



BOOK REVIEWS

Orca: How We Came to Know and Love the Ocean's Greatest Predator

Colby, J. M. 2018. ORCA: HOW WE CAME TO KNOW AND LOVE THE OCEAN'S GREATEST PREDATOR. Oxford University Press, New York, viii + 394 pp. ISBN: 978-0-19-067309-3 (hard cover), \$29.95.

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Book reviews are typically performed by an objective reader who is somewhat familiar with the subject matter so that an unbiased assessment can be written. For me, Jason Colby's book was different in that it felt more like I was reviewing a story about my family history. The staff and animals at Sealand of the Pacific, where I worked as an animal trainer in the late 1980s with *Haida II*, *Nootka IV*, and *Tilikum*, were part of my family. Later, as a naturalist and pilot for Seacoast Expeditions, Victoria, British Columbia's first whale watching operation, I spent every summer on the water with another part of my family, the southern fish-eating resident and mammal-eating transient killer whales that frequented the Strait of Juan de Fuca and San Juan Islands.

My story unfolded at Sealand where I worked alongside fellow trainers including the daughter of SeaWorld's veterinarian, socialized with the daughter of the head of the Icelandic whale capture industry, and worked with many of the whale researchers and key figures mentioned in this book. Little did all of us know at the time that many of our stories would eventually be retold and that many in my social circle would become actors in a larger story that would gain worldwide attention. Many of us were just kids in our early 20s and living a carefree lifestyle; we were adored by the throngs of visitors that would flock to Victoria to see captive whales at Sealand or venture out on the water to see wild whales. That is, until the day that tragedy struck and one of our fellow trainers was killed by a captive killer whale. A lot of us ended up splashed across the front pages of local newspapers, subpoenaed as expert witnesses at coroner inquests, and later appeared on CNN and the big screen in theaters all over the world. In my case, I was threatened with a defamation suit and the recipient of death threats because of the information I revealed about a secretive industry. Many of those very same friends that I once considered family turned against me and I felt like a lone voice as I took on the Oak Bay Marine Group's Corporate President, Bob Wright, the owner of Sealand.

The book's author, Jason Colby, and I share several common threads. Like I did, his dad also worked for Bob Wright

and Sealand. During my time as a whale trainer, I was a full-time marine biology undergraduate student at the University of Victoria. Ironically enough, Colby is now a tenured professor at my alma mater and we share a bond and parts of the same story that I never knew existed, having never heard of the Colbys until reading this book.

The Introduction includes a section where the author talks about his dad, a former killer whale capturer, who changed his tune about killer whales in captivity after seeing the documentary *Blackfish*. Little did I know that when I was contacted by Gabriela Cowperthwaite, the director of *Blackfish*, in 2011 to ask if she could interview me for a yet-unnamed documentary, that it would go on to change an entire industry, what Colby refers to as "one of the most influential documentaries of all time." I had no idea that this film would change the minds of so many people, including Colby's father John, the former hard-nosed whale capturer Don Goldsberry, and those very same peers who had turned their back on me when I went public about the conditions at Sealand two decades earlier.

Chapters 1–6 begin with the story of how Pliny the Elder first described killer whales in 79 CE. The author provides a brief lesson in natural history and the relationship that killer whales had with indigenous First Nations, early explorers, and whalers. We are introduced to the time when the conflicts began between whalers, fishermen, and killer whales. Salmon were overharvested, dams were being built, and killer whales were being slaughtered in the hundreds or thousands each year. Ted Griffin, the grandfather of whale capture and the man who started the Seattle Marine Aquarium, is introduced. He plays a pivotal role in this overall story and Colby relates Griffin's many early attempts to catch a killer whale without success. Ironically, it was Griffin who held a fascination with the species and refused to believe the widely held belief that this species was a man-eating monster of the sea.

Hound Dog, later renamed *Moby Doll*, was eventually harpooned at East Point on Saturna Island so that the Vancouver Aquarium's Murray Newman could use the dead animal to create a realistic sculpture to welcome visitors. But, the whale did not die, due largely to the brave efforts of Joe Bauer, who shielded the whale from further rifle fire. A decision was made to tow *Moby Doll* to Vancouver, representing only the second time that a killer whale had been taken in to captivity (the first had been captured by Marineland of the Pacific in California but that whale had only lived for 36 h before it died). We

also learn of another capture: *Namu* was captured in Namu, a small fishing town in northern British Columbia, and brought to Seattle's Pier 56. He garnered world attention when Griffin demonstrated that *Namu* was not the killer that had been portrayed. The two developed a special bond and the watershed moment occurred when Griffin entered the water with *Namu*, demonstrating to the world that these cetaceans were far from the man-eating killers they had been made out to be. The next whale to be captured was *Shamu*, a name that SeaWorld would eventually use as the stage name for a string of future performers across its franchises. This capture marked the start of a long tradition of exhibiting whales at SeaWorld, a company that would soon grow to dominate the captive industry.

Chapters 7 and 8 reveal a deeper side to Ted Griffin. We learn of his immense guilt and sadness at *Namu*'s death, his remorse for having killed four killer whales within two years, and his inner turmoil. While Griffin had been directly responsible for the deaths, he was also the impetus for a global change in perception about these icons of the Pacific Northwest. In particular, fishermen stopped shooting at killer whales and their disdain began to recede. One of the large southern resident pods, K pod, was eventually captured and *Walter* was brought to Vancouver. This whale, later renamed *Skana*, became the star attraction at the Vancouver Aquarium—and the very first killer whale that I ever laid eyes on, during a family visit to the aquarium in the early 1970s. Like *Namu* did with Griffin, *Skana* developed a relationship with researcher Paul Spong. Trainers discovered that *Skana* had a personality, a characteristic of captive killer whales that is obvious when one interacts with them on a daily basis. *Skana* was frustrated during one training bout and proceeded to “fail” every test given to her, not just once or twice, but soon refused to ever give the correct answer again, swinging the pendulum so far that it would have been statistically impossible for her “fails” to be due to chance. This was a pivotal moment in our understanding of how these animals were highly intelligent sentient beings.

Chapters 9 and 10 introduce the reader to ground zero of Canadian whale captures in Pender Harbour, where the Garden Bay Whale Station was established to conduct research and facilitate the logistics of killer whale transport and sorting. The global demand for killer whales began to climb and orders came in from all over Europe and Japan. The Canadian capture teams attempted to sell every whale they could catch. In contrast, the American, Ted Griffin, kept only seven out of the nearly 40 he had caught in 1968. He was concerned with birth rates and population viability, something that no other capture teams, or government officials, seemed to care about at the time.

Chapters 11 and 12 introduce us to Bob Wright and the tale of how he caught *Chimo*, the white killer whale. Colby describes Wright as a foul-mouthed cantankerous Canadian who didn't give a hoot about who he offended. He was a man with a huge ego and he was determined to show Ted Griffin who was the better whale capturer. Meanwhile, Griffin and his team later captured 90 whales in Penn Cove, Washington. This represented almost the entire southern resident population. Four whales died, three of which were calves, and this opened the floodgates of

criticism, particularly when the calves were gutted and weighted down with anchors so that no one would find out about their deaths. All three eventually washed up on shore, spurring public contempt for killer whale captures in Puget Sound.

Chapters 13 and 14 focus on the new regulations that were enforced on whale capture in Washington state. The Game Department restricted captures to areas outside of Puget Sound and outside of public scrutiny. Ted Griffin had enough and he left the industry. The Marine Mammal Commission was created to protect killer whales and other marine mammals at the federal level in the United States. In the meantime, SeaWorld continued to grow and branched out from its roots in southern California to both Ohio and Florida, and eventually purchased the Seattle-based capture franchise started by Griffin.

Chapters 15 and 16 recount the dawning of the research movement with an account of the capture and marking of K1, a whale that I watched for hundreds of hours over my career, and one of *Skana*'s relatives. His dorsal fin was notched by Dr. Alan Hoey, the veterinarian I had worked with at Sealand. We also learn about Mike Bigg, arguably the pioneering father of killer whale research and the one who developed the technique of photo-identifying individual whales based on the shape and markings of their dorsal fin and saddle patch. At the same time, opposition and other activists took on Bob Wright. Serendipitously, during a SeaWorld capture at Budd Inlet, Washington, Ralph Munro, special aide to Washington state governor Dan Evans happened to be sailing through the area. Munro was appalled and took the fight to Olympia, causing SeaWorld to eventually agree to a settlement wherein they promised to cease all killer whale captures in the state. The Budd Inlet whales were eventually released by the author's father (John Colby), but not before O4 and O5 were fitted with radiotransmitters, two transient killer whales that I would encounter on numerous occasions in the wild over a decade later.

Chapters 17–19 recount the shift from the Pacific Northwest to Iceland as the global epicenter for whale capture. But, Bob Wright was not done yet. Over the 14 years that *Haida I* was in captivity, Wright tried repeatedly to find a mate for him. He first introduced *Chimo* (a white killer whale), followed by *Nootka I*, *Nootka II*, *Nootka III*, and *Miracle* but each died (except *Nootka I*, who was sold to a theme park in California because of her aggressiveness) and eventually *Haida I* himself succumbed on 3 October 1982. Wright eventually turned to whale laundering wherein he bought whales from Iceland and, in turn, sold them back to SeaWorld, who had been prohibited from importing “wild” whales by the federal National Marine Fisheries Service. Colby also tells the story of *Keiko*, a whale that I had watched at Marineland Niagara as a kid, and the star of *Free Willy*. And, finally, we learn about Keltie Byrne's death at Sealand, an event that forever changed my life. In the end, *Tilikum*—the protagonist in *Blackfish*—was moved from Sealand to SeaWorld Orlando, eventually going on to kill two more people.

This is a book I would not have otherwise read save for this review. When it comes to killer whales, I am somewhat jaded after having been exposed to the issues and controversies for most of my adult life. Having worked for many years with killer

whales on a daily basis, both in captivity and in the wild, my experiences are fairly unique. So, it came as a huge surprise to me to read so many back stories that I had never heard, replete with photographs that I had not seen. It's akin to being at a family get-together and listening to your relatives tell stories about your parents that you had never heard. What I thought would be a rehash of the same stories that I had grown desensitized to over many decades turned out to be a riveting behind-the-scenes "tell all," told from the perspectives of the individuals that witnessed this important period in our history.

What strikes me most about this book is a remarkable theme that seemed to pervade most of the key players in this story. Most seemed to express a profound guilt, something that many of us that were involved in the captive industry have felt. We learn how the author's own father showed remorse for being a part of the capture industry exemplified by the author's dedication "For my father, John Colby – forever haunted by this story." Similarly, Joe Bauer put himself in harm's way to protect *Moby Doll* even though he had assisted the harpooner on shore, Ted Griffin released far more whales than he kept, Murray Newman defended whales against persecution, and a whole cast of other characters that were involved in the captive industry but later broke away and became outspoken critics. Maybe that, too, explains Bob Wright's \$11.2 million gift to the University of Victoria (OBMG 2012). Some might find it ironic that the school has a building named The Bob Wright Centre and offers scholarships to students "working to save the ocean that brought [Wright] such happiness and fortune" (University of Victoria 2018). This generous donation came from a man who was driven by greed and who played a pivotal role in the demise of the killer whale populations that frequented the very waters near where the university sits. Perhaps Wright, too, felt the same remorse shared by many of us, an epiphany that Colby refers to as a "conversion experience."

This book is a historical account of how an industry formed, nearly destroying the very commodity on which it depended, coupled with an infusion of science that helped us to better understand killer whale life history. The whales that were captured garnered the attention of the world and thus the very same people responsible for the rise in popularity and knowledge of the species were eventually demonized by the public. My love for killer whales started as a young boy when I went to see *Skana* and *Hyak* at the Vancouver Aquarium in the early 1970s. I eventually watched 17 captive killer whales perform at parks throughout North America and I ended up working closely with *Tilikum*, arguably one of the most infamous of all killer whales. I find it ironic that two industries, captivity and whale watching, that shaped my career and that have educated hundreds of millions of people about the fascinating world of cetaceans and pinnipeds are both now thought of as threats to the very animals that they originally helped protect through public awareness.

The Epilogue reveals that Colby's original intent was to write a book about how business and science shaped the way humans think about killer whales. The topic eventually morphed into what he portrays as the story of "how we came to know and love" killer whales. The part of the tale that Colby

misses, however, is the development of how whales were portrayed to the public once in captivity. He alludes to some of the housing and training methods but he really glosses over the operant conditioning methods, intermittent reinforcement, and enrichment programs that were key to the actions displayed to audiences. There was also a fundamentally different method to how animals were portrayed. At the Vancouver Aquarium and Sealand, for example, the approach was to display more "natural" behaviors with trainers out of the water, at least in later years. The SeaWorld strategy was much more focused on entertainment, replete with music and light shows, trainers in the water, and resembled something more akin to a synchronized theater performance. The impressions that the public took away from seeing captive killer whales likely varied depending upon which park they visited. It was certainly not a "one whale show fits all" experience. If one really wanted to understand how "we came to know and love" the whales, one would have to delve a little deeper into display approaches, training techniques, and overall whale show delivery methods. Colby gives us small snapshots but one does not really get a good feel for how the experiences of audience members varied across the spectrum of facilities that displayed killer whales.

I also found the book disproportionately focused on the nuances of capture but little space was dedicated to the day-to-day life of a captive killer whale. Issues about sensory deprivation and the subsequent deaths of trainers have equally played a critical role in how captive killer whales have been perceived. Sealand was guilty of sensory deprivation when it housed the three whales in a small, dark, metal holding pool known as "the module." This 6 m deep × 8 m diameter pool, where the whales spent 60% of their time (14½ h per day), was not even large enough for them to turn around. Whales that are cooped up in such a manner are likely to exhibit strange behaviors. The whales craved stimulation and sought out interactive activities. This "acting out," similar to the behavior that *Skana* displayed decades earlier, likely led the whales to pull the trainers into the water. I had to make two rescues during my time at Sealand. A few years later, Keltie Byrne slipped and fell into the same pool but this time the whales prevented her from reaching safety and she ended up drowning. In my opinion, Keltie's death could have been prevented had the whales been appropriately trained to deal with novel objects (including humans) in the pool as part of an overall training and enrichment program. Perhaps Colby will write a sequel that focuses more on the captive side of things, the approach that was taken by Cowperthwaite when she told the story of *Tilikum* in *Blackfish*. This part of the story cannot be overlooked if one wants to truly understand public sentiment and the deep emotions invoked when people from around the world visit oceanaria and look into the eyes of the captive animals.

Out of the 156 whales that have been captured and put into captivity (WDC 2018), there are five that stand out in my mind: *Moby Doll*, *Namu*, *Skana*, *Keiko*, and *Tilikum*. Each played a profound role in the progression in public attitude toward killer whales. These ambassadors forever changed the human perspective on killer whales and I feel privileged to have known three of the five while they were in captivity. I also knew the

family members of *Moby Doll* and *Skana* as I came to encounter them frequently while they roamed the Salish Sea. My two children have never seen a captive killer whale. Unlike most kids their age, however, they have had the extraordinary opportunity to witness killer whales in the wild. Will this experience cause them to appreciate these great creatures in the same way that I have? Will their peers, those that have never seen a captive killer whale, let alone a wild one, care about the plight of these magnificent diplomats of our great oceans? I can only hope.

This is a book not strictly written for marine mammalogists or whale enthusiasts. It is written for anyone who cares about the environment, the future of the planet, and the flora and fauna that surround us. It was a worldwide effort that first stopped commercial whaling, morphing eventually into a rapid shift in public sentiment toward captive cetaceans. Like many historical accounts, Colby retells a tragic yet sobering story of the good and dark sides of the delicate relationship between humans and other sentient beings. Even if you have never captured a whale, trained a marine mammal, or visited a marine park, you should read Colby's fascinating account.

—ERIC L. WALTERS[®] *Department of Biological Sciences, Old Dominion University, Norfolk, VA 23529, USA; e-mail: ewalters@odu.edu.*

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Guide to the Wildlife of Southwest China

McShea, W. J., S. Li, X. Shen, F. Wang, and D. Wang. 2018. *GUIDE TO THE WILDLIFE OF SOUTHWEST CHINA*. Smithsonian Institution Scholarly Press, Washington, D.C., v + 306 pp. ISBN: 978-1-944466-13-8 (paperback), \$30.99.

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During my field studies in China (1984–1996), I came to appreciate the diversity of bird and mammal species in southwest China. Likewise, many concerns arose over loss of species due to anthropogenic causes, which also had been noted as early as 1938 by Allen, and more recently by Cleveland (1985), Schaller (1998), and Smith (2008), among others. The government of China has established an increasing number of natural

reserves and assigned students to work in these protected areas as reserve staff.

This book was written to help prepare these reserve staff with a basic knowledge of the natural history of larger wildlife and their identification, as other staff members retire or are transferred to other sites. There is a concern that previous knowledge of natural history of the mammal and bird species is often held only by locals, and this book mitigates this concern. With few exceptions, this book deals only with animals weighing over 500 g. The authors justify this by noting that many species weighing less than 500 g are difficult to identify in the field. They use photographs of many species, along with distribution maps, descriptions of appearance, habitat, and ecology, and, for many, their scat and tracks. Latin species names are followed by the pinyin names (pronouncement of Chinese characters). Numerous photographs of bird eggs are presented. Photographic and species account information should be helpful to the reserve staff in identification of these species.

This guide describes 93 mammal species, 31 bird species, and 11 domestic or other wildlife species. The book is not divided into chapters. Rather, this book contains an introductory section that is 21 pages, a section on Mammals of Southwest China, a section on Birds of Southwest China, and a section on Common Domestic Animals and Other Wildlife of China. References are not used in this book; rather, a two-page bibliography is included at the end of the introductory section.

The introductory section has descriptions and diagrams of the geographic range and physiography of the region covered by this book, including maps of the location of reserves, precipitation across the region, habitat types, and human population densities. Photographs of the various forest types are excellent, and some remind me of ventures into northern Yunnan Province. Many of the photographs of the mammals were taken with wildlife cameras.

Readers interested in this book should realize the focus is primarily on larger species. For example, in the section on mammals, the only rodents described are two species of porcupine. However, in the Other Wildlife section, there are photographs and a paragraph each on pikas and bamboo rats. Bats are mentioned in only one paragraph, which references a photograph of bat droppings.

It is important to note the stated purpose of this book is for educating reserve staff. Providing this basic information on wildlife, especially when the planned Chinese language edition is published, is paramount in the education of new reserve staff. Reading this book reminds me of my encounter in a provincial natural history museum in 1984. I took a relatively large rodent from a museum tray, and happened to have covered the scientific name on the label. I commented that I was glad to see this specimen and asked the curator if he was familiar with the species. He quickly moved my finger off of the label and exclaimed the name printed. The problem was that the specimen label was grossly incorrect. That evening, I presented a number of North American mammal specimens as gifts to the museum staff. One Chinese scientist reached quickly into the box and took out a prepared armadillo specimen, exclaiming loudly "*Dasybus*."