



Knowledge is the key to protection

Species protection starts with knowledge about the distribution of a species and the factors that are responsible for its decline. Most of the distribution data available for our mammal species are not systematically collected in a standardised way. Many mammal databases, if available at all, are a jumble of incidental sightings which are difficult to interpret, as the article on whales and dolphins in this edition of *Lutra* shows. Mostly they can only be used to say something on presence/absence of a species.

Luckily more and more people who try to protect mammals realise that such data are not sufficient to draw conclusions about species population dynamics. Over the last few years standardised monitoring schemes have been set up for several species and hopefully more will follow. Mammal protection societies play a key role in making these monitoring schemes financially possible by mobilising and co-ordinating networks of volunteers, which are indispensable for gathering the information needed to protect our mammal species.

When working with volunteers, it is very important to train them and validate the data they gather. But even then some data will remain dubious. Just look at the wolves that recently appeared in Wallony or the lynxes in the Flemish region of Voeren. Did they get there on their own or did humans give them a helping hand? In the case of the lynx, natural dispersal from the German Eiffel population is possible. But wolves arriving here

by themselves? There are plenty of illegal private zoos from which they could have escaped. Certain organisations support the reintroduction of wolves and even brown bears in our regions. Keeping this in the back of your mind, the interpretation of sightings of 'unusual' mammals should be done with care.

But our 'ordinary' mammals are also moved around more than we realise. Wounded or baby mammals, like squirrels and hedgehogs, are brought to reception centres and when fit are released somewhere else, people move animals that they like to their garden or release pets that they are tired of somewhere in nature, hunters translocate rabbits and roe deer to 'bring new blood into the population' and so on. This makes it even more difficult to interpret changes in species' distributions and the underlying causes.

Apart from knowledge about the distribution of a species, we need to understand which elements of the habitat are important for its survival in order to be able to maintain or restore these elements. One such important element is the presence of sufficient food resources and the possibility to shift to other resources. The latter requires either a habitat that comprises very diverse food items within a limited space, or a well connected habitat in order to reach other patches when preferred food resources become scarce. These are two elements that are often lacking in our fragmented, functional and monocultural habitats and certainly need our attention if we want to protect species.

The disadvantage of this kind of research is that it often requires more specialised and expensive methods, such as telemetry, DNA and faecal analyses, which are usually beyond the capacity of volunteers. It is very important to convince the government of the necessity of such research to get the requisite funds. In this edition of *Lutra*, two articles on our larger mammal carnivores, the otter and the stone marten, provide more information on dietary preferences and space use.

The article on the development of mammal fauna in a city park, which pays special attention to

hares and rabbits, also covers the previously mentioned subjects of distribution, population development, habitat characteristics and connectivity. It also raises other issues that appear to be important, such as the possible effects of interactions with other species, e.g. through competition or predation, or the effect of disease. A second rabbit article adds another element to the equation, namely the presence of refuges. Together with other elements these make up the complex ecological system that we need to understand as well as possible in order to be able to take the right protection measures. We still have a lot to learn!

