USE OF CITIZEN SCIENCE TO ENGAGE UNDERGRADUATE SCIENCE STUDENTS IN BIODIVERSITY ASSESSMENT

Jaime Gongora, Katherine Brittain

Presenting Author: Katherine Brittain (kbri6475@uni.sydney.edu.au)
Sydney School of Veterinary Science, Faculty of Science, The University of Sydney, Sydney NSW 2006, Australia

KEYWORDS: iNaturalist, online learning, self-directed learning

Use of Citizen Science approaches provide an opportunity for enhancing understanding in biodiversity. Citizen Science contribute to develop skills in students to conduct and develop participatory inventories of biodiversity. Here we present the use of the application iNaturalist (https://www.inaturalist.org/) in two undergraduate units of study in the Faculty of Science at The University of Sydney, in which learning outcomes focus on students being able to identify the major components of biodiversity and how this could be assessed through various methodologies. An introduction to Citizen Science was embedded in the junior unit Concepts of Animal Management (Year 1), in which veterinary biology, animal science and agricultural programs participate. Students were engaged with learning how to make observations and calculating measurements of biodiversity (eg, species richness) within the main campus of the University

(https://www.inaturalist.org/projects/biodiversity-richness-usyd-camperdown-campus). Since 2017, more than 120 observations have been made by students. Under COVID-19 conditions, the Wildlife Research (Year 3) unit was taught remotely with students focussed on joining, contributing to and evaluating one of the current Citizen Science projects available in iNaturalist, promoting critical thinking of strategies that engage the public. So far activities have been well received by students, including the unconventional teaching and self-learning outside of the classroom.

Proceedings of the Australian Conference on Science and Mathematics Education, 30 September - 2 October 2020, page 32, ISBN Number 978-0-9871834-9-1.