Anza-Borrego Desert State Park Paleontology Society

Fossil Curation

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Introduction

The Anza-Borrego Desert State Park Paleontology Society is an organization of amateur paleontologists who work within the Desert State Park's volunteer program. The society helps build and maintain the Park's extensive collection of fossils.

The purpose of my internship is to help the department by learning alternate types of preparation techniques and various steps of fossil curation, applying them to real specimens to be prepared and catalogued.

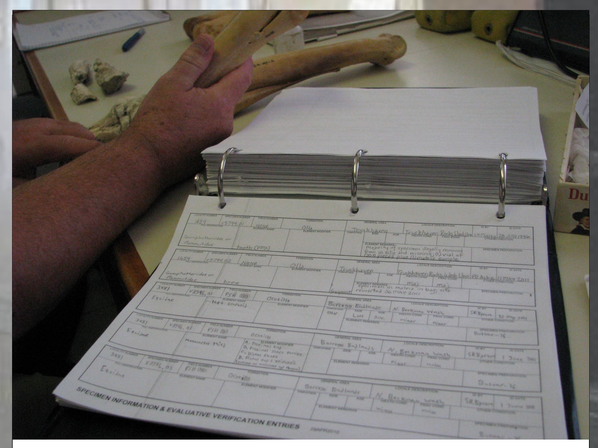
All of the fossils I am working on are Pliocene-age land animals estimated to be about 2 million years old. The Pliocene was a relatively recent epoch, spanning from 5.3 to 1.8 million years ago. Because of this, its fossil record contains many animals similar to present day fauna as well as extinct horses, camels, and tortoises.

Methods

❖When one or more specimens have been found and prepared by a volunteer, all of the relevant site and specimen information is kept together in a folder labeled with the same field number as the specimens. It is then ready for the curation process.

❖ The fossil must now be identified as thoroughly as possible. Typical specimens are in small pieces and fragments, and as a result the identifier must have an eye for the details a bone can show. The comparative collection (modern skeletons) can be used along with previously catalogued fossils to identify the new fossil.

❖ The fossil is given a specimen number and locality number for identification purposes. These numbers are carefully printed onto the surface of the bone with archival ink in case the fossil is ever misplaced.



❖ All relevant data are recorded onto a "SIEVE sheet", where information is sorted before database entry. These are filed into three different folders: vertebrates, invertebrates and plants.

❖ A data card is filled out for the specimen containing the same information, written in archival ink. Even if a specimen is eventually proven to be something else, information can only be crossed out, for research purposes. The specimen is given a divider with its specimen number and placed in a cabinet with the locality name.

Results

❖Several fossils have now been catalogued into the database, where they await future research by specialists in the scientific community.

Conclusion

Working for the Paleo Society has been a very fun and rewarding experience, though not without its own challenges. An accurate identification and log of information takes time and effort, but it is also one of the most important steps a fossil must go through to become scientifically viable. Because of this I look forward to continue volunteering at the Paleo Society and putting to good use the knowledge I've gained in paleontology curation.

Acknowledgements

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