

**Title:** Dataset associated with “What’s in a name? The paradox of citizen science and community science”

**Abstract:** Citizen science has expanded ecological and environmental sciences by making possible studies across greater spatial and temporal scales while incorporating local expertise and interests that might otherwise be overlooked. Broadly, citizen science involves the public in the process of science. However, it continues to struggle to engage diverse participants. Citizen science project coordinators are increasingly trying to promote inclusivity by rebranding as “community science” to avoid the term “citizen.” Rebranding efforts, while well-intentioned, are uninformed by research, as we lack an evidenced-based understanding of these terms. We distributed a survey to those who participate in citizen and community science. We found differences in how well known and accepted the terms are, who is perceived as initiating and benefiting from the projects, and associated levels of inclusivity. Our findings have important implications for those involved in citizen and community science seeking to better describe projects in the future.

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**Format of data files:** Comma-delimited values (.csv), .pdf

**Time period the data were collected:** 2021-02-2021-04

**Location where data were collected:** Colorado State University, Fort Collins, Colorado

**File information:** All data presented in the study is included in the .csv files “Citizen and community science study\_quantitative.csv” and Citizen and community science study\_qualitative.csv. All data are survey data and codes from analyses of open-ended survey data. The first file contains the quantitative data associated with closed-response survey questions (n = 196). The second file contains qualitative data, including anonymized open-ended survey questions and the content analysis data (n = 166).

There are 3 total data files – the two survey data files and the associated README file.

**Categories in the spreadsheet**

“Quantitative survey data” sheet

Column	Column name	Description
A	Participant ID	Identifying number across spreadsheets
B	Name they saw on the survey	Whether they saw “citizen science” or “community science” for quantitative questions
To what degree do you agree or disagree with each of the statements about [citizen science or community science based on column B] below?		
An outcome of [citizen science or community science based on column B] is...		
(1 = Strongly agree, 2 = Agree, 3 = Somewhat agree, 4 = Neither agree nor disagree, 5 = Somewhat disagree, 6 = Disagree, 7 = Strongly disagree)		
C	Answer research questions over long periods of time	Likert scale item from above question
D	Research that spans broad spatial scales	Likert scale item from above question
E	Answering research questions that are too expensive for paid staff	Likert scale item from above question
F	Answering previously unanswerable research questions	Likert scale item from above question
G	Inform management decisions	Likert scale item from above question
H	Effective ecosystem management	Likert scale item from above question
I	Useful data for managers	Likert scale item from above question
J	Protection for endangered species	Likert scale item from above question
K	Effective conservation	Likert scale item from above question
L	Conservation of natural habitat	Likert scale item from above question
M	Data for conservation scientists	Likert scale item from above question
N	Collaborative conservation with communities	Likert scale item from above question
O	Scientific information that informs policy	Likert scale item from above question
P	Data for policymakers	Likert scale item from above question
Q	Community-relevant policies	Likert scale item from above question
R	Inform policy decision-making processes	Likert scale item from above question
S	Inform policy implementation	Likert scale item from above question

T	Inclusion of all people in science	Likert scale item from above question
U	Participation in science by diverse peoples	Likert scale item from above question
V	Exclusion of people based on citizenship status	Likert scale item from above question
W	Inclusion of diverse voices in science	Likert scale item from above question
X	Partnerships between scientists and the public	Likert scale item from above question
Y	Collaboration between managers and the public	Likert scale item from above question
Z	Collection of trustworthy data	Likert scale item from above question
AA	Data that will be accepted by other researchers	Likert scale item from above question
AB	Acceptance of volunteer collected data	Likert scale item from above question
To what degree do you agree or disagree with each of the statements about [citizen science or community science based on column B] below?		
Participation in [citizen science or community science based on column B] can affect...		
(1 = Strongly agree, 2 = Agree, 3 = Somewhat agree, 4 = Neither agree nor disagree, 5 = Somewhat disagree, 6 = Disagree, 7 = Strongly disagree)		
AC	Public science literacy	Likert scale item from above question
AD	Project-specific content knowledge	Likert scale item from above question
AE	Knowledge about scientific processes	Likert scale item from above question
AF	Skills needed for scientific investigations	Likert scale item from above question
AG	Awareness about scientific issues	Likert scale item from above question
AH	Science informed behavior change	Likert scale item from above question
AI	Engagement in civic action	Likert scale item from above question
AJ	Attitudes about science	Likert scale item from above question
AK	Identities as scientists	Likert scale item from above question
AL	Environmental stewardship behaviors	Likert scale item from above question
In which parts of the scientific process do [citizen science or community science based on column B] volunteers participate? (select all that apply)		
AM	Asking research questions	Multiple choice option from above question
AN	Finding background information on the subject	Multiple choice option from above question
AO	Developing hypotheses	Multiple choice option from above question

AP	Designing methods for data collection or experiments	Multiple choice option from above question
AQ	Collecting data or samples	Multiple choice option from above question
AR	Analyzing samples	Multiple choice option from above question
AS	Analyzing data	Multiple choice option from above question
AT	Interpreting data and drawing conclusions	Multiple choice option from above question
AU	Disseminating (sharing) findings of the project	Multiple choice option from above question
AV	Designing new studies based on previous findings	Multiple choice option from above question
Of the items that you selected, order the activities based on how often [citizen science or community science based on column B] volunteers participate in them (1 being the most frequent activity).		
AW	Rank_Asking research questions	Rank options based on above question
AX	Rank_Finding background information on the subject	Rank options based on above question
AY	Rank_Developing hypotheses	Rank options based on above question
AZ	Rank_Designing methods for data collection or experiments	Rank options based on above question
BA	Rank_Collecting data or samples	Rank options based on above question
BB	Rank_Analyzing samples	Rank options based on above question
BC	Rank_Analyzing data	Rank options based on above question
BD	Rank_Interpreting data and drawing conclusions	Rank options based on above question
BE	Rank_Disseminating (sharing) findings of the project	Rank options based on above question
BF	Rank_Designing new studies based on previous findings	Rank options based on above question
How likely are you to describe a project as each of the following? (1 = Extremely unlikely, 2 = Unlikely, 3 = Somewhat unlikely, 4 = Neither likely nor unlikely, 5 = Somewhat likely, 6 = Likely, 7 = Extremely likely)		
BG	Likelihood of calling a project citizen science	Likert scale item from above question
BH	Likelihood of calling a project community science	Likert scale item from above question
How familiar are you with each of the following terms? (1 = Very unfamiliar, 2 = Unfamiliar, 3 = Slightly unfamiliar, 4 = Neither familiar nor unfamiliar, 5 = Slightly familiar, 6 = Familiar, 7 = Very familiar)		
BI	Familiarity with citizen science	Likert scale item from above question
BJ	Familiarity with community science	Likert scale item from above question

Which of the following best describes you?		
BK	Project volunteer	Multiple choice option from above question
BL	Project coordinator	Multiple choice option from above question
BM	Trainer of project coordinators	Multiple choice option from above question
BN	Data user	Multiple choice option from above question
BO	Researcher who studies projects that rely on volunteer data	Multiple choice option from above question
BP	Not part of a project	Multiple choice option from above question
BQ	Educator	Multiple choice option from above question
What types of projects do you work with? (choose all that apply)		
BR	Astronomy	Multiple choice option from above question
BS	Botany	Multiple choice option from above question
BT	Chemistry	Multiple choice option from above question
BU	Ecology	Multiple choice option from above question
BV	Environmental studies	Multiple choice option from above question
BW	Entomology	Multiple choice option from above question
BX	Genetics	Multiple choice option from above question
BY	Geography	Multiple choice option from above question
BZ	Geology	Multiple choice option from above question
CA	Medicine	Multiple choice option from above question
CB	Meteorology	Multiple choice option from above question
CC	Molecular biology	Multiple choice option from above question
CD	Oceanography	Multiple choice option from above question
CE	Ornithology	Multiple choice option from above question
CF	Paleontology	Multiple choice option from above question
CG	Physics	Multiple choice option from above question
CH	Public health	Multiple choice option from above question
CI	Watershed science	Multiple choice option from above question
CJ	Wildlife biology	Multiple choice option from above question
CK	Zoology	Multiple choice option from above question
CL	Social science	Write in response from above question
CM	Herpetology	Write in response from above question
CN	Mammalogy	Write in response from above question
CO	Invasive species	Write in response from above question
CP	Phycology	Write in response from above question
CQ	Marine ecology	Write in response from above question
CR	Computer science	Write in response from above question
CS	Forestry	Write in response from above question
Where do you live?		
CT	Country	Options: USA or Other
At what type of institution are you located?		
CU	University or college	Multiple choice option from above question
CV	Nonprofit or NGO	Multiple choice option from above question
CW	Federal agency	Multiple choice option from above question

CX	State agency	Multiple choice option from above question
CY	County agency	Multiple choice option from above question
CZ	City agency	Multiple choice option from above question
DA	K-12 school district or program	Multiple choice option from above question
DB	Industry	Multiple choice option from above question
DC	Consulting	Multiple choice option from above question
DD	Volunteer in a project	Multiple choice option from above question
DE	Other research institution	Multiple choice option from above question
DF	Museum	Write response from above question
Which of the following best describes how you identify?		
DG	Race	Options: White or POC (person of color)
What is your gender identity?		
DH	Gender	Options: Man, Woman, Nonbinary, Prefer not to say
What is your highest level of education?		
DI	Education level	Options: Less than high school, High school degree/GED, Some college, 2-year degree, 4-year degree, Some graduate education, Professional degree, Doctorate
What is your age?		
DJ	Age	20-24 years, 25-29 years, 30-34 years, 35-39 years, 40-44 years, 45-49 years, 50-54 years, 55-59 years, 60-64 years, 65+ years

“Qualitative survey data” sheet

Column	Column name	Description
A	Participant ID	Identifying number across spreadsheets
B	Why are you likely or unlikely to call a project citizen science?	Open-ended survey question: Why are you likely or unlikely to call a project "citizen science"?
C	Why are you likely or unlikely to call a project community science	Open-ended survey question: Why are you likely or unlikely to call a project "community science"?
D	What do you call a project and why? If you are not part of a project, please put N/A.	Open-ended survey question: What name(s) do you call the project(s) of which you are a part AND why? If you are not part of a project, please write N/A.
E	CitSci_ Not well known or accepted	Code from content analysis
F	CitSci_ Well known or accepted	Code from content analysis
G	CitSci_ Well known or accepted by funding agencies	Code from content analysis

H	CitSci_Well known or accepted by government agencies	Code from content analysis
I	CitSci_Well known or accepted outside of citizen science community	Code from content analysis
J	CitSci_Well known or accepted by the scientific community generally	Code from content analysis
K	CitSci_Well known or accepted combined	A created code that combined the codes from columns D-I
L	CitSci_Familiar to themselves	Code from content analysis
M	CitSci_Not familiar to themselves	Code from content analysis
N	CitSci_Community driven	Code from content analysis
O	CitSci_Driven by both scientists and communities	Code from content analysis
P	CitSci_Scientist driven	Code from content analysis
Q	CitSci_Science goals	Code from content analysis
R	CitSci_Social or community goals	Code from content analysis
S	CitSci_Inclusive	Code from content analysis
T	CitSci_Exclusive	Code from content analysis
U	CitSci_Community participants	Code from content analysis
V	CitSci_Individual participants	Code from content analysis
W	CitSci_Non-scientist participants	Code from content analysis
X	CitSci_Wider public participants	Code from content analysis
Y	CitSci_Data collection and analysis only	Code from content analysis
Z	CitSci_Participation in the entire project	Code from content analysis
AA	CitSci_More than data collection and analysis	Code from content analysis
AB	CommSci_Not well known or accepted	Code from content analysis
AC	CommSci_Well known or accepted	Code from content analysis
AD	CommSci_Well known or accepted by funding agencies	Code from content analysis
AE	CommSci_Well known or accepted by government agencies	Code from content analysis
AF	CommSci_Well known or accepted outside of citizen science community	Code from content analysis
AG	CommSci_Well known or accepted by the scientific community generally	Code from content analysis
AH	CommSci_Well known or accepted combined	A created code that combined the codes from columns AB-AF
AI	CommSci_Familiar to themselves	Code from content analysis
AJ	CommSciNot familiar to themselves	Code from content analysis
AK	CommSci_Community driven	Code from content analysis
AL	CommSci_Driven by both scientists and communities	Code from content analysis
AM	CommSci_Scientist driven	Code from content analysis
AN	CommSci_Science goals	Code from content analysis
AO	CommSci_Social or community goals	Code from content analysis

AP	CommSci_Inclusive	Code from content analysis
AQ	CommSci_Exclusive	Code from content analysis
AR	CommSci_Community participants	Code from content analysis
AS	CommSci_Individual participants	Code from content analysis
AT	CommSci_Non-scientist participants	Code from content analysis
AU	CommSci_Wider public participants	Code from content analysis
AV	CommSci_Data collection and analysis only	Code from content analysis
AW	CommSci_Participation in the entire project	Code from content analysis
AX	CommSci_More than data collection and analysis	Code from content analysis
AY	Currently going through or considering name change	Code from content analysis
AZ	Have already gone through name change	Code from content analysis
BA	Citizen science is part of community science	Code from content analysis
BB	Community science is part of community science	Code from content analysis
BC	Citizen science and community science are separate	Code from content analysis
BD	Citizen science and community science are interchangeable	Code from content analysis
BE	What do they call their projects	1) Citizen science 2) Community science 3) Both Neither
BF	Qualitative_Likelihood of calling a project citizen science	4) Likert scale questions
BG	Quantitative_Likelihood of calling a project citizen science	5) 1 = Extremely likely, 2 = Likely, 3 = Slightly likely, 4 = Neither likely nor unlikely, 5 = Slightly unlikely, 6 = Unlikely, 7 = Extremely unlikely
BH	Qualitative_Likelihood of calling a project community science	6) Likert scale questions
BI	Quantitative_Likelihood of calling a project community science	7) 1 = Extremely likely, 2 = Likely, 3 = Slightly likely, 4 = Neither likely nor unlikely, 5 = Slightly unlikely, 6 = Unlikely, 7 = Extremely unlikely
BJ	Qualitative_Familiarity with citizen science	8) Likert scale questions
BK	Quantitative_Familiarity with citizen science	9) 1 = Very familiar, 2 = Familiar, 3 = Slightly familiar, 4 = Neither familiar nor unfamiliar, 5 = Slightly unfamiliar, 6 = Unfamiliar, 7 = Very unfamiliar
BL	Qualitative_Familiarity with community science	10) Likert scale questions

BM	Quantitative_Familiarity with community science	1 = Very familiar, 2 = Familiar, 3 = Slightly familiar, 4 = Neither familiar nor unfamiliar, 5 = Slightly unfamiliar, 6 = Unfamiliar, 7 = Very unfamiliar
BN	Project volunteer	Demographic questions
BO	Project coordinator	Demographic questions
BP	Trainers of project coordinators	Demographic questions
BQ	Data user	Demographic questions
BR	Researcher of citizen science	Demographic questions
BS	Not part of a project	Demographic questions
BT	Physical science	Demographic questions: Combination of the astronomy, chemistry, geology, meteorology, oceanography, watershed science, and physics disciplinary options
BU	Life science	Demographic questions: Combination of the botany, ecology, environmental studies, entomology, ornithology, wildlife biology, and zoology discipline options
BV	Health	Demographic questions: Combination of the medicine and public health discipline options
BW	Multiple fields	Demographic questions: Total number of options selected if they selected multiple options from columns BS-BU
BX	University	Demographic questions
BY	Nonprofit	Demographic questions
BZ	Government	Demographic questions
CA	Volunteer	Demographic questions
CB	Qualitative_Race	Demographic questions
CC	Quantitative_Race	1 = White, 2 = POC
CD	Qualitative_Gender	Demographic questions
CE	Quantitative_Gender	1 = Woman, 2 = Man, 3 = Nonbinary
CF	Qualitative_Education Level	Demographic questions
CG	Quantitative_Education Level	1 = 2 year degree, 2 = Some college, 3 = 4 year degree, 4 = Professional degree, 5 = Some graduate education, 6 = Doctorate
CH	Qualitative_Age	Demographic questions

CI	Quantitative_Age	1 = 20-24 years, 2 = 25-29 years, 3 = 30-34 years, 4 = 35-39 years, 5 = 40-44 years, 6 = 45-49 years, 7 = 50-54 years, 8 = 55-59 years, 9 = 60-64 years, 10 = 65+ years
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**Definitions of acronyms, site abbreviations, or other project-specific designations used in the data file names or documentation files:**

Abbreviations in column names

- CitSci: Citizen science
- CommSci: Community science

**Variable information:** Please see the associated manuscript or email the dataset contact for clarification.

**Method(s):** Included in associated manuscript.

**Date dataset was last modified:** September 2021

**Are there multiple versions of the dataset?** yes/no