



Internal use only

PAS 2014 social listening

Overall report: January-December 2013

Objectives and method

- Ipsos MORI, on behalf of the Department for Business, Innovation and Skills, conducted a year long research exercise into how people talk about some key science topics/stories online (the topics were chosen in conjunction with BIS).
- The Brandwatch social media platform was used to measure internet traffic volumes on different subjects across a range of online sources, including Twitter, forums, blogs and news.
- Some of the data was then analysed qualitatively, looking at who was talking and what they were saying, and searching for themes, patterns and linkages

Jan-Mar



Meteor in
Russia



Horsemeat

Apr-Jun



GM food



Measles
outbreak

Jul-Oct



Fracking



Badger
cull

Oct-Dec

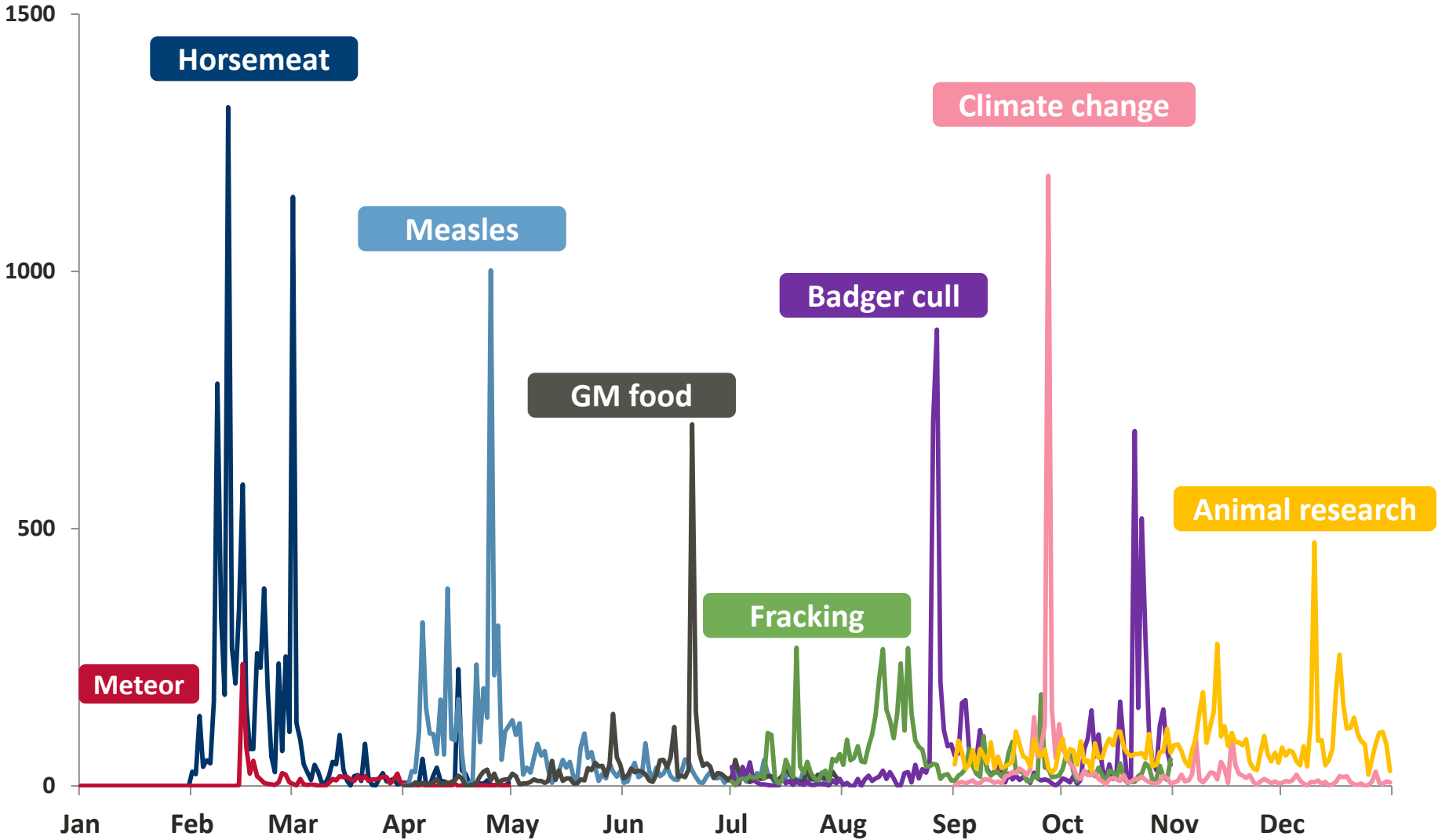


Animal
research

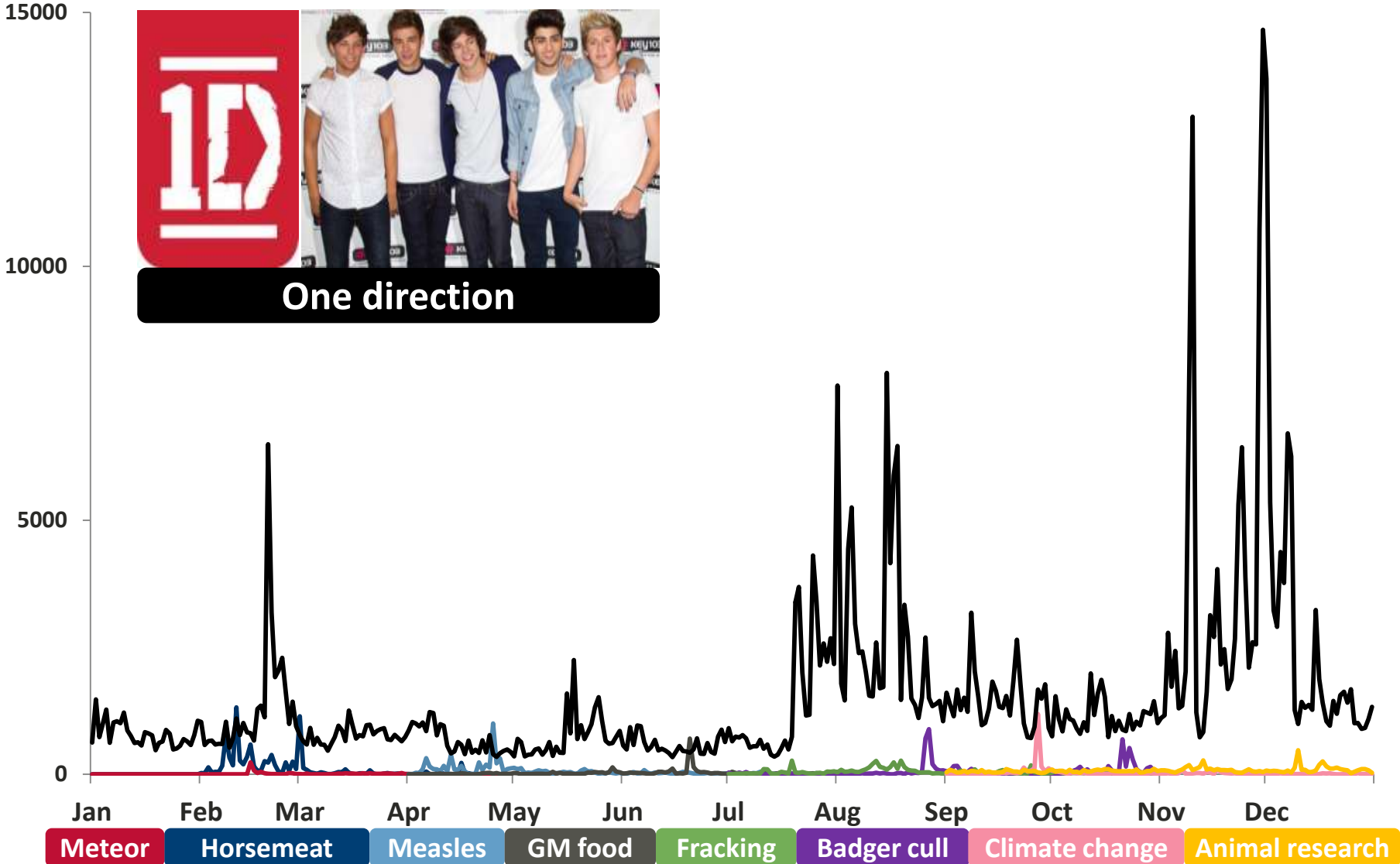


Climate
change

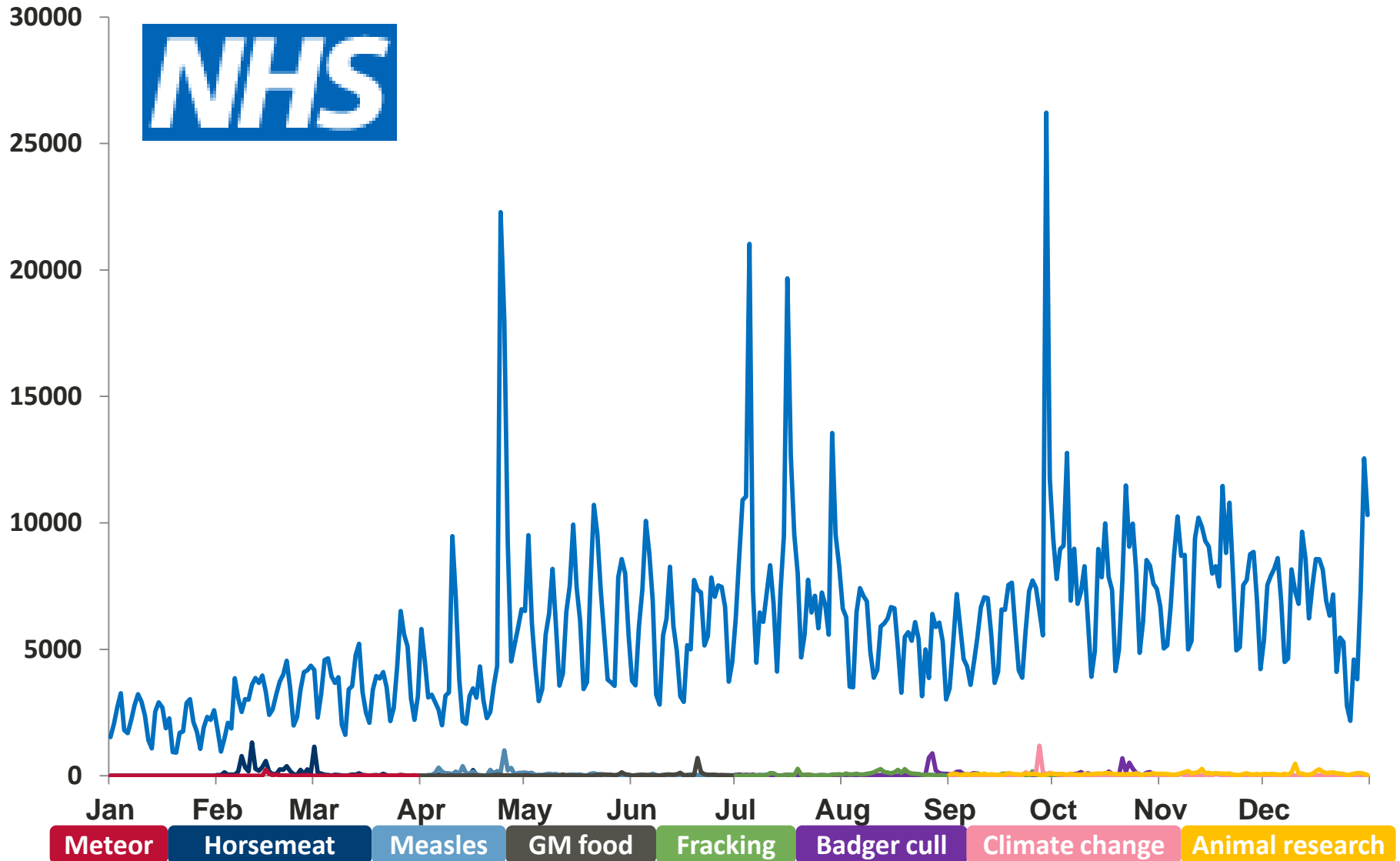
Of the science stories examined, the horsemeat story provoked the most traffic/conversation...



...but in the wider context most people would rather talk about something else online

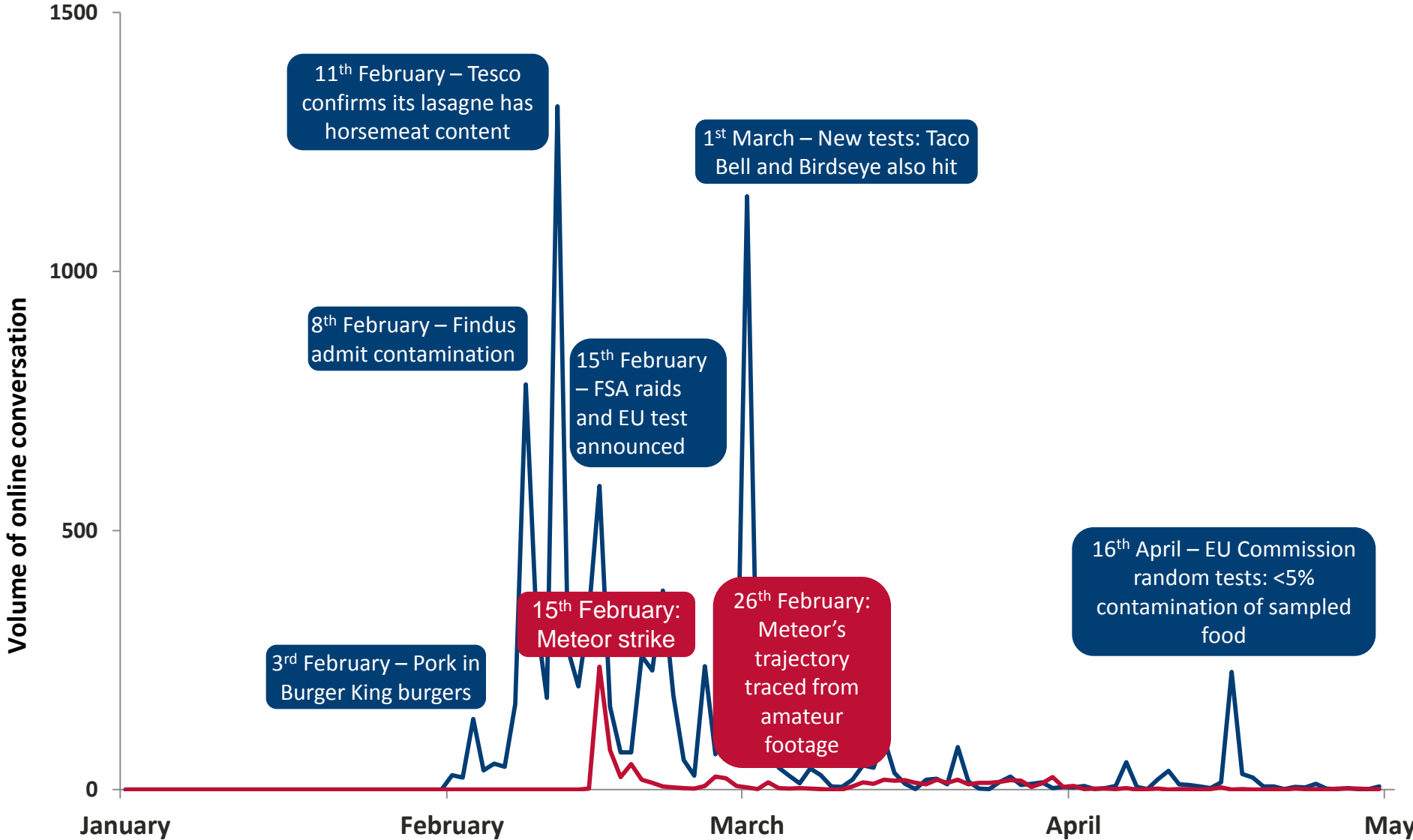


...and more salient political issues tend to dominate



NHS

Horsemeat and meteors

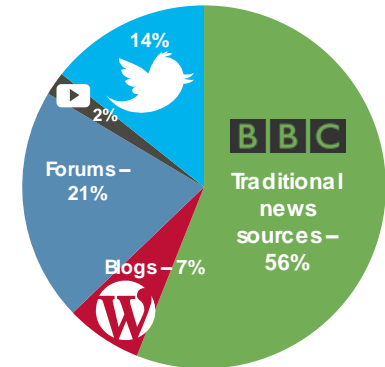


Visual and humorous impact

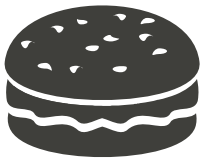
Meteor in Russia



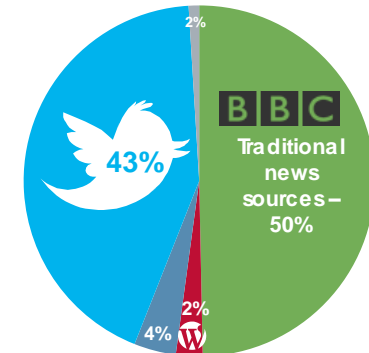
- The internet conversation came primarily from traditional news sources and scientists acted as authority figures, distributing information.
- The story had one main peak around the time of impact.
- Many shared videos of the moment of impact.
- **Visuals sparked interest and conversation but serious impact (i.e. death toll) and low public understanding of meteor science meant that this story quickly fizzled out.**



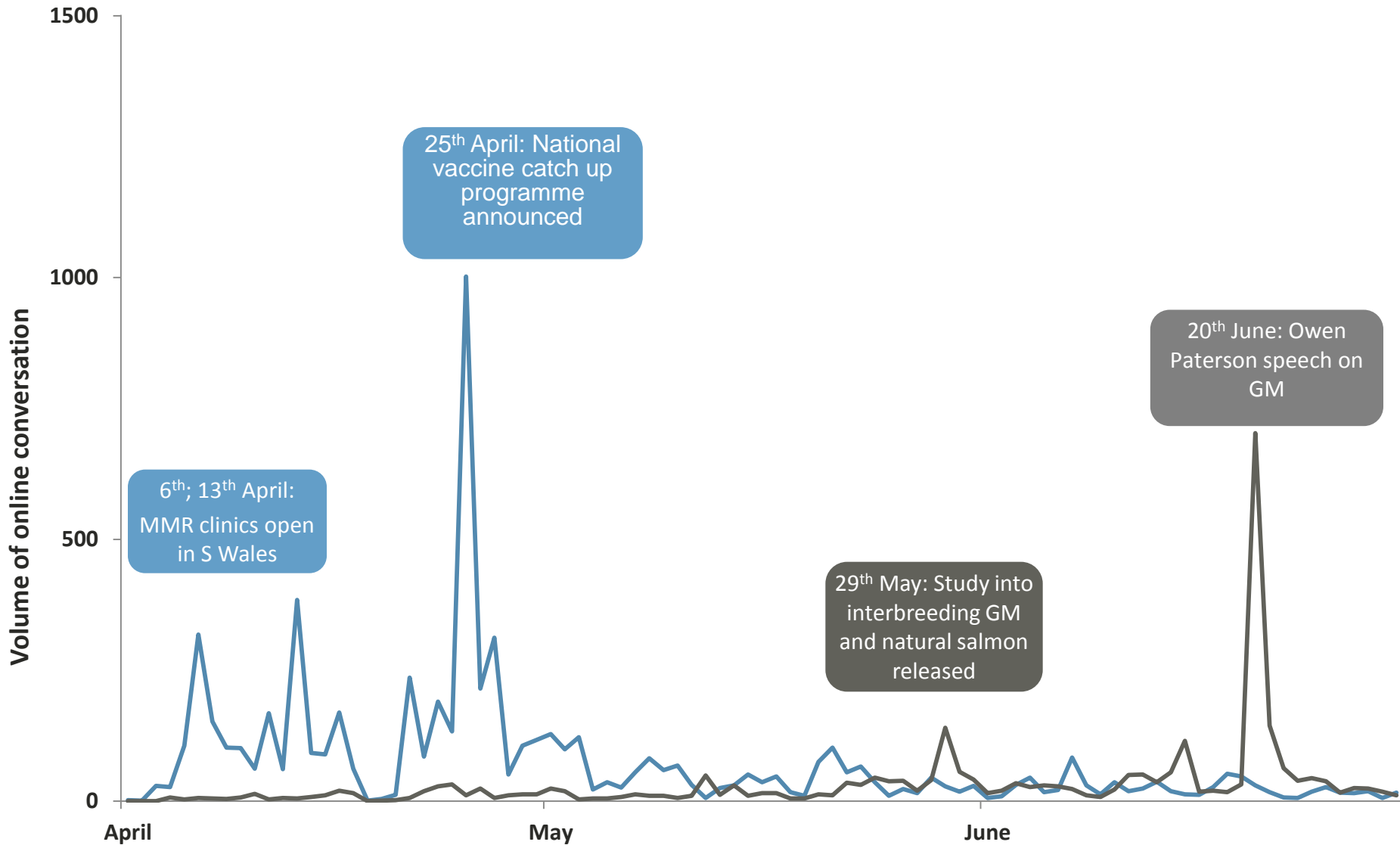
Horsemeat



- The horsemeat scandal took off on Twitter – the science of the story took second place to humour and people shared jokes, rather than facts.
- The numerous peaks in conversation followed the rolling revelations.
- There was little discussion on scientific information.
- **Involvement of household names, lack of serious public health implications and taboos around eating horsemeat drove extended, humorous online conversation.**

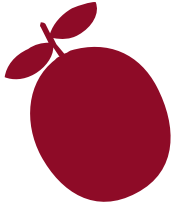


Measles and GM foods

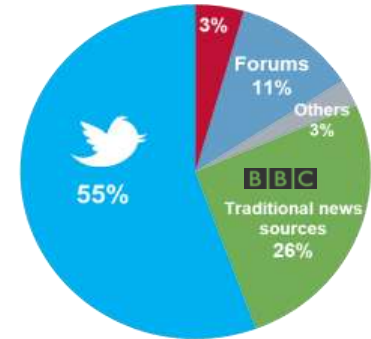


Conversations fuelled by government announcements

GM food



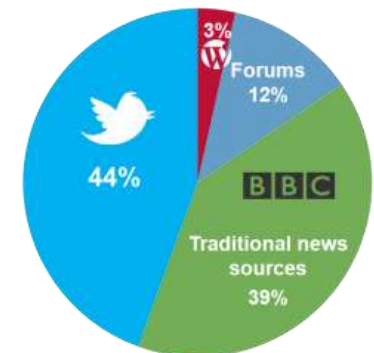
- Internet traffic on GM crops came predominantly from Twitter, in particular on the 20th of June when Owen Paterson gave a pro-GM speech.
- This sparked two debates; one about scientific authority and the other about the social and ethical implications of GM.
- **Controversial topics easily ‘activated’ by announcements /new findings. Low trust in politicians and low respect for their scientific authority – scientific advisers (e.g. Anne Glover) better trusted.**



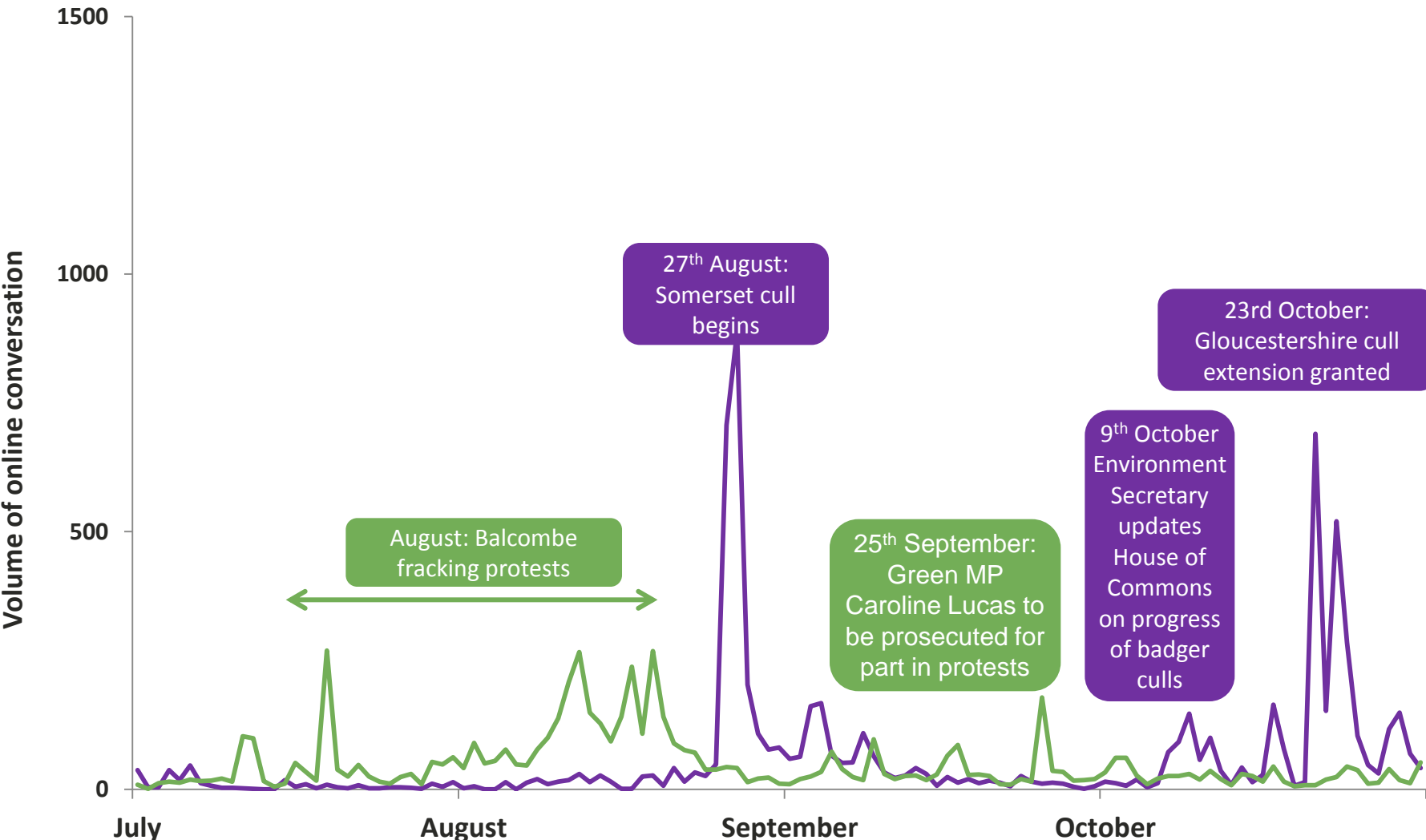
Measles outbreak



- While Twitter posts remained the largest traffic type, the volume of public health announcements increased the proportion of traffic coming from traditional sources.
- Much of the social media conversation was taken up by people sharing official public health messages.
- **Online conversation can boost government attempts to spread scientific messages (in this case a public health one around vaccines). Lack of traditional media coverage meant anti-vaccination online conversation was minimal.**

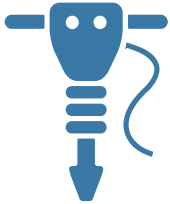


The badger cull and fracking

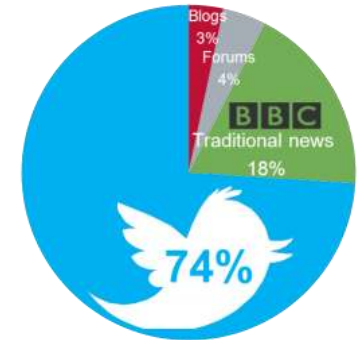


Antagonistic debate

Fracking



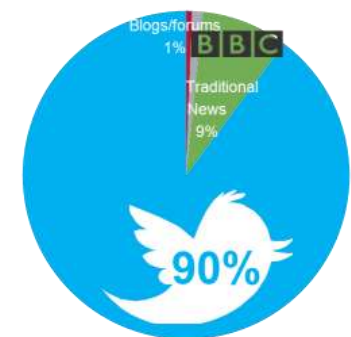
- This conversation was dominated by partisan voices on Twitter – with both sides of the debate citing “science” and “scientists” to promote their views.
- There was also a relatively high volume of more detailed conversation in environmental, investment and local area forums.
- **Well-informed, science-related discussions often lead to one-sided online debates, with little interaction between opposing views, as it means both sides can claim that the ‘authority’ of science is on their side.**



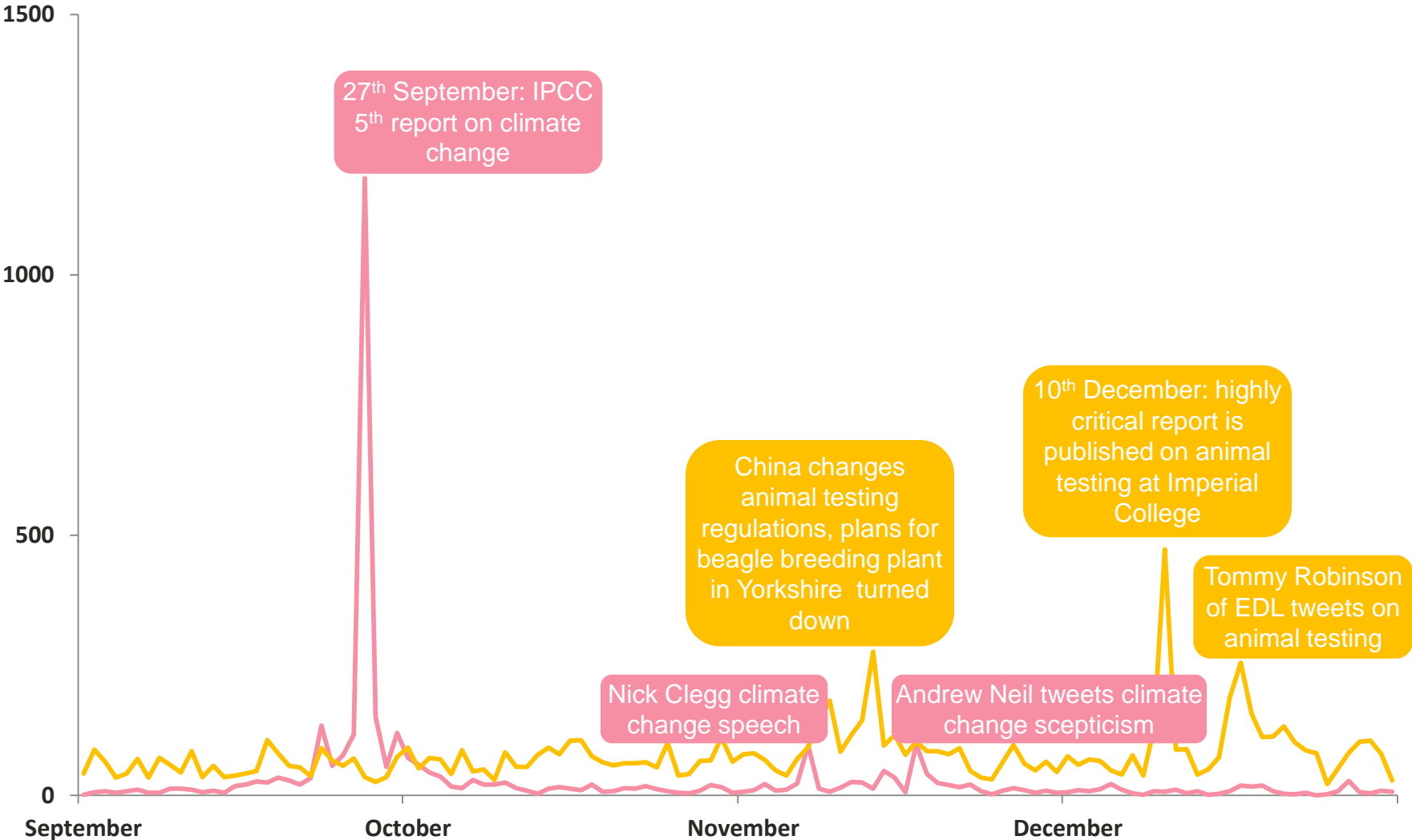
Badger cull



- While linked to events and critical comment pieces in the traditional media (particularly a piece by Mary Creagh MP), the conversation was dominated by intensely partisan discussion on Twitter, mostly against the badger cull.
- Much of this conversation was led by passionate individuals, rather than organisations.
- **Traditional media coverage of political interventions can still be very influential in driving online conversation, but true debate can be hampered by a lack of clarity on the science.**



Climate change and animal research

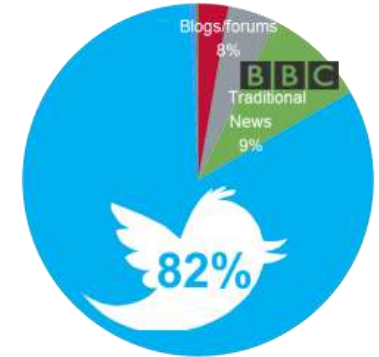


Science versus values

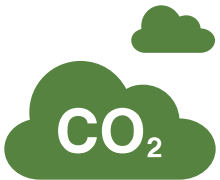
Animal Research



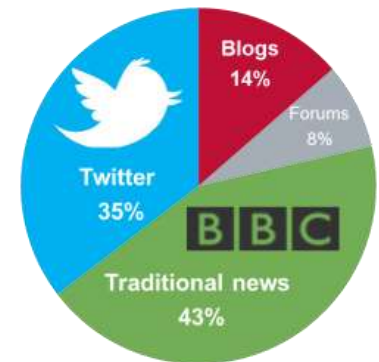
- Unlike some other topics there is always a certain level of discussion on animal testing; strongly held but niche views.
- On Twitter there is ongoing low level conversations, often with a consumerist slant e.g. naming and shaming companies and pleas for recommendations for products that haven't been tested on animals.
- Direct action groups and campaigns (e.g. BUAV, Lush) also dominate – conversation almost entirely anti-testing.
- **Scientific element of debate almost completely lost when strongly held ethical values are also at stake.**



Climate change



- Conversation dominated by news coverage of IPCC report.
- Debates on the existence of man-made climate change featured across many different types of unrelated forums and blogs – which often fell victim to 'trolling'.
- Outside scientific forums the debate is highly polarised. Evidence cited but for both sides the background of scientists matters as much as the science– who they work for, what they've studied, and their political leanings.
- **Closest to a public discussion of science observed. But few people appeared to change their minds – scientific arguments used to back up pre-set ideas and attitudes.**



Conclusions



The Context: Broader findings from other qualitative work suggests that much 'online conversation' is seen as noise by those who are not active social media engagers. Even those who have social media accounts described using them primarily passively in order to keep up-to-date, usually with friends and not with news.



The Audience: Discussion of science issues online is often among the pre-engaged who already hold strong views. Even the most animated Twitter debate is unlikely to reach many people who are not already interested and informed, though topics which have a humorous slant, visual appeal, or a public health element are more likely to reach a wider audience.



The Conversations: Wide online conversation around science-related issues is not always a marker for scientific discussion of the issue. Where participants in online conversations cite scientific evidence, science is usually used to shore up ethical or political arguments, rather than to inform, or present a balanced picture of all the research on an issue.



Trusted sources: Many of the debates boiled down to discussions of scientific authority and what this actually means/who possesses it. No consensus on authoritative sources, but general view that politicians especially lack credibility in science debate unless they have the backing of respected organisations.

Implications – social media tips and tricks for science communicators



Remember that trust is often low. In scientific debates, it tends to be attached to institutions and posts rather than people. Trust is likely to be highest in those organisations seen as independent and scientists aligned with them - use this form of authority where possible to spread your message.



Traditional media is your friend! Much of the online conversation consists of links back to trusted sources; the BBC and the traditional newspapers in particular for science conversations, but also the more accessible specialist media like Scientific American. Stories, research findings and opinion pieces in these media will be better trusted and have more reach.



Science alone isn't enough. You need to grab people's attention and make your story 'shareable'. What can you do to make what you're saying more visually interesting, more humorous or more relevant to people's daily lives?



Don't just preach to the converted! Many interventions into the online science conversation are unlikely to reach those who are uninterested or on the 'other side' of the debate unless you actively and directly engage them.