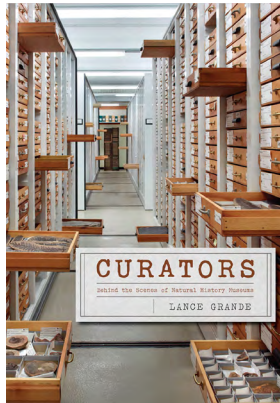


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Curators: Behind the Scenes of Natural History Museums

By Lance Grande. 2017. University of Chicago Press. 432 pages, 35.00 USD, Cloth, 21.50 USD, E-book.

Museums are, perhaps, best known for exhibitions. When visitors walk into any major museum, galleries and exhibits are the first things they see so it's easy to assume that these are the museums' main function. True, museums are about exhibitions, but they are also about so much more. Museums collect, conserve, communicate, and research, in



addition to developing displays. In fact, most large museums have only a fraction of their collections on display. Much of a museum's activity goes on behind the scenes, in the research and collecting by curators. Their projects often provide content for exhibitions, in the form of spectacular specimens and their associated stories. However, curators' work remains essentially unknown by museum visitors. Lance Grande explores this unknown realm in *Curators*, his behind the scenes examination of curatorship.

So what, exactly, does a curator do? "I came to realize that few people understood what a natural history museum curator does", writes Grande in his Preface (p. ix). I smiled wryly as I read his lament because I too have received blank looks when I have told people I am a museum curator. It's not a career that's well known, though it is one that can be filled with interest, variety, and opportunities, as Grande's life story well shows. According to his succinct definition, a natural history curator is a "research scientist whose job is to bring authority and originality to their museum's scientific mes-

sage" (pp. ix–x). Curators accomplish this through "original research" and the dissemination of "knowledge of scientific discoveries to students, other scientists, and the general public" (p. x). Interestingly, Grande's definition does not include developing natural history collections, though those collections derive in part from research activities, in particular fieldwork. Building and caring for collections are usually significant components of the job description and occupy much of a curator's time. Nevertheless, much of Grande's narrative does in fact focus on collections, how they are acquired, used, displayed, and maintained for the future. For anyone who has donated natural history specimens to a museum, this book provides insights about what happens to them and how they may be used.

Working for one of North America's major museums, Grande has had many opportunities for research, travel, and participation in diverse projects. His account is arranged roughly chronologically, following his career from a student interested in fossils to a senior museum administrator. Grande is primarily a palaeontologist with a focus on the fossil record and the history of life. Thus, much of his narrative, especially in the earlier chapters which deal with his education and early career experience, describes his fieldwork and collecting. His research focus has been fossil fishes, chiefly those from the Green River Formation in Wyoming. He proudly records that he has worked in his field area for 41 field seasons, as of 2015 (p. 63). Later in his career, he moved into more administrative roles, which were accompanied by different sets of challenges. His focus increasingly shifted from research to management, including issues management, balancing staffing and programs, and securing funding and outside support for specific projects. This progression gives him the opportunity to talk about many aspects of a curator's

life, including dealing with some of the ethical and practical issues around collecting and collections.

For many readers, the Field Museum in Chicago will perhaps be best known as the home of SUE the T-rex, who features prominently in the museum's promotional imagery and who even has a snark-rich Twitter account. The story behind the Field Museum's acquisition of SUE is lengthy, complicated, and fascinating, highlighting the difficult issues that arise when specimens of high scientific value also have high commercial value. As the most complete *Tyrannosaurus rex* found to that time (1990), SUE's ownership was contested from the beginning, an acrid controversy only resolved in court. Thereafter, the fossil's sale generated global interest, tension, and media hype. On 4 October 1997, Sotheby's sold the specimen to the Field Museum in a nail-biting auction. Securing SUE cost the museum more than eight million dollars (p. 133).

Although this specimen was secured for a major museum that recognized its tremendous display potential, scientific significance, and educational value, the story does raise questions about the commercialization of fossils. Grande argues that commercial fossil quarries are important to museums and points out that his own work on fossil fishes, in Wyoming and Mexico, was facilitated by cooperation with commercial fossil extraction. He reasons that some localities "could not possibly be adequately sampled for scientific study without the help of amateur and responsible commercial interests" (p. 43). On the other hand, many fossils are found purely opportunistically through industrial, mining, and development activities. Specimens may be revealed when large-scale disturbances expose fossil-bearing bedrock or sediments. A recent exhibition, "Grounds for Discovery", at the Royal Tyrrell Museum in Alberta highlighted exactly these kinds of chance finds. Good collaborative relationships can result in serendipitous specimens becoming part of museum collections.

Collaborative work also happens across disciplines. Grande describes one such long-term fruitful collaboration in his career, with an ichthyologist, Wally Bemis from the University of Massachusetts, who studies modern rayfin fishes. Their fields of expertise are complementary: Grande on skeletal anatomy, and Bemis on soft tissue anatomy. Studying modern fish specimens helped Grande to understand the structures he was seeing in the fossil record. Bemis obtained many specimens through donation at an annual marine fishing tournament off the coast of Alabama, which Grande describes as "a boon to fish research" (p. 96). Bemis ran a contest for "Most Unusual Fish" and through this and a filleting service was able to secure many large, rare, or unusual fish specimens. Besides enhancing the Field Museum's collection, specimens also went to other museums, universities, and institutions. Collections come from many sources, some not so obvious!

Notwithstanding his focus on palaeontology, Grande introduces the other curatorial programs at the Field

Museum. On the natural history side, the museum supports curators in botany, lichenology, ornithology, geology, meteoritics, marine invertebrate zoology, and entomology. The museum also supports several human history curators, including those focussed on cultural anthropology, archaeology, ethnology, and physical anthropology. This reflects the traditional subdivision of most large museums into natural history and human history sections. Field Museum curators travel to all parts of the globe. Grande mentions research projects that have taken place in Israel, Russia, Mexico, and many other countries in Europe and Asia. Grande emphasizes that interdisciplinary work at the museum is facilitated by the relatively small number of curators, 21 in 2014 (p. 158), and that the closeness of the group often leads to fruitful collaborations. This echoes my own experience as a curator. Many Field curators also mentor and supervise graduate students and thereby train the next generation of researchers and curators. Being a natural history curator is indeed a multifaceted job!

Museum collections aren't "owned" by curators; they are preserved and handed down from curator to curator. This means that specimens are available for re-investigation when new analytical techniques become available. Grande provides a particularly noteworthy example of this in the story of the "Man-eaters of Tsavo". These lions terrorized rail construction crews in Kenya in 1898 until they were shot and killed by John H. Patterson, who later sold the skins and skulls to the Field Museum, where the taxidermied specimens went on display in 1926. In the early 2000s, the Mammals curator, Bruce Patterson (no relation to the hunter) re-examined the skulls. He found that one of the lions had severe dental problems that undoubtedly caused pain and difficulty catching and killing regular prey. Hence the animal probably turned to the easier caught and killed railway workers as a food source. Grande also points out that the century between collection and re-examination also spans a substantive change in attitude towards wildlife and "Big Game". Nowadays, Field Museum curators are heavily involved in conservation efforts for wildlife and ecosystems in many areas of the world.

Curators may also participate in exhibit development, which can provide a tremendous outlet for creativity and originality. With extensive collections across natural history and great depth of expertise, there is usually no lack of high-quality specimens and story ideas. Natural history lends itself well to display. What is challenging is telling these stories and displaying the specimens in a way that is meaningful and engaging to visitors. This requires attention to the scientific importance of the material together with other qualities such as beauty. Grande emphasizes the aesthetic gaze when describing his contribution to the re-development of a gallery showcasing gemstones and jewelry. Exhibit development requires collaboration between curators and

professionals with different skills, such as designers, educators, and fabricators. When this succeeds, the results can be breathtaking.

For anyone interested in natural history collections, Grande's account is a great read—lucid, entertaining, and informative. The book is beautifully produced with a clear font on high quality paper. With its modest \$35 price, it is exceptional value for a high-end hardback book. Notably, it contains abundant colour images. Each chapter is followed by a half-dozen or more pages of colour images that directly relate to its topic, ending with an image that serves as an introduction to the next chapter. I really enjoyed this interweaving of the narrative and images. It was extremely effective in reinforcing the messages of the text. I especially liked

the images of specimens that Grande has collected and studied and the pictures of his field crews. These show that the collections are a collective effort and the efforts of many people are involved in their curation and long-term preservation. Without field assistants and skilled preparators back in the lab, museum collections would not be accessible for research or display and the research opportunities for curators would be limited. Although Grande's book is focussed on his career as a curator, his ultimate message is that the museum is an institution that benefits from the skill and dedication of many professionals from different fields.

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