



## Out of the Mainstream: Fossil collecting in the 21<sup>st</sup> century

Roy E. Plotnick

Fossils are wonderful objects. They represent the best evidence for the long and complex history of life on Earth. They are invaluable tools in our ongoing search for fossil fuels and in our efforts to reconstruct the geologic and environmental history of the globe. They excite the imaginations of children and adults alike. They also are, in many cases, worth substantial sums of money. Paleontologists suffer from the fact that the objects of our scientific interest are also objects of pecuniary interest.

When I first started out in the field, as an undergraduate at the American Museum of Natural History, I learned that there were three questions that members of the public had when they brought in fossils to identify. The first of these was “what is it?” followed by “how old is it?”, and then inevitably by “how much is it worth?” Interest in the last question has certainly been heightened by what could be called the “Sue effect,” the widely publicized price paid for the *T. rex* now in the Field Museum. This has certainly created the impression that fossils are rare and valuable objects.

Of course, many fossils certainly are unique and precious and require protection from exploitation. At the same time, the vast majority of fossils are incredibly common, to the extent that buildings are made of fossil-bearing limestones. Fossil collecting is a wonderful activity for children and is thus a breeding ground for future generations of paleontologists. Access to fossil collecting sites is essential for teaching paleontology.

Today, over a century after the Cope-Marsh “bone wars” and two decades after the contretemps over Sue, fossil collecting remains a difficult



issue for our community. In 2009, after many years of concerted work by the Government Affairs committee of the Society of Vertebrate Paleontology, the Fossil Resources Protection Act finally became law in the United States (see <http://www.vertpaleo.org/education/government.cfm> for details). This law provides strong new protections for scientifically valuable fossils, especially vertebrate fossils, on U.S. federal lands. As of this writing, agencies responsible for enforcing the law are still developing regulations, with public commentary periods to be announced in the near future. The form these regulations take, and the manner in which they are enforced, will affect our field for decades to come.

Issues involving collecting do not just involve vertebrates or public lands. Access to private lands is influenced by the “Sue effect” and by concerns over liability. In my own work, I have found it increasingly difficult to find quarries willing to give me access for research or teaching. The economic downturn has also closed several quarries. In terms of public lands, collecting at Illinois state

owned sites of the Mazon Creek biota has been hampered by the unfamiliarity by land managers with fossil collecting, as opposed to fishing and camping.

In addition, sites containing such desirable fossils such as trilobites and ammonites are just as likely to be harvested by unscrupulous collectors as those containing vertebrates. The need to protect these sites from pillaging conflicts with the necessity of documenting their existence for scientific purposes.

Over the next year or so, I will be inviting commentaries on fossil collecting from a spectrum of members of the paleontological community, includ-

ing amateurs, professionals, and reputable commercial collectors. I plan to include vertebrate and invertebrate paleontologists, as well as paleobotanists. The goal will not be to rehash the post-Sue arguments of the last two decades, but to discuss the future of fossil collecting in the new legal environment. Of course, these issues are not confined to the United States, as witness recent issues with collecting in China ([http://palaeo-electronica.org/2010\\_1/commentary/china.htm](http://palaeo-electronica.org/2010_1/commentary/china.htm)). Contributions will be welcome from interested parties elsewhere and future contributors to our ongoing series on the "World of Paleontology" will be asked to provide their insights.