Super Suckers: The Giant Pacific Octopus and Other Cephalopods of the Pacific Coast

By James A. Cosgrove and Neil McDaniel. 2009. Harbour Publishing, P.O. Box 219, Madeira Park, British Columbia V0N 2H0. 208 pages. 26.95 CAD Paper.

As a young boy I haunted the Natural History Museum on Cromwell Road in London, England. One of the many fascinating exhibits was the shell of the Chambered Nautilus (*Nautilus pompilius*). Next to the whole shell was one cut in half, exposing the remarkable chambered interior. I always coveted this beautiful object and a specimen now graces my living room.

This books covers the nautilus and its cousins, squids and octopuses, in some detail. Most of the book, however, concentrates on the North Pacific Giant Octopus (*Enteroctopus dofleini*). This creature has a fascinating, if short [four year], life history. The authors cover its sex life, egg laying and early planktonic life.

Octopus have some amazing abilities. They can change the colour and texture of their skin in a flash. They can envelope their prey in a numbing toxin. Their suction cups ranked along their arms [octopus do not have tentacles, but squid and cuttlefish do] are immensely powerful. Octopus can squeeze their large bodies through impossibly tiny holes, making them the animal Houdini.

After introducing us to some myths [interesting ones from the native community and fanciful ones from Hollywood] the author presents an overview of molluscs. Then he focuses in on the biology of the Giant Octopus; how it lives, breathes, eats and reproduces. Because it is so different from terrestrial animals, this is an absorbing account.

One fascination with the Giant Octopus is how large does it get. Certainly ones over 70 kg are proven, but as not many people took accurate defensible measurement some big ones may have "gotten away" – at least from the record.

The authors spend some time exploring the intelligence of the Giant Octopus. The problem, of course, is how to measure brain power of a creature that is so fundamentally different from us. Numerous researchers have tried and, while none have come up with an absolute answer, it is clear this beast is a smart creature. It can solve problems that would confound a three or so year old human.

The other cephalopods are covered, better than I have seen elsewhere. The squid species are clarified as is their status in the North Pacific. It is obvious, however, the authors' first love is the Giant Octopus, and maybe rightly so.

The photographs, many by Neil McDaniel, are very good. Having tried underwater photography for the first time earlier this year, I have a new appreciation for undersea photographers. On land only the subject might move, but in the ocean both the photographer and the wildlife are moving all the time. Unlike land animals fish often swim too close as well. Neil and his colleagues have given us some remarkable and colourful underwater images of many curious creatures.

The book is written in a lively, anecdotal fashion that is easy to read. In fact, I wondered who the authors saw as the audience. Sometimes I felt this was a book for teenagers and at others it seemed more adult. It was repetitious, even to the point of using virtually the same text. The authors often use text boxes for important points; a great idea, but this is where much repetition occurred.. There were also explanations of "scientific terms," again a valuable addition for words like "chemataxis." I am not convinced that adults need a definition of "enzyme", although teenagers might.

Overall the book is fun to read, about a species and its kin that are not well understood by most people. It is nice to realize the truth is more amazing that Hollywood's fantasies.

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The Second Atlas of Breeding Birds in New York State

By K.J. McGowan and K. Corwin. 2008. Cornell University Press, Sage House, 512 East State Street Ithaca, New York 14850, USA. xxiii + 688 Pages, 59.95 USD, Cloth.

We are now well into the era of second atlases of breeding birds; a few have recently come out (Ontario, Alberta) and others are currently in the field stage (British Columbia, the Maritime provinces). Atlases of today are not only known for reporting the breeding distribution of birds, they are also known for documenting avian history and basic biology as well as presenting stunning photographs or artwork of the area's birds. This second atlas of New York's birds is very representative of what we've come to expect of contemporary atlases, and it is a very welcome update on the breeding birds of that state. One's first impression of the book is the stunning artwork. Each species account is accompanied by a pencil drawing that is much more than just a profile shot. The artwork spans all facets of birds' lives, from incubating and nest-building, to courtship displays and feeding. The most elegant of these to my eye were the combative King Rails (Alan Messer), Northern Shoveler (Sue deLearie Adair) and Great Blue Heron (John Perry Baumlin), the latter of which also ended up engraved on the book's cover. Prior to each group of birds, there is a two-page colour spread illustrating one to several of the species in a typical, though not necessarily natural habitat. These paintings are all well done, and range from a Great Blue Heron flying in an ethereal mist (Michael Ringer), through the comforting forest with owls (Daniel Meyer) and the placid farm fields with blackbirds in the hedgerow (Bull Riley). Some of these two-page spreads include birds which are so cryptically included that only the caption alerts you to their presence – nice touch. The mislabelled American Oystercatchers (as Black Skimmers) should have been caught at some level of the editorial stage.

As with most atlases, there are introductory chapters (six in this case) which provide context for the species accounts. The methods by which the project was carried out, and presented in the book, are quite well explained; a series of 15 maps illustrate everything from urban areas, drainage, forest types, and Bird Conservation Regions. Instead of reporting birds in 10×10 km squares, 5×5 km blocks were used, which gives a higher resolution to the distribution maps. The extra effort to do this was, I assume, not trivial, and will likely result in better management decisions by users of this book. Results are summarized in the opening chapters, with two tables comparing the species detected in this project with those of the first atlas from 20 years prior; one is arranged taxonomically, the other by degree of change - nice. Summary maps illustrate species richness per survey block as well as a comparison of richness between the two atlas projects. All in all, this is a well-done section, explained with enough detail to satisfy statisticians, but not so overwhelming as to disillusion the nonspecialist. A liberal application of photographs, especially in the chapter on habitats, would have made for much greater visual appeal, and understanding of the introduction to this book.

Other atlases have included other introductory chapters ranging from aboriginal use of birds to a summary of other bird survey data (e.g., Christmas Bird Count, Marsh Monitoring, etc.). I assume it is a difficult choice for the editors to come up with the right breadth and amount of material – every additional chapter represents more people to deal with and more cost to the project, and hence a higher retail price. I wasn't disappointed with the selection though I would have liked to see a chapter on the state's birding hotspots (perhaps the top ten), complete with a state map showing their locations and perhaps a paragraph or two on, and a photograph of, each.

Maps are key to any atlas, and I found pros and cons to their use in this book. Positioning the major nondistributional maps (e.g., political borders, topography and ecozones) on the end sheets was great. This provides the reader with ready access to this information. As my old geography teacher once told me (ok, he had to tell me many times), "no province [or state] exists in isolation", so at least the political map of New York should have had neighbouring states, provinces and water bodies labelled. Less-often used maps ("descriptive maps"), such as human population distribution, precipitation and bird conservation regions are appropriately slotted in the introductory chapter, though all the end-paper maps are repeated there, too – unnecessary, in my mind. There are three maps misplaced in the summary results chapter – these maps show effort by birders in surveying squares, and given that *effort* is not a result, but part of the methods, those maps should have gone in the methodology chapter.

Each species account has two maps. The first shows distributional data for the second atlas, with squares of different shades indicating degree of confirmation. The second map compares the species' distribution from the current project with that of the previous one. It's not clear why the two maps weren't combined using the dot-in-a-square approach used successfully by other atlases, including the recent second Ontario Atlas (Cadman et al., 2007). In doing so, more space for other population indices (see below), embellished text, or a photograph would have been available.

Although a comparative look at the two maps gives a feeling for the level of breeding conformation and change since the first atlas, the editors have also chosen to include a small table giving some raw numbers and percentile changes. Although this feature won't be the first bit read by most users, I think it was a useful addition.

Although more than forty authorities were responsible for authoring the species accounts, over half were written by Kevin McGowan, one of the book's editors. There wasn't one account that wasn't well written or edited. I think putting headings (status and worldwide distribution, trends in New York, etc.), would have been useful. The species accounts start with a history of the bird's presence in the state, including a detailed comparison by the results from the state's first atlas. I was a bit confused with the following reference to the Ring-necked Pheasant: "Future land-use changes – will pose serious challenges to sustaining wild populations of this popular game bird." As someone who stands firmly against introducing species, let alone "sustaining" them, I found this comment just wrong.

A bird atlas should be about more than the results of *atlassing*, per se. The goal is to describe the distribution and numbers of breeding birds, and there are a multitude of surveys that could have been utilized to supplement the information. Although Breeding Bird Surveys were used for appropriate species, very few other data sources were utilized. Christmas Bird Count data were used for sedentary owls, but why not use them for other non-migratory species? It would have been very interesting to compare the CBC data with those of the BBS for Downy Woodpecker, House Finch, and Ruffed Grouse, among others.

I feel that the major omission in this work is the lack of point counts. Although early atlases did not use point counts, more, such as Ontario and Pennsylvania, which have completed their field work (with the latter still to be published) do so now; British Columbia and the Maritimes are both using point counts in their current protocols. These will establish a baseline of species' abundance that can be used to compare with subsequent efforts.

Overall though, this is a very well-written and illustrated book that will not only inform about current and past breeding distribution, but give some basic biology of New York's birds as well.

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Birds of Europe, Russia, China and Japan: Non-Passerines Loons to Woodpeckers

By Norman Arlott. 2009. Princeton University Press, 41 William Street, Princeton, New Jersey 08540-5237 USA. 240 pages. 29.95 USD. Paper.

When I received the first volume [or is it the second?] companion book [*Birds of Europe, Russia, China and Japan: Passerines*] my wife and I were due to visit China and Mongolia. This trip was cancelled due to earthquakes and a Muslim insurgency. Just as we decide to revive our trip to China [by sea, with stops in Japan and eastern Russia] this second book makes a timely arrival.

Between the two guides Arlott covers approximately 1800 bird species in Europe, Asia north of the Himalayas, Africa north of the Sahara Desert, and the Middle East excluding the Gulf countries. This new volume covers seabirds, ducks, shorebirds, gulls and terns, raptors, owls, swifts, hummingbirds, cuckoos, and pigeons. Despite the author's statement that he has covered all the birds recorded up to early 2008. I immediately noticed that the White-eared Night-heron Gorsachius magnificus is missing. It is found in China [and Vietnam] and numbers less than 1000 so is not likely to be seen by a visitor. Also Formosan or Taiwan Blue Magpie (Urocissa caerulea), an endemic bird from a small area in the mountains of Taiwan, is missing. More important to me, however, is the good coverage of seabirds along the China-Japan-Russia coasts. However, this also points out the one real failing of these two books. The adult, white-and black, short-tailed Albatross is nicely illustrated from above and below, but the all brown juvenile [and the one that could be confused with a juvenile Black-footed Albatross] is not shown. I think we must accept this in books that cover 1800 species and, combined, are two thirds the size of my Sibley's [The Sibley Guide to Birds, by David Allen Sibley, National Audubon Society, which covers only 810 species]. Generally it is only adult plumages and all but the raptors, seabirds and swifts are not shown in flight. These details are most significantly missing in the gulls. Here wing patterns and the sequence of moults are very important.

Norman Arlott, a leading and experienced bird artist has illustrated and described the adult plumage of the non-passerine birds of this region. As before, the illustrations are top quality and, in this book, the printer has achieved better quality control. The European Beeeater is a good example as it has both the correct hue and saturation ["colour" and "depth of colour"]. Cramming together so many species has led to some proportional errors. For example, the Rufous Hummingbird is 30% bigger than it should be compared to the African Grey Hornbill on the same page. Once I realized this, I looked at other illustration more carefully. I noted several species are not quite to scale. For example the Gyr Falcon is a mere 14% bigger the Peregrine next to it, when it should be twice that. Similarly, the Cape Pigeon should be larger than the neighbouring Murphy's Petrel.

There is one page that covers eight species of snipe and two woodcocks. While Arlott has depicted the minute differences accurately [in, for example, the width of the supercilium] and he does give basic differences in the text, it would be hard to use this plate in the field. Therefore I would not recommend this book for beginners. People with experience or novices with a more detailed text [like Sibley's] will find it a splendid reference. I look forward to using it in the fall. It will jog my memory of details about such birds as Slaty-backed Gulls, Wedge-tailed Shearwaters and Oriental Turtle Doves.

I used the mask I created for the first book [Made from a piece of clear plastic sheet with the outline map traced in blue, and I added transparent green to cover the region I now plan to visit.] By placing the mask over each map and I can quickly see if I will be in any bird's range. The range maps are $2'' \times 7/8''$ [5 × 2 cm] and again cover from Britain to Kamchatka, from Svalbard to Northern India. I have found this to be a rewarding exercise, especially for the open sea of the north Pacific — an area seldom visited by birders. It will be interesting to see how well my predictions work out. In particular, the range map for Lesser Blackbacked Gull shows a winter distribution on the coasts of southern Japan and China. This is not supported by any other publication. It could be that Arlott has included the range of a bird once considered a sub-species of Heuglin's Gull as "Larus heuglini taimyrensis." This



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