iDigBio's Public Participation Platform Survey

Thank you for taking the time to consider and respond to the following questions. iDigBio will make your responses available to the natural history collections community, both as an online resource available to anyone, and as a reference specifically for participants in our upcoming Public Participation in Digitization of Biodiversity Collections course.

Please return your completed survey to Michael Denslow (<u>michael.denslow@gmail.com</u>). And thank you for your time!

Questions:

1. Name and email of person responding to this survey:

Laura Trouille trouille@zooniverse.org

2. Name of public participation platform:

Zooniverse

3. Website:

Zooniverse.org

4. Company or group responsible for maintaining platform:

The Adler Planetarium, the University of Oxford, and the University of Minnesota

5. Long-term funding structure for maintaining platform (e.g., grants, membership, private):

Grants, as well as a small fraction of institutional support from each of the 3 main host institutions.

6. Brief summary highlighting the market niche for this platform:

Since the launch of its first project in 2007, Zooniverse has become a core part of the research infrastructure landscape. For research teams with large numbers of images, audio clips, or video files that need tagging, annotating, marking and/or transcribing, crowdsourcing the effort through Zooniverse provides a unique and effective solution to unlocking the large datasets that characterize our modern research landscape. With over 2 million participants worldwide in over 80 active projects, Zooniverse also provides a transformative tool for meaningfully engaging the public in real research and discovery.

7. Types of biodiversity specimens most common on the platform:

See zooniverse.org/projects, and filter to the 'nature' projects. As of today's date, there are 58 active 'nature' projects on Zooniverse, from NotesfromNature.org projects transcribing and tagging specimen labels to SnapshotSafari.org projects tagging animals and their behaviors in camera trap images across African wildlife reserves to planktonportal.org marking plankton in underwater ocean images to https://www.zooniverse.org/projects/benjamin-dot-richards/oceaneyes tagging Hawaiian bottomfish species in underwater images to PenguinWatch.org tagging penguins in Antarctica drone images to FloatingForests.org marking giant kelp forests in NASA satellite images, etc.

8. Types of tasks supported by the platform (e.g., transcription, measurement, georeferencing):

Transcription, measurement, tagging, marking/drawing.

9. Other disciplines that utilize the platform (e.g., camera traps):

Camera traps, astronomy, physics, climate, history, biomedicine, arts, humanities, social science

10. Example of the types of institutions/collections using your platform:

Each Zooniverse project is led by a different research team. There are currently over 80 active projects. Often the lead institution is an R1 university, but we also have many projects led by museums and zoos. A smaller fraction of our projects are led by liberal arts colleges and community colleges (e.g., https://www.zooniverse.org/projects/achmorrison/steelpan-vibrations).

11. Any restrictions as to who can use the platform:

There are no restrictions on who can use the Zooniverse Project Builder (zooniverse.org/lab) platform. However, projects promoted to the Zooniverse community **must**:

- Have the goal of producing useful research; your study needs to be well designed, and you must intend to analyze and write up your results as a formal publication.
- Make their classification data open after a proprietary period, normally lasting two years from project launch.
- Communicate research findings to their communities, via open access publication, a blog or elsewhere.

12. Primary language(s) supported:

English is the primary language in the Talk discussion forums associated with each project. However, project interfaces can be translated into any language (via https://translations.zooniverse.org/). Many projects have been translated by the Zooniverse

participants into many languages; see, for example: https://www.zooniverse.org/projects/hiro-ono/ai4mars

13. Primary volunteer base or core users of the platform:

Over 2 million participants worldwide. Approximately half are U.S.-based, 20% UK-based, and the remainder from around the world. Approximately 45% of participants are female, 55% male. The age distribution is quite flat, from 18 year olds to 75 year olds.

14. Brief description of method(s) for quality control/quality assurance available on the platform:

The general model in Zooniverse is that each subject (each image, audio clip, or video file) is classified by multiple people. The research team then aggregates these results to create a consensus result. Most projects upload expert-classified data as well, and compare the consensus result with their expert result to get a sense for the crowd's accuracy. During the initial 'beta review' phase, research teams experiment with how many people should classify each subject to reach the data quality and reliability that they need for their research goals.

15. Types of media supported by the platform (e.g., image, video, 3D):

Image, audio, video, and numerical data.

16. File formats supported by the platform. Indicate both input and output as appropriate:

Subject images can be up to 1000KB and any of the following: .jpg, .jpeg, .png, .gif, .svg, .mp3, .m4a, .mpeg, .txt, .json

17. Workflow customization available to the user:

Project teams use the zooniverse.org/lab Project Builder platform to build their project. Task types range from multiple choice to drawing tasks to open text fields, etc. If a project team does not see the functionality they need within the Project Builder platform, they engage the Zooniverse team in a dialogue around what functionalities are of interest, whether they are already part of the Zooniverse team's planned efforts, and/or whether the team and Zooniverse should pursue funding together to support the development of these new functionalities.

18. Costs to collections to use the platform:

Currently the Zooniverse.org/lab Project Builder platform is free.

19. Representative for potential users to contact:

contact@zooniverse.org

20. Best resources for additional information about the platform (e.g., presentations, brochures, recorded webinars, peer-reviewed papers):

zooniverse.org/lab contains links to 'how-to', 'glossary', 'policies', 'best practices', and 'project builder talk forum'. Also see this video (https://vimeo.com/537680644) for a demo of the Project Builder and this video (https://vimeo.com/534941470) for an overview of the Project review and launch process.

21. Data ownership or usage policies (e.g., publication, sharing of data, public access):

All Zooniverse code is open source (see https://github.com/zooniverse).

https://help.zooniverse.org/getting-started/lab-policies/ includes our policy around research teams "Make their classification data open after a proprietary period, normally lasting two years from project launch".