

# Implementing a Beaver Management in Lower Austria – first results and further steps



**PARZ-GOLLNER Rosemarie & HÖLZLER Gerald**  
 Institute of Wildlife Biology and Game Management  
 Gregor-Mendel-Strasse 33, A-1180 Vienna, Austria

rosemarie.parz-gollner@boku.ac.at, gerald.hoelzler@boku.ac.at  
 www.iwj.at



**University of Natural Resources and Applied Life Sciences, Vienna**  
 Department of Integrative Biology and Biodiversity Research

## Introduction

The beaver distribution in Austria is concentrated along the main lowland river systems Danube, March and Inn (Fig.1). Approximately 3000 beavers are the national population estimate with Lower Austria holding the majority of at least 2000 individuals (status 2006). The ongoing expansion and colonization of numerous man made and modified waterbodies in the cultural landscape has increased the number of conflicts between beavers and human caused interests.



Fig. 1: Beaver distribution in Austria 2006 (N2000 report, Parz-Gollner et al. 2006).

## Stepwise concept for conflict resolution

Provided that the favourable status of the species is secure a stepwise action plan has been issued by Nature Conservation Authorities in Lower Austria in the winter season 2006/07. Derogations are time and area restricted focusing on locally adapted case specific solution.

1. damage prevention
2. habitat modifications
3. trapping and killing of individuals



No authorization for translocations of individuals on a national level or for the transfer of beavers to foreign countries has been issued by the governmental bodies during the past three years.



Fig. 3: Leveler (left) and electro-fences (right) are used to control effects of beaver activities.

## Reported conflict cases

conflict categories (N = 90)	%
Water engineering	30
Infrastructure, human settlements	28
Agriculture	24
Ponds	12
Forestry	6

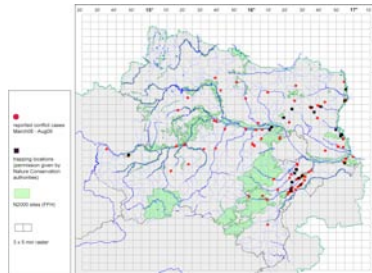


Fig. 2: Distribution of beaver conflict cases and trapping locations (03/08 – 08/09)



## Results

Conflict cases handled by the Beaver Management were categorized and efficiency of measures taken evaluated for 90 cases of known status (09/2006 – 03/2009). All together mitigation measures used are considered to reduce or solve conflicts in about 60% of registered cases under investigation. Derogations for trapping beavers have been used in 14 cases (see Fig.2). Applications for the removal of beavers have increased during the past three years. So far 4 (2006), 16 (2007), 25 (2008) and 18 beavers (until March 2009) have been trapped and killed.

Weight, morphometric measurements, determination of sex as well as tissue samples for genetic analyses, glands and skulls are taken and stored from all beavers trapped under survey of the existing beaver management. Data about reported road kills (car collisions) are also collected and stored in a data base.



## Discussion and further strategies

Recently two new funding guidelines have been implemented as additional financial tools to support conflict resolution covering to some extent extra maintenance repair costs with respect to water resources management as well as to offer limited financial support for set asides in forestry along rivers inhabited by beavers. Relevant funding though is restricted to Natura 2000 sites.

A more general discussion among interest groups and policy is taking place dealing with the role and capacity of Natura 2000 sites also with respect to the ongoing expansion of beaver settlements and the common agricultural policy as well as land use and nature conservation strategies.

Beavers are seen to act as key-stone species, actively modifying and improving wetlands habitat conditions and thus contributing to biodiversity in multiple ways. Significant effects of beaver activities depend greatly on the topography of waterbodies, size of area involved and possibilities to integrate and balance land use and conservation targets.

Financial Funding by

