

# Rachel Carson Center

## Perspectives

How to cite:

Christen, Catherine A. "History and Audacity: Talking to Conservation Science." In: "The Edges of Environmental History: Honouring Jane Carruthers," edited by Christof Mauch and Libby Robin, *RCC Perspectives* 2014, no. 1, 123–28.

All issues of *RCC Perspectives* are available online. To view past issues, and to learn more about the Rachel Carson Center for Environment and Society, please visit [www.rachelcarsoncenter.de](http://www.rachelcarsoncenter.de).

Rachel Carson Center for Environment and Society  
Leopoldstrasse 11a, 80802 Munich, GERMANY

ISSN 2190-8087

© Copyright is held by the contributing authors.

SPONSORED BY THE



Federal Ministry  
of Education  
and Research

Deutsches Museum 



Catherine A. Christen

## History and Audacity: Talking to Conservation Science

The predominant perspectives in conservation science are future-oriented. Research in conservation science is fundamentally concerned with averting oncoming extinctions and ensuring ongoing redemption of biodiversity. Environmental historians, practicing in a field that largely dedicates its historical analysis to increasing understanding of current environmental issues, generally respond positively to the future-linked “safeguarding” mission saturating the framework of conservation science. Some historians studying conservation science-related topics may even feel impelled to orient their own research to provide whatever that field may “need” from historians and their craft. Perhaps that tendency is a particular occupational hazard for historians like me, who spend most of our time working on programs devoted to training and implementation in conservation science itself. Accustomed to applying our historical sensibilities and approaches and our humanities perspectives to conservation projects, we may at times tend to interrogate our research topics in ways that risk a malpractice—that of appropriating history to justify a currently favoured conservation approach. What is called for, then, is audacity: employing the practice of history fully to tell a complex story involving conservation science yet unconstrained by the world views, narrative guideposts, or specific outcomes practitioners of that science might expect as foregone inclusions. Among the most daunting challenges conservation science faces is the question of how to align its scientific findings with its intended management applications in the inevitable “real world” context. The audacious, non-beholden practice of history, calibrated to process that real world context, ultimately provides the most benefit even in this regard.

### A Conservation Story: Przewalski’s Horses

Among the more dramatic conservation science endeavours afoot today is the captive breeding and subsequent reintroduction of wildlife species into native or near-native habitats, sometimes several generations after their extinction in the wild. As complex and engaging as any of these species rescue and redemption stories is that of the Przewalski’s horse. *Equus ferus przewalskii* possess two more chromosomes than domestic horses, and, also unlike *Equus caballus*, they shed their tail and mane hair once a year.

This horse was already well known to the Central Asian nomadic peoples who hunted it for meat, or sometimes encountered Przewalski's stallions mounting their domestic mares. After centuries of desultory rumours and occasional literary references, the Przewalski's horse was first identified by western science as a species in 1881, to much acclaim among contemporary European aficionados of both evolution and horse breeding. By this time the horse was already largely confined to the drier fringes of its natural range in Central Asia.

By the early 1900s violent round-ups by commercial agents of westerners seeking hides for collections and horses for breeding had removed more than 80 Przewalski's foals from their habitat and destroyed multiple harems in the process of dispersing and killing a great many stallions and mares that were interfering with the foal captures. Eventually the remaining horses evidently overcame these behavioural and breeding stressors and regrouped, as contemporary zoologists found that the species numbers had increased again somewhat by the 1930s. But by the late 1940s, growing rangeland pressures, high offtake for meat by traditional hunters, and a series of severe, prolonged blizzards apparently doomed the remnant population. The last live sightings of wild horses, in the Gobi Desert, date from the 1960s.

In the meantime, some 50-odd captured foals survived their early 1900s overland treks and trans-shipment to western estates and zoos, where sub-optimal captive conditions and profound loss of their natural ecological and social structures hastened more deaths and led to an overall breeding depression, compounded by the depredations of the Second World War. By 1947 only about 30 captive horses existed worldwide, and the fraction of these actually still in the breeding pool retained the genetic material of only about a dozen founder horses. Yet by the late 1950s, the species clock had in effect restarted on this population in diaspora. The next few decades saw rising interest among scientists and zoo managers, coupled with improved husbandry, increasing international coordination of captive breeding, and advances in conservation genetics. By 1990 the captive population numbered several hundred. Reintroductions to Mongolian reserves in the Gobi Desert and the more hospitable steppe-grassland regions started in 1992, following releases to semi-wild enclosures in parts of Europe. There are now reserves in China and Kazakhstan, as well. Over time, reserve management in Mongolia has incorporated more applied science, more Mongolian scientists, and more cooperation with local herdsmen, while the horse itself is increasingly embraced as a national symbol

in post-Soviet Mongolia. Zoologists find much to debate regarding whether a mammal captive-bred for several generations still remains functionally and behaviourally the same species it was when last in the wild. Interestingly, at the time of this horse's initial reintroduction, Mongolia's steppe and desert landscapes and human-landscape interactions were remarkably unchanged from the last time these horses were upon that land, or from the previous several thousand years. Already this is different. Economic and social change, including movement towards intensive mining and urbanization, started accelerating in the 2000s, increasing the challenges for the Przewalski's horse.

### **A *History of Przewalski's Horses***

A Przewalski's horse history written to serve conservation science's forward-looking interest in species survival might focus on how the horse's on-the-brink preservation in captivity made possible its subsequent reification as an actual wildlife species. Indeed, that is a leading theme of the story as presented by horse-holding zoos. A Przewalski's history could also focus on the ways scientists have maximised the genetic diversity of the present-day horses through developing one of the first global studbooks, as well as improving the management of the ecology of small populations. It would be unfair to claim that conservation scientists ignore the pre-conservation or anti-conservation segments of this story. They don't. When they've wanted their history, they have collected it themselves. In the process, interested scientists have made accessible some of the best primary and secondary sources on Przewalski's horses, including information pertaining to the early, decidedly non-conservationist horse wranglers.

Orienting a history of Przewalski's horses towards the future—for example, focusing on genetic viability or reintroduction—represents a “helpful” impulse for a collaboratively-minded historian, but also one that tends to make the historian beholden to the failure-and-success version of the story. There are other possible lenses for contemplating the dynamics of the histories associated with the fates of this horse and its habitats. These are compound lenses that help the historian explore this story simultaneously in at least two chronological gears: the one(s) associated with conservationists looking forward and the one(s) employed by historians looking back. Multiple gears and compound lenses make for complex historical mechanisms, but mechanisms that afford the opportunity to fully engage the wealthy dialogues that emerge from the disciplinary perspectives of

both the present-day and of that historical period. The history unearthed can then, with luck, help us usefully map out both the intellectual and practical capacities of the protagonists of that past time, and understand how they fit together. In the case of Przewalski's horses, this history draws on the extant primary sources (records of Russian Academy zoologists, or animal traders such as Carl Hagenbeck) and the physical worlds these were connecting with—Central Asian deserts inhabited by nomadic hunters, pastoralists, and a native fauna that included shy, rare wild horses. In an audacious history, what is sourced and analysed from that time proves resonant with each of these present-day disciplines—that is, with the historians *and* the various conservation natural sciences. What is more, it is likely to better inform current conservation issues—for example, the debate over relative suitability of grassland and desert habitats.

Where do the different professional worldviews of each entity involved in this story relate to each other, and to the larger historical framework? My compound lens in this case—explicitly an appropriated, twenty-first century lens—involves training and capacity-building, and convening or facilitation, at times expanding these terms beyond their established modern uses. The point is to assess as deeply as possible the extent of agency and interaction among two or more cultural viewpoints and their associated practices, in the place where they connect over human actions in relation to these particular animals. To a large extent, these horses existed outside of history until they became objectified by that first scientific identification. But as soon as they were thus identified, intellectual history became a big factor in their treatment. So, for example, in the collecting raids of the early 1900s, somehow plans to gather small numbers from these wary harems soon devolved into oversized raids collecting dozens of horses. The animals collected did eventuate in the living horses today repopulating Central Asian habitats, but while the intellectual fascination of scarcity was a motivator, “conservation” was not. By studying the motivations of and interactions among local hunters, Russian Academy scientists, and European collectors (including Hagenbeck's crews), we can learn more about how different protagonists and their cultures were connecting, interacting, and transmitting knowledge and world views via the capacity-building experiences they shared, and about the related environmental and ecological impacts. We can address these contemporary nineteenth century stories by specifically considering their similarities to and differences from twenty-first century conservation capacity-building (training) and consensus-building (convening) practices. By recognising that any of the actors could variously be the trainers or convenors, we can explore the cultural transmissions

and environmental impacts without privileging the perspectives of any pre-designated “learned” groups. It is an audacious endeavour, based on shifting into both forward and reverse gears at once.

### **Elephant Management Today**

Within present-day conservation science and management contexts, historians can incorporate various humanities-derived techniques for convening and for conflict resolution. Co-editing a volume of contributed symposium papers about ethical treatment of wild and captive elephants, zoologist Chris Wemmer and I began with an intellectual framework processing the viewpoints of each of our authors, who came from professional fields throughout the natural sciences, social sciences, and humanities, in terms of their predominant conception of elephants as individuals, populations, or species. Understanding the centrality of each participant’s self-alignment was crucial for approaching the symposium that engendered this volume—that the keepers and animal rights activists who were focused on ethical questions of zoo and circus elephants were working on a scale of individual animals; that some scientists in our group were mainly looking at populations; and that others were considering ethical questions from a species point of view. Faced with the prospect of these differently focused groups talking past each other for two days, we found leeway in our budget to hire two facilitators I knew from my community mediation background. During the two workshop days following the symposium, their work in helping us to find areas of agreement (no matter how seemingly minor) led to the development of a remarkable cohesion that impressed all members of the group. At the workshop’s end, all these people who had come to it thinking they had the lock on caring about elephants and their ethical management (from their own particular view of the elephant as individual, population, or species) had come to see something that they hadn’t even realised before. They saw that other people who cared about elephants were functioning from fundamentally different bases—in other words, that “relationships define perspectives,” including the not-so-conservationist perspective of those (such as Sri Lankan subsistence farmers) who found themselves in conflict with elephants over basic resources even as they held the elephants in high cultural regard. People took the new alignments they made at that workshop and have applied them during the past decade to expand the horizons and to enhance the efficacy of their elephant-related work.

### **The Value of Audacity**

Perhaps most historians don't feel audacity needs to be a key component of their modus operandi. Professional confidence usually should suffice. Some doubtless always feel audacious, and comfortably so. But when one is so much around the conservation science world that effectively one is of that world, and yet not licensed to practice in this way, graceful audacity becomes truly a valuable characteristic to acquire. Jane Carruthers has been a key mentor to me in my learning to possess and express this measure of audacity, both in my research and in the other segments of my alternative historian's career in the conservation science world. Jane has always prodded me to be bold. In what I've described above, she's been there, nudging me on to the true edges, whether I have been handling multidisciplinary edges in the Elephants and Ethics project or involving myself deeply in the governance of the Society for Conservation Biology. Jane has always kept putting me up to a lot of big things. She shows up at odd moments and prods me into new directions in historical service and historical research and convening, as I am sure she does with many other scholars. She is doing nothing more than passing along the lessons of the kind of audacity—with Jane, it is often something more like charming insouciance—that she demonstrated in her work with conservation managers in South Africa and with her historical research and analysis on the Kruger National Park. Jane praises one's boldness ahead of one's being bold and compliments you on doing the right thing, charmingly forcing you into joining the cross-disciplinary adventurers like her who have taken the bold and audacious steps.