Walking in Your Footsteps: The Protection of Paleontological Resources in Colorado

Lynda Knowles
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I. INTRODUCTION

This article addresses laws regarding fossil collection within Colorado and discusses a few notable cases. While fossils discovered on private lands belong to the landowners, federal and state laws require permits to collect or excavate for paleontological resources on public lands. As the illicit trade in fossils grows, public outreach and education will serve as important bulwarks highlighting the unique scientific and cultural value of these treasured resources.

II. FEDERAL LAW

The federal government owns thirty-six percent of Colorado land, or approximately twenty-four million acres. The Paleontological Resources Preservation Act of 2009 (PRPA) protects the paleontological resources found on this land and harmonizes cross-agency regulations regarding the curation of federal paleontological resources. PRPA vests authority with the Secretaries of the Interior and Agriculture Departments to protect paleontological resources on lands administered through their respective agencies. Although implementing regulations are still outstanding, PRPA requires collectors to obtain permits that are issued for the purpose of furthering paleontological knowledge or for public education. The collection activity must be consistent with any federal

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3. ROSS W. GORTE ET AL., CONG. RESEARCH SERV., R42346, FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA 4 (2012). This figure includes BLM, Forest Service, Fish and Wildlife Service, and the National Park Service lands. The number may be larger if Bureau of Land Reclamation and Armed Services lands are included. “Total federal land in the United States is not definitively known.” Id. at 1 n.1.
5. “Unified guidelines for paleontological resources management and special protection for vertebrate paleontological resources are greatly needed . . . . [These] fossils[] are heritage resources . . . . They provide opportunities for the public to learn more about ancient Earth ecosystems and the development of life from research and study . . . .” S. REP. NO. 109–36, at 10–12 (2005).
6. § 470aaa–1.
7. The Department of the Interior hopes to publish the draft proposed regulations for public comment within the next 12 months.
8. § 470aaa–3(b)(2).
land management plan in place and must not threaten significant natural or cultural resources. 

All specimens collected under a federal permit remain the property of the federal government and must be housed in an approved repository (federal institutions, museums, or educational institutions) to be made available for scientific research and public education. No permit is needed for casual collecting of invertebrate and plant fossils for personal, non-commercial use on Bureau of Land Management, Bureau of Reclamation, or Forest Service lands. This exception does not apply to National Park Service lands where any type of collecting requires a permit.

PRPA carries civil and criminal penalties for excavating, removing, damaging, or otherwise altering any paleontological resource on federal lands without appropriate permitting. It is illegal to transport, export, sell, or purchase a resource if the person knew or should have known that it was obtained from federal lands. For resources valued in excess of $500.00, the maximum criminal penalty is five years in prison. Penalties and civil fines may also be assessed based on: the scientific value or fair market value of the paleontological resource (whichever is greater); the cost of response, restoration, and repair of both the resource and site; and any other factors considered relevant by the Secretaries. Rewards may be authorized for information leading to a civil or criminal violation in amounts of up to half the penalties imposed on violators.

Although agencies managing federal lands have enforcement powers, the sheer size and remoteness of federal lands create challenging obstacles to enforcement and prosecution. To protect these resources from illicit excavation, PRPA also provides that the nature and specific locations of a paleontological resource are confidential unless the Secretaries.

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9. § 470aaa–3(b)(3).
10. § 470aaa–3(b)(4).
11. § 470aaa–3(c).
15. § 470aaa–5(a).
16. § 470aaa–5(c).
17. § 470aaa–6(a)(2).
18. § 470aaa–7(a)(2).
tary determines disclosure would serve the public interest without harming the resource or the site where it is located. 19

III. STATE LAW

The State of Colorado owns approximately three million acres of land. 20 Under the Historical, Prehistorical, and Archaeological Resources Act of 1973, Colorado reserves to itself title to all resources on its lands, including “fossils and other remains of animals, plants, insects, and other objects of natural history . . . . ” 21 The Act is administered through the State Historical Society of Colorado and establishes a permitting system for the removal or excavation of resources through the state archeologist’s office. 22 Regulations allow fossil collection only by qualified applicants and are subject to specific reporting requirements. 23 All excavations must be undertaken with the object of increasing knowledge. 24 If specimens cannot be adequately curated by a reputable museum where discovered, they must be placed in an approved repository. 25 Any person who appropriates specimens is guilty of a misdemeanor punishable by a fine of not more than $500.00, or by imprisonment in the county jail for not more than 30 days, or both. 26 Injunctive relief is also available. 27 Under Colo. Rev. Stat. § 3-3-101, Colorado and the United States have concurrent jurisdiction over certain national park lands, including Dinosaur National Monument and Florissant Fossil Beds National Monument. Both sites hold fossils in situ and are world-renowned fossil reposito-

19. § 470aaa–3(c)(3) (“Specific locality data will not be released by the permittee or repository without the written permission of the Secretary.”). See also § 470aaa–8 regarding exemptions from disclosure.

20. Colorado Trust lands comprise the bulk of state owned lands. The lands were conveyed to Colorado by the federal government upon statehood in 1876. The Colorado Division of Wildlife and State Park Service manage approximately 71,000 acres of land including forty-two separate state parks. See About the State Land Board, COLO. ST. LAND BOARD, http://www.trustlands.state.co.us/NewsandMedia/Pages/AbouttheSLB.aspx (last visited Mar. 16, 2013).


23. 8 COLO. CODE REGS. § 1504–7(7)(J) (2013) requires permittees to disclose fieldwork locations (by county), a catalog of materials collected and where reposed, and a summary of work in progress.

24. “Investigations . . . shall be undertaken only for the benefit of reputable museums, universities . . . or other recognized scientific or educational institutions, with a view to increasing the knowledge of such resources; and such activities shall be conducted for permanent preservation, either on the site or in museums, open to the public and available to qualified students.” COLO. REV. STAT. § 24–80–406(2)(a) (2013).

25. 8 COLO. CODE REGS. § 1504–7(9)(B) (2013). In October of 2010, a significant site including mastodons, mammoths, and other invertebrates was discovered near the town of Snowmass, Colorado on land owned by a political subdivision of the state of Colorado. The Denver Museum of Nature & Science became the repository of record in 2010 as the site was soon to become an expansion of an existing reservoir. See The Snowmastodon Project, DENV. MUSEUM OF NATURE & SCIENCE, http://www.dmns.org/science/the-snowmastodon-project/ (last visited Mar. 16, 2013).


There is no Colorado statutory exception for casual collecting by amateurs of invertebrate or plant fossils. Collectors are subject to state trespass laws if they enter private lands without permission and may well be subject to prosecution for theft. Providing identification to the land owner as a fossil collector and securing written permission is a best practice. Some states now require it, particularly for commercial collectors.

Prosecutions and Cases of Note

PRPA is relatively new, and there are no published cases citing it. However, the following cases provide insight into the growth of commercial collecting and prosecutions.

The 1990 discovery of an incredibly preserved Tyrannosaurus rex skeleton (named “Sue” after its discoverer) is the seminal case in current paleontological resource protection. The commercial collector that discovered it, and the ensuing legal battles surrounding its ownership and sale, laid the groundwork for PRPA.

In 1990 the Black Hills Institute of Geological Research, a commercial fossil operation, purchased the rights to excavate on a ranch owned by Maurice Williams, a Native American, for $5,000.00. The land was located within the Cheyenne River Sioux Indian Reservation and held in trust by the United States. The Institute announced the find publicly in 1992, and two months later, federal officials seized the skeleton. The Field Museum in Chicago, with other financial backers, purchased the skeleton at a public auction for $8,360,000. The government’s actions in seizing the fossil and prosecuting the commercial operator raised legal

31. See About Us, THE W. INTERIOR PALEONTOLOGICAL SOC’Y, http://www.westernpaleo.org/about_us.php (last visited Mar. 21, 2013) (“Obtain permission from private landowners or governmental agencies prior to collecting on lands either as an individual or as a WIPS member.”).
32. Under KAN. STAT. ANN. § 21–5811 (2012), it is illegal for commercial fossil hunters to enter private land or take any fossil from private lands without written permission of the landowner. Full disclosure of the collector’s intent is required, together with a full description of any fossil taken. Colorado has yet to address the issue.
34. Chew, supra note 33 at 1039.
35. Id.
36. Id.
37. Id. at 1041.
questions regarding the efficacy of existing laws. It also marked a sea change in the commodification of fossils. The possibility that such significant fossil finds could be auctioned to a private bidder for millions of dollars, and forever lost to scientific study (or public display) continues to generate discussion about how these resources should be treated and valued.

Sue was a spectacular and very public find. But much activity remains clandestine, with sporadic enforcement. For instance, in United States v. Peck, the Tenth Circuit, in an unpublished opinion, rejected constitutional challenges to the search and seizure of boxes of fish and turtle fossils found in the back of a pickup truck on federal land, noting:

The 18 Mile Canyon area is a wilderness in which the most frequent activity is the removal of vertebrate fossils. Although other legal activity may also take place there, common sense tells us the late hour and the surreptitious nature of the conduct of the people digging that night suggest their intent was not likely to be lawful. The lack of human habitation in the area immediately calls into question late night activities accomplished in lantern light and accompanied by the clink of metal on stone, particularly when the locus of that activity is the long known site of illegal fossil harvesting. Moreover, it is not beyond the pale of prudence and common sense that a vehicle making a pre-dawn exit from the site in which that clandestine conduct occurred would contain the fruits of the nocturnal harvest.

This prosecution was based on a tip from Peck’s estranged wife. While PRPA now offers rewards for information that leads to prosecu-
tion, these type of cases reflect the very real difficulties of enforcement in remote areas where looting is commonplace.

The commercial market for fossils shows no sign of decline. Indeed, if anything it has gone international. In late 2012, a *Tarbosaurus bataar* was sold in the United States to a private, anonymous buyer for almost $1,000,000 over protests from the Mongolian government. The U.S. Attorney’s office subsequently filed a criminal complaint against Eric Prokopi, a commercial fossil collector, on charges of conspiracy to import the skeleton illegally into the United States. The skeleton was eventually returned to the Mongolian government and Prokopi is now awaiting sentencing. Given his extensive collection activities, he now faces up to 17 years in jail and $750,000 in fines under federal export fraud statutes.

Whether this last prosecution is the result of diplomatic influence, or the harbinger of more ardent enforcement to come, remains to be seen. In the interim, a simple Google search under “fossils for sale” quickly illustrates how ubiquitous the commercial market for fossils has become. Given the PRPA, upcoming regulations to be enacted under it, and high-profile international cases like Prokopi, buyers of fossils are well-advised to carefully assess the provenance of any paleontological specimen purchased in order to avoid criminal liability.

IV. CONCLUSION

PRPA was enacted with the charge to increase public awareness about the significance of paleontological resources. Events such as National Fossil Day educate the public about hobby collecting, and the benefits derived from the scientific study of fossils. This year’s celebration

47. *Tarbosaurus bataar* is a tyrannosaurid very similar to *Tyrannosaurus rex* and unique to Asia, particularly the Gobi Desert region of Mongolia. Source: Conversation with Joe Sertich, Curator of Vertebrate Paleontology, Denver Museum of Nature & Science March 26, 2013.
is on October 16th, with activities planned throughout national parks. Colorado, as home to so many world class fossil sites, is also home to equally top-notch educational programs that showcase these heritage resources. Special summer camps focus on paleontology for children and classes and paleo-certification programs are available for adults through a variety of sources. The preservation and study of these unique resources is a happy task we can all share. Education will undoubtedly prove as effective, if not more so, than enforcement.

54. Id.