

April 17, 2007
Committee on Natural Resources
Subcommittee on National Parks, Forests and Public Lands
Hearing on H.R. 554: The Paleontological Resources Preservation Act
Written Testimony: Peter L. Larson
Black Hills Institute of Geological Research, Inc, Hill City, SD (President)
Black Hills Museum of Natural History (Member: Board of Directors)
Association of Applied Paleontological Sciences (Member: Board of Directors)

I am a degreed geologist, experienced vertebrate paleontologist and current member of the Society of Vertebrate Paleontology, the Paleontological Society, and the Mid-American Paleontological Society. My expertise has been requested for numerous educational, academic and museum programs, public lectures, and governmental committees. My opinions about the subjects addressed by H.R. 554 are certainly strong, but they also reflect decades of study and collaboration with a host of experts in the field who represent the scientific, amateur, government and commercial communities.

You might be surprised and pleased to note that in general, the prevailing views of all of these groups coalesce in shared needs, practices, and opinions. This trend was first documented in essential and foundational conclusions reached by the Committee on Guidelines for Paleontological Collecting, which was convened by the Board on Earth Sciences of the National Research Council, National Academy of Sciences (NAS) from 1984 to 1987. I was appointed as a member of that committee, along with ten other paleontologists and geologists, plus two attorneys. We all worked closely with liaison members from various Federal land management agencies including the Bureau of Land Management, the National Park Service, and the U. S. Geological Survey, among others.

The committee reviewed several categories of interest relating to the subjects of H.R. 554, which will be discussed in this document. However, first allow me to summarize the overall findings and recommendations, as these might serve to illustrate the breadth of the committee's understanding of the issues.

NAS COMMITTEE ON GUIDELINES FOR PALEONTOLOGICAL COLLECTING

The committee's charge was to answer the question: "How should government protect and preserve fossils of extinct plants and animals while at the same time allowing other legitimate uses of the land and encouraging the scientific study of fossils?" (NAS Report, 1987, p. 1)

When the committee issued its report, it adopted the following statement as the basis for its 10 specific recommendations to federal agencies in answer to that charge:

"In general, the science of paleontology is best served by unimpeded access to fossils and fossil-bearing rocks in the field. Paleontology's need for unimpeded access is in sharp contrast to the prevailing situation in archeology. In this report, 'access' is defined to include all collecting and removal of fossiliferous material for study and preservation. Generally, no scientific purpose is served by special systems of notification before collecting and reporting after collecting because these functions are performed well by existing mechanisms of scientific communication. From a scientific viewpoint, the role of the land manager should be to

facilitate exploration for and collection of, paleontological materials.”
(NAS Report, 1987, p. 2)

The NAS Committee’s 10 recommendations are as follows (italics as they appear in original document):

Recommendation #1: A uniform national policy on paleontological collecting should be adopted by all federal agencies. Existing statutory authority is adequate for implementation of such a policy.

Recommendation #2: Each state should adopt a uniform paleontological policy for state-owned lands.

Recommendation #3: All public lands should be open to fossil collecting for scientific purposes. Except in cases involving quarrying or commercial collecting, collecting fossils on public lands should not be subject to permit requirements or other regulations:

The Committee recommends the following procedures and definitions:

Reconnaissance Collecting: *Requires no advance notice to any public lands manager; no permit is required. Such collecting is a day or less at any one locality and involves surface collecting by hand tools.*

Extended Stay Collecting: *Requires written advance notice to the land manager so that applicable rules can be known and followed; no permit is required. Consists of surface collecting for more than one day by using hand tools.*

Quarrying for Fossils: *For this report, a paleontological quarry is defined as an excavation of greater than two (2) cubic yards initiated for the extraction of fossils. Collecting fossils by quarrying should be controlled by a permit procedure. Permit forms should be simple.*

Recommendation #4: Fossils of scientific significance should be deposited in institutions where there are established research and educational programs in paleontology. These repositories will ensure that specimens are accessioned, maintained, and remain available for study and education. There is no justification for requiring that fossils be deposited in an institution in the same state in which they were found; such requirements discourage paleontological research.

Recommendation #5: Commercial collecting of fossils from public lands should be regulated to minimize the risk of losing fossils and data of importance to paleontology. Permit applications must be subject to review by paleontologists qualified to assess the projects’ potential impact on related research programs. Applications must receive the endorsement of a paleontologist who is willing to supply guidance to the commercial operation. Specimens deemed to be of special scientific interest must be deposited in a public institution, such as a museum, college, or university.

Past experience has clearly shown that commercial collecting has both benefited and hurt paleontological research. Many unique and scientifically important fossils have been discovered and made available to science by commercial collectors. Conversely, there are documented

instances of important fossils disappearing into private hands with no opportunity for scientific study. The Committee believes that a permitting procedure for commercial collecting would ensure access to specimens by scientific community and commercial interests.

Recommendation #6: Private landowners should follow the guideline that commercial collecting of fossils be undertaken with thorough scientific oversight to ensure that the scientific usefulness of specimens is not impaired.

Recommendation #7: Blanket paleontological inventories, mitigation, or salvage activities should not be undertaken, funded, or required by government agencies as a routine part of environmental assessment, impact analysis, permitting, land management, or similar programs.

By facilitating the work of scientists, Land managers and other agencies can take advantage of the most effective means of accomplishing inventory objectives, i.e., increasing knowledge of fossil distributions on public lands. Thus, surface paleontological collecting should be encouraged on all public lands, including Areas of Critical Environmental Concern, Research Natural Areas, Wilderness Study Areas, and Designated Wilderness Areas. There is no need to conduct general paleontological inventories on all public lands....

Recommendation #8: Land managers or developers who require scientific guidance on perceived paleontological problems should initially seek advice from the U. S. Geological Survey, or appropriate state geological surveys, which in turn may wish to contact appropriate paleontological organizations.

Recommendation #9: The Department of the Interior, in cooperation with the professional paleontological community, should identify and evaluate potential paleontological localities of national significance (on both public and private lands) for designation as National Natural Landmarks (NNL's), pursuant to the existing National Natural Landmark Program administered by the National Park Service (36 CFR 62).

Recommendation #10: The paleontological societies of the nation should develop permanent and broadly based educational programs to inform landowners and commercial and amateur collectors of the research needs of professional paleontologists. (NAS Report, 1987, p. 24-26)

Although the committee finished its work nearly 20 years ago, the recognized problems and solutions are perhaps even more relevant today than they were at the time we published our findings. Fossils are still being exposed and destroyed by the actions of nature and humans at a rate so great that it will never be possible to save them all, no matter how many collectors are allowed access. Unfortunately, because of competing interests, both in the land management agencies and in some private organizations, the National Academy's recommendations were never implemented. This lack of action occurred despite a mandate by Congress found in the

1987 Appropriations Act requiring that federal agencies use the report in developing regulations concerning paleontology (Congressional Record – House, Oct. 15, 1985, p.H.10679, sec. 121).

After conclusion of the NAS committee’s work, I was appointed to and served for several years on a committee for Negotiated Rule-Making with the BLM, NFS, NPS, USGS, and other agencies. The resulting rules and proposals again were never implemented.

Today the NAS Report on paleontological collecting remains the **only** scientific study that has addressed the question of what is best for the science of paleontology and for fossils found on public lands. This committee’s work often stands in great contrast to recommendations by special interest groups such as SAFE (“Save America’s Fossils for Everyone”) and some of the leadership for the Society for Vertebrate Paleontology (SVP). SAFE and the SVP leadership rely heavily upon recommendations distilled from a poll of 300 adults conducted in 1995. That poll has since been scientifically analyzed:

“Many people are trumpeting this poll as proving that public opinions overwhelmingly in favor of legal restrictions on fossils, whether the fossils were found on public or private land, and whether the finder is a professional, commercial employee, or an individual. The poll was likely biased and, worse, made no attempt to distinguish whether the respondents understood the issues at hand, thus making the wisdom of following their opinions suspect. Regardless, the poll does not prove public opinion is in favor of legal restrictions as 1) many results were contradictory, 2) results were clearly in favor of personal property rights despite claims to the contrary, and 3) questions were not worded in such a way as to allow only a single or clear conclusion.” (Poling, 1996, p. 7)

Although I applaud Congressman McGovern’s interest in the somewhat esoteric subject of paleontology, and I share his desire to coordinate the efforts of the various land management agencies, I cannot support this bill in its present form because it diametrically opposes valid research and the recommendations of the National Academy of Sciences Committee on which I served.

Specific topics illustrating this opposition are discussed below.

IDENTIFYING THE PROBLEM

The most basic problem in this debate is a difference of opinion on the nature of the problem. Are there not enough fossils, or are there not enough fossil collectors? Do fossils need to be protected from humans, or does the very nature of human scientific curiosity need to be protected and nourished? Is it acceptable to “sacrifice” a small number of fossils to inadvertent damage for the greater benefit that is derived from having more people looking for them? Is it possible that by loosening restrictions, we might be able to increase exponentially our scientific knowledge of life on this planet?

The posture of H.R. 554 is evident in Section 5, which imposes rigorous permit requirements for fossil collecting for scientific research and does not permit commercial collecting **of any kind** or vertebrate collecting by amateurs, contrary to NAS recommendations #3 and #5.

Let’s recall how the NAS Committee spoke to this very issue when it stated:

“...the science of paleontology is best served by unimpeded access to fossils and fossil-bearing rocks in the field....Generally, no scientific purpose is served by special systems of notification.... From a scientific viewpoint, the role of the land manager should be to facilitate exploration for, and collection of, paleontological materials.” (NAS Report, 1987, p. 2)

H.R. 554 seems to focus on danger that can occur to fossils—either in the form of damage or theft—where the NAS Committee focused on the good contributed by a higher volume of interested parties participating in a common goal. Further, the NAS Report stated, “the Committee was dismayed to learn of the number of instances of disruption of collecting by what seem to be overzealous regulatory activities of federal agencies.” Clearly, the NAS Committee was more concerned with the potential for wrongful prosecution of people than with the human threat posed to fossils.

How can we reconcile these seemingly polar positions, and arrive at an equitable, reasonable, beneficial, and long-standing solution that maximizes resources? For me to contribute to this answer, I must first present information broadening the scope presented in H. R. 554.

ABUNDANCE OF FOSSILS

A primary element of the equation is whether or not fossils are rare—and if some are, how much protection do they need?

H.R. 554 assumes that fossils, especially all vertebrate fossils, are rare, and thus are in need of protection. Only those who do not actively collect fossils could possibly believe this; field experience quickly reveals that, in fact, fossils are **not rare**. They occur wherever we find sedimentary rock, which is found on over 80 percent of the land surface of this planet. Certainly, plant cover and human structures obscure these rocks in many areas, but natural weathering and human activity constantly uncover new fossils; they also ultimately destroy them, sometimes within a few hours. The NAS Report states:

“An irony of the natural renewal process is that once specimens of fossils are exposed at the surface of the earth, they do not remain collectable for very long in most environments. If a collector does not remove them, nature will destroy the exposed fossils through weathering and erosion. In especially hard and resistant rocks, on the other hand, a fossil exposure may remain essentially intact for many years.” (NAS Report, 1987, p. 16)

It is true that certain fossil species are represented by only a few, or in some cases, only one individual.

“The rarity of a particular kind of fossil depends very much on what one means by ‘particular kind.’ For example, dinosaur bone fragments are a common component of many stream deposits of Mesozoic Age; they are found on all continents and occur in rocks spanning more than 100 million years of geologic time. In many collecting areas, finding dinosaur bone fragments, or even complete bones, is not unusual or especially noteworthy. However, certain species are known only from one or two localities.” (NAS Report, 1987, p. 15)

Therefore, the blanket statement that fossils, or even vertebrate fossils, are rare is untrue. For this same reason, there is no scientific, public, or practical reason why **all** fossils found on

public lands should remain, in perpetuity, as public property, as is mandated by H.R. 554, [Sec. 5(c)(1)].

There are literally trillions of fossils eroding out from public lands each year. The NAS Committee recognized the value and variety of uses for these fossils, from science to the most mundane. “To many people, the purely esthetic quality of fossils is important, and they use fossils for decorative purposes as objects of art.” (NAS Report, 1987, p. 11) The Report mentions as acceptable interior decorating and even using fossils as facing stones. With this in mind, we cannot assume that all fossils are rare or important, and must be housed only in museums.

Conversely, SAFE and the SVP leadership often cite a “worst-case scenario” that causes those unfamiliar with the science to focus on “protection” rather than “multiple use.” The scenario involves a clumsy amateur stumbling upon a rare treasure and stashing it on his mantelpiece, hidden away from the public and scientists. Although most fossils found today on the average mantelpiece are common and have little scientific value, I contend that even in this unlikely case, a fossil has been saved that probably otherwise wouldn’t have been. Further, that one important fossil, should it have made its way to a mantelpiece, represents thousands of others that have been brought to museums and saved for science.

For those of us on the NAS Committee, we saw the value incorporated in that mantelpiece fossil. Left uncollected and unobserved, that fossil has no value at all.

THE VALUE OF AMATEUR ENTHUSIASTS AND COMMERCIAL COMPANIES

Amateur collectors are the foot-soldiers of paleontology. They are the equivalent of amateur astronomers, who broaden the scope of scientific observation a thousandfold. This bill does nothing to encourage their contribution or increase their access to fossils, but acts, instead, to negate their contributions to the science. I recall a time in 1982 when tens of thousands of letters were received by the BLM in opposition to a proposed rule-making that failed to address amateur access in the way promoted by the NAS Report. Those tens of thousands represent perhaps hundreds of thousands who have a strong interest in paleontology.

Further, museums all over the world have depended—for their entire histories—upon the commercial collection of fossils for display purposes. In fact, some museums, such as the Houston Museum of Natural Sciences and the Children’s Museum of Indianapolis, contain entire exhibit halls that are almost exclusively composed of specimens that were purchased from or donated by businesses like my own.

Every one of the six *Archeopteryx*, that rare missing link between birds and meat-eating dinosaurs, was found by an amateur and commercially placed in a public museum. And of the 40 *T. rex* specimens found to date, only two were discovered by academic paleontologists—who, under this bill, would be the only people able to secure permits. All of these specimens, and countless others collected and preserved by amateur and commercial collectors, changed the face of science. Without their access to public lands, a impressive percentage of the potential scientific information contained in public areas will be lost forever.

To assume that it is beneficial to draw a line separating academics from the rest of the field, as recommended in H.R. 554, reflects a lack of paleontological field experience that is understandable only if one has never collected fossils.

THEFT

No responsible person condones the theft of fossils or vandalism of fossil sites. Not only are these acts reprehensible and already covered under existing laws, but also they are erroneously attributed to amateur and commercial collectors. Instead, fossil crimes are committed by people who neither understand nor appreciate the science—the most exciting aspect of paleontology to true enthusiasts, regardless of whether they hold jobs in paleontology, and regardless of who writes their paychecks. Thieves are opportunists who do not fall into the categories of “amateur,” “professional,” or “commercial” paleontologists. Thieves do not share our love of or respect for fossils and paleontology.

Thieves also do not understand the small size, intimacy, and particular dynamics of the marketplace. This is a marketplace that depends, for the most part, upon museums as customers. Stolen fossils are nearly impossible to pass undetected through the usual rigors and channels of this marketplace. Amateurs and commercial paleontologists alike are, generally, familiar with current collections, market needs, and any reported thefts. Indeed, I have personally been responsible for reporting to an institution when I saw what I suspected was stolen property at a trade show.

Much of the debate informing H.R. 554 has targeted amateurs as “inexperienced” people who can damage our scientific heritage. Although it is true that some amateurs lack experience and might not be the best fossil collectors, the same can be said about academics, as well. How is a graduate student expected to learn, without going out into the field—and learning by doing?

The debate also has wrongly pitted academia against commercialism, when in fact the two are complementary and interdependent. It is incorrect to assume that “commercial collector” is synonymous with “thief.” Academics and amateurs who work with credentialed, experienced, respected commercial paleontologists recognize their valid contributions. “The trading, buying, or selling of common fossils often fulfills an educational need. In fact, many museums have funds set aside to purchase unique, unusual, or rare fossils.” (NAS Report, 1987, p. 13)

Many of the supposed violations commonly quoted—usually about commercial collectors—actually misrepresent innocent mistakes or exaggerate the problem. A famous example is that of “Big Al,” an *Allosaurus* skeleton from near Shell, Wyoming. In this case, a misplaced fence, established on the wrong line for more than 80 years, led to an assumption that a fossil found on the “private side” actually was on the private side. Only after extensive surveying was it determined that the fossil actually lay, literally, inches beyond the line, on BLM-administered land. This collector was never prosecuted for obvious reasons, but often this case is cited as one of intentional wrongdoing.

A second case, in which a university professor collected most of a *T. rex* skeleton without bothering to check on land ownership at the courthouse, also could have been prosecuted for intentional trespass. However, again, this was understood to be an honest mistake.

Finally, a group of boy scouts skipping stones on a lake—and inadvertently damaging a dinosaur track way—were nearly prosecuted, along with their counselor.

The single case that most exemplifies the assumptions about commercialism is the one in which I played an intimate part. Sue the *T. rex* was seized from a non-profit museum because the Acting U. S. Attorney falsely claimed that we collected it from federal land, and that our commercial participation in the collection of the fossil by definition put the fossil at risk to be “sold to the highest bidder.” The land claim was later abandoned; the fact that the fossil had already been donated in perpetuity to the private museum seemed irrelevant. At the end of a three-year investigation and eight-week trial, I served a prison sentence for “failure to fill out

forms.” Our purchase of the fossil from the original owner was recognized and then negated, the fossil was returned to the landowner, and the federal government facilitated its auction sale. Like our donation, the irony of this outcome seemed irrelevant. The fossil is again on public display at a private museum in Chicago, where I enjoy scientific visitation rights. (For more information on this case, see Fiffer, 2000, and Larson & Donnan, 2002.)

All of these examples illustrate the potential problem with the legislation as written, in which fossils are more important than people and their intent. Individuals such as these must be distinguished from thieves and vandals.

Responsible, knowledgeable collectors fall in all camps, and all camps support reasonable permitting processes. One way to help protect and preserve paleontological resources is through education and promoting access to all qualified individuals for the collection of fossils. This includes amateur and commercial collectors who could double as the eyes and ears of land managers.

PUNISHING PERPETRATORS

Adequate laws are currently in force to protect against theft and vandalism of public property. However, H.R. 554 increases the number of offenses, and the penalties for violations, despite the NAS Committee’s findings:

“In its further investigations, the Committee was dismayed to learn of the number of instances of disruption of collecting by what seem to be overzealous regulatory activities of federal agencies. Cases range from a Harvard biology professor who was apprehended in Montana for collecting fossils after inadvertently crossing an unmarked boundary of BLM land to an elderly hobbyist who was arrested in South Dakota for collecting seven rather undistinguished fossils in a National Forest.” (NAS Report, 1987, p. 2)

H.R. 554 creates a “fossil police force.” There are two primary, troubling aspects to this development. First, this force would be assigned the impossible task of patrolling the nearly one-half billion acres of public land controlled by the Bureau of Land Management (this does not include land controlled by the U.S. Forest Service, Park Service, Bureau of Reclamation, and other agencies). As soon as this position is adopted, the public’s relationship with the land and land managers becomes adversarial. The focus becomes on protecting something from “almost everyone,” instead of facilitating reasonable processes. In times of record deficits and a drain on human resources, is this really how we want to direct our efforts?

Second, if we adopt the wording of H.R. 554, this police force could potentially arrest scouts, students on organized field trips, graduate students, professors, and researchers whose sole goal is to learn about past life on earth—while missing those who intend to steal. As in most illegal enterprises, those with a negative agenda are skilled at evasion; a reasonable permitting process would facilitate access for those who are not a danger, and erect an initial roadblock for those who are. Instead of subjecting students and educators to jail [Sec. 7(a)] or confiscation of private and school vehicles [Sec. 9(b)], how about instituting a reasonable program that includes easy, permit-less access for educational organizations and easy-to-obtain excavation permits when it is in the best interest of science, as is recommended by the NAS Report (Recommendations 3 and 5).

Other “crimes” listed in H.R. 554 are also troubling. The bill states that mislabeling fossils is to become a crime [Sec. 7(b)]: “A person may not make or submit any false record, account, or label for, or any false identification of, any paleontological resource excavated or removed from federal lands.” If this becomes a standard, then all museum curators are destined for a prison cell instead of a laboratory. There is no museum that is free from labeling or identification errors, and even field identifications might change several times before a piece arrives in the lab—and then additional times thereafter. Science is a process of discovery, postulation, comparison, and educated guessing. Scientific names have been found to be redundant or inaccurate—but only after additional information and preparation has occurred. If scientists feel constrained to be “correct,” science will stop in its tracks.

Further, Sec. 5(c)(3) states that: “specific locality data will not be released by permittee or repository without written permission by the Secretary.” This is in complete opposition to the scientific principle of shared data and information. Research dictates that locality data is essential in the scientific process; a fossil without a locality has no scientific value. We all understand that the purpose of this rule is to protect a site from unauthorized access; however, the researcher should be trusted and allowed autonomy in determining recipients of the data.

“SCIENTIFIC VALUE”

“Scientific value” has been listed as a determinant for the penalty phase in prosecutions or judgments. Specifically, H.R. 554 [Sec 8(a)(2)(A) sets the amount of a penalty for violations as “the scientific or fair market value, whichever is greater.” However, this definition would never stand in a court of law, as there is no empirical way to assign a dollar figure to “scientific value.” One scientist’s treasure is another scientist’s trash—because of varying areas of interest. Also, a fossil might answer the question of ancestry for an entire Order of organisms but, because of its abundance or size, might not bring three cents on the open market. Indeed, the value is often in the discovery, not the object

Because of my extensive work with valuing fossils for museum and other sales or donations, I have often been called upon to appraise individual fossils and entire collections. Although scientific value is certainly mentioned in the appraisal, and might have an effect upon fair market value, standard practice shows that it cannot be quantified into a discreet dollar figure. We scientists call this nebulous, unquantifiable amount, “the cool factor. “ It is completely subjective and untestable. The only equitable value to include when assessing penalties is fair market value, which is both easily determined and takes rarity and scientific importance into account.

“Scientific value cannot be determined by a simple formula or by application of a predetermined set of criteria . . . The scientific value of a fossil depends ultimately on what it adds to our knowledge of the history of life or of the physical history of the Earth, rather than on any easily codified assessment of value.” (NAS Report, 1987, p. 18)

CONCLUSION

It is gratifying to see that this subject, crucial to so few of us, is still being discussed by our government. I am hopeful that we are approaching an equitable end to this long discussion.

As in this case, so often legislation is introduced by well-intentioned legislators who are inundated by information on so many topics that they cannot possibly have integrated the large

volume of background or crucial data necessary for adequate coverage of a single topic. Particularly in a specialized field like this, where decades of debate have been clouded by paleontological politics, it is easy to see that only the most vocal or powerful side may be able to bring their desires to the forefront.

This is our opportunity to propose solutions that will work for the whole field, and for the public, today and for the future.

Our mission is not to restrict access to all except those representing academia. Our mission is not to draw a line between academia and commercialism. Our mission is not to restrict amateurs because they lack education—thus denying them access to one of the best classrooms on earth. Instead, our mission is to create policy that distinguishes between those who act according to the best interest of science and the law, and those who do not. Our mission is to gather together all foot-soldiers of paleontology, so that they can work toward common goals of preserving scientific information, and train collectors sufficiently so that fossils are not unduly damaged. We must ensure that experts are called in appropriately in order to identify important sites, evaluate scientifically important specimens, and make recommendations as to what is best for the resource.

It should be everyone's job to help protect these resources from people with bad intentions. Academic, amateur, and commercial paleontologists all share these goals and these responsibilities. Excluding everyone who does not work at a government facility is shortsighted and unnecessarily exclusionary. The private sector, on a daily basis, supports and assists the public sector in its goals.

The question remains: what do we do about “the bad guy”? Can restricting legal access to large stretches of public lands prevent a fossil from being destroyed—either by unsavory collectors or by the weather? No. **The only sure way to protect a fossil is to collect it.**

Adopting legislation such as H.R. 554 not only will not protect fossils from degradation or theft, but also makes them more vulnerable—because there is less chance that they will be found. The bill is written from a stance that is untenable. What is required to solve the dilemma we all recognize is a paradigm shift from “saving fossils” to “utilizing available resources.” The best resources to protect and save fossils and their crucial scientific data are fossil collectors. They are eager to help—and the work of the independents is free to the taxpayer.

“I know no safe depository of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion.” (Thomas Jefferson, 1820)

I urge you to review and adopt the recommendations of the thorough NAS Report. Any lasting and helpful legislation must rely upon the extensive work already done by a coalition of the scientific community. The wheel in this case has already been invented. Let's put it on the cart.

I believe, therefore, that despite the well-meaning intentions of the Honorable Representative, James McGovern from Massachusetts and his co-sponsors, whom I respect very much, H.R. 554 is fatally flawed. My recommendation is that H.R. 554 in its present form not be recommended by this committee for passage by the House of Representatives.

Thank you for the opportunity to address this committee.

BIBLIOGRAPHY

Congressional Record, Oct. 15, 1985, Omnibus Spending Bill - through 1987, p. H. 10679
NAS (National Academy of Sciences) Report, 1987, Paleontological Collecting, National
Academy Press, Washington, D.C. 243 pp.

Fiffer, S., 2000, *Tyrannosaurus Sue*. W.H. Freeman & Co., New York, NY. 248 pp.

Jefferson, T., 1820, Letter to William Charles Jarvis, September 28.

Larson, P., & K. Donnan, 2002, *Rex Appeal: The Amazing Story of Sue, the Dinosaur That
Changed Science, the Law, and My Life*. Invisible Cities Press, Montpelier, VT. 404 pp.

Poling, J., 1996, Analysis of the SAFE poll on fossil collecting, 7 pp.

APPENDICES

APPENDIX A:
EXECUTIVE SUMMARY
NATIONAL ACADEMY OF SCIENCES REPORT:
PALEONTOLOGICAL COLLECTING
NATIONAL ACADEMY PRESS, WASHINGTON, D.C. 1987

APPENDIX B:
LETTER TO COMMITTEE
MICHAEL TRIEBOLD, PRESIDENT
ASSOCIATION OF APPLIED PALEONTOLOGICAL SCIENCES
APRIL 10, 2007