This topic may be a bit far afield for this blog, but dinosaurs are always worth considering . . .



The T. rex fossil known as “Sue” in Chicago’s Field Museum. Photo by Petr Kratochvil.

The Montana Supreme Court has resolved an intriguing dispute about ownership of fossilized dinosaur remains that turned on the question of whether those remains were or were not “minerals.” In the process, the Montana court provided an object lesson in judicial humility to a couple of Ninth Circuit judges.

Mary Ann and Lige Murray own the surface estate, literally the rights to the surface of the land, of a ranch they operate in Montana. Mineral rights are frequently transferred separately from surface rights, and that happened here. Robert and Jerry Severson, who sold the surface estate to the Murrays in 2005, reserved to themselves (and subsequently to two companies they set up) two thirds of the mineral rights underlying the ranch, transferring the other third to the Murrays.

Shortly after the Murrays acquired the ranch, they discovered some dinosaur fossils. Although the first fossils weren't particularly significant, within a few years the Murrays had found several rare fossils, worth millions of dollars, on the ranch. The haul included:

> the fossilized remains of two dinosaurs locked in combat (the Dueling Dinosaurs) . . . ; a Triceratops foot . . . ; a large Triceratops skull . . . ; and the nearly complete fossilized remains of a Tyrannosaurus rex . . . .

The Seversons claimed partial ownership of the fossils, asserting that they were included in the mineral estate. The Murrays disagreed, claiming all rights to the fossils as surface owners. They sought a declaratory judgment from the Montana courts. The Seversons and the companies that formally hold their mineral interests were able to get the suit moved to federal court under diversity jurisdiction.

All parties agreed that the case turned on whether, under Montana law, the fossils were included in the surface or the mineral estate. The federal district court ruled that the fossils went with the surface. A divided panel of the Ninth Circuit disagreed. Two judges concluded that because fossils are chemically composed of minerals, valuable ones are part of the mineral estate. (If you, like me, are not a fossil expert, you might be interested in this brief explanation of how organic material is replaced with mineral over time, essentially turning bones into rocks.) Dissenting, Judge Murguia argued that the Montana courts would look to the "ordinary and natural" meaning of the term mineral in this context, which would exclude fossils.

Here's where the lesson in judicial humility comes in. The outcome of the case depended on Montana property law. That law was unclear; there had never been a Montana Supreme Court case precisely on this question, and the Ninth Circuit judges read the closest Montana precedents differently. In such circumstances, federal courts can ask the highest state court to answer the controlling question of state law. None of the parties asked the Ninth Circuit to do so, but it can make such a request on its own.

In fact, the full Ninth Circuit did just that. The court agreed to hear the case en banc, and certified to the Montana Supreme Court the question of whether dinosaur fossils are minerals that go with a reserved mineral estate.

The Montana Supreme Court answered (by a vote of 4 to 3) no. It declared that materials are included within a general reservation of minerals only if they fall within the ordinary and natural meaning of the word mineral in this context. Fossils, the majority said, are not minerals in this sense, despite their chemical composition. The opinion noted that Montana statutory law repeatedly distinguishes fossils from minerals, classifying the former as “natural history objects” or “paleontological remains,” and that the US Interior Department had long held that fossil diggers could not stake mining claims on federal land.

The Ninth Circuit majority had ruled that anything that is both chemically mineral and rare or valuable falls within Montana’s mineral estate. The state Court clarified that not all value counts. Minerals must be valuable because of their mineral content. The Court tied that sort of value to processing or refining for economic purposes. I might put it differently. “Minerals” are valuable for their present or future, for the chemical composition as it stands or for what it could become. Fossils are valuable for what they were. It’s not the chemical composition of a fossil that matters, it’s the fact that it is the remains of an ancient plant or animal, and offers a window on the past.

Does this matter? As a practical matter, with respect to fossils dug up in Montana, not much for the future. In 2019, the legislature passed a law declaring that fossils are part of the surface estate unless the deed explicitly says otherwise. But it settles the matter for deeds written in the past and fossils extracted in the past, which should give some comfort to owners of fossils and split-estate land that might yield fossils.

With respect to federal courts facing tough state law property questions in the future, this saga is a reminder to seek state court input. Ironically, the Ninth Circuit panel majority emphasized in its opinion that “we are not free to impose our policy preferences over those of the Montana Supreme Court.” But that’s exactly what it did, because it failed to ask the Montana Supreme Court.

And it raises for me an interesting thought question: what’s the best way to assign property rights in fossils? The courts here were focused on interpreting the deal between the Seversons and the Murrays. As long as the law is clear on the meaning of unclear contracts, it probably doesn’t matter much whether the surface owner or the mineral owner gets rights to fossils. The parties will assign those rights to whoever values them most, and will adjust the price accordingly.

But there’s another possibility here. What if fossils, which are chiefly valuable for the scientific information they harbor, could not be privately owned at all? Suppose only the state, or the federal government where it owns fossil-harboring lands, could own fossils? Would that be preferable?

On one hand that would avoid the bidding wars that rare dinosaur fossils sometimes ignite. *T. Sue*, the specimen pictured above, went for $8.3 million at auction in 1997. She ended up in Chicago’s Field Museum, thanks to the museum’s deep pockets aided by the generosity of individual and corporate donors. Perhaps it would be better to short-circuit that market, which might after all put the most scientifically interesting specimens in the hands of greedy or ostentatious billionaires.

On the other hand, even if only the government could own fossils, it would need the permission of landowners to extract them, which would no doubt come at some expense. And if landowners (or even mineral estate holders) are more familiar with the fossil-bearing properties of their lands, it might be important that they themselves have economic (or other) incentives to extract fossils in a way that preserves their scientific value.

I don’t have a ready answer, and it may be that we live in a world where it’s too late to declare that the government owns buried fossils. But it sure would make an interesting Property exam question . . .