record distribution

As with most biological recording there is a strong recorder bias to the data, with a pattern that is familiar to many. The main gap is in the east of Leicestershire and the far west, with perhaps a surprising paucity of records from the north east of the city. Efforts will be made during 2018 to encourage more recording in these areas.



Verification

Every record is carefully checked and only accepted where there is satisfactory evidence to confirm the species identity. This evidence can comprise images, descriptions or knowledge of the recorder's skills and competence. Overall, 96% of submitted records have been accepted and a further 2% considered plausible.

NatureSpot uses the verification system set up by the Biological Recording Centre (BRC) for use on iRecord, the national online recording system developed by the BRC. NatureSpot is part of the iRecord family with some sharing of software. All NatureSpot records are securely held on the BRC warehouse server. This verification system offers verifiers five options as shown below. In addition records may be queried, seeking more information before a decision is made.

Verification option	2017 records	%
Accepted / Assumed correct	45,407	95.81%
Plausible	1,079	2.28%
Unable to review/identify	504	1.06%
Incorrect	244	0.51%
Not reviewed/queried	81	0.17%
Grand Total	47,392	100.00%

Overall, 95.8% of the records submitted in 2017 were accepted and verified correct.

A further benefit of linking NatureSpot records with iRecord and the BRC is that they are made available to national experts. As a result, 1,228 records were verified by these national experts, however the great majority were verified locally by NatureSpot, assisted by County Recorders and other local experts.

Data distribution

At the year end the record data is shared with local and some national recording schemes, as well as land managers such as the Leicestershire and Rutland Wildlife Trust and the National Forest. Specifically the records are distributed locally to each County Recorder and also to the Leicestershire and Rutland Environmental Records Centre. In addition, all NatureSpot accepted records are published on the National Biodiversity Network Atlas.

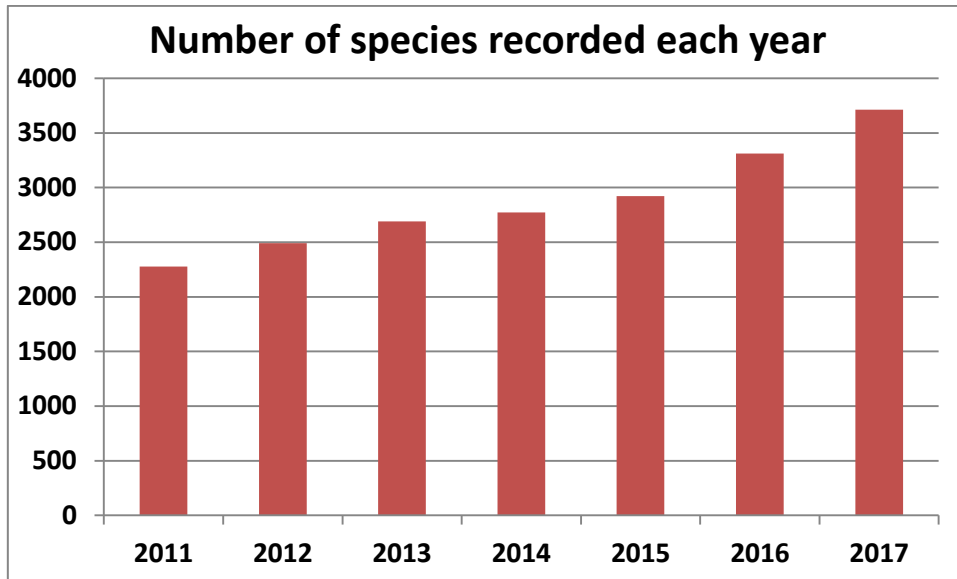
Images

It is not necessary to submit images with records, particularly for the more common species, though it does help to confirm the identification. Records of unusual species or from an unfamiliar recorder do normally need an image to allow a correct verification decision, though confirmation from a known expert or a satisfactory description of the identification method may be sufficient.

The best images are selected for display on the NatureSpot species pages and on the taxon group galleries. Where possible, images are selected that show the key identification features and also represent different colour forms, sex differences and juvenile stages.

Species

The number of different species recorded each year has grown steadily, with 3,713 recorded on NatureSpot in 2017.

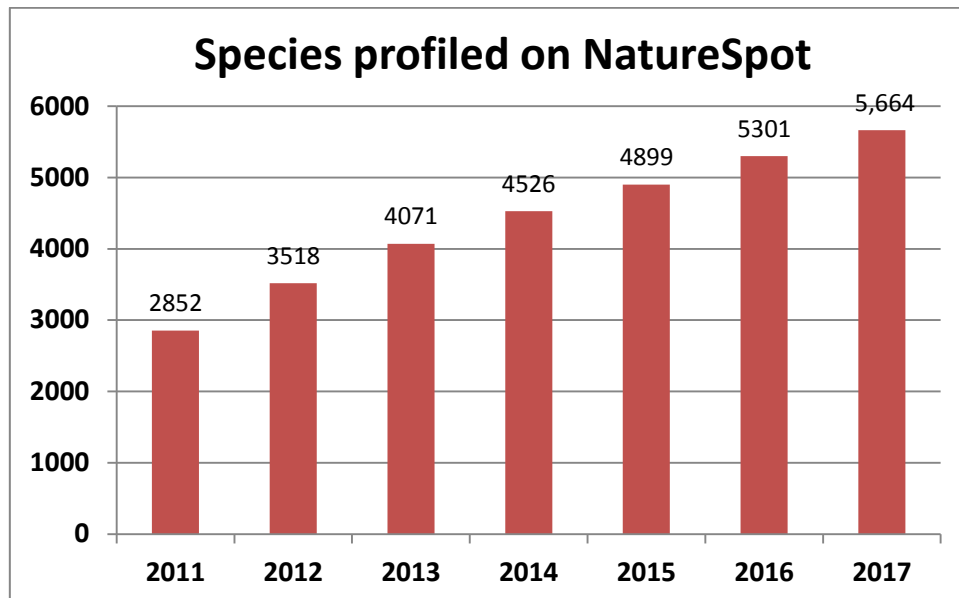


The table below lists the taxon groups represented by 99% of the species records received in 2017. Birds are the most recorded group overall but moths topped the list in 2017. 60% of all records are from the three most recorded groups of moths, birds and wildflowers, the remainder are widely spread amongst all other groups.

	2017	%	Total	%
Moths	10,908	24.0%	39,356	22.1%
Birds	10,447	23.0%	43,034	24.2%
Wildflowers	6,046	13.3%	25,817	14.5%
Butterflies	2,395	5.3%	8,388	4.7%
Bugs	1,763	3.9%	5,936	3.3%
Beetles	1,713	3.8%	7,541	4.2%
Fungi	1,552	3.4%	4,578	2.6%
Bees, Wasps, Ants	1,535	3.4%	4,677	2.6%
Trees, Shrubs & Climbers	1,371	3.0%	5,295	3.0%
Flies, Gnats and Midges	1,076	2.4%	3,533	2.0%
Hoverflies	983	2.2%	4,321	2.4%
Spiders, Harvestmen & Mites	877	1.9%	3,116	1.8%
Slugs & Snails	788	1.7%	4,542	2.6%
Mammals	686	1.5%	2,736	1.5%
Dragonflies and Damselflies	628	1.4%	3,597	2.0%
Grasses, Rushes & Sedges	560	1.2%	2,680	1.5%
Mosses & Liverworts	361	0.8%	1,199	0.7%
Lichens	247	0.5%	1,016	0.6%
Ferns & Horsetails	226	0.5%	823	0.5%
Grasshoppers & Crickets	175	0.4%	698	0.4%

Amphibians	173	0.4%	658	0.4%
Woodlice, Crustaceans	164	0.4%	506	0.3%
Sawflies	136	0.3%	716	0.4%
Craneflies	96	0.2%	573	0.3%
Caddisflies	88	0.2%	728	0.4%

The total number of Leicestershire and Rutland species recorded on NatureSpot at the end of 2017 was 5,664, an increase of 363 over the year. Every species has an information page in the galleries, illustrated with images submitted by recorders (all taken in Leicestershire and Rutland).



New species

Birds are so closely watched across the two counties that it is no surprise to see a few new species recorded each year. Three new birds in 2017 were Hoopoe *Upupa epops*, European Bee-eater *Merops apiaster* and Bearded Tit *Panurus biarmicus*.



Some newly recorded species are not so welcome arrivals and the Asian Clam *Corbicula fluminea* is such an example. This species is known to alter ecosystems by sequestering most of the available carbon and outcompeting native filter feeders. It can also block intake pipes on water and filtration systems.



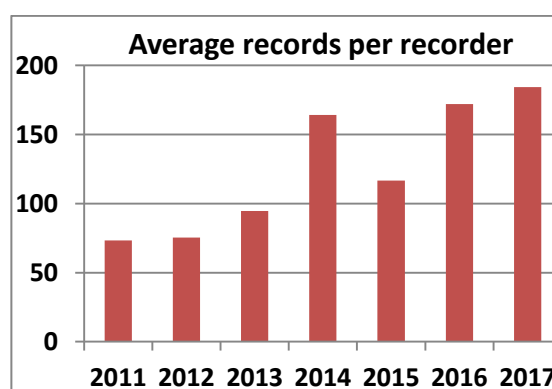
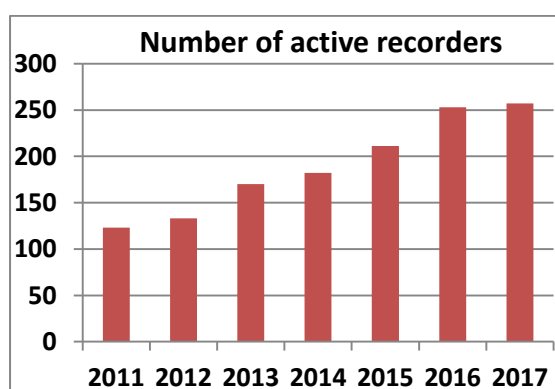
Twenty six new beetle species were added in 2017, bringing the total to 552, but given that this is the largest taxon group with over 2,000 known species in VC55 there are still lots more to go! Amongst the new species are the Screech Beetle *Hygrobia hermanni*, the Umbellifer Longhorn *Phytoecia cylindrical* and the water beetle *Ilybius quadriguttatus*.



Recorders

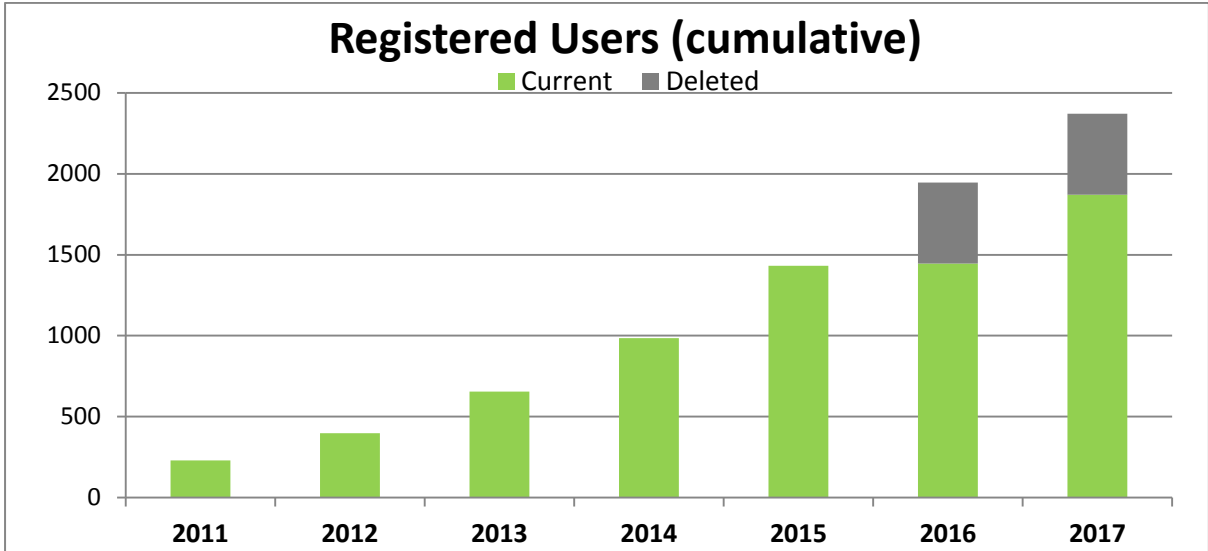
There has been steady growth in the number of active recorders submitting wildlife records to NatureSpot each year. The total overall number of contributing recorders is 872. There has also been an overall increase in the average number of records submitted by each recorder, perhaps indicating greater commitment to recording from regular members and/or an increase in the range of species they feel confident to identify.

NatureSpot tends to receive regular submissions from core recorders rather than lots of occasional submissions from the general public. This has proved mutually beneficial in that NatureSpot verifiers build up their knowledge of the recording abilities and reliability of individual recorders, whilst the recorders develop their identification skills and interests through regular dialogue.



Registered Users

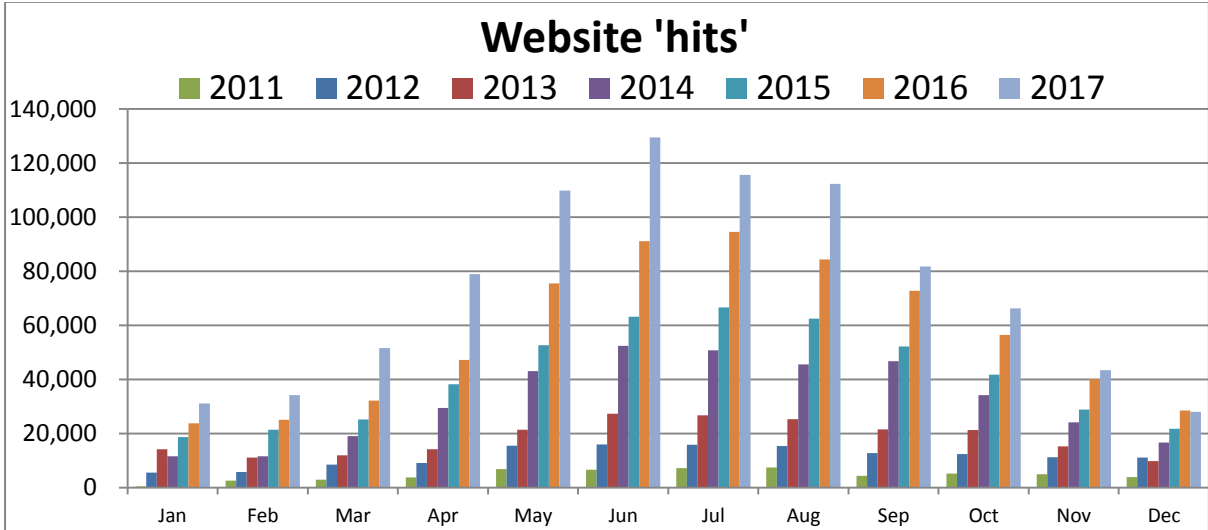
It is necessary to be registered with NatureSpot to submit records, but not all registered users actively record. We know that some users use the site as a source of information, including many that would submit records but they live outside of Leicestershire and Rutland. There was an increase of 426 new registered users in 2017, however 500 accounts that hadn't accessed the site for over two years were removed in 2016.

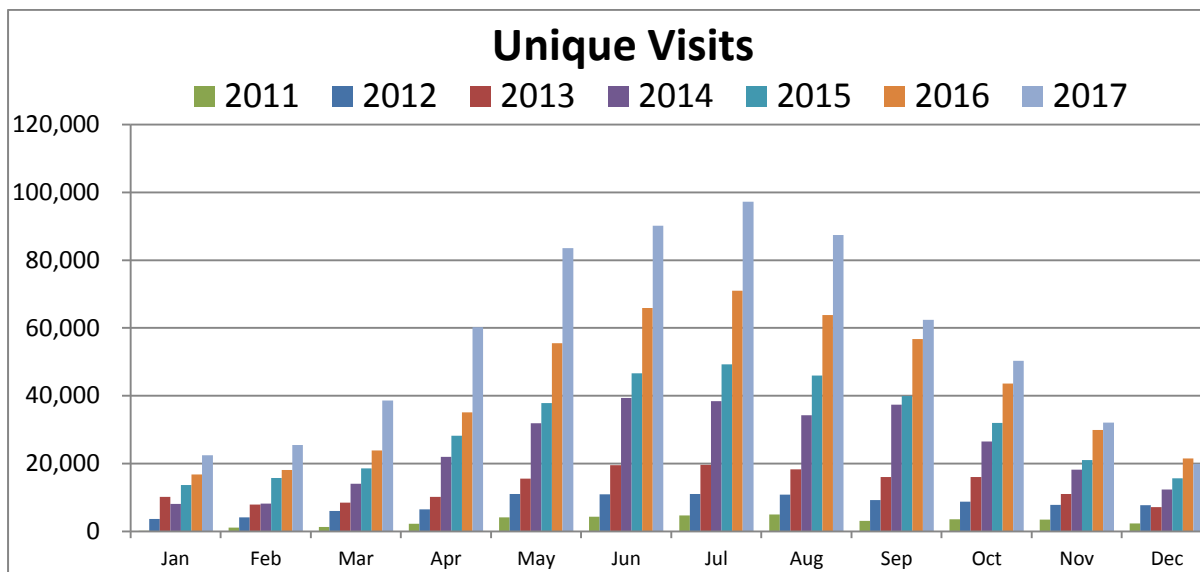


Visitors

Visits to the NatureSpot website are monitored using Google Analytics. This records many details of each visitor, including: country of origin, their operating system, the search engine used and the term entered. It also identifies 'unique' visitors – access from computers with different IP addresses.

Visitor numbers have grown every year, showing a distinct seasonal pattern, peaking in June/July. There is a similar seasonal pattern of record submissions due to flowers and invertebrates being more numerous and more easily seen in the warmer months.





Total website visits for the year was 802,803 (669,915 unique), a 76% increase compared to the previous year.

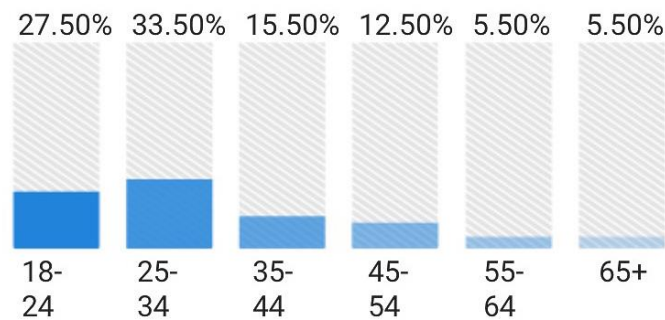
Social Media

In 2017 the NatureSpot website received over two million page views from over half a million users (data from Google Analytics). 72% of these visits came from the UK, the rest coming from a total of 217 countries or territories worldwide:

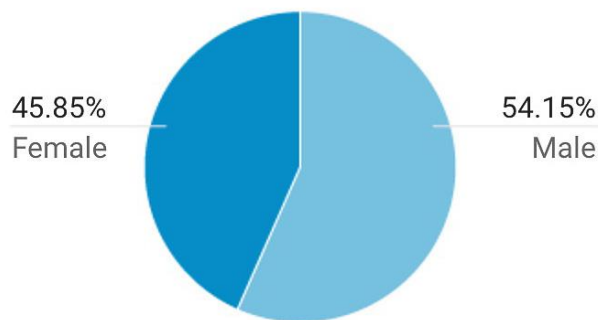
1. United Kingdom	72%
2. United States	9%
3. Canada	2%
4. France	1%
5. Germany	1%
6. Ireland	1%
7. India	1%
8. Spain	1%
9. Netherlands	1%
10. Australia	1%

The demographics of NatureSpot users (according to Google Analytics data) were:

Age



Gender



51% of site visits were made from computers, 36% on mobile phones and 13% on tablets (c.f. 2016: 58% computer, 29% mobile phone, 13% tablet). The sources of site visitors were:

- Web search 83%
- Direct 11%
- Social media 3% (25k visits)
- Other 3%

In 2017 we also published regular news stories on the website, approximately on a weekly basis. In June we conducted an online user survey which received 332 responses. These were published on the website in July (<http://www.naturespot.org.uk/node/116225>):

On average approximately how often do you visit the NatureSpot website?	
This is my first time:	31%
Once a week:	31%
Once a day:	16%
Once a month:	13%
A few times a year:	9%

Feedback from site users was almost all very positive:



- *Your site is incredibly useful on a national level. Other local groups could try to replicate it but so far I'm not aware of any coming remotely close. I can't praise this site enough.*
- *It's a great resource. I know several people who regularly use the species galleries pages who don't live in Leicestershire or Rutland and wish their county had something similar.*
- *I absolutely adore your website. It is my first point of call when I want to find good images of certain species and a regular for me to scour to see if I can identify what I have photographed.*
- *I have been following this site for many years, and have found it an invaluable reference source for identifying species of all kinds. Excellent work. One of the very best out there! Thank you!*
- *This is such a valuable resource to help me, as a relative newcomer, to identify species. It's terrific having so many photos for each species to show the variation, angles, etc. I am really grateful for all the work that you have put into this site - thank you!*
- *An excellent resource for identifying species in neighbouring Nottinghamshire. Thank you, your hard work is appreciated. (I have made a donation!)*
- *I'm not in Leics & Rutland but this is a fantastic resource for wildlife ID anywhere in the UK (at least). Thank you!*
- *Although I live in (against my will) in the London area, I go on trips to look at wildlife every chance I get. This is by far the best website for identifying UK species.*

On other sites, the NatureSpot Twitter account now has over 300 followers and an annual reach of >10,000 views; our Facebook page has 184 followers with an annual reach of >10,000 views. The NatureSpot Flickr photo sharing group was revamped and has 33 regular followers who have posted 1,680 photos to this group.

Support for local wildlife groups

We have continued to provide a web platform for a number of local wildlife groups, including those listed below, helping to promote their work and publications. We also allow these groups to publicise their events and activities directly onto the website's calendar.

- Leicestershire Entomological Society
- Leicester Amphibian and Reptile Network
- Leicestershire Moth Recorders
- Leicestershire and Rutland Mammal Group
- Market Bosworth & District Natural History Society
- Literary & Philosophical Society – Natural History Section

Wild Places and Parish Pages

A feature of the NatureSpot website is the ability to set up pages for any given site or area boundary in order to showcase the wildlife of that area. Records and images for each site/parish are



automatically displayed on these pages creating a dynamic and up to date display of recent wildlife sightings. Many of these site/parish pages are administered by local volunteers.

Developments in 2017

In July a major upgrade to the NatureSpot website was carried out, involving the migration to the Drupal 8 content management system. A number of design changes were also instigated to modernise and refresh the overall appearance. A key objective of the upgrade was to enable the website to be able to adapt to mobile devices where a smaller screen requires a modified layout.

NatureSpot is a partner with the **Black to Green project** – an initiative led by the National Forest Company and the Leicestershire and Rutland Wildlife Trust. A key objective is to encourage wildlife recording in the Heart of the National Forest area as part of an overall community engagement strategy, linking residents to their local environment.

A number of **training and educational activities** were carried out during the year, working with schools as well as adults to raise awareness of local wildlife and foster interest in recording.

Further Information

If you would like further information or an explanation of anything included in this report, please contact:

David Nicholls

dnicholls@narespot.org.uk

tel: 0116 2393159



Appendix 1 NatureSpot Who's Who

Board of Trustees

Graham Calow (Chair)
David Gould
Simon Bennett
Ron Stevens
Alan Cann
Steve Mathers

Manager

David Nicholls (Company Secretary)

Verifiers

David Nicholls (All)
Graham Calow (All)
David Gould (All)
Paul Ruddoch (All)
Mike Higgott (All)
Steve Mathers (All)
Alan Cann (All)
Ben Devine (Fungi)
Jon Daws (Arachnids)
Helen O'Brien, Nathalie Cossa, Barry Ingram, Jools Partridge (Mammals)

Website administrators

David Nicholls
Simon Bennett
David Gould
Graham Calow
John van Breda

Site Editors

Alan Cann (Social Media)
Ben Devine
Paul Ruddoch

Parish Editors

Ron Stevens (Broughton Astley)
Phil Crowfoot (Burbage)
Lorraine Ellison
Simon Bennett (Knighton Ward)

Image Editors

Kate Nightingale
Annie Smith
Steve Mathers
Mike Higgott

Events Editors

Russell Parry (Lit and Phil)
Louise Marsh (BSBI)
Andrew Heaton (Leics Amphibs & Reptiles)
Janet Sykes (Market Bosworth Nat. Hist.)