PLATE 1. Surface features of Kansas. The diagram represents the topographic characteristics of different parts of the state, many of which depend closely on geologic structure and influence conditions of ground-water occurrence. Eastward-facing escarpments formed by west-dipping beds of differing hardness distinguish the eastern Kansas region. The Smoky Hills Upland and Blue Hills Upland are formed by Cretaceous rocks. The Great Bend Plain is a nearly level sandy area that is locally dotted by dunes. Further south is the red-rock country of Permian outcrops, which is relatively rugged. The western Kansas High Plains region is mostly a very gently sloping area, but it is intersected by many valleys that are bordered by low bluffs.