



COLD CANYON LANDFILL

Project Description: Expansion of landfill area plus expansion of the landfill composting operations. Cold Canyon Landfill, near Arroyo Grande in San Luis Obispo County. The regulatory environmental was CEQA and local. The work was performed for the County but paid for by the landfill operating company.



Services Provided: Paleontological Monitoring, Fossil Salvage, Fossil Preparation, Fossil Identification, Fossil Analysis, Stratigraphic Columns, Micropaleontological Analysis, Collection Management, Interpretive Report, Creation of Replicas for Display at the Landfill and Curation Arrangements.

Challenges: (1) Discovery of an intact locality consisting of a partial skeleton of a Pliocene fur seal, (2) Reconstructing a scraper-smacked whale skull, (3) Sampling Invertebrate Localities, (4) Creating Replicas and (5) Curation Arrangements to permit research on the new species recovered.

Solutions: (1) The partial skeleton of the new species of fossil fur seal was well preserved in hard sandstone. The skeleton was distributed over about 10 feet and was recovered in blocks. Preparation took considerable time but the specimens are a significant contribution to science.

(2) A whale skull was discovered when it was impacted by heavy equipment and shattered. Our monitor and field supervisor recovered all of the pieces exposed. Our lead preparator determined



that only the rostrum (nose) could realistically be pieced back together and a time limit was placed on that work since it did not meet scientific significance criteria. The restored whale rostrum is on display at Cold Canyon Landfill.

(3) Several shell localities were also discovered but these are common in the formation (Pismo). They were sampled and grading permitted to resume without delays.



(4) The landfill operators requested that we create replicas of the fur seal bones for display at the landfill (they have an educational program for grade school children). We created molds of each fur seal bone and then cast plastic resin replicas. As a finishing touch, each was painted to look like the originals.

(5) The County required that the scientifically-significant specimens be gifted to an accredited museum. Cogstone arranged for their donation to the Museum of Paleontology at Berkeley and ensured that a copy of all data and the report accompanied the collection. Since the lower jaw represents a new species, we were able to have it independently evaluated and place the value of the donation at \$10,000. The landfill operators were then able to deduct this as a charitable contribution to the non-profit Museum of Paleontology.