

tures overnight. In the meanwhile, we will also test possible habituation of wolves to such barriers, because we do not want to recommend implementation of a technique that will only work temporarily. Specifically, wolf researchers should avoid public opinion over-reactions to unexpected livestock losses due to wild wolves habituating to such barriers!

We believe that the *fladry* technique has great potential for wolf management. The use of *fladry* for wolf capture is currently being implemented. Further research is needed as soon as possible in order to evaluate the use of *fladry* to protect livestock in areas where conflicts between wolves and shepherds are arising.

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Electric Fences and Fladries in Romania

The *Carpathian Large Carnivore Project* is an international joint initiative of the Munich Wildlife Society and the Romanian State Forest Administration. Goal of the project is to establish a community-based conservation of large carnivores and their habitat in a model region in the southern Carpathians through an integrated management approach. Mitigation of conflicts between large carnivores and livestock breeders is an important part of our management and conservation concept.

In the Romanian Carpathians, flocks are traditionally *guarded* with shepherds and guarding dogs. This method is very effective and only about 2% of all sheep are taken annually by wolves and bears. Still, many livestock owners consider large carnivores a pest. Social and economic conditions are changing in Romania, and it is likely that this intensive guarding system will not be economically feasible anymore, once salaries are rising.

To *counteract* this, our project initiated a programme to improve the livestock guarding system

and to find alternatives to the intensive guarding. Electric fences and fladry seem to be two possible solutions. During fall and winter 1999, we equipped two shepherd camps with 12 V powered electric fences in order to test the difficulties in running the camps under the specific Romanian conditions (e.g. no access to electric current or little technical understanding of shepherds). Starting from May 2000, we will equip 10 shepherd camps during the summer grazing season with electric fences, to test their effectiveness against wolves and bears. Based on the experiences of Musiani, we further plan to equip 5 camps with fladry equipment. We will monitor all equipped shepherd camps and 15 control camps without additional protection and compare the results with data from shepherd camps monitored in 1998 and 1999.

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Norwegian Brown Bears: Holders of an Unwanted World Record

When flying over Norway, it appears that the forests and mountains are endless. Compared to a similar flight over other areas of western Europe the signs of human occupation are minimal. Surely if there is anywhere for brown bears to have a chance to survive and thrive in Europe it must be here? Unfortunately the answer is not necessarily yes. The forests of Norway represent superb brown bear habitat. There are plenty of moose, ants and blueberries and other things that bears like to eat. It is no problem to find good denning sites under anthills or spruce trees. Even though the forestry industry is intensive, this appears to have no negative effects on brown bears, as the population in neighbouring Sweden is thriving where forestry is even more intensive. So, what's the problem?

The problem is that bears do not confine themselves to eating moose, blueberries and ants. Every summer, over 2 million domestic sheep are released into the forests and mountains of Norway. These graze freely without any supervision in the form of shepherds or dogs for up to 3 months. During these three months there is nothing to prevent bears (and other large carnivores like lynx, wolverine and wolves) from helping themselves *ad libitum*. Unfortunately for farmers, managers, and conservationists ali-