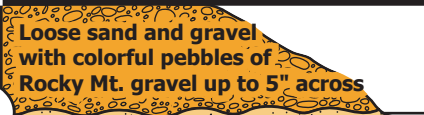
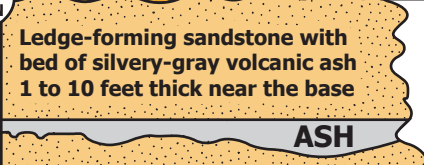
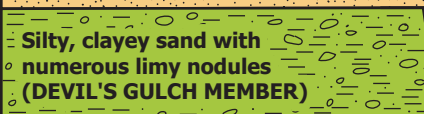
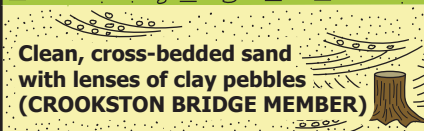


GEOLOGIC SETTING OF ASHFALL FOSSIL BEDS AND VICINITY

SEDIMENTARY ROCK LAYERS				SIGNIFICANT FOSSILS	ENVIRONMENT OF DEPOSITION	CLIMATE
Elev	Name	Age	Description			
1750	LONG PINE FORMATION	2.5 million	 <p>Loose sand and gravel with colorful pebbles of Rocky Mt. gravel up to 5" across</p>	Zebbras, lemmings, giant camels, muskrats, giant beavers, short-jawed four tuskers	Energetic river (probably ancestral Platte before diverted South by the first glaciers to reach Nebraska)	Still warm enough for armadillos and large tortoises but cooling rapidly as ice sheets approached
	1700	ASH HOLLOW FORMATION (CAP ROCK MEMBER)	11	 <p>Ledge-forming sandstone with bed of silvery-gray volcanic ash 1 to 10 feet thick near the base</p> <p style="text-align: center;">ASH</p>	Barrel-bodied rhinos, giant land tortoises, camels, burrowing rodents, horses, bone-crushing carnivores	Broad flat savanna (grassland with clumps of trees) periodically inundated by floodwaters
1650	VALENTINE FORMATION	12	 <p>Silty, clayey sand with numerous limy nodules (DEVIL'S GULCH MEMBER)</p>	Long-jawed four tuskers hornless rhinos, alligators, giant salamanders, fish fossil wood (both upright stumps and rolled logs)	River channels bordered by forested floodplains	Frost-free climate with abundant rainfall (evidence of drying climate in upper part of formation)
		14	 <p>Clean, cross-bedded sand with lenses of clay pebbles (CROOKSTON BRIDGE MEMBER)</p>			