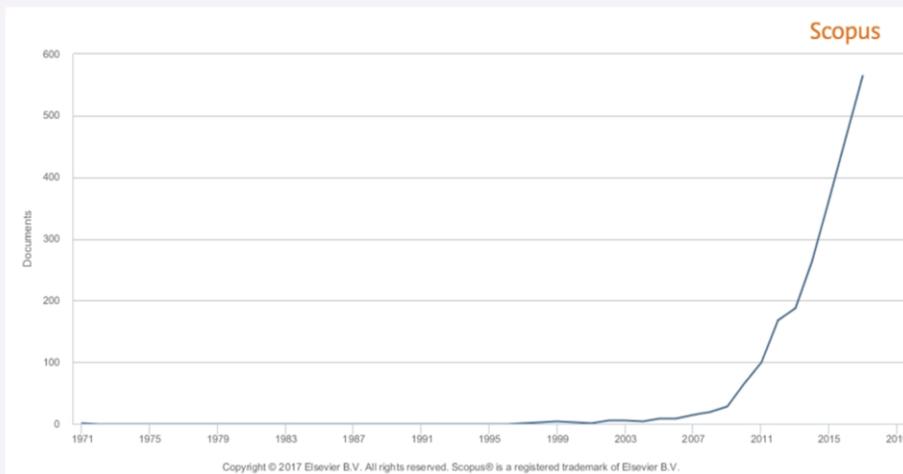


Academic publications



According to scopus, there are now over 550 papers in leading academic journals. Google scholar, which includes a wider range of papers, identified over 8060 papers in 2018, 7800 in 2017, 5190 in 2015, 1450 in 2010, 748 in 2007, and only 525 in 2005. We're seeing a very rapid increase in the use of the term by researchers and in publications of scientific papers in this area.

Conferences and meetings

- 2008-2009 – US CAISE Working group on Public Participation in Scientific Research
- 2009 onward – Sessions in conferences in Earth sciences, ecology, and computing
- 2010 – Citizen Cyberscience Summit, London (2012, 2014)
- 2012 – Public Participation in Scientific Research, Portland
- 2016 – European Citizen Science Conference

An indication of the growth of citizen science is also in the creation of special sessions and workshops on this area. About a decade ago, a very influential working group was set by the Center for Advancement of Informal Science Education in the US which explored an alternative name for this field of activity – Public Participation in Scientific Research (PPSR). Around the same time, we see special sessions in academic conferences about citizen science when people want to share their experience. This is happening in areas such as earth science, ecology, and computer support collaborative work. In 2010, the first conference that was dedicated to citizen cyberscience was organised in London with about 100 participants, with two further conferences organised at UCL in 2012 and 2014. In 2012, a conference on public participation in scientific research was organised in Portland, Oregon. In 2015 this evolved into the Citizen Science 2015 conference and the first European conference in 2016. All these meetings show that people in many academic areas that are dealing with citizen science want to meet and exchange experience and learning. This is also known as a “Community of Practice”

Citizen Science (OED 2014)

citizen science n. scientific work undertaken by members of the general public, often in collaboration with or under the direction of professional scientists and scientific institutions.

citizen scientist n. (a) a scientist whose work is characterized by a sense of responsibility to serve the best interests of the wider community (now rare); (b) a member of the general public who engages in scientific work, often in collaboration with or under the direction of professional scientists and scientific institutions; an amateur scientist.



Now, with all the examples, we can look at an official definition of citizen science. Notice in the definition the use the “often in collaboration or under the direction of professional scientists” – most of the examples that we’ve seen are indeed focus on projects that are led by scientists. It does give scope for projects that are created by the public. The second part is talking both about scientists in part (a) and about members of the public in (b). We will talk about these differences later in the course.

Community of practice - associations

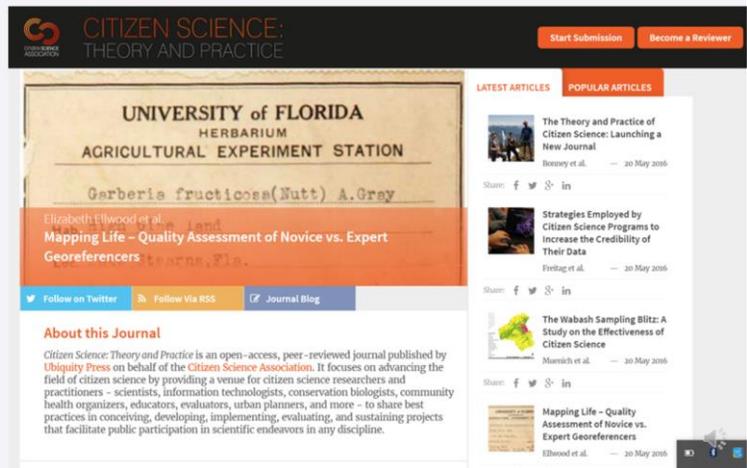
- (2012)-2014 – Citizen Science Association
- 2013 – European Citizen Science Association
- 2014 – Australian Citizen Science Association
- 2017 – African Citizen Science Association



There is now a growing body of professional organisations that are dedicated to citizen science. Out of the meeting on PPSR, came out the citizen science association. In Europe, the European Citizen Science Association was set in 2013, and another one in Australia in 2014. In 2018, an association was launched in Africa and there is also an effort in Asia.

Academic Journals

- There are many special issues of academic journals that are dedicated to citizen science



Another demonstration of citizen science growth is the increase in academic publications that are dedicated to the area, and there are a number of special issues of academic journals in ecology, biology, science communication, and geography that are dedicated to it. For the past 4 years, there is a dedicated journal to exchange research on citizen science

Beyond academia

- Interest in the term have been growing steadily over the past 15 years

citizen science is|

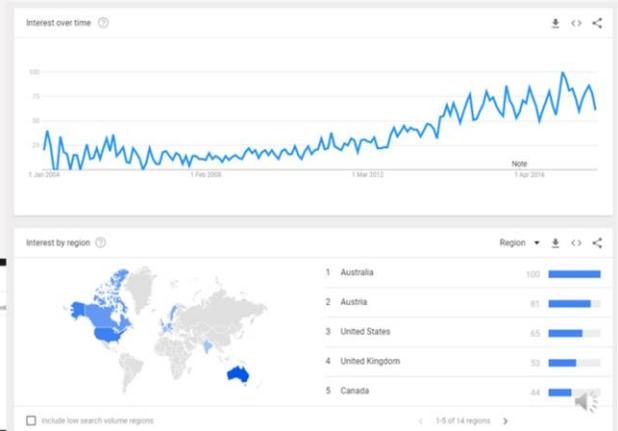
citizen science is **the new black**
citizen science is
why citizen science is **important**
easier citizen science is **better**
is citizen science **reliable**
ispex citizen science

Google Search

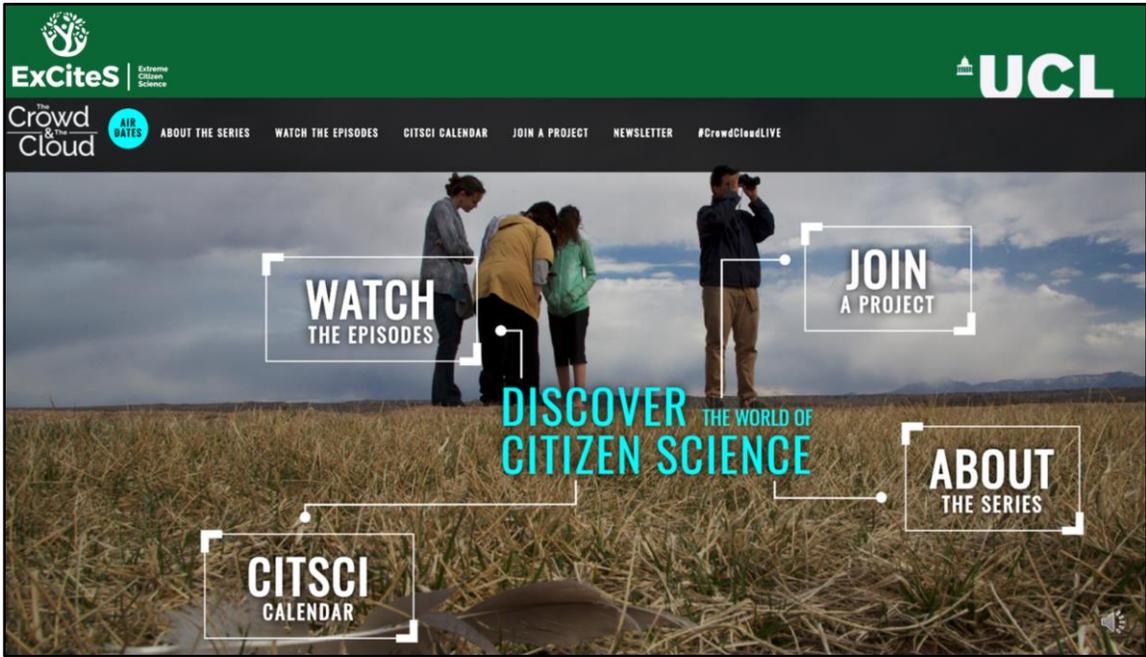
Bing citizen science

Citizen science
Citizen science is scientific research conducted, in whole or in part, by amateur volun-

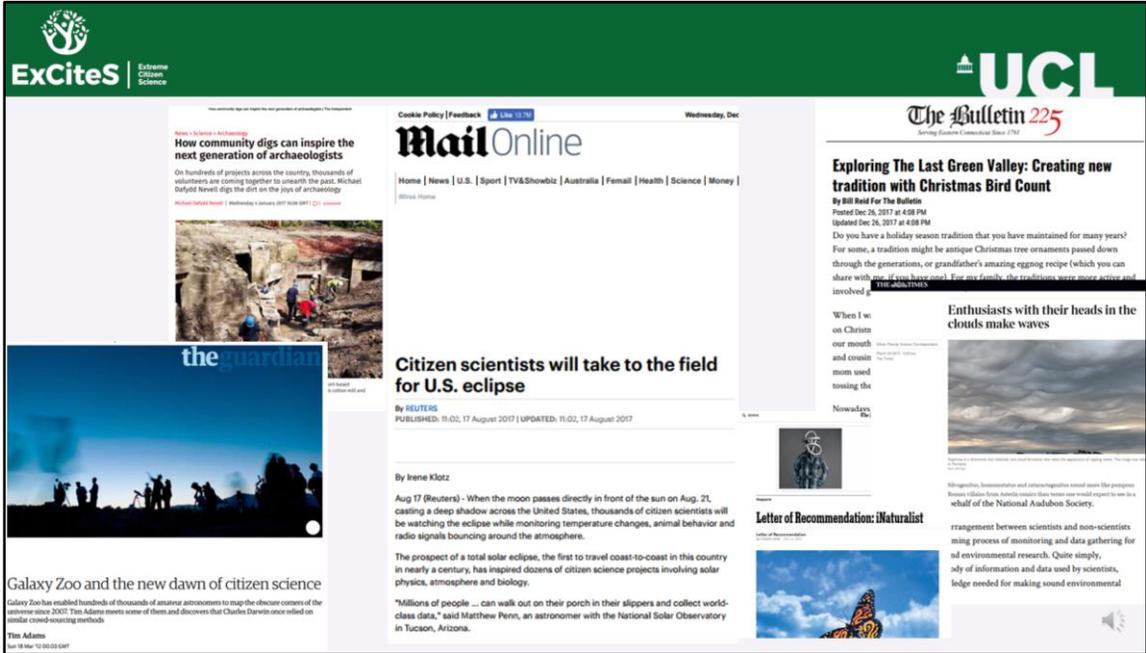
citizen science
citizen science **games**
citizen science **news**
citizen science **jobs**
citizen science **uk**
citizen science **lessons**
citizen science **for kids**
citizen science **journal**



When looking at google trends, we can see that in terms of search volume, the term is being recognised and people are searching for it. The predictive text also tell us what type of things people are searching for...



In 2017, public television in the USA broadcasted a programme dedicated to citizen science, which you can watch online.



Attention to citizen science is also growing in the media and across newspapers – from the local to global news outlet. In 2017, there were 500 references to citizen science in the UK, including MailOnline, the Guardian, the Independent, the Times, and many other places – over 190 media outlets

Summary

- Citizen science has historical precedents, but new types of activities and participants.
- Social and technological trends enabled modern citizen science
- Citizen science includes a wide range of activities, and is gaining recognition among the public and within the area of research

