18. Where can I get permission to collect fossils on public land?

In Oklahoma, public land includes city, county, State, and federal property. You must first determine what agency manages the land that interests you. A city or county clerk usually knows who owns what land in their area of jurisdiction.

No current laws govern fossil collecting on city or county land, including road cuts. However, common sense dictates obeying traffic laws, parking as far off the road as possible, and avoiding stopping along interstate highways (where only emergency parking is allowed). Collecting on most State land (such as State parks and wildlife conservation areas) is prohibited, although some agencies will issue special permits. (In Oklahoma, the Tourism and Recreation Department and the Department of Wildlife Conservation [Appendix 1] have significant land-management responsibilities.)

Most collecting (excluding that on private land and along road cuts) is done on federally managed land, where specific regulations apply. Collecting vertebrate fossils such as dinosaur bones is prohibited. You may collect petrified wood only if it is for personal use—you must not sell it—and you are limited to 25 pounds plus one piece per day with a yearly maximum of 250 pounds. Collecting fossils of plants and invertebrate animals for noncommercial use is permitted but generally requires written permission, which can take a long time to secure.

School groups, Scout groups, and rock and mineral clubs often collect fossils on public land without formal permission. Most public-land managers recognize this as a valid educational or recreational activity and allow it. However, collecting fossils on public land is a privilege and not a right. Abuse of that privilege (such as driving off the road, leaving gates open, surface disruption such as digging, and collecting vertebrate fossils) will often cause land managers to enforce the regulations.

19. Where can I find fossilized dinosaur bones in Oklahoma?

Dinosaur bones have been found in southeastern Oklahoma and in Cimarron County in the Panhandle. Outcrop areas of the Antlers Formation (Cretaceous) and Morrison Formation (Jurassic) have proven productive in the past and can be located using geologic maps.

Dinosaurs probably once roamed throughout the area we now call Oklahoma, but most of the evidence for this has been removed through erosion. Rocks deposited during Mesozoic time (the "Age of Dinosaurs") are exposed in southeastern Oklahoma and in northwestern Cimarron County, and dinosaur bones have been found in both areas. From 1935 to 1942, J. Willis Stovall, professor of geology at the University of Oklahoma and director of the University Museum (later the Stovall Museum of Science and History, now the Sam Noble Oklahoma Museum of Natural History), excavated 17 sites in Cimarron County and recovered about 6,000 bones. Recent studies of his collection by paleontologists at the Museum have resulted in the discovery of new species of dinosaurs, including *Saurophaganax maximus*, the State Fossil (see question 21). All the bones collected by Stovall were from the Morrison Formation (Jurassic in age), which is perhaps the most well-known dinosaur-bone-bearing formation in the western U.S.

Dinosaur bones also have been found in the Antlers Formation (Cretaceous) in southeastern Oklahoma. The most complete skeleton of *Acrocanthosaurus atokensis* (named after Atoka County) was found near Eagletown and later sold to the North Carolina State Museum of Natural Sciences for about $3 million. Bones of the raptor dinosaur *Deinonychus* were recently discovered in Atoka County with bones of its presumed prey, the ornithopod dinosaur *Tenontosaurus*.

Collecting vertebrate fossils is prohibited on public land. You may collect vertebrates on private land with permission of the landowner. The best places to look for dinosaur bones are in areas where the Morrison and Antlers Formations crop out. Geologic maps available from the OGS (Appendix 1) show where these formations occur at the surface.