



PRESIDENT'S MESSAGE

January 2017

by Shirley Leeson

sdmgpresident@sdmg.org

Lisbet Thoresen is Public Lands Representative for **SDMG** and Chair of the Public Lands Advisory Committee (PLAC) – South for **CFMS**. Recently, she has been working with the **Southern California Paleontological Society (SCPA)**, which is taking the lead on preparing a comment letter on “A Proposed Rule” on casual collecting of fossils under the **Paleontological Resources Preservation Act of 2009 (PRPA)**. The regulation will codify language that affects hobby collecting of invertebrate fossils, rocks, and minerals. **SCPA president Karol McQueary** has drafted an excellent comment letter on it. **SDMG** applauds her effort and we look forward to signing onto the letter. We encourage other **CFMS**-affiliate clubs, non-profits organizations, and credentialed professionals to support the letter, as well. The comment period deadline is February 6th, 2017. See pg. 21 for details on how to participate – the Paleontologists have done the heavy lifting for Rockhounds, so please support their effort.

Because the proposed regulation to **PRPA** is the equivalent of an eight-alarm fire for Rockhounds, this month's bulletin is dedicating a lot of coverage to the subject. **Andrew Hoekstra**, who is an **SCPA** member and editor of *Delvings*, the bulletin of the **Delvers Gem & Mineral Society**, in Bellflower, specializes in paleontological resources. He kindly allowed us to reproduce his article on “Fossils from the ‘Imperial Sea,’” which is located in Fossil Canyon and the Coyote Mountains, south of Anza Borrego State Park (see pg. 9). It provides a fascinating glimpse of a beautiful landscape and its marvelous fossil resources. Did you know this amazing place was right in our backyard?

See pg. 12 for a second article by **Andrew**, this one on the proposed **PRPA** regulation. It's a primer to help Rockhounds understand the critical language that needs to be targeted in a comment letter (in case you could use some pointers on writing your own).

A third editorial article appears in the January bulletin courtesy of **Mike Nelson**, member of the **Colorado Springs Mineralogical Society** and PLAC Chair of the **Rocky Mountain Federation of Mineralogical Societies (RMFMS)** (see pg 16). Both his and **Andrew's** articles underscore some of the same concerns with the proposed Rule, but from different perspectives. **Nelson's** article also drills down on its implications for research and permitting – he has some disturbing observations that few Rockhounds may have contemplated previously.

Editor's note: The President's Message as shown here is an excerpt from the original version published in the January 2017 bulletin.

Public Lands Update

New rules proposed for fossil collecting on federal lands

by Andrew Hoekstra

ajhoekstra@yahoo.com*

Comment period deadline: February 6, 2017

A NEW REGULATION is proposed to manage fossil collecting on federal lands administered by agencies of the **Department of the Interior (DOI)**, including the **Bureau of Land Management (BLM)**, **Bureau of Reclamation (BR)**, **National Park Service (NPS)**, and **U.S. Fish and Wildlife Service (FWS)**.⁽¹⁾ To evaluate the impact of these rules, one should read the complete regulation in the Federal Register.⁽²⁾

What laws apply to Paleontological Resources on federal lands?

What agencies have oversight?

The proposed regulation implements the **Paleontological Resources Preservation Act of 2009 (PRPA)**,⁽³⁾ which was passed by Congress as Public Law 111-11, Title VI, Subtitle D of the **Omnibus Public Land Management Act of 2009**. The purpose of the proposed regulation is to clarify terms, definitions, ambiguous, or contested language addressed in public comments submitted previously. The new proposed regulation should be read with understanding of the **PRPA of 2009**, and also with reference to the **USDA's** Final Rule on Paleontological Resources Preservation for the National Forests, which was published in 2015.⁽⁴⁾



The “Elephant Knees” above the Mud Hills, Fish Creek, Carrizo Badlands, Anza Borrego State Park. Behind (around to the south) and atop the ridge are beds of oyster fossils. Photo: A. Hoekstra.

To review: the intent of **PRPA** is to protect vertebrate fossils and other rare fossils. Another explicit purpose of the **PRPA** is to protect hobby collecting: “To ensure that amateur collecting of rocks, minerals, and invertebrate and plant fossils on Federal lands is not affected by this Act.”

Research collecting by professionals or commercial collecting requires a permit. “Casual collecting” of limited quantities by the public, where allowed, does not require a permit. Casual collecting is restricted to “common” invertebrate or plant fossils. Vertebrate fossils (bones,

- 1.) Short document url: <https://www.federalregister.gov/d/2016-29244>.
- 2.) <https://www.gpo.gov/fdsys/pkg/FR-2016-12-07/pdf/2016-29244.pdf>
or short url: <https://goo.gl/YvaPQ7>.
- 3.) <http://www.fs.fed.us/geology/PaleoResourcePres.pdf>.
- 4.) <http://www.fs.fed.us/geology/FS%20Paleontological%20Resources%20Preservation%202015-08483.pdf>
or short url: <https://goo.gl/Y9kaHg>.

* If your club would like to reproduce this article, please contact the author for permission.



Fossil corals from the Coyote Hills, Latrania Formation, Imperial County. Collection of the Invertebrate Paleontology Department, Natural History Museum of Los Angeles County. Photo: A. Hoekstra.

teeth) cannot be collected from federal land without a permit. Casually collected fossils may not be sold or traded. Casual collecting is allowed on certain **BLM** and **U.S Forest Service (FS)** lands, but not on **NPS** or **FWS** lands. The **Forest Service** is under oversight of the **Department of Agriculture (USDA)**, which has implemented its own rules.(5)

Typically, rules for collecting common invertebrate and plant fossils have been similar to the rules for collecting rocks and minerals; although, fossils may have additional restrictions due to their scientific value. Rockhounds should carefully examine the proposed standards for “negligible disturbance” since that issue also pertains to rock collecting and similar guidelines may be proposed for rocks and minerals. Petrified wood is a paleontological resource, but collection falls under 43 CFR part 3622, the **Petrified Wood Free Use Act**.(6)

BLM lands cover large areas of the western states and contain many fossil sites. The 2009 law states that the **BLM** is to allow casual collecting except

where it is specifically disallowed; however, it is being banned in *Monuments, Conservation Areas, Outstanding Natural Areas, Cooperative Management and Protection Areas unless specifically opened through the bureau planning process*. Not mentioned in the proposed regulations are **Areas of Critical Environmental Concern (ACECs)** or **Wilderness Areas**. My understanding is that collecting fossils and rocks is allowed in **ACECs** unless stated otherwise in their plan, and surface collecting is allowed in **BLM-administered Wilderness Areas** unless prohibited by the specific area management plan.

What should concern Rockhounds in the proposed rule?

Rockhounds will be interested primarily in the sections on “casual collecting”: pages 88195-88196 (Subpart I) and also pages 88182-88183, where the intent and meaning of the rules is discussed. Topics of specific concern to address in a comment letter on the proposed new regulation include the following:

- *The BLM is requesting public comment regarding the range of designations listed in 49.805(a)(2) as prohibiting or restricting casual collection, including whether and why additional designations should be included or currently proposed designations excluded from the list.*

The intent of the **PRPA of 2009** is to allow casual collecting on **BLM (DOI)** and **Forest Service (USDA)** lands, but more and more **BLM** lands are placed within protective designations such as **National Monument (NM)**. The proposed rule does state that portions of a **NM** or other special designation may be “opened through the bureau planning process.” The **BLM** should consider accommodating traditional collecting activities during the plan drafting process.

The **BLM** should follow the intent of the **PRPA** and allow collecting in all those areas or sites where it does not conflict with other values.

5.) <http://www.fs.fed.us/geology/FS%20Paleontological%20Resources%20Preservation%202015-08483.pdf>
or short url: <https://goo.gl/Y9kaHg>.

6.) <https://www.gpo.gov/fdsys/pkg/CFR-2004-title43-vol2/pdf/CFR-2004-title43-vol2-part3620.pdf>
or short url: <https://goo.gl/rZL3Hz>.

The **BLM** should not automatically or reflexively forbid collecting across a broad range of land use designations, but only in individual areas if an Environmental Assessment (EA) determines that casual collecting is likely to cause a specific harm or conflict with other values.

- 49.810(a)(1) – “Common” is not well-defined. When comparing one thing against another, it may be easy to agree which is more common, but agreement is less certain when used in an absolute sense to say something is of commonplace or ordinary occurrence.

And what does “established as having ordinary occurrence and wide-spread distribution” mean? Established by whom? Where do we find the authoritative reference for this information?

Page 88182 of the document states: *It may not always be possible for a collector to identify in the field whether a fossil is common. When in doubt, collectors should err on the side of caution and collect only the resources that they know are common. The bureaus may hold a trained amateur, avocational paleontologist or professional to a higher standard of knowledge than the general public about whether or not a fossil is common.*

The vague definition, with penalties and wide discretion given officers, can be expected to have a chilling effect on law abiding casual collectors. The boundary separating caution from carelessness is itself a highly subjective judgment when following the admonition to “err on the side of caution.”

- 49.810(a)(1) – Replace “negligible disturbance” with “low impact disturbance.” This would accord with **BLM’s** standard and aligns with **BLM’s** study (in progress) on Disturbance Caps (est. May 2017, Barstow, CA field office). **BLM** characterizes amateur rockhounding as a “low impact disturbance” activity contrasted against “high impact disturbance” caused by commercial mining activity. The high and low impact disturbance can be differentiated visually from aerial surveying at different elevations. We recommend applying to invertebrate fossil collecting the same “low impact disturbance” standard used for rockhounding.

- 49.810(a)(2) – Many hobby collectors will be satisfied with far less than 25 pounds of fossils. But when fossils are collected with heavy matrix attached and removing it in the field is impractical, the 25-pound weight limit is not reasonable.
- 49.810(a)(2) – Petrified wood is covered by 43 CFR part 3622, which allows for 25 pounds per day plus one piece of any weight but to not exceed a total of 250 pounds per year. It should be explicit that 43 CFR part 3622 takes precedence over these new regulations (see p. 88175). How will the differing daily and annual total weight rules be combined or reconciled, if both petrified wood and other fossils are collected by a single individual?
- 49.810(a)(3)(i) – The one square yard limitation is impractical as a one-size-fits all standard. It conflicts with actual experience of locating material in the field. Even when taking less than one pound of fossils, they will usually be retrieved from an area greater than one square yard. Fossil distribution or concentration varies considerably and locating fossils often requires exploratory digging in more than one spot. There may be only a single fossil within an area of one square yard. Because collectors drive and/or hike long distances to find fossils, the rules should not require them to return empty-handed when more fossils are present, albeit outside a one square yard perimeter.

It should be made clear whether or not the proposed one square yard limitation is applicable only when digging. Surface collection should not be defined as a disturbance. Collectors should be allowed to use their common sense to survey a fossiliferous area based on the spatial distribution of fossils at the site.
- 49.810(a)(3)(ii) – Because fossils are not distributed evenly throughout the landscape, and they are sometimes concentrated in limited areas, multiple collectors may need to share a small area. It is impractical for each collector to be separated by 10 feet from the areas being examined by other collectors.

- 49.810(d) – Additional “limitations” need to be communicated to the public and applied consistently from one **BLM** field office to another. They should not vary depending on which officer is present, and they should be written and accessible for public reference, with the explanation of their justification.

The **PRPA of 2009** restricts casual collecting to **BLM** and **National Forest** lands. There are federal lands administered by other agencies where casual collecting may be an acceptable use. If you comment on this, remember that the **DOI** must follow the **PRPA of 2009**, and any modification of that law will take congressional action. Collecting rocks and fossils seems compatible with the goals of certain fish and wildlife refuges. Hobby collecting of rocks or fossils seems compatible with other recreation activities in **National Recreation Areas (NRAs)** administered by the **National Park Service** (under **DOI**). Proposals to extend **NRAs** may face public opposition due to the ban on educational hobby activities near our urban areas where the need is greatest, just as **National Monuments** have faced opposition due to public fears that traditional activities will be restricted.

It is important to remember that fossils cannot be “protected in place,” because erosion destroys fossils exposed at the surface. To protect and preserve the value of fossils, they need to be found and usually collected (“Fossil Search and Rescue!”).

The value of fossils is scientific, educational, and recreational. Recreational collectors almost always make use of fossils for their educational and/or scientific purposes and amateurs make significant contributions to science. In general, the community of professional invertebrate paleontologists supports amateurs and hobbyists. Professionals do not have sufficient time to survey all fossil exposures and so rely on assistance from amateurs. The unique excellence of fossils in education is widely recognized, as is the necessary role collecting plays in using fossils for education, especially with youth.

Andrew Hoekstra is a member of Delvers Gem & Mineral Society and the Southern California Paleontological Society.

Proposed fossil regulation to impact collecting on federal lands, including Rockhounding

**Comment letters urgently needed
-- by February 6, 2017 --**

The proposed new rules under the PRPA of 2009 have far-reaching implications for collecting on federal lands, whether the material is paleontological, geological (i.e. rock), or mineral.

Individuals are encouraged to comment – the more letters the better! To be effective, target your comments point-by-point to the language of the proposed regulation.

Strength in numbers

San Diego Mineral & Gem Society, along with other **CFMS**-member clubs and **AFMS** regional federations are adding their signatures to a detailed comment letter being prepared by the **Southern California Paleontological Society (SCPS)**.

Credentialed professionals, whether affiliated with other non-profit groups or working in academia, are also encouraged to lend their support to the comment letter on this regulation. You don't have to be a rockhound or a paleontologist to support traditional activities being accommodated on public lands in the future.

More signatures are needed. Ask your club to sign onto the SCPS letter.

Contact:

socalpaleo@yahoo.com

View the current draft of the SCPS letter:
www.sdmg.org/blmdocs/PRPA_comment_draft.pdf

**Stay current
with News.bytes**

The BLM California newsletter

Editor's Note: The BLM's website, including the online newsletter, News.bytes, is undergoing long term maintenance. Email BLM and tell them getting their resources back online should be a high priority: <https://blmca.sites.usa.gov/contact-us/>

Collecting invertebrate fossils on public lands

by Mike Nelson

Public Lands Advisory Committee Chair

Rocky Mountain Federation of Mineralogical Societies

csrockguy@yahoo.com*

ON MARCH 30, 2009, the **Paleontological Resources Preservation Act (PRPA)** became law on lands managed by various agencies of the federal government. The law had been through numerous drafts before approval by the U.S. Congress and subsequent signing by President Obama. Although in 1999 the Senate Interior Appropriations Subcommittee asked federal agencies to prepare a report on fossil resource management, most rockhounds and many professional paleontologists believed that any new regulations would be written to protect vertebrate fossils (in my opinion). However, unbeknownst to most amateur fossil collectors, the **United States Forest Service (USFS)** published (May 23, 2013) draft regulations concerning the collection of invertebrate fossils and plant remains on land managed by the Agency. The comment period was 60 days and the Agency received few legitimate (non-form letters) concerns. Candidly, the proposal caught most rockhounds “off guard” and it was tough for rock and mineral clubs to organize informative responses. In my opinion, rockhounds lost many, many collecting privileges associated with invertebrate fossils as the proposed rules are now codified as 80 FR 21588. However, in defense of the **USFS**, the Agency was simply interpreting tenets of the **PRPA**, and that is the magic word, at least for me – interpretation.

In December 2016, proposed regulations for lands managed by the **Department of Interior’s Bureau of Land Management (BLM); National Park Service [NPS]; Fish and Wildlife Service (FWS); and Bureau of Reclamation (BR)** were published in the

Federal Register and became available for comments (received no later than February 6, 2017).

The proposed rule [of Interior] would address the management, collection, and curation of paleontological resources from federal lands using scientific principles and expertise, including collection in accordance with permits; curation in an approved repository; and maintenance of confidentiality of specific locality data.

Most of the proposed regulations (formally known as “A Proposed Rule” by the **Land Management Bureau** and the **Fish and Wildlife Service**, posted on 12/7/2016),⁽¹⁾ but specifically subparts A through H, applies to all four bureaus – **BLM, FWS, BR, NPS**. Parts A through H are also very similar, perhaps mostly identical, to current **USFS** regulations (80 FR 21588). However, Part I of the proposed rules notes some differences between **Interior (BLM and BR)** and the **USFS** regulations regarding actual field collecting of common fossil plants and invertebrates. I should also note that **PRPA** does not allow casual collecting in areas administered by **NPS** or **FWS**.

“The Rule”

So, what are some of the proposed items in Interior’s new rules and regulations – hereafter known as the Rule? I will only hit on a few sections as the proposed Rule, as published in the Federal Register, is tens of pages long.

Mining claims

The Rule does not impose additional requirements regarding fossil collecting activities on permitted lands associated with general mining or mineral laws. It

-
- 1.) “The Proposed Rule” permalink: <https://www.federalregister.gov/documents/2016/12/07/2016-29244/paleontological-resources-preservation> or short document url: <https://www.federalregister.gov/d/2016-29244>; see Land Management Bureau at: <https://www.federalregister.gov/agencies/land-management-bureau>; Fish and Wildlife Service at: <https://www.federalregister.gov/agencies/fish-and-wildlife-service>.

* If your club would like to reproduce this article, please contact the author for permission.

appears that if you have a permitted mining claim the fossil plants and invertebrates are fair game for any collecting (§49.15 ...states that the proposed rule does not impose additional requirements on activities permitted under the general mining or mineral laws). Does this mean that if you are mining sedimentary rocks for minerals (such as barite or uranium) that any and all invertebrates may be collected? I don't know; however, that seems to be a reasonable assumption to me. But remember, my interpretation of various regulations and codifications found in the Federal Register may be subject to suspect. I do know, however, that a mining claim will not be approved by an Agency simply to allow a person/company to collect fossils. Any approved mining claim must include some sort of a commodity and fossils are not such.

The mining claim section of the Rule is an interesting one. Around this part of the country one permitted mining claim would create more surface disturbance, and could destroy more fossils, than all the Colorado rockhounds added together. **BLM** and **USFS** manage multi-purpose lands; however, some activities are much higher on the pecking order than rockhounding.

Archaeological resources

Fossils found in an archaeological context are archaeological resources, and are not considered paleontological resources. It is always best to not disturb archaeological resources.

“Other resources”

An authorized federal officer at **BLM** or **USFS** (the person in charge) may decide that specific rocks/minerals, such as coal, chalk beds, diatomites, etc. are not subject to **PRPA** rules as paleontological resources. However, there are a myriad of other federal regulations that may protect them.

Petrified Wood

The Department of Interior has specific Agency regulations concerning the collection of petrified wood on their managed lands:

Petrified wood is managed as a paleontological resource when on or from lands administered by NPS, Reclamation, and FWS. On lands administered by BLM, petrified wood (defined by the Petrified Wood Act of 1962, Pub. L. 87-713, 76 Stat. 652, Sept. 28, 1962 as agatized, opalized, petrified, or silicified wood, or any material formed by the replacement of wood by silica or other matter, and identified as a mineral material under the Materials Act of 1947) is subject to commercial sale at [43 CFR part 3600](#) and free use regulations at [43 CFR part 3622](#). Therefore, on BLM lands, petrified wood may be managed as a paleontological resource, but the savings provisions in PRPA (16 U.S.C. 470aaa-10) prevent the imposition of additional restrictions on the sale or free use of petrified wood. When it is not subject to sale or free use, petrified wood on BLM-administered lands may be managed as a paleontological resource and/or under the authority of the FLPMA.(2)

My old and used mind fails to understand this latter statement! Why would not all petrified wood collected on **BLM**-managed land be free use?

Indian Lands

PRPA rules do not apply to “Indian lands.” However, lands managed by Native Americans always have collecting rules so avoid trespassing.

What’s “casual” and what’s “common”?

A federal authorized officer may restrict access or close a collecting area at any time. Therefore, fossil collecting on federal lands will now essentially involve a visit or call to an agency office.

Microfossils, such as *foraminifera* and *radiolarians*, are paleontological resources and are subject to collecting rules – except if you are drilling a permitted energy well. The drilling bit may then grind up as many microfossils as the driller pleases. Yes, that last sentence was cynical.

Most individual rockhound collecting of invertebrate and plant fossils (excluding petrified wood) falls under the definition of “casual collecting”; therefore, such individuals may collect on **BLM** lands that are not restricted or closed – lands such as **BLM**-administered national monuments would be closed. The Rule notes

-
- 2.) In the Code of Federal Regulation, Part 3600 – Mineral Materials Disposal, see 43 CFR part 3600 at: <https://www.gpo.gov/fdsys/pkg/CFR-2015-title43-vol2/xml/CFR-2015-title43-vol2-part3600.xml> or short url: <https://goo.gl/GSqHqF>; see CFR part 3622 at short url: <https://goo.gl/301UP9>; FLPMA is the Federal Land Policy and Management Act of 1976.

casual collectors may collect *common invertebrate and common plant paleontological resources...casually. Common invertebrate and common plant paleontological resources are invertebrate or plant fossils that have been established by the bureaus, based on available scientific information and current professional standards, as having ordinary occurrence and wide-spread distribution.* But, and there are many “buts” in the Rule, *not all invertebrate or plant paleontological resources are common. When in doubt, collectors should err on the side of caution and collect only the resources that they know are common.* In other words, pay a visit to an Agency to find out what fossils an officer has decided are “common.”

Defining “Casual collecting”

So, what is a casual collector as defined by the Rule? *Casual collecting means the collecting without a permit of a reasonable amount of common invertebrate or plant paleontological resources for non-commercial personal use, either by surface collection or the use of non-powered hand tools, resulting in only negligible disturbance to the Earth’s surface or paleontological or other resources.*

Although this seems a restrictive definition, it is much better than the **USFS** definition: *casual collecting is generally happenstance without intentional planning or preparation..., the view of casual collecting as an activity that generally occurs by chance without planning or preparation.* The “good thing” about the Rule and the **USFS** regulations is that they clarify the allowance of collecting certain fossils from their managed lands.

But here are additional “buts” of the Rule. The casual collector may only collect 25 pounds per day, not to exceed 100 pounds per year – and this weight includes matrix. This part of the Rule was modified after the codified collecting rules long established for petrified wood; however, there is a big difference between specimens of petrified wood and invertebrate fossils. Petrified wood is usually collected without matrix, while many invertebrate fossils are collected with matrix.

Rockhounds do not want to take a chance of breaking the specimen by chipping away the matrix in the field. Collectors also may not pool a total weight with their buddy in order to collect larger specimens. What does this mean for the collection of larger fossils weighing over 25 pounds? I don’t know. Perhaps it indicates a permit is required? However, a permit requires that a collector give up his/her specimen to a museum or repository!

Collectors also may not disturb over 1 square yard of the landscape, and your digging buddy must be at least ten feet away from your land disturbance. I am uncertain if a collector may have several disturbances per day? At any rate, like all good rockhounds, collectors must fill in their disturbance holes.

This restrictive regulation on land disturbance continues to be a problem for me. If the **BLM** really wants to stop major land disturbance, then I suggest examining extensive disturbance by domestic livestock, off-trail ATV and OHV riders, and even off-trail mountain bikers and hikers (among others). I support these multi-use land activities, in moderation, but simply want to point out that land disturbance by rockhounds is minimal compared to these other large-scale activities.

“Casual collecting” at odds with research

Casually collected fossils may only be used in a personal collection and may not be sold, bartered, used for financial gain, or research! I presume this section also means that club members may not use the collected common plants and animals in their club silent auctions. What about gifting a common plant or invertebrate during a club gift exchange? Does bartering mean that fossil interest groups may not trade collected fossil specimens? I don’t have those answers.

But to me the interesting aspect of this tenet is that the casual collector may not use his/her collected fossils for research! The federal agencies want the collector to get a permit if any of the fossils are used in a research project. I presume the point behind this requirement is to make certain that fossils in the research project are documented as to provenance and placed in an accredited repository. However, I would like to suggest that any casually collected fossils could be turned over voluntarily to a repository before results of the research are reported. A case in point – our rock club-sponsored Pebble Pups and Junior Scientists collect fossils and actually write up reports (sometimes published) and present results at meetings where abstracts are refereed. How can an agency expect a group of Pebble Pups to submit a permit application (see below)?

Another set of questions, then, involves the definition of research. If a collector completes a

study on a casually collected fossils and later presents information on such organisms at a rock/mineral club meeting – is this research? What if the collector “publishes” results of their study in a club or federation newsletter, or on a Blog – is this research? Questions to be answered. I do not want some of these restrictive clauses in the Rule to stifle the interest of our children and young adults.

As with the **USFS** regulations, the Rule requires that only hand tools may be used in collecting fossils. These excavation tools may not be motorized and must be light and small enough to be hand-carried by one person. Does this mean that my geological hammer may not be carried in my backpack, or must it be hand-carried? Does it mean that I cannot bring along a two-wheel cart to pack a 25-pound specimen back to the vehicle (my knees will not allow carrying 25 pounds plus equipment)? Luckily, **Interior** listened to criticism directed at **USFS** over their regulation about size of collecting tools – *but not large tools such as full-sized shovels or pick axes*. I don’t have any trouble carrying a full-size shovel in my hand!

Unfortunately, **Interior** chose not to rid the regulations of the permitting process for small groups of rockhounds. I argued against this rule implemented by the **USFS** without success. As I read the rules, and perhaps they are beyond my comprehension, it is my understanding that groups of rockhounds heading out to collect some invertebrate fossils must have a permit. I can understand permitting a group of professionals going out to quarry a marine limestone looking for specific ammonites. I cannot understand requiring a permit in order for a club’s fossil interest group, or a group of Pebble Pups, heading out on a beautiful fall afternoon to do some prospecting for fossils!

If a group of Pebble Pups, some as young as six years old, go fossil hunting at a locality where both common and uncommon invertebrate fossils may be found, then a permit is required (as I try to understand the Rule). For example, I can envision local localities, actually a number of old quarries, where there is a mixture of common and uncommon lower Paleozoic fossils represented. These quarries have been prospected for years and rockhounds have almost always submitted their interesting specimens to museums and repositories. However, the permitting process is a very onerous experience for “ordinary”

rockhounds. So, what happens? Collection without a permit continues, with loss of interesting specimens heading to a museum due to a fear of prosecution, or collecting stops and children and adult rockhounds simply drop out.

Assume that a permitted fossil prospecting activity could be pulled off, please note that all prospectors must deposit their fossil finds in a designated repository. Can you imagine taking kids on a fossil hunt and then taking away their finds? In addition, the rules and regulations concerning report writing are onerous (for most rockhounds) and would require additional time.

As a former classroom instructor, I could not imagine applying for a permit every time I took my students fossil hunting. Certainly, a permit was required whenever a student researcher was out collecting fossils and describing stratigraphy – these collected fossils were deposited in a repository. In fact, during my early days of writing environmental impact statements (fossils) for projects crossing federal lands I devised my own permits (with approval from the agencies) from items like logging permits. I am not against permits; however, I simply want to allow for some slack with non-professional collectors.

In addition, mandating that all permittees must deposit their fossils in an approved repository creates other concerns since the requirements for establishing a repository are pretty stiff. Most colleges and universities with a scientific staff have something, a museum or curated collection, that could qualify as a repository. But what about the poor old group of rockhounds – would nearby repositories curate their specimens without monetary assistance (*Permittee is responsible for the costs, monetary and otherwise, of the permitted activity, including fieldwork, data analysis, report preparation, curation of the collection and its associated records consistent with subpart C of this part*)? I don’t know. Once fossils are collected under a permit they remain the property of the Agency *in perpetuity*. Even if a federal authorized officer removes the collected fossils from the research collection the specimens still remain in repository collection “somewhere.”

My comments pertain to only a small part of the Rule but are, in my opinion, most directly related to fossil collecting by rockhounds and other amateurs. I want members of our rock and mineral clubs, including Pebble Pups and Junior Scientists, to have an

opportunity to collect fossils without fear of “breaking the law.” I want these members to have an opportunity to study and photograph and learn about specimens without fear their work is research and requires a permit. I want members, especially younger members, to have an opportunity to present information at professional meetings about their fossils finds without fear their study requires a permit. But, I would also expect the mentors of the collector to require fossil specimens be offered to a museum and/or repository along with appropriate provenance information. I believe there must be some middle ground in this entire permitting and land disturbance issue. If not, we may begin to lose generations of future STEM graduates that our nation badly needs.

With that said, please note that I have several friends and acquaintances working in the federal agencies. In fact, I take pride in the fact that some Agency paleontologists were my students and we have remained friends for decades---they do excellent work. In visiting with these paleontologists, I have found they are, in their opinion, constrained by federal law found in the **PRPA**. Perhaps they are; however, I still believe in compromise and middle ground and “working things out.” Is this possible with the rules in the **PRPA**? I don’t know. Could interpretation of **PRPA** regulations be less “strict.” I don’t know.

What I do know is that these new laws (**USFS**) and the proposed Rule (**Interior**) are almost impossible to enforce – I am not advocating breaking the law but simply stating my strong opinion that collecting of invertebrate fossils on federal lands will go underground. Unlike vertebrate fossils, where poachers are interested in selling their unlawfully collected specimens, rockhounds collecting invertebrate fossils are interested in building up a personal collection, trading specimens with club members, and perhaps most importantly helping young children and their schools build collections. Also unlike the somewhat easily identified vertebrate fossils (yep, that is a dinosaur skull, so leave it alone), invertebrate fossils are much more difficult to identify. I am guessing that

most rockhound amateurs will have great difficulty identifying uncommon fossils (need a permit) from common fossils (casual collecting).

What You can do

So, what advice can I offer? Take the time to read, or attempt to read, [the Proposed Rule](#) at the Federal Register (short url: goo.gl/idd1nz). After this little chore, rockhounds should submit personal comments, or even pooled comments by several members of the club; however, it is best to not use form letters. Also, remember as you comment:

- Provide first and last name, city, state, & country. All other fields of information are optional. Keep in mind that much of this information is publicly viewable.
- Comments may be typed in the box provided or they may be uploaded as attachments (Word docs or PDFs only).
- Comments may be brief or in-depth/well-researched. Comments with facts to support them are much more useful (e.g., examples of overlooked scenarios). Keep comments civil and straightforward. Comments using offensive terms, threats, or other inappropriate language will be disregarded.
- **Comments on the proposed rule must be received by February 6, 2017.**

And finally, stop in Agency offices (especially **BLM** and **USFS**) and visit with the geologists—they are a nice group of people. The paleontologists in both the **USFS** and the **BLM** are stationed few and far between. But again, if you are in their area stop in and converse with them.

Perhaps I am just a crusty old guy remembering “the good old days” of collecting. But perhaps I am just an old guy seriously worried about the impact of the Rule (and USGS regulations) on school children, Pebble Pups, rockhounds, and interested amateurs. I want to find a common ground with the **USFS** and **Interior** in the permitting processes, the land disturbance issues and the collecting limits. Will it happen? Another question that I cannot answer.

Mike Nelson is a member of the Colorado Springs Mineralogical Society and PLAC Chair of the Rocky Mountain Federation of Mineralogical Societies. This article was first published on his blog and is reproduced by permission. M. Nelson. 26 December 2016. [Collectioning Invertebrate Fossils on Public \(BLM\) Land](http://csmsgeologypost.blogspot.com/). CSMS Geology Post. Available online at: <https://csmsgeologypost.blogspot.com/>.

If your club would like to reproduce this article, please contact the author for permission at: csrockguy@yahoo.com.



Deadline for public comments on “The Rule”

Monday, February 6, 2017

**Have your say about casual collecting of
fossils • rocks • minerals**

A Proposed Rule for Paleontological Resources Preservation

The “Elephant Knees” above the Mud Hills, Fish Creek, Carrizo Badlands, Anza Borrego State Park.
Art based on a photo by Andrew Hoekstra.

JOIN THE EFFORT TO PRESERVE HOBBY COLLECTING ON PUBLIC LANDS

Ask your Club to sign onto the comment letter
prepared by Southern California Paleontological Society (SCPS)

What we are asking you to do (3 easy steps):

1. Download the current draft of the comment letter by Southern California Paleontological Society (SCPS) from the SDMG website at:
http://www.sdmg.org/blmdocs/PRPA_comment_draft.pdf
2. Take the SCPS letter to your board for approval ASAP.
3. Upon approval, email Karol McQueary (socalpaleo@yahoo.com) your club contact info to add to the letter:
 - Club/org/school name
 - Officer name and title (usually club president)
 - Number of members in your club
 - Club mailing address