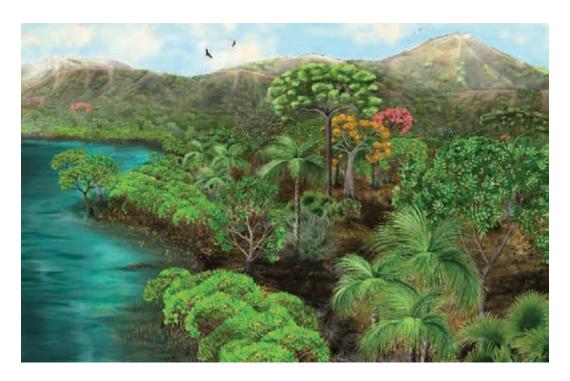
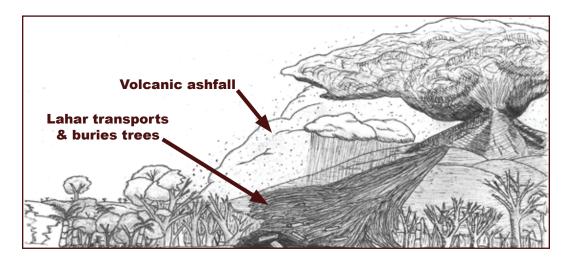
Home

Preservation of the Fossil Forest

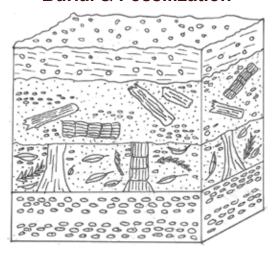
A tropical forest with many species of trees grew near Sexi during the Eocene epoch 39 million years ago, as a nearby volcano became active. As ash was erupted from the volcano and fell over the forest, it stripped leaves from the trees and buried them below. Some ash formed small round rocks, or "lapilli," as it came into contact with water. Soon after the ash and lapilli first reached the forest floor, another burst of activity moved volcanic material along the surface and buried the entire forest.



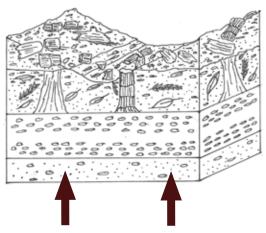
Reconstruction of the Eocene forest and volcano at Piedra Chamana. Artwork by Mariah Slovacek (above) and Laura Clarke (below).



Burial & Fossilization



Erosion & Uplift



Wood and leaves remained encased in the layers of volcanic rocks for millions of years, slowly fossilizing over time. Movement of Earth's plates later uplifted the buried forest to its present elevation as the Andes Mountains formed. Rain and wind eroded the rocks encasing the forest, exposing the fossil woods and leaves at the Earth's surface.

Sexi Today

Scientific study of the fossil woods and leaves shows that the ancient low-lying tropical forest buried by the volcano was very different from the evergreen trees and shrubs that cover the hills near Sexi today.

