INTRO: Welcome to Earth Matters - field notes on the geology of New Mexico's Enchanting Landscapes. Celebrating Earth Science week, I'm Dave Love.

What if you woke up one morning, looked out your windows, and discovered it was Ground Hog Day twenty thousand years ago?

In Albuquerque, you'd see prehistoric horses, mammoths, camels, bison, deer, large cats, giant sloths, bears, and wolves going about their daily business on the banks of the Rio Grande.

If you stepped outside in search of human companionship you'd probably be disappointed. The earliest documented humans had yet to arrive in this part of the world.

The Rio Grande Valley itself was narrower and several tens of feet deeper. The river was a large, gravel-bedded stream. Whooping cranes were among the marsh birds along its banks and trout fishing was productive.

A weather report would have included more cloudy, wet days; average temperatures were about ten degrees colder than today. A weather map would show several large lakes scattered around New Mexico, from the Estancia Valley east of Albuquerque to White Sands in the Tularosa Basin to the Animas Valley near Lordsburg.

The high mountains were capped with snow most of the year, and small glaciers were found near some of today's ski areas. Lower-elevation areas that are desert today were much greener with a thick cover of grasses and sagebrush.

In general, the climate and vegetation would have made you feel like you had moved one thousand miles to the north, perhaps to Montana, and the variety and large size of the animals on the landscape might have made you think that you'd been transported to a nature preserve in Kenya!

Lastly, it would have been Marmot Day instead of Ground Hog Day.

OUTRO: Celebrating Earth Science week, I'm Dave Love of the New Mexico Bureau of Geology at New Mexico Tech