On Original Species

While reading the proof sheets of this new issue of Lutra I became aware how all the articles in this issue are based on research that is quite original, in one way or another. 'Original research' has a very specific meaning in science and ironically Van Vuure's article, which made me first think about originality, is not strictly original research, but more of a review. However, using linguistics as a basis for determining the historical occurrence of the wisent (or European bison) in various parts of the continent really is a novel and innovative approach towards the matter. But this article is about originality in more than one way. The question of which species are part of the original fauna of a country or region and those that are non-natives is currently a hot topic in nature conservation. There are numerous cases of introduced species outcompeting their indigenous cousins or otherwise causing problems. In many cases, exotic species have been introduced unintentionally when they hitched a ride with man, but there are many other examples where the introduction of some seemingly useful animal was intentional – though often misguided. But conservationists also need to watch their step. Canadian beavers are still present in parts of Europe, displacing European beavers. In Lutra 57-2 (2014), Van Vuure addressed the matter of the konik's ancestry and in this issue he considers whether the (re?)introduced wisent is indeed indigenous to the Netherlands. We should remember that the original Dutch wisent would have been the steppe wisent (*Bison priscus*), the remains of which are regularly found in our coastal waters. Unfortunately, it's been extinct for some 10,000 years.

There is no room for question that Reeves' muntjac (*Muntiacus reevesi*) and Sika deer (*Cervus nippon*), are non-native species. Both are from Asia and neither ever trotted on European soil until their introduction here by man. One look at an adult male Reeves' muntjac and one can see that they are original in at least one way: the males not only sport a handsome pair of short, curved antlers but also possess elongated upper canines which can be as long as 2.5 cm. This is definitely a novel and therefore original approach for a deer to fend off its competitors. That may be all well and good but it doesn't make up for the effect they are having on our indigenous flora and fauna. Hollander's article presents an up-to-date overview of the occurrence of both species in the Netherlands, and of current trade in, and possession of, them.

Elsewhere, Kleef and Wijsman present the results of their research which is original in the more traditional scientific sense. Their study explores a classic example of an adaptive response to fluctuations in food availability on interrelated trophic levels in the food chain. They found that Pine martens (*Martes martes*) change their hunting behaviour according to

the availability of wood mice (*Apodemus sylvaticus*) as prey. Wood mice populations are, in their turn, strongly influenced by mast production of beech and common oak.

Pine martens are not the only species who live close to wood mice in the trophic pyramid. Wild boar (*Sus scrofa*) compete with wood mice and bank voles (*Myodes glareolus*) for acorns and, alongside mast production, their behaviour influences successful acorn germination. Wood mice display hoarding behaviour, stashing acorns for later consumption and tracking the fate of these hidden acorns, once again, required an original approach. Suselbeek's thesis, reviewed here by Lammertsma, describes the use of PIT-tags, usually a tool used by scientists to track all kinds of animals, to track the dispersal of acorns. Again one might say it's quite original.

Last in this list and first in this issue, there's an article by Thissen et al. on the distribution of the Pannonic root vole (*Microtus oeconomus mehelyi*) in Austria. Again in this case, there's no question regarding the status of the species. There's no doubt that it is part of the original fauna of Pannonia. In fact, the Pannonic root vole does one better: it's a local specialty, its range is restricted to a small part of Central Europe. Like the Dutch subspecies *Microtus oeconomus oeconomus*, it is an endemic subspecies; and its origin is in this region – and nowhere else. While the steppe wisent became extinct when the last ice age ended, the root vole clung on to existence and became an ice age relict. The preservation of the species through careful management therefore deserves our attention.

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