



Chinese fossil protection law and the illegal export of vertebrate fossils from china

J. J. Liston & Hai-Lu You

To cite this article: J. J. Liston & Hai-Lu You (2015) Chinese fossil protection law and the illegal export of vertebrate fossils from china, *Journal of Vertebrate Paleontology*, 35:2, e904791, DOI: [10.1080/02724634.2014.904791](https://doi.org/10.1080/02724634.2014.904791)

To link to this article: <http://dx.doi.org/10.1080/02724634.2014.904791>



Published online: 19 Feb 2015.



Submit your article to this journal [↗](#)



Article views: 679



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

CHINESE FOSSIL PROTECTION LAW AND THE ILLEGAL EXPORT OF VERTEBRATE FOSSILS FROM CHINA

J. J. LISTON^{*1} and HAI-LU YOU²

¹Yunnan Key Laboratory for Palaeobiology, Yunnan University, Kunming 650091, Yunnan Province, People's Republic of China, leedsichthys@gmail.com;

²Key Laboratory of Vertebrate Evolution and Human Origins of Chinese Academy of Sciences, Institute of Vertebrate Palaeontology and Palaeoanthropology, Chinese Academy of Sciences, 142 Xizhimenwai Street, Beijing 100044, People's Republic of China, youhailu@ivpp.ac.cn

ABSTRACT—The relevant legislation regarding fossil protection in the People's Republic of China is reviewed, with particular emphasis on the aspects of illegal excavation and export of vertebrate fossils contained within the 1982 Cultural Relics Protection Law and in the current legislation as of 2010–2013. Guidelines for how to follow procedures to stay within the law are given for the assistance of international researchers wishing to work on Chinese specimens with a collaborating Chinese institution.

INTRODUCTION

Researchers from many institutions around the world desire to work on fossil vertebrate material from the People's Republic of China (PRC), but there are few methods of clearly disseminating guidance to such parties on what practices and procedures need to be adopted. The legislative and linguistic obstacles mean that there is a problematic lack of knowledge about the very clear restrictions within national legislation regarding both the initial collection of such material and also it leaving the country. This makes it all too easy for well-intentioned researchers to find themselves inadvertently on the wrong side of the law, due to a lack of clear understanding of the pitfalls of such work: as Besterman aptly put it, “Dodgy [specimens] come from . . . collectors either ignorant of the law, or who deliberately flout it” (Besterman, 2001:200). This is a serious ethical issue—although it can be difficult, researchers do have a responsibility to make themselves aware of the laws of the lands that their materials come from and ensure that they are following these laws. If one does not take this matter seriously, one's work is potentially subject to a later legal claim. This is not simply a historical problem; it is a contemporary situation because researchers are still publishing research done on material smuggled out of the country (Liston, 2013).

More than this, there is a human cost: if you have not exported it legally, those responsible for getting the material to you could face severe—and potentially life-threatening—sanctions. It can nonetheless be difficult to gain access to the required expertise, whether on the legislation itself or as an independent source of translation of the requisite legislation. The purpose of this paper is therefore to place in the public domain clear guidance on procedures necessary for work with such material, particularly focusing on requirements for fossil vertebrate material to legally come out of China—smuggling material out of the country through a

variety of routes is still a major problem. This is timely, because new legislation was put in place in March 2013. Although it is recognized that researchers are still publishing on material illegally removed from China, it is hoped that this guidance will help reduce the possibility of any future misunderstandings.

The full procedure is outlined later in this paper; but as a quick shorthand guide, the most effective way to check is to look for the unique Ministry of Land and Resources registration number, with which your material should have arrived. If your material has this number, then it has left the People's Republic of China legally. If your Chinese fossil material does not have this number, then it is appropriate to be concerned as to just how it came to leave that country.

CORRUPTION AND WEAK LAW ENFORCEMENT

One problem that has arisen in the past is a perception that the culture of bribes, and the problem of corruption referred to by former premier Zhu Rongji (Zhu, 1998 as quoted in Schmidt, 2000), is so pervasive that it makes it harder to respect or take fossil protection legislation in China seriously. However, few countries are in a position to claim their government is truly ‘corruption-free’ (Winnett and Watt, 2009; Steinhauer, 2010; Gallup, 2013; Mintz Group, 2013), and the use of what some would call ‘bribes’ can in some countries be considered as cultural and traditional in basis. From a purely ethical position, it is irrelevant whether one is working in an environment that requires ‘supplementary payments’ to progress legitimate activities according to the law or not: one must at least be seen to be following the law of the land in which one works. Participating in a culture of such transactions does not in any way legitimize or excuse illegal activity; it is an ethical responsibility to make oneself aware of the relevant legislation in the country where one is working, and to follow it: Article 12 of the Society of Vertebrate Paleontology's Member Bylaws (Society of Vertebrate Paleontology, 2013) requires that (Article 12.2) “The necessary permits on all lands administered by federal, state, and local

*Corresponding author.

governments, whether domestic or foreign, must be obtained from the appropriate agency(ies) before fossil vertebrates are collected." Other bodies from similar professions have gone further. For example, the Institute of Field Archaeologists Code of Conduct (2009) explicitly stated (Rule 1.6): "A member shall know and comply with all laws applicable to his or her archaeological activities whether as employer or employee, and with national and international agreements relating to the illicit import, export or transfer of ownership of archaeological material." This clause makes clear to archaeological field workers that they have to be responsible and ensure independently that they are working legally within the laws of the country—as well as international law. One cannot simply rely on guidance from one of your collaborator organizations on this subject—they are likely to have vested interests in making the process seem simpler than it actually is, and if they are working locally, they may not care too much about the wider external realm of international law. Seek independent counsel, so that you are clear what needs to be done in advance. A culture may or may not regard it as acceptable or even obligatory to bribe whomsoever you need, but you as a professional still need to have secured all the right approvals, permissions, and paperwork to legally excavate and then leave the country with the permitted material.

There is a further sphere of responsibility beyond the researcher, with regard to ethical research, and that is of the international scientific publishing community. Although some scientific journals emphasize the importance of appropriate collecting permissions, it is noteworthy that PLoS ONE appears unique in explicitly stating that fossil material it publishes on must have been legally exported if removed from the country of origin (PLoS ONE, 2011), whereas high-ranking journals such as *Nature* (Liston, 2013) have no such criterion within their guidelines (Anonymous, 2013). PLoS ONE's model of best practice should become more widely followed, to provide better safeguards against publication of material that has been illegally collected or exported.

FOSSIL PROTECTION LEGISLATION IN CHINA

The fossil vertebrate material of China has been protected by the Cultural Relics Protection Law (or CRPL) since 19 November 1982 (Anonymous, 2000a). As Schmidt (2000) notes, for Chinese legislators, such material falls under the heading of 'Cultural Relics': Article 2 states: "fossils of paleovertebrates and paleoanthropoids of scientific value shall be protected by the State in the same way as cultural relics." Some geologists might regard the selection of these two categories as somewhat arbitrary or even unfair, but there is some logic in this segregation, beyond that China's main palaeontological institution, the Institute of Vertebrate Palaeontology and Palaeoanthropology (founded in 1953 from 1929's Cenozoic Research Laboratory; Sullivan et al., 2012), reflects those same categories in its institutional name. In comparison with other geological material, vertebrate specimens are likely to be more scarce, large, and easily recognized by the non-specialists that form the bulk of the private market (Nudds, 2001) and so are accorded higher prices: this means that they are the most sought after in terms of any attempt to sell geological material outside China, and so it is sensible that these two categories (although, strictly speaking, they are really only one) were identified as priority groups within this law.

Since that first legislation in 1982, revisions have occurred in 1991 (Anonymous, 2000b), 2002 (Anonymous, 2002), and 2007 (Standing Committee of the National People's Congress, 2007), and further enabling or implementing legislation was also enacted in 2003 (State Council of the People's Republic of China, 2003) and 2005 (Anonymous, 2005), but the content of this sentence in Article 2 has remained unchanged (despite an apparent loophole, see Liston, 2013).

Excavation Control—Restrictions on Excavation

Article 5 of the 1982 legislation (Anonymous, 2000a) sweepingly brought all vertebrate fossils ('of scientific value') under state ownership as part of "all cultural relics remaining underground" (Schmidt, 2000:202). Although this is somewhat simpler and different from the law in other parts of the world (e.g., in Scotland, fossils are treated as minerals in the economic sense and can be owned by the Crown, the private, public, or voluntary sector, while the land itself might be owned and managed separately by other individuals; MacFadyen, 2008), it is consistent with pre-revolutionary China's 1930 Law on the Preservation of Ancient Objects, which similarly asserted state control of unexcavated relics (State Cultural Relics Affairs Management Bureau, 1987; Schmidt, 2000).

The Cultural Relics Protection Law then went on to specifically prohibit any excavations (described broadly as 'archaeological') without excavation plans being submitted to the State Council for their approval (Article 17; Anonymous, 2000a). Significantly, Article 33 also explicitly forbade foreigners from prospecting or excavating within China's boundaries without a 'special permission' from the State Council. Again, this was consistent with the 1930 Law on the Preservation of Ancient Objects, which declared that excavation had to be undertaken by Chinese institutions instead of foreign scientists (State Cultural Relics Affairs Management Bureau, 1987). Both pieces of legislation made all unauthorized digging for fossils an act of theft (Schmidt, 2000). In its practical effects, the Cultural Relics Protection Law meant that excavation could only be conducted by authorized scientists with permission from the provincial Department of Culture and the State Cultural Relics Affairs Management Bureau, with very few permissions being granted in any given year.

Export Control—Restrictions on Exporting

Under Article 28 of the Cultural Relics Protection Law, transport of all material abroad had to be reported to the National Administration of Customs (Anonymous, 2000a). The State Administration of Cultural Heritage then would appoint a committee to investigate. Only they could issue a permit for the material to be exported through the Customs Office of a designated port. Material of 'scientific importance' could not go abroad without express permission from the State Administration of Cultural Heritage. Again, this contrasts sharply with legislation in some other territories: for example, there is no control over removal of fossils from the U.K. unless their destination is outside the European Union (EU). If a collection of 'palaeontological interest' valued at £30,400 and higher is to leave the EU, it requires a license (MacFadyen, 2008).

Similarly, under Chapter VI of the 2002 iteration of the legislation, Articles 60 and 61 noted that for any 'cultural relics' to leave the country, an exit permit (for a specific designated exit port) had to be granted by the State Council's administrative department, following examination and assessment of the material (Anonymous, 2002). A noteworthy exception to this was for 'cultural relics' being taken out of the country for the purposes of exhibition. Again, the 2007 iteration of the legislation noted under Article 64 of the legislation that 'precious material' could not go abroad, unless exceptional circumstances permitted the State Administration of Cultural Heritage to issue a permit, specifying to the designated port Customs Office that the material had to pass through (Standing Committee of the National People's Congress, 2007).

Crime and Consequences—An Escalating Definition of Criminal Activities and Punishments

Articles 30 and 31 under Chapter VII of the 1982 Cultural Relics Protection Law listed criminal acts under the law, such as not reporting discovered relics, excavating them without permission (judged under Article 31 to be theft) and their illegal export; sale of state material (i.e., anything that had been in the ground) without authorization, or transferal of it to a private individual; destruction of objects was also noted (Anonymous, 2000a). The 2007 iteration of the Cultural Relics Protection Law, however, noted for the first time the criminal act of destruction of a site, not just the objects (Standing Committee of the National People's Congress, 2007). Once again it was expressly forbidden to export material to foreigners or otherwise smuggle, steal, or in other fashion illegally obtain material. As has already been noted, the consequences for individuals found to be participating in such 'cultural relics' crimes can be quite severe. The 1979 Criminal Law (National People's Congress, 1979) was supplemented in March 1982 by the 'Decision of the Standing Committee of the National People's Congress Regarding the Severe Punishment of Criminals who Seriously Undermine the Economy' as a result of "rampant . . . theft and sale of precious cultural relics" (Standing Committee of the National People's Congress, 1982; Schmidt, 2000:199), one of the significant aspects of which was the introduction of the death penalty for the economic aspect of some 'cultural relics' crimes. But that changed when both of these laws were superseded by the 1997 Criminal Law (Anonymous, 2000c).

Enacted on the 1 October, the 1997 Criminal Law contained eight articles relevant to cultural relics crimes. Article 151 (under 'Crimes of Undermining the Order of Socialist Market Economy') deals with smuggling of cultural relics (relevant, because most fossils illegally excavated would be destined for the market outside of China, to realize a large market value), and it notes that serious offenses would be punishable by "life imprisonment or death, with forfeiture of property" (Schmidt, 2000:212). Similarly, Article 264 (under 'Crime of Encroaching on Property') states that "those committing serious thefts of precious cultural relics . . . to be given life sentences or sentenced to death, in addition to confiscation of property." (Schmidt, 2000:210). Articles 324–329 (under 'Crimes of Obstructing Cultural and Historical Relics Control') relate to cultural relics in general, with Article 328 specifically mentioning the illegal excavation of fossils (Schmidt, 2000). Although fines scaled to relate to the relative economic scale of cultural relic-related crimes, culminating in the death penalty for serious economic crimes, had been in place for some time, the 1997 Criminal Law moved to expand the scope of capital punishment relating to cultural relics. In this context, merely illegally digging and robbing a fossil site could now be serious enough to result in a death sentence, whereas before an economic dimension would have been necessary before such a punishment could be given.

It is worth noting at this point that this is not merely a national criminal issue, because there is of course an international legal dimension to the smuggling and illegal export of fossils. In 1970, the United Nations Educational, Scientific and Cultural Organization (UNESCO) established the 'Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property' at its Paris conference, within which 'objects of palaeontological interest' are specifically included, and to which the People's Republic of China is a signatory (UNESCO, 1970); its acceptance of the Convention has been in force since 28 February 1990. Nevertheless, a booming international market in Chinese fossils emerged throughout this period, as noted by Padian (quoted in Besterman, 2001). Fossil vertebrate material has for some time been illegally taken out of the People's Republic of China to the rest of the world, through

routes such as Japan, Hong Kong, Macau (Schmidt, 2000), and Taiwan (Huang, 2013). (In spite of Taiwan's complex status, it is clear that fossil material leaves the People's Republic of China during its journey through Taiwan to the outside world.)

LEGISLATIVE SHORTCOMINGS

Schmidt's review (2000) of Chinese legislation pertaining to fossils drew attention to "flaws in China's present legal framework" (Schmidt, 2000:187). Some of her highlighted concerns were related to terminology used in the legislation. 'Cultural relics' were defined as either 'ordinary' or 'precious,' with different legislation and punishments (e.g., the possibility of the death penalty) becoming relevant accordingly, but because 'ordinary' relics by definition originate after 1795, that would seem to make all fossils 'precious.' And yet, paradoxically, Schmidt (2000) refers to a case of stolen dinosaur eggs, where eight were judged to be 'ordinary' relics, in contrast to the 148 'precious' ones.

Similarly, Schmidt (2000) and Nudds (2001) draw attention to the description 'Fossils . . . of scientific value/significance' as applied to fossils in Article 2 of the Cultural Relics Protection Law. Scientific value can be hard to judge without a particular kind of analysis, which might not be possible within China at a given time (one of the key arguments for specimens to leave the country temporarily for research abroad). Indeed, that 'scientific value' may only become apparent in later years, with new examinations in different contexts: von Meyer's '*Pterodactylus crassimanus*' took on a much greater significance once John Ostrom viewed it in Teyler's Museum, over a century after it was first described (Liston, 2000). Schmidt (2000) notes the presence of vast numbers of 'duplicates' of given species in her discussed case study of '*Confuciusornis sanctus*' and questions the significance of an individual specimen in this context, echoing the observations of Martill (2001) discussing some exceptionally common species of Early Cretaceous fossil fish from Araripe in Brazil. Schmidt (2000) also notes that on losing its contextual information (as most specimens excavated by farmers have), such specimens lose their value and therefore could leave China with loss of information. Schmidt then goes further, arguing, somewhat controversially, that gathering the necessary contextual information from a specimen through a formal government structure could then release it for export (Schmidt, 2000).

Within Schmidt's 'flaws,' she spoke of issues arising from fossil material being placed within 'cultural' legislation, with very little input or oversight from paleontologists instead of cultural relic/archaeological government authorities, where fossils were likely to receive a less sympathetic or understanding hearing (Schmidt, 2000). Schmidt noted that the 1970 UNESCO Convention was fundamentally underpinned by the assumption that objects belong within the boundaries of the nation in which they are found (UNESCO, 1970), and this concept informs other international legislation. Nudds (2001) discussed this issue, noting that fossils do not relate culturally to the country in which they are found: "The evolution of life did not take cognizance of today's political boundaries" (Nudds, 2001:193). This, in fairness, is a common problem with many sets of legislation (e.g., the European Union's umbrella of 'cultural property' in Council Regulations 3911/1992 and Directive 1993/7/EEC [European Union, 1992, 1993], as well as the International Institute for the Unification of Private Law [UNIDROIT] principles of 1994, 2004, and 2010 [UNIDROIT, 2010]) and will be discussed elsewhere (Liston, 2014).

Similarly, in bemoaning the lack of a protection law that was specific to fossils (as opposed to including some fossils under umbrella legislation designed for a very different discipline of material), Schmidt highlighted the lack of protection for

palaeontological sites, in the same way as was specified for archaeological sites, noting again the importance of context in that "...the significant value of fossils *in situ* demand a preventative scheme and the administrative organization to enforce it" (Schmidt, 2000:215). She further noted the 1997 'Report of the Committee on Education, Science, Culture, and Health' stating that the Committee was undertaking to amend the Cultural Relics Protection Law to provide more specific protection for fossils (Committee on Education, Science, Culture, and Health, 1997). Academicians from the Chinese Academy of Sciences similarly spoke out in May 1998 for better legal protection of rare fossils, recommending the creation of a committee within the Ministry of Science and Technology to oversee and administer paleontological prospecting and excavations (Xinhua English Newswire, 1998 as quoted in Schmidt, 2000). This legislative shortfall was again noted in the revised 2005 enabling legislation for the Cultural Relics Protection Law, under the Chapter VIII heading Supplementary Legislation, where it was predicted that "Protective measures for vertebrate and anthropological fossils, as well as protection and management of historical cities, will be worked out separately from this legislation" (Anonymous, 2005, p. 7).

A PROTECTION LAW FOR FOSSILS

Although the formal recognition that the national law was not proving entirely adequate for some of the more 'specialized' forms of cultural relics (in particular fossils), and that they required their own more appropriate legislation, dated back to 1997, it was not until 2010 that this finally saw the light of day. The salient legislation was shifted from the auspices of the State Administration of Cultural Heritage to the Ministry of Land and Resources, because of the need for distinctive protection of fossils as a different commodity from other more strictly archaeological 'cultural relics.' On 10 September 2010, this new legislation was promulgated (State Council of the People's Republic of China Order No. 580: Implementation of Protection Regulations for Fossils), and enacted from 1 January 2011 (State Council of the People's Republic of China, 2010). [The following month, a revised version of the Criminal Law was promulgated (enacted on 1 May), but the sections concerning cultural relics were unchanged from 1997 (Anonymous, 2011).]

For the first time, the legislation explicitly clarified what constituted 'important' fossil material: type specimens, relatively

complete vertebrates, lagerstätten of plants/trace fossils/invertebrates (plus the catch-all of 'any other specimens designated as important'). This was of course the first time that paleobotanical, ichnological, and invertebrate fossils were embraced by national protective legislation (which reflected the broader definition enacted 1 March 2001 and revised in 2005 by Liaoning People's Congress). Until then, for example, it would have been perfectly legal to buy specimens of the world-famous invertebrate Chengjiang biota fossils of Yunnan Province from eBay (Ma Xiaoya, pers. comm., October 2013) (Fig. 1); Liaoning being the only province that seemed to have any restriction on invertebrate fossil excavation and export prior to this date (Liaoning People's Congress, 2005).

Under Section 4, Article 26 of the 2010 legislation, unnamed fossils could not under any circumstance go abroad (State Council of the People's Republic of China, 2010). This meant that for any material to leave the country, it had to undergo some level of analysis, to at least provide preliminary identification. Applications required that all specimens intended to go abroad had to be treated the same way as many institutions around the world require of loans: in other words, to be listed, identified, and individually photographed and all specimen data (including provenance) recorded. Individual museum specimen numbers from a Chinese institution had to be allocated before the application was made. The application had to state the destination institution to which the material was traveling, along with a description of that institution's suitability to do the work, and the care intended for the loaned specimens under that institution's emergency or 'disaster planning' procedures. Details of the insurance that would be provided for the specimens while outside China also had to be provided by the intended host institution.

For any fossil material to go abroad, the application had to be made by a Chinese national, via a local institute, through provincial-level Department of Land and Resources. It is worth noting here that the government structure from top to bottom in the PRC is state or central government, then provincial governments, then city governments, county governments, township governments (called 'district governments' in cities), and finally village authorities. If approved, the fossil material would go to the provincial-level Department of Land and Resources, and only if ratified by them would it proceed to be considered by the Ministry of Land and Resources. It is worth pointing out that the application could be rejected at any stage, with no right of



FIGURE 1. Specimen YKLP 10200a, *Myllokunmingia fengjiao*, published as *Haikouichthys ercaicunensis* (Zhang and Hou, 2004). Although it has been regarded as a vertebrate (Hou et al., 2002), it has been argued that it cannot be convincingly demonstrated to be one (Donoghue and Purnell, 2005). As such, rare specimens like this 40-mm-long example, which are clearly important to understanding vertebrate origins, could legally have been sold before the 2011 legislation extended protection from vertebrates to include other types of fossils. Scale bar equals 5 mm. **Institutional Abbreviation**—YKLP, Yunnan Key Laboratory for Palaeobiology, Yunnan University, Kunming, China.

appeal, and that would be the end of the application. It was only when all three bodies agreed, that permission would be granted for the export of the specimens.

Furthermore, if fossils were approved to go abroad, it could only be for a maximum period of 6 months. Although this international loan could be renewed for a further 6 months, such a renewal could only be requested once, and the application for such a renewal would need to be submitted at least 60 days prior to the expiration of the originally agreed loan period. In other words, although material could travel abroad, it could not under any circumstances be outside China for more than 12 months after the date on which it left the country.

THE 2013 ITERATION

This legislation was supplemented on 1 March 2013 by the Ministry of Land and Resources of People's Republic of China Order No. 57: Implementation of Protection Regulations of Fossils (Ministry of Land and Resources of the People's Republic of China, 2012). As with the 2003 and 2005 enabling and implementation legislation for the Cultural Relics Protection Law, this deals with the detail or process to enable the 2011 law to operate. Article 42 of this year's legislation is therefore perhaps of the most relevance, because it clearly summarizes the eight requirements for any fossil material to go abroad: (a) an application needs to be made by a local scientific institution or museum local to the site, containing (b) a list of specimens with photographs, catalog numbers, systematic names, horizon, date excavated, grade of protected area, and dimensions of specimen; name of repository; (c) the basic information of the destination foreign institute and a statement of its qualifications or credentials to conduct the proposed research; (d) a cooperative contract or statement of collaboration between the institution/museum and the foreign institution; (e) a protective statement of how specimens will be looked after while abroad; (f) 'Disaster Planning': preparedness for emergency with specimens while at the host institution; (g) an insurance certificate for the specimens while in the care of the foreign institution; and (h) anything further requested by the Ministry of Land and Resources.

From the time of submission, there is a 14–20-day processing time. If accepted, a letter is sent with a Ministry of Land and Resources registration number. Application for this registration number can only be made by a local museum or scientific institution in the PRC (and this number is distinct and quite different from catalog numbers for specimens provided by such a local museum or scientific institution). The Ministry of Land and Resources then appoints a representative to check and pack the material for transport to the Customs Office of the designated port, for dispatch to the destination institution.

There is also some detail on the procedure for material to return to China from its international loan. When the material comes back from being abroad (see limitations on loan periods and extensions described above), the following three requirements need to be met: (a) an application needs to be made to return them; (b) photographs must be provided of the specimens returning; and (c) the specimens must be checked by a Ministry of Land and Resources representative. Of particular note is that the material has to be returned, under the Ministry of Land and Resources registration number, prior to publication of any scientific research on the material. Clearly, the need to have obtained a registration number prior to publication represents a relatively straightforward means by which scientific journals could enforce a requirement to provide such a number as part of the manuscript review, if they intend to support Chinese anti-smuggling legislation.

Another section of interest in the 2013 enabling legislation relates to collection of any specimen from a protected area (such as the many GeoParks across China, for example, in Lufeng County). For this, an application needs to be made to the

Ministry of Land and Resources and a record placed in the provincial Department of Land and Resources, with vertebrate specimens falling under the category of 'Important Protected' material. Fines are also listed: if fossils have been illegally collected, the fine is between 300,000–500,000 yuan (around \$50,000–80,000 U.S. dollars), where previously in 2011 the legislation had noted the minimum level at 100,000 yuan (around \$15,000 U.S. dollars).

But perhaps most interesting is Article 47 of the 2013 legislation. This presents for the first time a formal means of bringing official government attention to any suspected Chinese material that might be abroad illegally, i.e., without such permission as coming from a granted application above. Once this has been reported to government, the Ministry of Land and Resources should call a committee member to investigate, at which point the Police Authorities, Diplomatic Affairs, and Customs Office all become involved. Assuming the investigation confirms the report, actions will be taken for the material to be returned to China. Once the material returns to China, it then becomes the responsibility of the Ministry of Land and Resources to arrange a home for this material. It seems reasonable to assume that this is the Chinese Government formally declaring its intention to go after material taken across its national boundaries, perhaps as a warning to those considering attempting to take ownership of such material in the future.

CONCLUSIONS

Restrictions on excavation of vertebrate fossils in China have been in place since 1982 and are particularly constraining for researchers from foreign institutions. Export of material from China has extremely strict legal controls and requires a detailed application to be submitted by a Chinese institution to be agreed by three tiers of the government's Land and Resources body, before the necessary registration number is given. Even then, any material taken out of China for research under the terms of such a successful application is on a strict timetable for its return. In particular, the material has to be back within its Chinese repository prior to publication of any research on the material. Note: For a more detailed account of the development of legislation relating to the excavation of Chinese fossil material, and comparison with legislation affecting some other territories, see Liston (2014). For more detail regarding the export of Chinese dinosaur eggs, see Liston (2013).

ACKNOWLEDGMENTS

Thanks and appreciation are accorded to X. Ma, Z. Feng, and L. Wang for their patient assistance with downloads and translations of salient documents during this extensive research. P. Cong is thanked for image advice, and J. Hilton and Z. Zhou are also thanked for facilitating publication of this article. L. S. Zamorano is acknowledged for support.

LITERATURE CITED

- Anonymous. 2000a. Law of the People's Republic of China on the Protection of Cultural Relics, adopted at the 25th Meeting of the Standing Committee of the Fifth National People's Congress and promulgated by Order No. 11 of the Standing Committee of the National People's Congress on and effective as of November 19, 1982; pp. 77–89 in S.-y. Liu and Y.-p. Li (eds.), *Laws of the People's Republic of China, Chinese-English edition, Volume 1, 1980–1994*. Jilin People's Publishing House, Jilin, Changchun, China, 1321 pp.
- Anonymous. 2000b. Law of the People's Republic of China on the Protection of Cultural Relics (adopted at the 25th Meeting of the Standing Committee of the Fifth National People's Congress on November 19, 1982; revised in accordance with the "Decision of the Standing Committee of the National People's Congress Regarding the Revision of Article 30 and Article 31 of the Law of the People's Republic of China on Protection of Cultural Relics" at the 20th

- Meeting of the Standing Committee of the Seventh National People's Congress on June 29, 1991); pp. 741–748 in S.-y. Liu and Y.-p. Li (eds.), *Laws of the People's Republic of China, Chinese-English edition, Volume 1, 1980–1994*. Jilin People's Publishing House, Jilin, Changchun, China, 1321 pp.
- Anonymous. 2000c. Order of the President of the People's Republic of China, People's Republic of China Criminal Law—amended by the 5th Session of the 8th National People's Congress (March 14, 1997), enacted October 1, 1997; pp. 2066–2220 in S.-y. Liu and Y.-p. Li (eds.), *Laws of the People's Republic of China, Chinese-English edition, Volume 2, 1995–1999*. Jilin People's Publishing House, Jilin, Changchun, China, 1413 pp.
- Anonymous. 2002. Law of the People's Republic of China on the Protection of Cultural Relics (Order of the President No. 76) (adopted at the 25th Meeting of the Standing Committee of the Fifth National People's Congress on November, 19, 1982; revised in accordance with the “Decision of the Standing Committee of the National People's Congress Regarding the Revision of Article 30 and Article 31 of the Law of the People's Republic of China on Protection of Cultural Relics” at the 20th Meeting of the Standing Committee of the Seventh National People's Congress on June 29, 1991; and revised again at the 30th Meeting of the Standing Committee of the Ninth National People's Congress on October 28, 2002). Available at http://www.gov.cn/banshi/2005-08/21/content_25079.htm. Accessed August 25, 2013.
- Anonymous. 2005. Rules for the Implementation of the Law of the People's Republic of China on the Protection of Cultural Relics (approved by the State Council on August 21, 2005, promulgated by State Administration of Culture Heritage). Available at http://www.gov.cn/banshi/2005-08/21/content_25090.htm. Accessed August 25, 2013.
- Anonymous. 2011. Order No. 41 of the President of the People's Republic of China, People's Republic of China Criminal Law (promulgated February 25, 2011, enacted May 1, 2011.). Available at http://www.npc.gov.cn/npc/xinwen/2011-02/25/content_1625679.htm. Accessed January 24, 2015.
- Anonymous. 2013. Guide to publications of the Nature journals. Available at <http://www.nature.com/authors/gta.pdf>. Accessed February 10, 2014.
- Besterman, T. P. 2001. Frontiers to science: free trade and museum ethics. *The Geological Curator* 7:199–209.
- Committee on Education, Science, Culture, and Health. 1997. Report of the Committee on Education, Science, Culture, and Health to the November 1997 meeting of the National People's Congress; pp. 757–758 in *The People's Republic of China National People's Congress Committee Reports, Chinese Democratic Legal System Publishing House, Beijing*.
- Donoghue, P. C. J., and M. A. Purnell. 2005. Genome duplication, extinction and vertebrate evolution. *Trends in Ecology & Evolution* 20:312–319.
- European Union. 1992. EU Council Regulation 3911/1992. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1421493708587&uri=CELEX:31992R3911>. Accessed January 17, 2015.
- European Union. 1993. EU Council Directive 1993/7/EEC (15/3/1993). Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1421493854197&uri=CELEX:31993L0007>. Accessed January 17, 2015.
- Gallup. 2013. *Global States of Mind: New Metrics for World Leaders*. Gallup, Washington, D.C.
- Hou, X.-G., R. J. Aldridge, D. J. Siveter, D. J. Siveter, and X.-H. Feng. 2002. New evidence on the anatomy and phylogeny of the earliest vertebrates. *Proceedings of the Royal Society (London) B* 269:1865–1869.
- Huang, D. 2013. A tale about ‘good eggs’ instead of ‘bad eggs’. *Chuxiong Wenbo* 2013:119–128. [Chinese]
- Institute of Field Archaeologists. 2009. Institute of Field Archaeologists Code of Conduct. Archived copy available at <http://paul-barford.blogspot.com/2010/04/new-code-of-ethics-for-british.html>. Accessed December 1, 2013.
- International Institute for the Unification of Private Law (UNIDROIT). 2010. *Principles of International Commercial Contracts*. International Institute for the Unification of Private Law (UNIDROIT), Rome.
- Liaoning People's Congress. 2005. Fossil Protection and Administration Rules of Liaoning Province, Decree No. 30 (passed January 12, 2001, enacted March 1, 2001, revised May 28, 2005, enacted August 1, 2005). Available at http://law.baidu.com/pages/chinala/win/1684/7/bdd274ce70d5c202ae9f032e2e8fc36_0.html. Accessed December 21, 2013.
- Liston, J. J. 2000. *Archaeopteryx* and the evolution of feathered flight: the hidden story. *The Quarterly Journal of the Dinosaur Society* 4:6–14.
- Liston, J. J. 2013. Out of China: dinosaur eggs and the law on ‘Kong Long Dan’. *The Geological Curator* 9:545–555.
- Liston, J. J. 2014. Fossil protection legislation: Chinese issues, global problems. *Biological Journal of the Linnean Society* 113:694–706.
- MacFadyen, C. J. 2008. *Scottish Fossil Code*. Scottish Natural Heritage, Inverness, 82 pp.
- Martill, D. 2001. The trade in Brazilian fossils: one palaeontologist's perspective. *The Geological Curator* 7:211–218.
- Ministry of Land and Resources of the People's Republic of China. 2012. Decree No. 57 of the Ministry of Land and Resources of the People's Republic of China—Measures for the Regulations on Preservation of Palaeontological Fossils (adopted at the Fourth Ministerial Meeting of the Ministry of Land and Resources of the People's Republic of China on December 11, 2012, effective March 1, 2013). Available at http://www.mlr.gov.cn/zwgk/zytz/201301/t20130111_1174600.htm. Accessed December 19, 2013.
- Mintz Group. 2013. Where the bribes are. Penalties in U.S. Government Foreign Corrupt Practices Act Cases since 1977. Available at www.fcmap.com. Accessed January 26, 2014.
- National People's Congress. 1979. The criminal procedure law of the People's Republic of China. Reprinted as Article 7 in *Journal of Criminal Law and Criminology* 73:171–203.
- Nudds, J. R. 2001. Ethics, science and the trade: let's get together. *The Geological Curator* 7:191–198.
- PLoS ONE. 2011. PLoS ONE editorial policies. Available at <http://www.plosone.org/static/editorial#paleontology>. Accessed February 10, 2014.
- Schmidt, A. C. 2000. *The Confuciusornis sanctus: an examination of Chinese cultural property law and policy in action*. Boston College International and Comparative Law Review 23(2, Article 3):185–227. Available at <http://lawdigitalcommons.bc.edu/iclr/vol23/iss2/3>. Accessed January 17, 2015.
- Society of Vertebrate Paleontology. 2013. Society of Vertebrate Paleontology Member Bylaws. Available at <http://vertpaleo.org/The-Society/Governance-Documents/Bylaw-on-Ethics-Statement.aspx>. Accessed November 30, 2013.
- Standing Committee of the National People's Congress. 1982. Decision of the Standing Committee of the National People's Congress Regarding the Severe Punishment of Criminals who Seriously Undermine the Economy (adopted by the 22nd Session of the Standing Committee of the 5th National People's Congress, March 8, 1982); reprinted in *The Criminal Law and the Criminal Procedure Law of China 1984*. Foreign Languages Press, Beijing.
- Standing Committee of the National People's Congress. 2007. Order No. 84 of the President of the People's Republic of China—Decision of the Standing Committee of the National People's Congress on Amending the Law of the People's Republic of China on the Protection of Culture Relics (adopted at the 31st Meeting of the Standing Committee of the Tenth National People's Congress on December 29, 2007). Available at http://www.gov.cn/ziliao/flfg/2007-12/29/content_847433.htm. Accessed August 25, 2013.
- State Council of the People's Republic of China. 2003. Decree No. 377 of the State Council of the People's Republic of China—Regulations for the Implementation of the Law of the People's Republic of China on the Protection of Cultural Relics (adopted at the Eighth Executive Meeting of the State Council on May 13, 2003, effective July 1, 2003). Available at http://www.gov.cn/zwgk/2005-05/23/content_153.htm. Accessed August 25, 2013.
- State Council of the People's Republic of China. 2010. Decree No. 580 of the State Council of the People's Republic of China—Regulations on Preservation of Palaeontological Fossils (adopted at the 123rd Executive Meeting of the State Council on August 25, 2010, effective January 1, 2011). Available at http://www.gov.cn/zwgk/2010-09/10/content_1699800.htm. Accessed August 13, 2013.
- State Cultural Relics Affairs Management Bureau. 1987. *Law on the Preservation of Ancient Objects*; pp. 212–219 in *Selected New Chinese Laws on Cultural Property*. Cultural Relics Publishing House, Beijing.

- Steinhauer, J. 2010. Senate, for just the 8th time, votes to oust a federal judge, *New York Times* 9 December 2010;A27. Available at www.nytimes.com/2010/12/09/us/politics/09judge.html?_r=0. Accessed November 30, 2013.
- Sullivan, C., D. Hone, and Xu, X. 2012. The search for dinosaurs in Asia; pp. 73–106 in M. K. Brett-Surman, T. R. Holtz Jr., and J. O. Farlow (eds.), *The Complete Dinosaur (Life of the Past)*. Indiana University Press, Bloomington, Indiana.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). 1970. Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property. United Nations Educational, Scientific and Cultural Organization, Paris.
- Winnett, R., and H. Watt. 2009. MPs' expenses: Alistair Darling billed us for two homes at the same time. *The Telegraph* 31 May 2009. Available at www.telegraph.co.uk/news/newsttopics/mps-expenses/5418493/MPs-expenses-Alistair-Darling-billed-us-for-two-homes-at-the-same-time.html. Accessed November 30, 2013.
- Zhang, X.-G., and X.-G. Hou. 2004. Evidence for a single median fin-fold and tail in the Lower Cambrian vertebrate, *Haikouichthys ercaicunensis*. *Journal of Evolutionary Biology* 17:1162–1166.
- Submitted December 28, 2013; revisions received February 14, 2014; accepted February 17, 2014.
Handling editor: Marcelo Sanchez-Villagra.
- Citation for this article: Liston, J. J. and H.-L. You. 2015. Chinese fossil protection law and the illegal export of vertebrate fossils from China. *Journal of Vertebrate Paleontology*. DOI: 10.1080/02724634.2014.904791.