

Astrobiology News March 2021: Astrobiology and Earth Month

In 1970, April 22 was designated as Earth Day, and since then, activities and events related to climate action and environmental awareness have taken place throughout the month of April.¹ What does this have to do with astrobiology? Astrobiology is concerned with the study of life in the universe, and the universe includes Earth. Many faith-based and interfaith organizations are responding to the call for climate action and environmental justice.² Indeed, many of you have signed the Climate Crisis Letter on the CLP website, which notes that, “our own survival is inextricably connected to the responsible stewardship of the Earth and all its creatures.”³

During this time of pandemic, it can be difficult to get out and participate in community service projects; however, it's still possible to take positive environmental action by helping scientists better understand the effects of climate change and habitat loss. On April 6, Faith in Place⁴ and the Chicago Muslims Green Team,⁵ in collaboration with the AAAS Dialogue on Science, Ethics, and Religion and Zooniverse⁶, will present a free webinar⁷ (you're all invited) that demonstrates how people of all faiths can participate in environmental research using the online Zooniverse platform. We'll present a general introduction to Zooniverse, an overview of how to participate in research projects, and *Chicago Wildlife Watch*⁸ project leader, Seth Magle, will discuss his project's focus on monitoring urban wildlife and assessing the biodiversity of the greater Chicagoland region.

Environmental research projects on Zooniverse span the globe. For example, *Floating Forests*⁹ asks volunteers to mark the presence and location of giant kelp forests within NASA Landsat satellite imaging from the past 30+ years. These classifications are used to understand the impact of climate change on giant kelp forests, an indicator of the health of our oceans. In *Penguin Watch*,¹⁰ volunteers tag penguins in drone images from Antarctica to help understand how they are being affected by climate change, the potential impact of local fisheries, and how we can help conserve these incredible species. For a larger selection of environmental and ecological projects, just go to [zooniverse.org/projects](https://www.zooniverse.org/projects) and click on “Climate” or “Nature” in the scroll bar.

Please consider going to bit.ly/Zooniverse-Faith and registering for the April 6 webinar and participating in one or more of the amazing and fun research projects on Zooniverse! Meanwhile, it's still March and it's still Women's History Month, which makes it a great time to

¹ <https://www.earthday.org/>

² <https://www.interfaithpowerandlight.org/>

³ http://www.theclergyletterproject.org/Climate_Letter/ClimateLtr.html

⁴ <https://www.faithinplace.org/>

⁵ <https://chicagomuslimsgreenteam.org/>

⁶ <https://sciencereigiondialogue.org/projects/zooniverse/>

⁷ <http://bit.ly/Zooniverse-Faith>

⁸ <https://www.zooniverse.org/projects/zooniverse/chicago-wildlife-watch>

⁹ <https://www.zooniverse.org/projects/zooniverse/floating-forests>

¹⁰ <https://www.zooniverse.org/projects/penguintom79/penguin-watch>

check out *Star Notes* and help transcribe the groundbreaking work of the early 20th century women known as the “Harvard Computers”!¹¹ These women worked with glass plate photographs that represent our first ever pictures of the universe - women like Annie Jump Cannon, who devised a stellar classification scheme that’s still in use today; or Ida E. Woods, Sarah Breslin, and Henrietta Hill Swope, who discovered many variable stars that change in brightness over time. This project not only helps us better understand the history of the women who worked with this early photo collection, it enables researchers to study how our awesome universe evolves.

Until next month,

Grace

Grace Wolf-Chase (gwolfchase@gmail.com)

Senior Scientist & Senior Education & Communication Specialist, Planetary Science Institute
(www.psi.edu/about/staffpage/gwchase)

Vice President, Center for Advanced Study in Religion and Science (CASIRAS: casiras.org)

¹¹ <https://www.zooniverse.org/projects/projectphaedra/star-notes>