Godwits: Long-haul Champions, New Zealand to the World - One Bird's Voyage

By K. Woodley. 2009. A Raupo Book, published by Penguin Books, Penguin Group (NZ), 67 Apollo Drive, Rosedale, Auckland 0632, New Zealand www.penguin.co.nz 240 pages, approximately \$50 NZD.

This prominent book from New Zealand naturalists comes as a mixed bag: it's truly an elaborate international Bar-tailed Godwit monograph of relevance for North America and for the East Asian Australasian (EAA) flyway, but it does not achieve on the conservation side at all.

Of course, the 239 pages greatly impress by their minute detail, through the thoroughness of the text, with the great effort invested by the author, and indeed through its fascinating photos (once again, many brilliant shorebird master pieces from J.van de Kam, from the author and from many international naturalists can be enjoyed). The text makes for a reading in bird physiology, describes literally every feather of the godwit, and is full of global shorebird gospel (specific terminology like radius, ulna, humerus, keratin, moult patterns etc. are also found throughout, but it usually lacks the statistical basics to make sense of the information provided). Myself, I am not a big fan of equaling avian body fat with airplane fuel, of hyping up evolutionary traits, and elaborate on scientific ivory-tower questions and statements like 'do birds sleep while on non-stop migration' or "A wing area reduction of 10 per cent will increase the minimum turning radius by 11.1 per cent". The 16 lavishly illustrated book chapters deal with virtually all aspects of Bar-tailed Godwits and shorebirds along the huge EAA flyway and beyond. Readers will find that the author chooses his sources and words extremely carefully and strategically (as shown for instance in the frequent use of terms like 'may', 'could', 'potentially', risk, threat, serious). The chapters explain to the naturalist all details of 'being godwit', 'being waderologist', how to capture birds, how to count them, what it means to participate in the infamous cannon-netting operations, and finally, how to run satellite telemetry (the real clue of this authoritative monograph). The earlier investigations tracking godwits into the Yellow Sea and at the Yalu Jiang reserve (where the huge shorebird concentrations were hardly known to even the local staff prior to this effort!) makes for a shorebird classic, and so do the shore bird counting, leg flagging and inventory training sessions in China held by Australian and New Zealand shorebird enthusiasts. Ultimately, this book culminates with 'E7', the celebrated international Bar-tailed Godwit media star who now allows for many people to have a career and a living by flying for them a round-trip migration New Zealand Yellow Sea Alaska, and which was followed via the internet and Google maps intime through the use of satellite telemetry (presumably supported by American tax money).

Throughout the book, one will find many wise citations made by naturalists and ornithologists. I really like the opening chapters of this publication, and the nice descriptive Alaskan breeding ground chapter from the Old Chevak camp (godwit crèches are reported. But it's of peculiar note that Woodley does not elaborate whether his birds engage in Extra Pair Copulations (EPCs)). Further, I like the many environmental and shorebird history facts presented, e.g., for the Yellow Sea and for the entire New Zealand and British context. The author makes clear that godwits and shore -

birds are still hunted virtually anywhere on the entire flyway (this includes New Zealand and Australia, as well as a rampant harvest in international Ramsar sites). The author further states that many airports are placed right into shorebird habitat (e.g., in Anchorage, Vancouver, San Francisco). Almost funny is the reported statement made by a New Zealand politician that "The birds migrate to Siberia and provide food for Communists", and thus that they should be hunted. Further counterproductive comments appear by the actions of the New Zealand Acclimatization Society. Fascinating are the details provided through the interview with G. Turbott (who also wrote the Foreword for this book) about New Zealand and its shorebirds in the 1950s. Whereas, the 'future outlook' chapter mentions many conservation keywords, but it really "has no teeth" (=no beak). The fact that these godwits migrate routinely over 11,000 km each way gets quickly over sensationalised in the text (while for instance Red-necked Stints, tiny shorebirds of the same flyway and flying equally long distances from Tasmania to Wrangel Island, are not mentioned by the author, nor is the earlier telemetry and survey work in Russian Far East and Japan really given credit. As typically found in western publications, meaningful citations from the Russian Far East, a major part of the EEA flyway, are unfortunately missing).

Like many members of the public that are not familiar with the genetic discussion, Woodley fell in the trap to believe that the scientific DNA taxonomic analysis would easily 'resolve' avian taxonomy, and should lead conservation decisions (whereas instead, being habitat-centric would be much more meaningful). Basic general ecology, wildlife management and statistics literature got ignored. But the author leaves us with no doubt that Australia lacks (!) relevant protection efforts for godwits, and Woodley further documented many times that the New Zealand government either missed the boat regarding a meaningful shorebird and habitat godwit protection, or prefers to be entirely absent from flyway conservation meetings, or favours other (industrial) goals in its actions paid with tax money (these facts match a pattern we see elsewhere too, e.g., in southern hemisphere fisheries, forestry, agriculture, invasive species, seabird research and Asian protection of biodiversity).

Unfortunately, this book still celebrates an outdated single-species and overall population approach, and shows no vision or lead for an efficient shorebird and ecosystem management, e.g., calling for institutional reforms, use of science-based pro-active decision-making, and how naturalists can contribute in a meaningful way. No calls for truly protected areas, e.g., relevant mudflats or flyways, are made neither. And so, where this detailed book ultimately fails us, in my view, is in its ethics and relevant conservation achievement. The author and his team try to imply otherwise though. But already the serious environmental issues

such as avian disease, wholesale watershed destructions, ocean sewage and algae blooms, as well as local extinctions, oil spills and climate change are just mentioned in passing. The Yellow Sea chapter makes for a very nice read, but it is widely naïve in its conservation view (e.g., that one would still be able to manage the Asian situation and 'western style', while instead we are already faced with massive losses and write-offs and on a global scale, and certainly in New Zealand and Australia); it hardly is criticizing China's environmental policies and the many known violations of its internationally agreed-upon migratory bird legislations (e.g., signed with the U.S., as well as with Australia in the China-Australian Migratory Bird Agreement (CAMBA), and with the international community). Where are the lawyers, environmental advocates, big NGOs and shorebird conservationists here? But China is obviously one of the main trading partners, also floating Australian mines and public income, directly affecting New Zealand also). The godwit flyway is obviously dealing with some of the biggest and most influential economies in the world: U.S., China, Korea, Japan, Russia, as well as the Australian Arc of Instability and Destruction (e.g., Timor, Fiji, Bougainville). All of these topics so crucial to godwits are not well dealt with in this book. And equally serious, the retreat of the melting permafrost in the tundra as well as sea level rise (an issue publicly known for over a decade) is virtually left untouched by the author. Whereas, it's sure that areas like the Yukon-Kuskokwim Delta (in terms of biomass being among the richest in the world, and a godwit breeding ground where the author and his colleagues spent much time and pages on) will be directly affected. Same is true for the New Zealand and Australian godwit wintering coasts, its diminishing mangroves and ecological watershed services. Also, at the home front in New Zealand and Australia, and other than just 'counting', these shorebird enthusiasts and their organizations did virtually nothing to stop large-scale coastal and watershed destruction. The excessive use of Australian and New Zealand beaches by cars, ATVs, tourists, locals, dogs, as well as real estate development remains widely unmentioned. But at least when the industrial developments in Alaska's Bristol Bay (e.g., the huge Pebble Mine and offshore oil & gas drilling) nearby the breeding and stop-over grounds receive no mentioning at all, the informed reader will start to get really annoyed and understand that here just a one-sided and limited bird profile gets presented. But the story really gets worse in the Saemangeum case of South Korea's Yellow Sea (where 30% of the tidal area has already disappeared: a tragic topic the author writes about in several chapters, but does not much beyond that). It appears as if the author and his shorebird team spent great efforts there counting migratory shorebirds before and during the controversial sea wall construction seasons at this MAJOR migration hotspot for most shorebirds along the fly-

way. But if one thinks it honestly through, it was clear right from the start that the habitat destruction in Saemangeum was NOT to be stopped by just 'counting shorebirds', and while just talking about it. And thus, it basically was a done deal, and the counting exercises did not stop but eventually rather confirmed the destruction and with the intimate knowledge of virtually all major shorebird communities in Australia, New Zealand, England and beyond (e.g., in the U.S. The big conservation NGOs like BirdLife International, Wetlands International and WWF did basically not achieve a thing in Saemangeum). Knowing that the 'shorebird activists' themselves were right at the front line of this incredible destruction event and saw it all coming, all what they did was "count shorebirds", and mostly for non-peer-reviewed journal publications without impact or audience even, and all done just after the fact (=funeral science: just confirming the dead). Wildlife management can do much better. This has certainly not been objective science, lacks latest statistical methods as well, and thus is not really good science, nor a good global citizenship, nor best professional practice, nor pro-active management and pre-cautionary (as mandated by IUCN and officially approved by New Zealand and Australia). It just makes for a very poor conservation science practice, if at all. Being non-political is a political statement indeed (in the text, the author instead still spends great detail elaborating on uncertainties in population trends, that naturalist shorebird counting data would be used by science and management, and even, that the baueri subspecies of godwits already declined by 30%, and so does the population at the infamous Farewell Spit in New Zealand!). What is all that narrow shorebird effort good for if knowingly we just count the deckchairs on the Titanic? And how ethical is that approach, and who promotes it and why? And why should we celebrate extinct birds in greatly illustrated books, instead of just maintaining them in nature? Other ethical issues got quietly ignored, and when knowing that using mist nets, banding/leg flags and cannon netting tends to regularly result into (some) bird deaths. Also, when gear and telemetry implants are used birds can die early, and if they ever survive the migration even (as with the apparent and assumed cases of the many try-out birds that lead to E7 and its colourful data points on a Google Earth map). The fact that a veterinarian from the U.S. is cited to cover for proper animal treatment in New Zealand cannot deny this fact, or might make it worse (e.g., that anaesthetics would generally have no effect on little bird brains, behaviour and migration). Science what for, and by whom? And what political scheme and party do these New Zealand naturalists here truly support in their actions? The text is otherwise not short in blaming hunters for birds with crippled legs (the 'sick army' that occurs after each hunting season).

But the author and his team are not alone in such approaches to conservation that ignores basic ethics questions and the root causes of extinction. It just tries to present a profile of so-called objective science (while in Australia, New Zealand and with the USGS hardly any universities are even involved in this project and in EAA shorebird flyway research). Playing god, playing with birds, and as an anthropological and cultural phenomenon? It even receives uncritical support with some researchers in Holland, UK and elsewhere, supporting such concepts into the academic arena. Similar stands to conservation have actually been taken by a wide culture of ornithologists, by big NGOs and by some naturalists in the western world; and some even herald it as good bird management (but on what performance metrics and achievements is that based on?). In reality, and fully in line with the many criticisms made by Rosales (2008); Bandura (2007); Stiglitz (2006); Schweder (2001) and others, this approach had lead by now to a global bankruptcy and crisis, and certainly for shorebirds (c. 65% of North American shorebirds alone are declining). The conservation model of this book and its naturalists has shown itself as nothing but enforcing 'business as usual': a global habitat destruction towards the extinction process. And theses engaged naturalists are the first ones to see and to know it during the shorebird counts; but why do they not speak up and do something about it? Perhaps a hint for such value system is found in the British birding origin, in the U.S fear of good advocacy and environmental stewardship, or with the former profession of these shorebird naturalists (e.g., retired employees of mining companies and industry, metallurgists etc.). Other explanations might come with the intimate project involvement of big and effluent governments, and which are often directly tied to big (oil & energy) money. Showing funding transparency would help to resolve this question (no funding details are provided in this book). The presented satellite telemetry work on godwits is certainly not done and funded by naturalists but by the USGS and the Anchorage office (located in a state which receives largest chunks of its budget directly from oil revenues and their companies). It is clear that research designs and animal care permits would run differently when universities and their students and Institutional Animal Care and Use Committee (IACUC) would have gotten involved and be in the driver seat. The great shorebird data mentioned by the naturalist author and collected by publicly paid USGS employees and others for over 30 years are not made available to the global audience (at least conceptually, the Freedom of Information Act should probably apply here). Whereas, an Arctic project like this and linking both poles (!) would have made for a great showcase in the International Polar Year (IPY) 2007/8, with eBIRD (www.ebird.org) data, in GBIF (www.gbif. org) and in movebank (www.movebank.org). What a great opportunity to serve the global public and data needs for better decision-making, but the project participants simply did not choose to participate in such

efforts for the benefit for mankind, instead just serving their own interests!

In conclusion, one way or another, this otherwise great book includes some environmental science scandal. Great achievements might not always come cheap or for free, but only the ethics, and the declining bird populations and habitats will judge our efforts eventually and how well we finally achieved as naturalists, as governments and otherwise. At least for the next few years, it is clear that Asia, global warming and the massive global human population increase will easily run over New Zealand, Australia and North America, and as well run virtually over all of our birds, habitats and wilderness. With most governments, big NGOs and professional societies failing us already for years

in regards to pro-active globally sustainable leadership, it's left on us naturalists to keep as many pieces of nature as we still can. There is no time left anymore. But as the lacking conservation progress by these shore-bird naturalists shows us, and with G2 and the Pacific Free trade zone in the full making, we must be very scared indeed and be prepared for E7 just being an environmental write off and that it simply was just a wasted 'flash in the pan' but without a sustainable future.

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