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Conference Abstract

Project Paleo: Citizen Curation and Community Science at the Natural History Museum of Los Angeles County

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Abstract

The School and Teacher Programs of the Natural History Museum of Los Angeles County have partnered with the La Brea Tar Pits and Museum (LBTPM) and the Invertebrate Paleontology (LACMIP) collection to create two “citizen curation” exercises dubbed “Project Paleo”. Classroom kits were created with unsorted fossils from either LBPTM or from a local invertebrate paleontological field site, to be sorted and identified by local elementary and middle school students and then returned to the museum for curation, analysis, and research purposes. Each kit contains background information about the project and fossils, and an identification guide to assist the students and teachers.

The “Project Paleo: Rancho La Brea” kit contains three tablespoons of unsorted fossil matrix from LBTPM’s Project 23. Groups of students learn about past and present food webs of the Los Angeles Basin, then sort the matrix into several categories (bones, plants, other fossils, and rocks) using a guide with drawn examples of each. An online iNaturalist (inaturalist.org) project also serves as an identification resource as well as a platform by which students can contribute photos for identification by staff researchers. This project is

aimed at middle schoolers and over 700 students have used the sorting kits. Results will help to recreate past ecosystems of Southern California and help to inform a National Science Foundation (NSF) funded project, “A Mouse’s Eye View of Rancho La Brea”.

The “Project Paleo: Marine Invertebrates of Southern California” kit produced by LACMIP, contains approximately two cups of washed but unsorted coarse fossil matrix from a salvaged (now destroyed) construction site. This kit is aimed at 5th grade Los Angeles Unified School District classrooms and homeschooling families. Students are asked to sort fossils by species and use included identification cards to identify the sorted fossils to the best of their ability. Results of this project will be included in an NSF funded digitization project and will contribute to research on the paleoecology of Pleistocene Southern California.

Early evaluation of both kits has shown positive feedback from students and educators, as well as some room to improve instructions to students. These kits are designed to conform to Next Generation Science Standards while generating useful data for museum scientists. Collections staff are able to outsource the curation of critical data to students who get the experience of handling real museum fossils and contributing to the body of paleontological research.

Keywords

microfossil, food web, paleontology, fossil, education

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