Introduction to the Special Issue

The last observations of Eurasian otter (*Lutra lutra*) in the Alpine region go back to the late seventies, in relation to the decrease of the species observed in most of Europe.

Causes behind this decrease are the same: habitat destruction, direct persecution of the species and, maybe in a smaller quote for the protected area, pollution of the aquatic ecosystem.

But, while in the last years otters are naturally recovering throughout most of the European countries, in the Alpine region this phenomenon is absent or slowed down.

The fundamental politics of conservation that have favoured the return of the species clearly cover also this region, but the Alps may represent for otters an extreme habitat, and, especially in the western part, with few mountain crosses to pass by. This may suggests that the actual conservation strategies are not enough to consistently favour the presence of the species across the Alpine region, which, anyway, represents a fundamental corridors for the expansion of the otters in Europe.

As a matter of fact, only sporadic observations or, sadly, recovery of carcasses of dead individuals, have been reported in the region up to now, suggesting some attempts of otters to expand between the different countries bordering the Alps.

To date, status, presence and distribution of this species in the Alps is unclear, and this is the reason of the present special issue of the Journal of Mountain Ecology edited by the Gran Paradiso National Park (GPNP) and dedicated to Eurasian otter with the contribution of most of the European experts.

As early as the late 1980s, the GPNP started a project on the Eurasian otter, an ambitious plan that aimed to realize a centre for breeding animals for a future reintroduction project, as part of an "*ex situ*" conservation project.

The project changed over the years but it allowed the Park to deepen its knowledge on the possibility of the return for this species; all these efforts have been concretised in a scientific and outreach centre names "Acqua & Biodiversità" (Water and Biodiversity) entirely dedicated to the aquatic ecosystems, where captive otters are hosted as ambassadors of the importance to conserve these environments.

This Centre hosted, in 2018, a specialist workshop titled "*Eurasian otters in the Alps: towards a common strategy across boundaries*". All experts involved in the monitoring, study and management of the species in the Alps were invited to the event, with the aim of producing a detailed scenario of the actual situation of the species in an environment not easy to monitor. The contributions presented at the conference were collected in this special issue of the *Journal of Mountain Ecology* to favour the distribution of results.

Making the point on distribution and conservation status of the otter in the Alpine region is the first step towards possible European strategies aimed at promoting the expansion and conservation of the species, also through the protection of its habitat.

The Editorial Board Journal of Mountain Ecology