

Sue's final stroll: In this painting, the giant matriarch (center), discernable by her chronically infected facial wounds, walks with her mate and offspring just before they were mauled by rival tyrannosaurs. Larson proposed this scenario because he found bones from another adult and a juvenile along with those of Sue, whose death apparently resulted from head wounds.

ven by a dinosaur's standards the *Tyrannosaurus rex* named Sue must have led an unusually difficult life. Its huge skeleton has scars aplenty, bearing witness to several life-threatening injuries sustained more than 65 million years ago. One leg shows a healed-over fracture, the skull has gouges along its side, and a tooth fragment remains embedded in a rib, the remnant of some distant combat with another *T. rex*.

These wounds can't compare, however, to the tribulations the dinosaur has suffered since fossil collectors first dug it up in August 1990 on land owned by a South Dakota rancher named Maurice Williams. Its bones sparked a legal battle over ownership that raged all the way to the U.S. Supreme Court. And for the last 3 years, it has remained incarcerated in a dinosaur dungeon—a garage at the South Dakota School of Mines in Rapid City.

Reputedly the biggest and most complete *T. rex* skeleton known, Sue attracts great scientific interest. But those attributes also make this dinosaur a desirable commodity on the fossil market. Williams, who emerged as the winner of the ownership battle, has received offers of up to \$60 million for the skeleton and is now trying to figure out what to do with it.

Paleontologists, meanwhile, are trying to sort out what the case can teach them. The controversy fueled a longstanding feud between commercial fossil collectors and academic researchers, who see themselves as competitors for a limited resource. Congress may weigh in with legislation that changes the rules on fossil collecting.

The case of Sue began 5 years ago, when Williams met Peter Larson, a commercial collector and president of the Black Hills Institute of Geological Research, a company dealing in fossils. At the time, Larson was looking for fossils on property adjoining Williams' ranch near Faith. Williams says he invited Larson over to look for fossils.

While searching Williams' property on Aug. 12, 1990, a member of Larson's team named Susan Hendrickson spotted a piece of *T. rex* bone in the side of the hill. The fossil, which became known as Sue, was apparently that of a female *T. rex*.

Larson claims that he immediately asked Williams for permission to excavate the fossil. Two weeks later, when his team uncovered the dinosaur's skull, Larson gave Williams a check for \$5,000 to purchase the skeleton. The check had "for theropod Sue" written on the bottom, says Patrick K. Duffy, Larson's attorney.

But Williams offers a different version of the story, saying that he told Larson the fossil couldn't be sold without government approval because it was found on "trust" land—real estate held in trust for Williams by the federal government. The trust agreement protects the interests of Indian landowners by giving the government oversight of the land.

Williams denies that he reached any sort of agreement with Larson over the sale of the dinosaur. In fact, he says, Larson handed over the check without an explanation. "I asked him what the check was for and he didn't choose to answer," Williams told Science News. "We just considered it [was] for the right to search or for damage to the land."

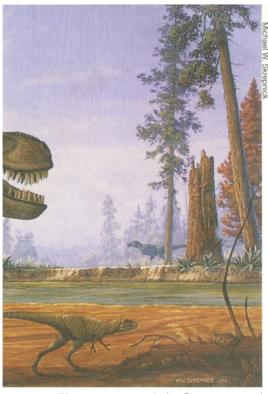
In any case, Williams deposited the check and kept the money. Larson, meanwhile, packed up and took the specimen, which he knew was probably worth hundreds of thousands of dollars, if not millions. After transporting the skeleton back to the Black Hills Institute, Larson announced that he would build a museum around it.

hen a local newspaper reported the discovery and word of its tremendous value circulated, the legal struggles began. The Cheyenne River Sioux claimed ownership of the fossil because it was found within the reservation boundary. Williams asserted his right to the *T. rex* because it came from his land. All the while, the Black Hills Institute had possession of Sue and was putting hundreds of hours of labor into preparing it for display—a process that involves carefully removing the rock matrix from the fossil.

U.S. Attorney Kevin Schieffer stepped into the case on May 13, 1992, with a search warrant to seize Sue as evidence in a criminal case against Larson and his colleagues. The next day, National Guardsmen and FBI agents raided the institute, removing Sue and many other specimens and documents. Schieffer subsequently justified the seizure as a means of protecting public access to the fossil, which he feared Larson was preparing to sell.

SCIENCE NEWS, VOL.148

NOVEMBER 11, 1995



The institute sued the Department of Justice for the return of the *T. rex*, but the U.S. District Court ruled against Larson's group. In the court's opinion, the fossil represented a piece of real estate and could not be sold without involving the U.S. Department of the Interior, the trustee of Williams' land. Therefore, the fossil remained the property of Williams' trust, a decision upheld when the U.S. Supreme Court decided not to consider the appeal.

Schieffer never used the skeleton as evidence in a criminal case. But in 1993, a grand jury indicted Larson and other institute officers on 39 felony counts. The indictments portrayed Larson as an unscrupulous dealer who stole fossils from government land and lied to private landowners in order to search their property for valuable bones.

In March 1995, a Rapid City jury acquitted the defendants on most of the charges but convicted them on eight felony and five misdemeanor counts regarding less important fossils: a catfish, an extinct marine reptile, and a whale. The convictions include counts of stealing fossils from government land and making false statements to U.S. Customs officials.

A recent Supreme Court ruling in an unrelated case invalidated five of the felony convictions because of a legal technicality related to the way juries consider false statements. The U.S. government could have retried those five counts, but it decided in October not to.

Larson and his brother Neal currently await sentencing, and the institute may suffer fines. Peter Larson, the only person convicted of a felony, faces a possible 43 months in prison, although Duffy plans to appeal the convictions after sentencing. The defendants have

spent more than \$1 million in legal fees so far, according to Marion Zenker of the Black Hills Institute.

ust as the Larsons' fate remains in limbo, so does Sue's. The decision falls to Williams and the federal Bureau of Indian Affairs (BIA), charged with obtaining the "highest and best" use of the fossil for Williams.

Carson Murdy, an archaeologist with the BIA in Aberdeen, S. D., says Williams has received offers for the *T. rex* from potential buyers as far away as Japan. "Prices have been mentioned ranging from \$300,000 to \$60 million, although that was an anonymous offer which came in secondhand," says Murdy. "The only written offer is for \$2 million from an individual in Canada."

Murdy has sought advice from the Society of Vertebrate Paleontology (SVP), which convened a panel of three paleontologists to examine the fossil. "It was my hope that Mr. Williams could enter into an arrangement with an academic institution to have the fossil cleaned up and stabilized," says Murdy. Such a deal would benefit both parties, he says. The academic institution could study the fossil while doing the preparation for little or no charge.

But funds for bringing paleontologists to Rapid City evaporated, and the BIA put the project on hold.

Williams says that he would like to retain ownership of the fossil and derive some income from it. "The government tells me the bottom line is money when it comes to fossils. I'm not a scientist. I'm not a paleontologist," says the 69-year-old rancher. "I should get a value out of this or any other fossil. The time I've got left in my life I don't think is going to be devoted to the beneficial study of fossils."

hat kind of sentiment scares dinosaur researchers because it suggests that Sue could find a home in a private collection, out of view of scientists and public alike.



A fleeting friendship: Peter Larson with Sue.

Vertebrate paleontologists have long maintained their desire to avoid commercialization of fossils and to keep important specimens available for the public, says SVP president David Krause of the State University of New York in Stony Brook. "We do not condone the sale, the barter, or the trade of fossil vertebrates that would result in their being lost from the public domain."

Commercial collectors, however, argue that they serve an important purpose and have a right to search for fossils. Indeed, dealers have helped build the collections of many museums around the country. "We have come under fire from a lot of what I would call academic zealots who have a purist attitude towards fossil collecting and feel that they are the only qualified people to collect fossils," says Jon Kramer, past president of the American Association of Paleontological Suppliers and a research associate at the Earth Museum in Robinsdale, Minn.

The laws concerning fossil collection on public lands are nebulous. Amateur and commercial collectors face a tangled web of rules that vary widely between the U.S. Forest Service, the Bureau of Land Management, and the Park Service. Rep. Tim Johnson (D–S.D.) is drafting legislation to address the problem and has sought comments from the SVP, commercial collectors, and amateur collectors.

One issue raised by the bill is casual, or reconnaissance, collecting. If included, it would allow amateurs and commercial collectors searching on public land to take fossils off the surface without a permit. Serious excavations, however, would require permission from the agency overseeing the land.

Commercial collectors support the idea of unrestricted reconnaissance collecting, but the proposal has drawn criticism from the SVP. "There is a lack of appreciation of the significance of small fossils that can be found at the surface. Most of the scientifically significant fossils are found in that manner," says Krause.

The rival sides will continue their battle as the bill moves through Congress. But both sides agree that the case of Sue has only served to inflame the division between the commercial and academic communities. "It's a travesty what happened, because ironically, now it's for sale to the highest bidder. It's an ugly mess that hasn't done anybody any good," concludes Kramer.

Of all those involved, Sue may have the last laugh. When Larson found the *T. rex* skeleton, only 11 specimens of this giant carnivore were known. But in the intervening 5 years, Larson and others have found eight more specimens, perhaps reducing the value of the fossil that Williams won. "Now *T. rex*es are cropping out all over the place," says Kenneth Carpenter of the Denver Museum of Natural History. "They're turning out not to be quite as rare as everyone was saying."