EXHIBIT A

REX APPEAL

The Amazing Story of Sue,
the Dinosaur That Changed
Science, the Law, and My Life

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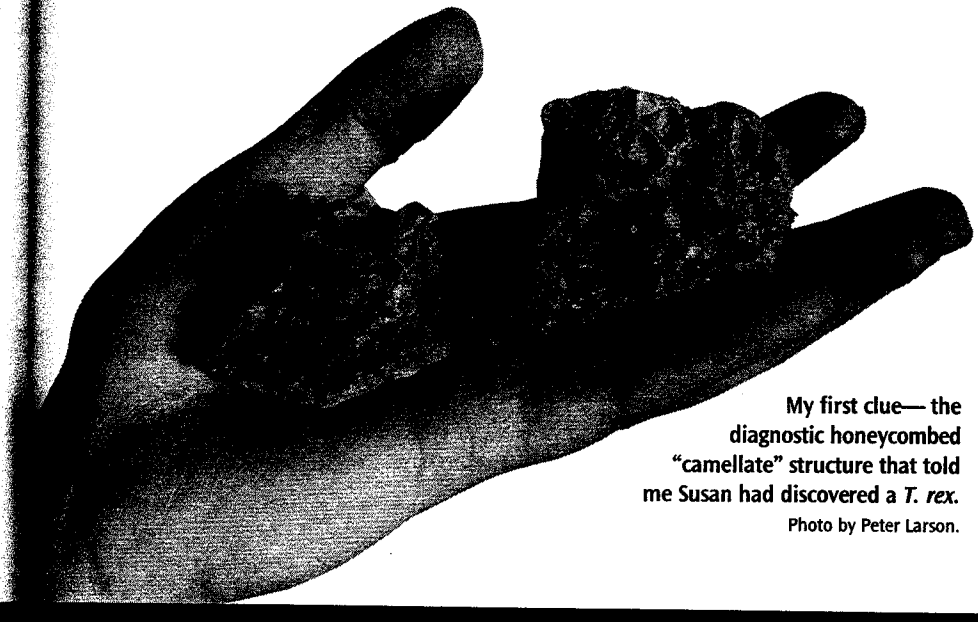
teeth were shed regularly, they are often found by themselves.) This *Triceratops* skull was the latest in his string of finds, and it was a good representative of the three-horned monster. Adults probably weighed up to five tons[2] and possessed the heaviest skulls of any land animal before or since—skulls so massive that they apparently were preserved even when the rest of the animal was eaten and scattered.

It was August 12, 1990, and we were past the chain-gang pick-swinging part of every excavation, where a section of hillside is removed above the bone layer. We had just completed tedious and joint-numbing X-acto-blade detail and had finally sat back on our haunches, brushing the dirt from faces recently pushed into rocky earth. Terry Wentz, our chief preparator and one of the most gifted and careful excavators alive, was on autopilot. We were both elbow-deep in plaster of paris, working on part of the frill and one horn of the *Triceratops* skull. Matthew and his sixteen-year-old cousin, Jason, were carefully preparing other bones for casting. Susan was out scouting. It was just a typical day in the middle of nowhere in the noonday sun, after a lunch of warm soda pop and stale chips.

Suddenly I looked up in the one-hundred-degree heat to see Susan, reappeared from the shimmering distance and stopped in front of us, a curious half-smile on her face. She opened her hand to expose two fragments of fossil bone, each not much larger than a matchbook.



My first clue— the diagnostic honeycombed "camellate" structure that told me Susan had discovered a *T. rex*.
Photo by Peter Larson.

I could not speak. I couldn't believe my eyes, and I couldn't trust my voice. I could do nothing but look at them, cradled in her palm.

Finally I picked them up.

They were portions of a larger bone, and each had a curved external surface on one side. The other surfaces looked like a honeycomb, with quarter-inch compartments—obviously from the bone's interior. The fragments were light and hollow. I had never seen the inside of a *T. rex* vertebra, but I knew instantly that was what I was seeing. The honeycomb texture is called camellate structure, and it occurs in the vertebrae of both birds and theropods—the group of dinosaurs that ate meat. The external curve of the bone indicated vertebrae too large to be from anything but *Tyrannosaurus rex,* the king of the Cretaceous, the baddest beast that ever walked the earth.

I wanted to transport myself immediately to the spot from which Susan had come and *be there,* to blink my eyes and open them at the magical place on the planet where the rest of these bones waited. *"Where?"* I finally whispered. "Where did you get these?"

"There's more. Come on, it's only about two miles away."

I grabbed my camera.

My fatigue only a vague memory, we ran. Every step of the way.

Finally we came to a flat-topped cliff rising to the left. What I saw was impossible. The earth went up fifty-five feet, but my eyes were on my worn boots. Surrounding my toes were thousands of pieces of bone, in all sizes, from tiny, quarter-inch chips to six-inch chunks. In rust-colored profusion, pieces of vertebrae and ribs and unidentified fragments coated the ground in front of the cliff. My eyes then instinctively raised to higher ground, following the trail of bones to the cliff base, then up farther, to the source of those fragments.

Impossible.

About seven feet above the base of the cliff, bony cross-sections — of not one bone, but at least a dozen—protruded from the ancient sandy sediment. This first view told me everything. At one time this fossil had been buried a thousand feet below the surface. Atop the cliff of Cretaceous rock I saw before me, there once was at least another two hundred feet of Hell Creek Formation, and

probably an additional seven hundred and fifty feet of early Cenozoic-age sediment, all of which was deposited over this plain and then washed away by millions of years of erosion. The weight of this sediment would have caused the fossil to break; tiny fractures were sure to have appeared in nearly every bone as the years brought the beast closer to the surface and the pressure of the entombing sediment was relieved. Eventually, the insulating escarpment was weathered back to the point where every drop of rain, every gust of wind, every freezing and expanding bit of ground moisture tore the bones apart. As they finally reached the surface, their fractures became larger until pieces fell off, thousands of them, and tumbled down the last seven feet of the wall.

I carefully avoided treading on the fragments as I crawled up the face of the cliff to get a better look. I could see that a small shelf had developed at the top of the bone horizon, indicating that the bones were harder than the surrounding sandy sediment. On top of this shelf, I saw, among other bones, three vertebrae, *articulated—still connected—in their original relative positions!*

Although these bones tantalizingly disappeared into the hillside, there was no guarantee that the rest of the backbone, or an entire

Three of Sue's articulated, dumbbell-shaped vertebrae. The two vertical slots once held cartilage discs. Photo by Susan Hendrickson.

animal, would be attached to them. In the Hell Creek Formation, finding even a few articulated dinosaur bones is unusual, an articulated dinosaur rare indeed, and an articulated *T. rex?* Never. For no logical reason, however, *I knew* the rest of the dinosaur—all of it—remained buried just beyond where I crouched. These joined body vertebrae told me that history would be made in this place. From this moment, I *knew* this would be The Find of Our Lifetimes. This *T. rex* had been safely tucked away for sixty-five million years, waiting patiently. Waiting until Susan stopped by.

In a choked voice I told Susan what I believed she had found.

"It's yours," she said, grinning. As one of our team, she lay no personal claim to the specimen. Black Hills Institute financed the digs, and any finds went to the institute. We both paused, drinking in this most precious moment, a "megafind moment" all scientists live for. I was afraid I'd suddenly wake up and find this cliff had vanished. So I put my hands on the bones and leaned against the tangible mountain that held them. I wanted to see more, to look through the ground to see what it held. I wanted to dig a little and identify a large bone I could see in an erosional cut. My eyes moved systematically across what I could see, my mind racing. I bent closer. *Are all of these rib-looking bones actually ribs? This one looks different—could it be from the hand? Do the articulated vertebrae continue to be articulated? No evidence of the skull, either in the bones protruding from the wall, or in the thousands of fragments on the ground. Good sign.* There were plenty of scientific indications pointing to the *chance* for the skull to be sheltered intact underground, but, again, there was no guarantee.

I remembered I was not alone. I wiped my forehead and grinned back at Susan. "Thanks," I said. "I'm naming it after you. I'm calling it Sue."

During our walk away from Sue's grave and back to Matthew's *Triceratops,* I had already decided what to do, and I told Susan all about it. The challenges of the sudden excavation before us—like exhaustion, the lateness in the season, and low finances—evaporated in the face of the possibility of having a *T. rex* as the centerpiece of our not-for-profit museum. I was thinking big, and I would not take "wait" for an answer.

Without any of us realizing the import of the moments we were living, I began my usual pre-excavation process. My telephone calls from Faith on the afternoon of August 12, 1990—a couple of hours after I first saw Sue's bones—began with a request to our new administrative assistant to double-check land ownership with the Dewey County courthouse. Marion Zenker, equal parts iron will and soft heart, used our map coordinates to verify that Williams owned the land. This was what our lawyers would later call "standard practice," and for us it wiped out any doubt caused by the enormous expanses of ground in the Great Plains. Here, fences can be off or boundaries sometimes not marked at all. In practice, a rancher might sweep his arm across a horizon in response to our question, "Which is your land?" but in fact an invisible boundary line might intrude. Marion's research would show that while Williams's actual deed was on file with the Bureau of Indian Affairs—his ranch lay within the borders of the Cheyenne River Sioux Indian Reservation—the land indeed belonged to him and he had leased oil-exploration rights to a major oil company over the years.

My next call was to Williams. I told him what I thought lay buried under his hill, and the mess we would have to make in order to retrieve it. After receiving his go-ahead, I called my brother Neal. Last, I invited Phil Currie to join us, and I did tell him about Sue. After his back-to-back *T. rex*es, I could think of no better expert with whom to share our sandbox. Unfortunately, he was already tied up—we would have to put this puzzle together ourselves. I scheduled one day to clean up Matthew's *Triceratops* dig and to get organized for Sue's, and the next day . . . that would be the day. August 14.

An Engraved Invitation

Maurice Williams was the latest in a long line of ranchers from Kansas to Montana who had welcomed us onto their property to hunt for fossils. Formations on their land eroded to expose turtles, horses, oreodonts (prehistoric "sheep"), saber-toothed cats, and ancient shells of ammonites—creatures related to the chambered nautilus. Once we knew a rancher personally, we would call on

soon as we smoothed the tunnel's surface, we began plastering. There was no time to lose, as the rapidly evaporating ground moisture in the sand grains allowed the plaster to adhere better. We were also worried about the possibility of a collapse of the block under its own weight. Only two days before, a four-hundred-pound plastered section broke away only moments after Terry had crawled out from under it. The fossil broke along a natural fracture, and was essentially unhurt; it would have been a different story for Terry. Keenly aware of the danger of working under the block, we continued to create more support with the plaster, and then chiseled away at the columns—until the block stood on four-foot-wide legs. Plaster, chisel, plaster, chisel. Finally, we had enough room and stability to slide beams through the tunnels, and we built a pallet under the big block.

We had worked sixteen full days. It was the first of September and time for the only gas-guzzling members of our team to come to the rescue. While some of the crew maneuvered trailers and pickups into position and loaded them with casts and bags and bones, the rest finished framing. Thanking our physics and engineering professors, we built wooden triangles for a stabilizing trestle over the block, something that would keep it from flexing and breaking under the strain of driving 130 miles to Hill City. We then fastened the trestle, frame, and underlying pallet to the block's plaster cast, and chipped away the remaining sandstone blocks under it. Everything was ready—for the death-defying, magic part.

At other sites we have used pipes as rollers, or a forklift attachment for our Bobcat skidsteer loader, both of which help in loading most pieces onto trucks and trailers. At the Sue site, there was no place for rollers and we had no Bobcat. What we had were chains, heavy-duty come-alongs, crowbars, and two lowboy trailers—our own and one brought by our younger brother John and his best friend, Bob Tate. These recruits came in the nick of time, three days earlier, adding fresh muscle to the removal of heavy casts we were unable to budge alone. They drew the line, however, when I generously volunteered Neal and Terry to assist Maurice Williams in the bloody job of dehorning young, crabby cattle, and they chose to stay on-site with me. After all, *somebody* had to supervise Sue.

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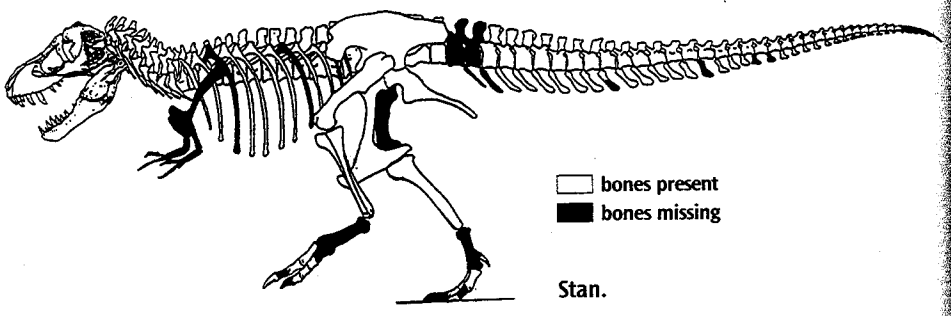

Stan.

of bone mass. Between Sue and Stan, especially considering the significance of Stan's skull in the scientific world, we were almost ready to initiate a monograph—the standard-setting work, the Bible of a species. A *T. rex* monograph had never been done, and this one would be different from any we had seen before: we had organized an unprecedented collaboration of thirty-four scientists from around the world, each of whom would contribute in his or her particular specialty area. We also toyed with ideas of tours and exhibitions, where enthusiasts could visit a matched set, a "mating pair" of *Tyrannosaurus rex*. It was time for us to burst into the mainstream.

We did. But not in a way we ever could have anticipated. At 7:30 A.M. on May 14, 1992, one of my staff pounded on the door as I took a shower in my trailer house across from the main institute. I heard her say "FBI."

> The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well.[9]

When I emerged a moment later, I dove into Alice's Pool of Tears. Accustomed to climbing over barbed wire fences in the field, instead I vaulted POLICE LINE—DO NOT CROSS tape. Accustomed to knowing everyone in our hallways, I was met instead by FBI agents and sheriff's officers already searching our building. In our breakroom kitchen, two agents handed me the search warrant Neal and

Bob already had seen. Teams had been dispatched; paleontologists from land management agencies oversaw the packing of fossil specimens, while various other agents conducted the main search—which they had interpreted as permission to open each drawer, photograph each room, and videotape every fossil, shelf, box, nook, and cranny. This process seemed crazy; what the warrant asked for was relatively easy to find.

She weighed ten tons.

Upon a closer reading, I realized the search warrant's scope—and its implications—did indeed reach past the skeleton. Citing a violation of the Antiquities Act of 1906, the document said we had *stolen* U.S. Government property and, somehow simultaneously, Cheyenne River Sioux Tribal property. We were to surrender everything that had to do with Sue:

> All the fossil remains of one tyrannosaurus rex dinosaur skeleton (commonly referred to as "Sue") . . . and other fossil specimens . . . taken from an excavation site on the property of Maurice Williams . . . (including) all papers, diaries, notes, photographs . . . or other records relating to the excavation of the tyrannosaurus rex ("Sue").

The questions that poured into my mind were left mostly unanswered in the frenetic momentum of that agonizing instant. Agents were bustling around, asking what this room was or where those fossils were, while my brain was back on square one. *Stolen? Stolen from the government? Stolen from the tribe? How could Sue be everyone's property at the same time, including, as the warrant stated, Maurice Williams's?*

Sue became the newest media phenomenon on the first day of the seizure. Plucked from the very runway of her debutante ball—mere hours before her skull was slated for its NASA trip—she made headlines around the world. This time she was the prize sought by a posse sent up from the big city into the Black Hills to capture a dinosaur. Apparently anticipating spotlights, Acting U.S. Attorney Schieffer, yet to be confirmed to his post, arrived late to

the event wearing makeup for television cameras. Some wondered if politics or fossils were his real targets, but his supporters believed he was saving the world's best dinosaur from a questionable fate; it was here I learned that the NASA CAT-scan trip had somehow been twisted by the rumor mill into a "secret sale" to unknown buyers.

Pete, daughter Sarah, and institute employees Lynn Hochstafl and Denise Etzkorn are comforted by Hill City Mayor Drue Vitter. Photo by Louie Psihoyos.

Louie Psihoyos, the *National Geographic* photographer who had been scheduled to accompany Sue to the Marshall Space Flight Center in Huntsville, Alabama, instead found himself covering fast-breaking news alongside local and national media. They all added to the surrealism of what would become three days of occupation, and they captured our darkest moments on film. For years, whenever our case was discussed on the local news, the same selection of footage would accompany the update: children skipping school to parade tearfully and defiantly in front of our building carrying placards; National Guard soldiers loading crates with front-end loaders. "They had the Black Hills Institute surrounded as if a live *T. rex* were loose inside the building," Psihoyos later wrote.[10] I would have preferred that.

No one before had seized a *Tyrannosaurus rex*. It was a complex procedure made more complicated by the number of participants, the emotional distress of our frightened and incredulous crew and families, and the obvious outrage of demonstrating local citizens. Despite FBI Special Agent Asbury's warnings that if the children were not dispersed, they would be arrested, the kids maintained a steady chant, "Don't be cruel! Save Sue!" In fact, their chant grew louder and more anguished, nearly a primal scream, when boxes started emerging from our buildings.

As we took the advice of our attorney, Patrick Duffy, and complied with the order, we nonetheless searched for relief. We first asked what provisions—including a possible chaperone of gov-

ernment representatives—might allow the CAT scan to remain on schedule. FBI agent Charles Draper, the only of our visitors who seemed at all interested in the science of the situation, called his superiors to see if an exception could be made; his efforts failed. Next we tried our best to persuade the government to settle for something less than a seizure. When we were told Sue was considered evidence in a criminal investigation, we asked if she could remain safely in one place, undergoing preparation and study, while legalities continued. Under guard if necessary.

Nothing doing. To the press, Schieffer said something for which I was totally unprepared: "The fossil is property of the United States. Period."[11] I was flabbergasted. If there was one entity that didn't seem to have any conceivable claim to Sue, it was the United States Government.

Not even the passionate, temperamental, and charismatic Pat Duffy could stem the tide. He stormed, he reasoned, he issued curt explanations. His flamboyance and self-assurance flowed through every gesture, every twitch of his eye, every lick of his lips, but still official pictures were shot, boxes packed, paperwork removed. We had two choices—get out of the way or help. We gave up talking and settled on minimizing any damage to Sue. Neal, Terry, and I hustled from room to room, supervising groups and packing fossils. Amidst all the confusion, Bob Farrar, our soft-spoken, analytical partner, tried to keep track of paperwork, lists, and records of seized items.

Pete and Terry pad and protect their giant patient against jolts during her transport. Photo by Louie Psihoyos.

We all adopted a new view of our government-hired former colleagues, who now stood in our buildings as crew chiefs. These paleontologists representing Dinosaur National Monument, Fossil Butte National Monument, and the nearby South Dakota School of Mines and Technology circled their prey with Bureau of Indian Affairs officials, sheriff's officers, local police, and National Park

Service and Forest Service rangers. They came ill-prepared, woefully lacking in requisite packing materials and plaster—which we were forced to provide. The camouflage-wearing National Guard arrived later with flatbed trucks when it was time to load up. Thankfully everyone was in uniform, or it would have been even more confusing. Hill City's restaurant employees also found the uniforms helpful; they identified the people to be refused service. By the second day of the raid, the FBI brought sack lunches.

National Guard troops load a flatbed truck.
Photo by Louie Psihoyos.

At the end of the second day, an official FBI teletype reported, "One load of bones removed via military vehicle on May 15, 1992. During removal, citizens of Hill City, South Dakota, including small children, vocally demonstrated in front of the building. When vehicle loaded and began to depart, the children ran in front of the vehicle. No other incidents occurred." The report also cautioned agents about possible problems for the next day: "Removal of remaining bones including skull to occur on May 16, 1992. Information developed from local authorities that possibility of larger demonstration is to occur May 16, 1992. This may include human chain to block departure of vehicles. . . . Decision to be made . . . whether or not to remove remaining items then or at later date."

The report's final note reflected a concern that would play a major part in future court proceedings. It read, "Above matter receiving heavy media attention both locally and nationally."

On the third day, news cameras and private video captured the throng of people following the last canopied green truck—which carried Sue's skull—as it pulled out of town on its thirty-mile journey. The atmosphere was somber, reminiscent of a funeral, although there was no human chain. It's true that Marv Matkins, the largest and most loyal real estate agent I have ever known, at first laid down on the street in front of the truck. And later, children trotted after it as it gained speed; video footage shows uni-