
All animals...

What book would you pick to read and reread if you were going to an uninhabited island? Well, as we have been under the spell of the worldwide covid-19 pandemic for some time, seemingly in splendid isolation, I have had the chance come forward with three titles. Although all three reflect on animals, it would be difficult to find any three books that describe animals from such extremely different perspectives, than *Animal farm* (George Orwell 1945), *Variability in mammals* (Alexej Yablokov 1966) and *The song of the dodo* (David Quammen 1996). The differences in size, style, and scope are striking.

Animal farm, published in English and already by 1947 printed in Russian [Ukrainian] is well known among Dutch scholars as a lean, one hundred page, book, often prominently featured on secondary school English literature lists. *Animal farm*, is a story about farm animals -mainly mammals and poultry who revolted against their owner and tried to create a new society. It is a thinly disguised metaphor of the changes that occurred in the Soviet Union in the decades after the Revolution of 1917. Many intellectuals at the time (Orwell included) had great hopes for the Revolution, which descended into pogroms and a reign of terror. The new society in Orwell's book was based on seven commandments of which the last one was: *All animals are equal*. At the end of the tale the pigs, the self-announced leaders, deleted the original

commandments. Only the seventh remained, but with a salient addition: *All animals are equal, but some animals are more equal than others*. In the past, this last, slightly changed commandment was an oft-cited passage, brought up during discussions on political and sociological topics. There are obvious differences between the species/animals living on *Animal Farm*. There was Boxer, the ever-trustworthy carthorse who looked forward to his retirement, so he could dedicate the rest of his life to learning the alphabet beyond the letter 'd'. By contrast there were the pigs, who as the real politicians, could totally change the meaning even of commandments, simply by adding words. At the end it is obvious that this bunch of animals are far from equal, whether socially or physically. The pigs discriminated against the other species. Boxer, one of the Equidae is just a simple carthorse, while another one, Benjamin is a cynical donkey, the oldest of all the animals. All those animals/species turn out to be different, completely different.

Variability in mammals, written in Russian, became available world-wide in 1974 when an English version was produced. It is a medium sized textbook, containing 271 pages (excluding the appendix) and it ends by illustrating the differences (in populations) of mammals, using some 100 tables, 67 figures and some 670 references. In *Variability of mammals*, Yablokov describes phenotypic variation, the



Figure 1. Harp seals (*Phoca/Pagophilus groenlandicus*) on an ice-floe off the coast of Svalbard. Photo: Kees Mostert.

raw material for natural selection and Darwin's basic theme and the intraspecific variability of mammals: the differences between mammals of the same species. Yablokov presents coefficients of variation (the standard deviation divided by the mean) in standard body measurements (length of body, tail, feet, ear and body weight) and the regular skull measurements of mammal species in different orders (mainly Rodentia) that you can find from studies of mammals from all over the world. More peculiarly, he also describes the seemingly unimportant variability of the integumentary -skin- system (as he describes it): the number of vibrissae in sequential lines on the upper lips of harp seals (*Phoca/Pagophilus groenlandicus*), ringed seals (*P. hispida*), hooded seal (*Cystophora cristata*) and other Phocidae.

Besides measurements Yablokov also presents some non-metric variations such as the six basic patterns on the back of the harp seal (figure 1): a. horseshoe. b. open-p. c. open-q. d. horseshoe with point. e. loop and f. scattered (figure 2). There are significant differences in the presence of these basic patterns between

the breeding populations in the White Sea, the Greenland sea ice (north of Jan Mayen) and the Newfoundland region.

Kükenthal (1890) had already described the splitting of the fourth digit in beluga (*Delphinapterus leucas*) specimens from the Barents Sea and the Kara Sea. However, Yablokov (1974) observed that this splitting occurred on the fifth digit among belugas from the Okhotsk Sea. After reading *Variability of mammals* one must conclude that there are significant intra species differences within mammals although sometimes these need detailed observing and measuring.

The song of the dodo is a page turner of more than 638 pages -beware of getting repetitive strain injury, excluding an extended glossary and more than nine hundred references. It is highly informative and a great primer for courses in population biology, genetics and more. A good friend recommended this book to me a long time ago. Being a full-blooded mammalogist I hesitated to read it, as the title seems to suggest it is about a bird (and an extinct species at that!). However from the

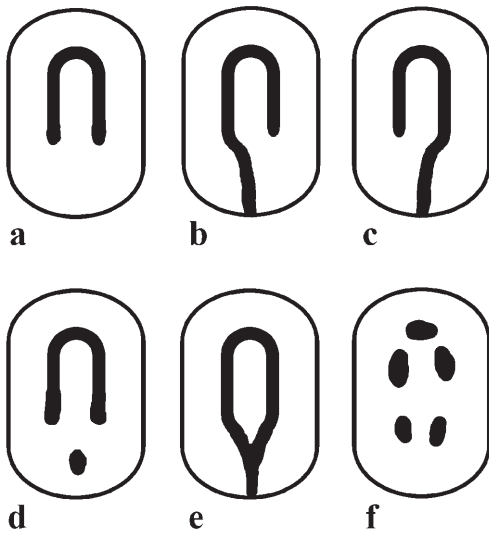


Figure 2. Scheme of different back patterns of adult males of harp seals (*Phoca groenlandicus*). Explanation: a. horseshoe. b. open-p. c. open-q. d. horseshoe with point. e. loop and f. scattered (simplified after an image by Yablokov 1974).

very first page I discovered that I was completely wrong: this is a wonderful book, written in exquisite English, and containing solid summaries of key theories (e.g. the island theory, genetic drift or impeding extinctions) as well as mini interviews with influential scientists and personal observations by the author himself. One of these observations is of the golden bamboo lemur (*Haplemur aureus*), an elusive species which the author, accompanied by a very competent Malagasy guide, was searching for. After two hours climbing uphill over a ridge and pushing through thick groves of bamboo, they came to a spot where they found two golden bamboo lemurs, as he describes it: "... a pair of fuzzballs no bigger than house cats". The observers sat down and for more than an hour they watched the lemurs in a constant, drumming rain. When several leeches started creeping their way up over his legs, searching for blood, the author realised it was time to go. The intestinal revenge of the bamboo groves' hardships came, back in the basecamp, that night... *The song of*

the dodo hides an important message: finding the origins of differences between mammals and other animals, can be a demanding task. Sometimes the differences turn out to be decisive in different ecological circumstances, sometimes the significance stays concealed until the species is challenged by a new situation.

The prominent element shared among these three books is the existence of intraspecific differences in mammal species or between individuals of closely related species. The recognisable elements point all three in the same direction and are in line with each other. These lines in the three books are: Orwell comes to the conclusion that all animals are different, Yablokov presents a wide variety of examples of differences (all concerning mammals), while Quammen basically describes the causes leading to those differences. Now it is time to perceive differences between (populations of) mammal species and to address their origins. This is even possible on an (almost) uninhabited island.

In this issue of *Lutra* a longstanding tradition is continued with the publication of the new list of stranded cetaceans: Keijl et al.'s list (2016) has now been updated to cover the period 2015-2019 (Keijl et al). A rather successful story comes from 'De Onlanden' in the northern part of the Netherlands where van Boekel reports on a study of otters (*Lutra lutra*) based on pictures from camera traps. In contrast to the prospering of otters, Vink & Schröder describe a drastic decline of occupied badger setts in the Veluwe region. Van der Veken et al. describe the diet of the first wolves (*Canis lupus*) to settle in Flanders, confirming these large predators are now part of the ecosystem in this part of Belgium.

References

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