Enjoying Lutra!

Over the past four years I have had the great fortune to spend the late spring, until early autumn, in Norway in a house on the island of Sula, along the Hagenfjord, close to the mouth of the Sognefjord. In this time I have had around forty casual encounters with otters (*Lutra lutra*). All these encounters were special for me, even if most of the observations confirmed typical otter behaviour: a trail of air bubbles, clearly visible especially during calm weather, betraying the course the animal followed before surfacing again. Or, an otter dashing over and between the rockweed (*Fucus vesiculosus*) during low tide, sometimes playfully but now and then stopping to consume a small crab or fish racing for deeper water. Once I saw a couple of otters in the fjord, right in front of the house, diving and surfacing with small fish, making several wild bites, swallowing and diving again. When one caught a bigger fish, it was taken and devoured ashore. Afterwards I saw the same individual galloping inside a large concrete tube, obviously sprainting, before dashing out again and returning to the water. The other otter caught a fish in a water pool, killed it with a quick bite, swallowed the fish and returned into the water again. After watching them for more than an hour the two animals disappeared.

On two occasions I saw new (to me) patterns of otter behaviour. The first was a female with several youngsters in the water, regularly diving for food. The pattern displayed was: the female went down with the cubs following. Then the adult emerged, often without food, but sometimes with a fish. Usually the cubs had already surfaced, and when the female appeared, the youngsters raced towards their mother uttering high pitched squeaks and devouring pieces of the prey. And then they dived again from the same place. Once submerged, they spread out in different directions. During those dives each cub apparently followed its own centrifugal path, exploring the sea bottom. At the end of their exploratory dive, perhaps close to oxygen depleted, they instinctively went straight upwards and after surfacing gravitated towards their mother. This pattern repeated itself several times.

The locomotor activity of an otter at the surface, almost always follows the same pattern: emerging, swimming short distances at the surface, submerging with the middle of the back bending towards an angle of approximately 90º and starting their search for prey. After catching a bigger fish or when their search has ended, otters swim in a straight line towards the coastline, staying surfaced, devouring their prey ashore or just disappearing between the rocks. Last summer the yearly event of spawning mackerel entering the Hagenfjord was late. During these weeks no otters were observed. Then a single otter appeared in the water, right beyond the observation point, displaying a remarkable

swimming behaviour that I had not noticed before. The otter stayed more or less at the surface, without diving, but instead of diving, only keeping its head under water and alternately swimming head down in bursts of straight lines for one or two metres and then heading up. This could be described as a 'dolphin stroke'. Then the otter followed a straight line towards the other side of the 400 m wide Hagenfjord using this same stroke. This was really unusual behaviour. At first, I thought this swimming stroke was because of the absence of fish: that he or she was 'fast scanning' the deeper waters in. Later, when the mackerel came by the thousands, another observation of an otter (the same specimen?) displayed the same type of locomotion. Was this otter, with its remarkable swimming behaviour, suffering from a highly advanced vertebral arthrosis? A disorder already reported from this area (Bekker 2019). I really do not know. Maybe somebody else has observed a similar type of swimming behaviour?

On all these occasions I felt very privileged to have had the opportunity to enjoy the presence of this beautiful mammal. And I hope that all readers of this edition of the *Lutra* journal will enjoy its contents as much as I have enjoyed observing individual *Lutra*, face to face.

This issue completes the 65th volume of *Lutra*. Whereas last October's special issue focused exclusively on bats, this issue covers a variety of mammals and subjects. Two contributions highlight marine mammals. Haelters et al. report on the extremely high number of grey (*Halichoerus grypus*) and harbour seals (*Phoca vitulina*) that washed ashore on Belgian beaches in 2021. From necropsies and photographs the authors found out that most deaths were human-related, which, they argue, stresses the need to re-evaluate the phenomenon of 'by-catch'. In another marine study, Raemakers & Oosterbaan investigate deformed whale bones of at least six species (mostly harbour porpoise - *Phocoena phocoena*), from the North Sea and discuss the possible influence that these malformations may have had on the whales' health.

This *Lutra* also dives into the past with Govaert's study of beavers' (*Castor fiber*) historical presence in the river IJssel. By meticulously studying preserved financial records, the author comes to the conclusion that, surprisingly, beavers, after (almost) being driven to extinction by the year 1400, must have been present in large numbers in the IJssel in the second half of the fifteenth century.

Bats also feature in this issue, albeit this time not as hibernators. Jonker et al. compare the activity of common pipistrelles (*Pipistrellus pipistrellus*) around white and the now widely-used bat-friendly, but expensive, amber street lighting, with a special kind of (phosphor converted) amber light. The latter is more energy-efficient, cheaper to run and also provides better visibility to humans. The authors give advice on how to repeat the experiment to arrive at more decisive conclusions, which they could not draw from their study.

Mammal ecologists nowadays commonly use (stand-alone) trail cameras to detect and monitor mammals. But these are suited mainly for animals of a certain size. In this issue Smaal & van Manen introduce a device, called a *Struikrover*, which includes an adjusted trail camera, to study mammals up to the size of a western polecat (*Mustela putorius*). They provide recommendations on how to best use Struikrover for the optimal results.

At the end of this year I will step down as a member of the editorial board of *Lutra*. Since I joined the board in 2003, when *Lutra* published a beaver special, I have felt a great camaraderie with my fellow editors, and especially from Ben Verboom, the current managing editor, with whom I closely collaborated

to prepare and finalize *Lutra's* latest special issue, on hibernating bats. Over the years, the editors of *Lutra* have produced a wealth of inspiring issues, and I feel privileged to have taken part in this work. I wish the journal a prosperous future, full of sparklingly creative and appealing intellectual manuscripts, that will attract more and more readers.

References

Bekker, J.P. 2019. Skeleton of an otter (*Lutra lutra*) with some regular and remarkable alterations. Lutra 62 (2): 77-88.

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