

INTERCAFE@Saxony Meeting Summary

The meeting held in Bautzen, Germany (1st -3rd October 2005) was the third scientific meeting of INTERCAFE. The meeting was designed so that there was time for the work groups and subgroups to continue with their activities (see Project information for aims and objectives of INTERCAFE)

WG1 (Ecological databases and analyses) primarily undertook four activities during the Saxony meeting:

Field trip analysis: WG1 focussed on an analysis of ecological aspects in relation to cormorant presence in the whole carp pond area. Taking into account basic data on cormorant behaviour and ecological requirements, as well as information on the water-system in the study area gathered both during the field trip (carp producers, ecologists, ornithologists) and published information (report and papers), WG1 members devised a simple predator-prey model. Apart from putting on the paper some simple estimates of numbers so as to quantify the size of the numerous interacting parameters, this exercise was also useful as a basis for drawing different scenarios for the management of the carp aquaculture in relation to (a) the likely further development of the cormorant population (and those of other fish-eating predators) on a local and regional/continental scale, (b) the use of funds for the reimbursement of damage and (c) losses due to fish-eating predation.

Current status of the Water System Database: preparation and analysis: As already discussed in Gdansk, the aim of this water system database is to investigate the ecology of cormorants at the continental level, particularly their temporal and spatial status and distribution and choice of breeding roosting and foraging sites. Analysis of these data at the continental scale in relation to ecological characteristics (e.g. geographical, climatological, biological – size, nutrient status, fish communities etc) through a Geographic Information System will provide better understanding of current cormorant distribution across Europe and could also allow predictions of their future distribution. Furthermore, this improved understanding in relation to ecological system characteristics would enable the investigation of site-choice (i.e. breeding, foraging) by cormorants and could lead to more effective widespread management options. In order to be as representative as possible of the main water system types in Europe, and to attempt to obtain a representative coverage of the distribution of case-studies in Europe, work in Saxony consisted mostly of a careful examination of the currently available water system case studies in the database, in order to determine which water system examples were needed for each country.

Historical Database of Cormorant Breeding Colonies: The database has been designed to contain information useful not only for documenting the change of colony distribution and population development in Europe, but even for feeding into the Water System Database and providing layers for GIS analysis. Thus the historical database is aimed at gathering referenced information on colony distribution, size, habitat, cormorant/colony management measures, date references.

Cormorant Manual: Discussion on the content of the Cormorant manual and responsibilities for contributing to each chapter.

WG2 (Conflict management and resolution) concentrated on three activities:

- **An understanding of definitions:** It was agreed previously that there was a need to establish and maintain a common understanding of relevant terminology and definitions among the participants, notably '*favourable conservation status*', '*sustainable fishery*', '*serious damage*' and '*successful conflict resolution*'. These definitions were discussed at the meeting.
- **An overview of legal frameworks:** Information is being collected on which countries protect cormorants, which countries do not protect cormorants, which countries have a management plan and culling trends.
- **Cormorant Management in European countries:** Several presentations were given including:
 - “Cormorants in Austria – conflicts focusing on river-systems”
 - “Conflicts and solutions in the Czech Republic”
 - “Cormorants in Bulgaria- case study of a warm-water reservoir”
 - “Cormorant conflicts and control measures in Italy”
 - “Management plan for the Cormorant in Denmark 2002 – 2007”
 - “Monitoring Cormorant numbers in Norway”

WG3 (Linking science with policy and best practice) undertook a number of activities during the meeting. In Saxony the emphasis was on an in-depth exploration of some aspects of the wider social, cultural and political issues that may influence conflicts.

Four presentations were given by national representatives, including:

- Lake Hjälmaren, fish, the fishery and cormorants -a case study from a Swedish inland water (a case study involving apparently successful conflict management at one site but failure to transfer this to another).
- Governance and knowledge: concepts used for studying human-wildlife and environmental conflicts.

WG3 also worked in smaller groups to discuss issues surrounding governance and what works well and less well when extending 'solutions' from one place to another, even though the context looks similar.

- Role of the Media in Forming Attitudes towards Cormorants (focus on Lithuania)
- The Role of Power in Human-Wildlife Conflicts in relation to the 'wolf conflict' in Norway

WG3 then worked in groups to discuss, “Is consensus among all stakeholders the goal”?

Fieldtrip

The meeting also explored the theme of issues surrounding cormorant interactions with carp aquaculture systems. Saxony is an ideal setting for this meeting as the area has developed a unique financial compensation scheme for fish farmers and a forum has been developed whereby biologists, fish farmers and regional politicians can discuss matters, collaborate and find satisfactory solutions. The compensation scheme is known to be subjective but has gone some way to mitigate local concerns about fish losses to cormorants. The Saxony situation is thus strikingly different from others in

operation (at broadly similar aquaculture systems), which focus on the use of such things as protective barriers and intensive scaring of birds.

The purpose of the field trip in Upper Lusatia was to understand more about the way local stakeholders framed issues around cormorant-fisheries conflicts, and the problems and opportunities resulting from these. Upper Lusatia is the centre of carp production in Saxony and holds a large concentration of fish ponds. Carp production is an important part of local culture and history; the oldest maps show fish ponds from the 15th century.

The INTERCAFE group was briefed by local carp pond aquaculture experts and German scientists who knew the areas. On the field trip the group were joined by local business people and carp pond experts, a colleague from Biosphere Reserve Administration, local scientists and ornithologists. Places visited included:

- *An annual harvest festival celebrating carp and carp production*
The festival marks the opening of the fish harvest season. The festival is an important marketing activity (in combination with angling and tourism) to promote a regional product. It helps to anchor the culture and economic base in the minds of local people and visitors.
- *A carp pond aquaculture business*
The company started in 1992. It produces mainly Lusatian Mirror Carp but also grows pike, catfish, tench and sturgeon as well as some ornamental coloured fish. Fish is sold at low prices. The fish farmers have no influence on the price they receive for their fish so besides changes in the political system, the socio-economic position of fish-farmers is under pressure as well. Competition (e.g. from Poland and Czech Republic) is under-cutting the price of carp.
Cormorants are considered to be a problem-an average number of 1,000 rises to 4,000 in August to September. The balance between fish farming and cormorants is a difficult issue. *“This issue is never free of conflicts”* the company owner stated. Compensation is paid and companies can get permission to remove nests and eggs by flushing out nests with high-pressure water sprays.
- *Old open-cast mining*
Former open-cast coal mines in Lusatia are being converted into artificial lakes, largely by ceasing to drain water from the mines and by pumping water from the River Spree systems. Some artificial lakes have island which provide potential breeding territory for cormorants and other birds.
- *Biosphere Reserve “Upper Lusatian heath and pond landscape”*
The Biosphere Reserve aims to create a stakeholders’ network to promote different activities, including tourism. During summer weekends the Reserve receives between 200-300 visitors a day in the area INTERCAFE visited. Most tourism is day visits. The Reserve has 200-300 beds in hotels, 200 beds in private homes and 1000 camping spaces. Anglers, eco-tourists and other tourists presumably have a stake in the area as well as the commercial and agricultural sectors and water regulators.
- *Water reservoir and Quitzdorf Special Protected Area (SPA)*
A few kilometres from this lake is a reservoir (Talsperre Quitzdorf) created between 1965 and 1972. The reservoir’s main function is to supply water for

industry but also for aquaculture and to provide flood protection. The reservoir is also used for recreation, angling and nature conservation. The gradient is low so there are plenty of wetland areas suitable for birds when water levels fall. Birds are protected.

Cormorants use the reservoir during migration and roosting. Recently seven cormorants tried to establish nests but the nests were destroyed. The INTERCAFE group were told that as the cormorants also stay to feed in the reservoir there are no conflicts with surrounding fish farmers. It is important to note that other fish-eating predators also inhabit the reserve including: 150 white tailed eagles, 400 otters, heron, egrets and gulls.

Management measures for cormorants in the Reserve include:

- Nest destruction (only possible if a nest does not have eggs and after negotiation with the Reserve management)
- Scaring (which could be done by shooting some birds – up to 250, although about 600 cormorants were shot each year in Saxony). Scaring is not allowed when other protected bird species, for example eagles, are nesting.
- Pyrotechnics and noise machines have been attempted but seem ineffective as the birds adapt to them.

Compensation

Compensation payments are another measure for managing conflicts with cormorants, an approach that creates a positive climate for negotiations with fishermen. Compensation payments support the carp-rearing businesses but the continuation of these financial payments are not assured. Conflicts with cormorant would likely increase if compensation declines.