

Social Media



Guide to using social media for Citizen Science Projects



About this report - Introduction:

This guide is produced by The Conservation Volunteers (TCV) as part of the Scotland Counts Project. Scotland Counts aims to ensure that every individual and community in Scotland has the opportunity to develop skills and confidence to understand their local environment through Citizen Science.

Effective use of digital media is clearly identified as an important element in the development of Citizen Science. It was highlighted in the UK Environmental Observation Forum's 2013 major [review of Citizen Science](#) (and in particular in the Forest Research 2014 report, '[Citizen Science: Social Media as a supporting tool](#)').

In particular this report follows up a specific recommendation from an earlier Scotland Counts study on the role of the media in supporting Citizen Science to: *carry out further research into best use of social media to achieve widespread understanding of the term 'Citizen Science' and engage more people to participate in Citizen Science.*

Why is social media important?

“When you look at the numbers, it’s hard to deny that social media has become a ubiquitous part of how the world does business. Ninety one percent of online adults worldwide now use some sort of social media regularly; in the UK alone, there are 41 million Facebook users, and 10 million people on Twitter. The question of whether or not social media is important has been answered.”

A [practical guide](#) to #SocialMedia for #Charities & #SocialEnterprises

Social media plans are now considered highly [important to businesses](#):

- 86% of marketers stated that social media is important for their business
- 89% of marketers stated that increased exposure was the number one benefit of social media marketing

Use of social media is now the [top Internet activity](#): with people in Britain spending an average of 61 minutes daily on social media, a higher time-spend than any other major Internet activity, including email.

The demographic of social media usage is also broadening considerably. Whilst once considered a youth based media, according to the [Global Web Index study](#) it is being increasingly adopted by older users; on Twitter the 55-64 year age bracket is the fastest growing demographic with 79% growth rate since 2012. The fastest growing demographic on Facebook’s and Google+’s networks are the 45 to 54 year age bracket at 46% and 56% respectively.

- **Facebook** has 1.15 Billion users
- 25% of these users check this account more than five times a day
- They upload 350 Million photos a day
- **Twitter** has over 288 million monthly active users sending an average of 400 million tweets per day
- It’s fastest growing age demographic is 55 to 64 year olds

Courtesy of [digital insights](#) (figures from 2013)

Social media in Charities and Community Groups

“Social media enables charities to build relationships and go about cost-effective campaigning.” [Charity Comms Guide](#)

It is not only businesses which are using social media, it has also become increasingly important to charities and community groups. Social media can be an important way for activists to network and communicate better with one another and to make community activity much more visible¹. Research by [Idealware](#), an organization which provides resources to help nonprofits make smart software decisions, suggested that non-profit organisations are seeing tangible results from the use of social media:

- Over 70 percent of respondents had succeeded in bringing new supporters to their events
- 66 percent of advocacy organizations had got Facebook fans to take some type of action, like signing a petition

[Fourthsource](#), an independent publication dedicated to digital media marketing offers 10 key reasons why social media could be important to you:

1. Listen to your supporters.
2. Drive traffic to your website.
3. Help improve your online search results.
4. Raise more money.
5. Inform about your work.
6. Let your supporters spread the word about you.
7. Mobilise grassroots support.
8. Have a two-way conversation
9. Gain new supporters.
10. Increase trust and loyalty

Whilst these reasons focus on the broader importance of social media, there are clear implications for using social media in Citizen Science.

¹ <http://www.theguardian.com/voluntary-sector-network/community-action-blog/2012/mar/01/social-media-empower-communities>

Why is social media important for Citizen Science?

We know that Citizen Science can achieve a wide range of outcomes; it is described by the UK Environmental Observation Forum (UKEOF) as ‘an indispensable means of combining environmental research with environmental education and wildlife recording’. As well as gathering vital information to help scientists across the UK understand how the environment is doing, Citizen Science helps develop skills, improves health and wellbeing and connects us with each other and the environment around us. However there can be challenges in setting up successful Citizen Science projects. A number of academic studies have highlighted the importance of enjoyment and enthusiasm for the project as well as a need to see the usefulness of the activities and opportunities for progression in learning and skills. Research

“We must not lose the personal touch as we seek to tap the efficiencies of web-based approaches.

We must try to make remote experiences as personal as possible”

Chris Wernham, Head of BTO Scotland

“Social media can be used within Citizen Science projects as a way of creating virtual communities, which can enhance the enjoyment and satisfaction felt by volunteers. This is especially important for Citizen Science projects in which people are geographically dispersed.”

Understanding Citizen Science & Environmental Monitoring

indicates that proactive engagement and good feedback are a really important part of the success of Citizen Science projects. We know too that regular communication with participants is key to maintaining interest: ‘even for those not interacting directly, they get an impression of the activity within the project’. Social media can play an important role in delivering these essential elements.

Social media in Citizen Science is particularly relevant as projects become increasingly technology based, with data being reported and collected via online portals or mobile apps. Volunteers collecting data will often have no physical contact with other participants or the organisers of the research. A social element can be important in volunteers’ motivation to take part, so for those Citizen Scientists who are gathering and submitting data largely independently, social media can provide a

forum to discuss projects, share results and perhaps importantly for participants to see the activity of the group and feel part of a community which they are contributing to.

There is developing interest across the UK in ‘co-created’ Citizen Science projects – in which participants are engaged in developing the questions and the research ideas, as well as collecting the data. Social media has the potential to play a role in these kinds of collaborative approaches, building Citizen Science projects with strong and active communities of participants, sharing ideas and engaged in the underlying motivations of the projects.

Social media is already often used to recruit volunteers and retain them and to provide feedback of results.² However a number of studies have suggested that social media is not always used in the most efficient way, 'not due to lack of desire, but rather lack of skills, time, or understanding'.³

A Forestry Commission [report](#) into the specific use of social media in Citizen Science suggested that social media activity is currently mainly restricted to data collection and could be expanded to play a role at other points in the research cycle. The same report also suggested that social media campaigns are not always clearly targeted or focused on participants needs.

The remainder of this report therefore focuses on practical advice, hints and tips for successful use of social media in the context of Citizen Science.

SUMMARY: Social media can

- build communities of participants
- share information as results come in and projects develop
- raise awareness of particular surveys
- carry out regular communication with participants and interested others
- provide rapid and interactive feedback
- share good practice and noteworthy observations
- maintain motivation and engagement of participants

² Citizen Science: Social Media as a supporting tool Bianca Ambrose-Oji

³ Unity.co.uk

What Social Media options should I use?

There are many different social media options available. Those you choose should depend on your audience, the message you want to get across, and the resources you have available. You may choose to adopt an integrated approach, using a range of different tools, or more simply focus your efforts on one or two. Below are the main options which are out there, with the focus on Facebook and Twitter as these are probably the most commonly used and most applicable to Citizen Science projects.

Facebook

- Facebook has 750 million users worldwide
- Once you have ‘added’ someone on Facebook, and they accept your request, they are able to see all the photos, videos and status updates you have shared and posted on your public profile.
- Facebook Pages also allow you to create a profile for your organisation. Anyone who “likes” it will see updates from your organisation and view its content, as if it was their “friend”.

Good for:

- Posting simple status updates about your projects/organisation
- Sharing links to stories that your audience will find interesting - in turn they can share those links with their friends so if you post interesting material it can spread ‘virally’
- Good for embedded multimedia – ie sharing photos or videos
- Roughly one status update per day is usually enough for Facebook
- Tends to be a ‘word of mouth’ media – ie your posts are only seen by those who know about you and chose to ‘Like’ your organisations, or if one of their friends shares something you have posted
- Maintaining the support of an existing audience, rather than attracting new ones

Twitter

- 200 million users
- 2 or 3 tweets a day (not including replies to other updates) or even more would be perfectly acceptable on Twitter.
- Each ‘tweet’ is less than 140 characters
- Everything you tweet is available to everyone online, not just your followers. This does mean you have to be even more careful what you say but it also means there is more possibility to attract new followers
- The tweets of people you “follow”, which could include many of the world’s most prominent politicians, celebrities and organisations, appear in a chronological list known as your **timeline**

Good for:

- Publishing regular, short updates about what you're doing or thinking
- Like facebook you could use a tweet to link to a website or news that you find interesting or to reply to other people's tweets
- People posting on Twitter can categorise their tweets in simple ways, using hashtags (see below). This makes it easy to locate people who are discussing issues that you may be interested in, and lets you build a relationship with them so that they can become a supporter
- For example you can search for all tweets about Citizen Science and find any tweets which have included those words
- This means twitter can be a good research tool, even if you don't want to tweet yourself, as you can use it to follow what people are saying about a certain subject and locate good information, articles and links to other sources on a subject you are interested in

TWITTER TERMS:

Twitter in particular has it's own terminology which you need to understand in order to use it effectively.

- **Timeline:** a real-time list of tweets from people you follow on Twitter.
- **Hashtag:** the # symbol, called a hashtag, is used to mark keywords or topics in a Tweet. It was created organically by Twitter users as a way to categorize messages. For example, tweets about Citizen Science can include the hashtag #citizenscience, allowing anyone to click on the word, and see more tweets about Citizen Science.
- **Mention:** mentioning another user in your Tweet by including the @ sign followed directly by their username is called a 'mention'.
- **Reply:** a tweet posted in reply to another user's message, usually posted by clicking the 'reply' button next to their Tweet in your timeline. Always begins with @username.
- **Retweet (verb):** the act of forwarding another user's Tweet to all of your followers.

The image shows a Twitter thread with several tweets. Annotations are provided in colored boxes with arrows pointing to specific parts of the tweets:

- Top tweet (TCV Scotland @TCVScotland):** "See how volunteers are combining [#citizenscience](#) with practical conservation work outdoors - you could too [ow.ly/F9220](#)".
 - Annotation: "Here TCV Scotland are sending a tweet using the **hashtag** [#citizenscience](#)."
 - Annotation: "This means that anyone searching for that **hashtag** or interested in citizen science could see the tweet – it also means they could click on the **hashtag** and see other tweets on the same subject."
 - Annotation: "This is a link to a webpage with more details about the story. The **weblink** has been shortened in order to save space as you only have 140 characters for a tweet."
- Retweeted tweet (Laura White @Laura_CSW):** "Another joint day with @TCVScotland #GreenGym on the Kelvin Walkway at Kelvinbridge. [#volunteers](#) @SustransScot".
 - Annotation: "Here another twitter user [@Laura_CSW](#) has sent a tweet and **mentioned** TCV Scotland."
 - Annotation: "Laura has also used two **hashtags** ([#volunteers](#) and [#GreenGym](#)) to increase the chances that people interested in those topics will see the tweet."
- Retweet (TCV Scotland):** "New blog post! What's been happening in the Inner Forth! Hello, it's been a while since my la... [bit.ly/12cbPYP](#) #JoininFeelGood".
 - Annotation: "TCV have then **retweeted** Laura's tweet so that all their followers can also see it."
- Retweet (Comm Safety Glasgow):** ".@GCVGreenNetwork in partnership w/ @TCVScotland are opening up an old tractor track off Commonhead Rd & doing a litter pick today w/ [#NIES](#)".
 - Annotation: "TCV Scotland are using the tweet to try to attract more people who may be interested in citizen science to look at the webpage for more details."

Other social media options include...

You Tube

YouTube is a video sharing site with a massive worldwide community of 490 million users. Posting short videos of your organisation's work in creative, funny or moving ways can be a great way to communicate. For example you could post a video explaining how to take part in your Citizen Science project or sharing the results of your project so far. The videos can also be embedded on other social media or on your website.

Linked In

This is essentially a professional version of facebook – for people to network in a professional setting. In terms of Citizen Science it is probably of most use in gaining possible partner organisations rather than participants.

Google+

Google's version of Facebook. As with all google related products using them can be increasingly useful to help your web content to be found via google by including basic information about your charity, such as a one sentence summary of what you do, photos of your organisation at work, and status updates. Google+ also has the added advantage of sharing content by Circles- groups of people that you have segmented according to who they are. This allows for targeting - you can share different messages with different groups of people, according to what they would be most interested in.

Flickr

(pronounced "flicker") is an image hosting and video hosting website - users can share and embed photographs and as with facebook and twitter there is also the ability to set up a profile, to follow other people's profiles and to share images. It could be used if you want participants to share photos of species they find etc. Also see [blipfoto](#) a simple site which allows you to keep a photo journal which can be very useful for wildlife recording.

Pinterest

is a web and mobile application that offers a visual discovery, collection, sharing, and storage tool. Users create and share the collections of visual bookmarks (boards). Boards are created through a user selecting an item, page, website, etc. and pinning it to an existing or newly created board. Users save and share pins from multiple resources onto boards based on a plethora of criteria, e.g., similar characteristics, a theme, birthday parties, planning a vacation, writing a book, interior decorating, holidays. Boards can develop projects, organize events, or save pictures and data together.

Blogs: not always thought of in the category of social media – but blogs can be a very easy way to post updates on your project and allow participants to discuss what they have found, ask questions and

comment on your latest news. Through blogging sites such as blogger or wordpress you can easily set up simple websites to host things like your contact details, more about your project and regular post updates as results are produced.

Social media management systems - eg **Hootsuite**: These are interfaces that allow you to manage multiple social networks. It allows you to post to more than one of your social media accounts at the same time and also to create different feeds showing topics you might be interested in.

Top tips for getting your community involved in Citizen Science via social media?

From these case studies, and in combination with the tonnes of online advice out there about using social media effectively and successfully, we have picked out some tips which have particular relevance to Citizen Science along with links to other references you can read for more information or inspiration in these simple do's and don'ts:⁴

Do...

...decide your communications aims. Have a clear goal - make it concrete and measurable with online and offline targets. It should have a clearly defined purpose as part of a well articulated project strategy. Are you trying to recruit more participants in your Citizen Science project, or retain existing ones? Are you promoting your project to get wider media attention, or providing a space for your participants to post results and discuss their experiences?

...learn about your audience

Think about where your current and potential supporters spend time online. Think about the other sites they may be using, and what they are looking for on your site. This might require some research by talking to your volunteers or carrying out a more formal survey. Thinking about this will allow you to decide if social media is the most effective option, which platform is most suitable and matches the digital literacy of those groups.

...Tailor your content to that audience

Take into account the differing needs, motivations and interests of the scientists and the target volunteer community i.e. the differences between the “interested public” or amateur experts (e.g. birders).

...post regular, useful or entertaining updates. To keep people interested you will need to post regularly and with things people are interested in. So make a plan of what you want to say, thinking about whether this social media page is just for one Citizen Science project, or is it for everything that your organisation does? Which areas of work is it going to focus on? The content doesn't all have to be about your project - posting things about other projects, news, or useful resources all makes your site more interesting, and helps to build relationships.

...build relationships. This is one of the main purposes of social media – so don't just post a never ending stream of sales pitches. Open up a two-way conversation via comments sections and message boards.

⁴ These tips draw heavily on four great resources which are well worth a read for more information; [charity commission guide to social media](#), [WikiHow](#) and [A practical guide to #SocialMedia for #Charities & #SocialEnterprises](#), and Citizen Science: Social Media as a supporting tool Bianca Ambrose-Oji

...participate in the community. Social media sites usually have/consist of tightly knit communities. In order to gain trust (and followers) you must be willing to participate as well. This is usually done in the form of commenting on the postings of others and the sharing or re-sharing of other people's posts.

...allocate resources For all of these reasons, you need to make sure you have enough time to devote to engaging with social media. You need to be able to check it regularly, reply to comments in a timely manner and produce regular content – so it's better to perhaps pick one social media platform and focus on that rather than spread resources too thin.

Don't...

...do it just because everyone else is

Just because everyone else is using social media, doesn't mean you have to! And don't try and do everything. You may be best to just pick one media – say facebook, twitter, or a blog site, and just use that to share regular updates on the results of your project. Don't try to do everything, just for the sake of it.

...speak too soon

If you're new to social media, it's best to spend some time watching how others use it and learning from them before adding your own content.

...just broadcast

While it's important to share your news and upcoming events, the best social media users don't just use it to broadcast their organisation's news. Talk to your supporters about what's important to them, respond to their questions and talk about other issues altogether.

Case studies

The case studies below are a selection of examples of how social media can be used in Citizen Science projects. There are many excellent examples out there and the selection below has been picked in order to highlight a range of approaches and to highlight certain features common to many good social network campaigns.

CASE STUDY 1 – OPAL

How do they use social media?

- [Facebook](#) and [Twitter](#)
- Regular posts (about 1 per day on facebook, sometimes more on twitter)
- They use a range of types of content: about their projects, about other people's and some just general interest

What can we learn from this orgs use of social media?

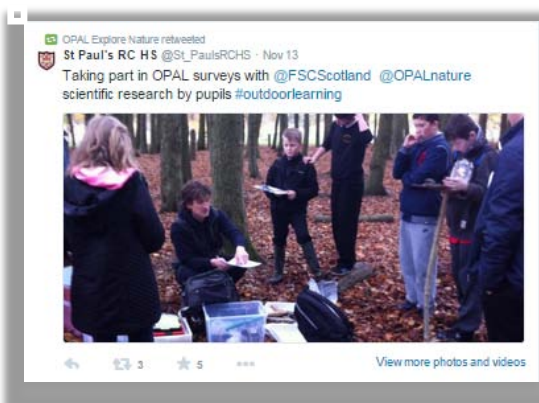
- **Effective recycling of content on facebook and on twitter**
- Most of the content appears on both the facebook page and the twitter page. However on twitter they include hashtags and mentions. This makes content more searchable and appear in more people's feeds so it reaches out to certain communities and organisations.



- They also feed in additional random snippets suited to twitter (remember twitter needs lots of regular short and sharp content):



- **Encouraging others to tweet about you, and use Retweets, hashtags and mentions!**
- It is also good to encourage others to tweet about you – especially if they are socially savvy themselves and can mention other partners, use hashtags etc. You can encourage people to do this by asking them at the end of a practical session, giving them a business card with your twitter handle on, or including it in a follow up email at the end of the event.
- In the example, below a school tweets on their account about a survey they have been doing, and mentions OPAL as well as FSC Scotland and uses a relevant hashtag to make the post more visible to other relevant people.



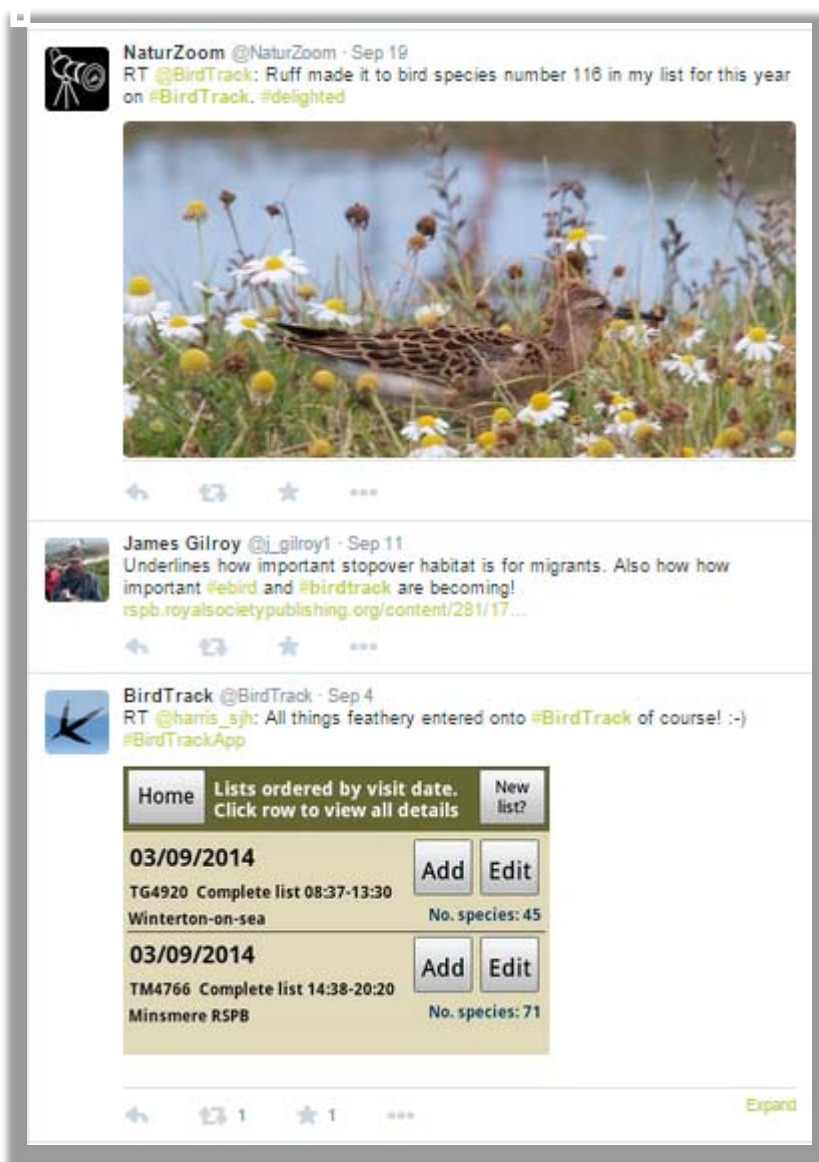
CASE STUDY 2 - BTO

How do they use social media?

- BTO has multiple twitter accounts – for example a BTO twitter account as well as a specific one for BTO garden birdwatch and for other surveys eg @BirdTrack.

What can we learn from this organisation's use of social media?

- This allows them to build awareness of their brand but also to separate content for specific audiences and reuse relevant material through retweets.
- They also make use of a specific hashtag for particular projects, for example #birdtrack
- The example below shows how use of these different twitter accounts, hashtags and mentions can build a community and a conversation about your project:



Case study 3a: Butterfly conservation:

How do they use social media?

- Butterfly conservation have a very active facebook page with over 30,000 followers. There is also lots of active community discussion. It shows how volunteers and enthusiasts can value the opportunity to feel part of an online community and discuss their recordings with others.

What can we learn from this organisation's use of social media?

- It shows how volunteers and enthusiasts can value the opportunity to feel part of an online community and discuss their recordings with others.
- The strength of the online community is evidenced by the number of comments and the little section below shows the value of an active community feel in Citizen Science projects:



Case study 3b: Butterfly conservation:

How do they use social media?

- Using flickr for actively collecting data



What can we learn from this organisation's use of social media?

- Butterfly conservation get people to submit photos of the butterflies they see onto their flickr page so actually collect data through a social media account.
- A similar approach has been used by an [innovative research project](#) which actively trawls social media sites, collecting photographs from instagram and flickr.
- This is a good example of more inventive use of social media to collect data inadvertently collected by social media users:

Case Study 4 – RSPB bird count

How do they use social media?

- Use of targeted tweets to attract specific audiences.

What can we learn from this organisation's use of social media?

- This is a simple example of how social media can be used to target a certain audience through partner organisations much as we may normally do off-line or perhaps via email.
- In this the RSPB specifically contact 'The wild network', an organisation which encourages kids to get outside. The RSPB therefore know that lots of the followers of the Wild Network will be interested in the bird count. So it is a great way to get your message out to a whole new potential audience who may not know about the bird count, or follow the RSPB already.



Case Study 5 – Conker tree science

How do they use social media?

- The conker tree science website does not promote any social media sites, but nevertheless a search on twitter shows it is being actively discussed and promoted

What can we learn from this organisation's use of social media?

- This case study shows that even if you are not actively using social media – it doesn't mean people aren't talking about your project
- So it is important to listen to what people say – and use this interest to promote your survey
- It also means you don't HAVE to set up your own social media channels to have your project promoted through them....if you work off-line with the 'right' partners, they can promote your project online for you.



Case Study 6 – UK Ladybird survey

How do they use social media?

- good active twitter account with over 3000 followers

What can we learn from this organisation's use of social media?

- It is very active in engaging people - people send in records and ask questions and the organisers provide support and thank people for recording ...



Case Study 7 – iSPOT

How do they use social media?

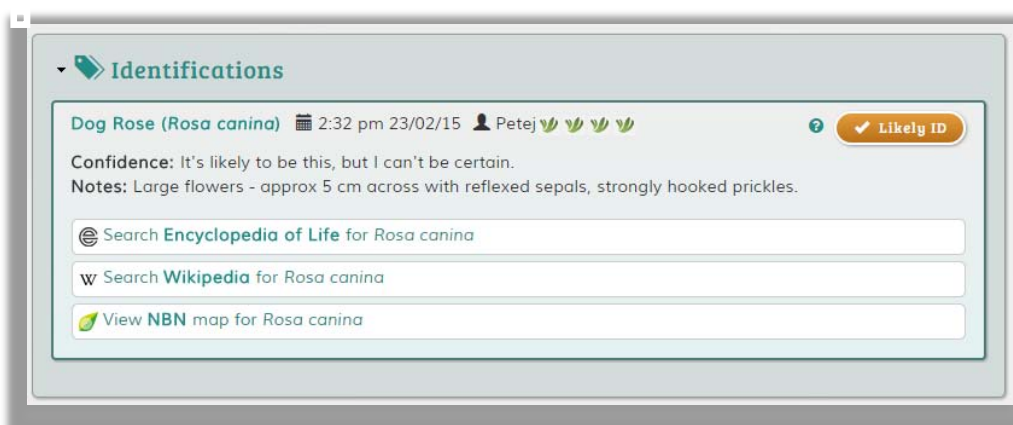
- We have included iSPOT in this guide as an example of a different kind of social media. Though it does use traditional social networking sites through an active [twitter account](#), it is also a social media platform in its own right.
- iSpot is a Citizen Science project run by The Open University.
- It is a self contained community which allows users to upload photos of species they see and get help in identifying them from other members of the online iSPOT community.

What can we learn from this organisation's use of social media?

- Much like other social media sites it gives you the opportunity to see what others are observing – for example see all the latest observation which people have posted:



- Each record has details about where it was seen, the species and the confidence level with which it has been identified.



- There is also an opportunity for people to comment on and discuss other people's records and agree their observation (rather as you would 'like' in facebook) or to comment and discuss.
- Therefore as with all social media it relies on building an active and engaged community online who generate content and support each other.
- Whilst setting up your own self-contained social media website might be beyond most of us, iSpot is a good example of an existing social media platform that facilitates Citizen Science activity. It allows you to join and set up communities that share your interests and will build your knowledge.