

Help Study Parasite Diversity from Home

I fyou are sitting at home watching wildlife from your kitchen window, you are witnessing several levels of biodiversity that cannot be seen through binoculars. Much of this biodiversity, including parasites on birds and mammals, has yet to be documented digitally. You can help.

"We have a collection with over 80,000 parasites from around the world," says School of Biological Sciences' Dr. Sarah Bush. "We just need help determining what we have." To digitize specimens, Bush and colleagues from twenty-two museums and institutions have turned to a citizen science platform where anyone, anywhere can go online and help transcribe data from historic microscope slides.

Explains Bush, "Our goal is to better understand the distribution and evolution of parasites" which live in fur and feathers and include lice, fleas, flies, ticks and mites. By digitizing data from existing specimens the team hopes to determine where parasites occur, what hosts they infest and which are most likely to "vector" pathogens like a coronavirus to humans which cause disease.

As a citizen scientist you can peek through the parasite collection of over 1.2 million parasite specimens in the next three years. "You never know what you're going to find," says Bush. "The slides you see may be parasites found in your backyard, or they might be a parasite collected one hundredplus years ago in the far reaches of New Guinea."

We may be stuck at home during the pandemic of COVID-19, but this is a way to explore those levels of biodiversity outside your window in a way that can be shared and studied by new generations of biologists.

To join the team go directly to the project here: https://tinyurl.com/rww9lqb or go to zooniverse.org and search for "Terrestrial Parasite Tracker."