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OTTERS AND FISHERIES - WORKSHOP REPORT

Marcela Kucerová

Czech Otter Foundation Fund, Trebízského 457, Trebon, 379 01, Czech Republic.

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3rd European Congress of Mammalogy in Jyväskylä, Finland on 31st May 1999
Chairpersons: Marcela KUCEROVÁ and Claus REUTHER

Abstract: Through history, human and otters have been in competition for resources such as fish. The result of the recovery of otter populations, especially in central Europe, is likely to lead to an escalation of this conflict, and solutions are needed urgently. We recommend not treating fishermen and fish farmers as enemies but as partners, to learn about their problems and how they perceive them, to take those problems seriously as they are our problems too, to remember that it takes time to build confidence between people concerned, to use the knowledge gained to develop clear, useful project objectives and avoid duplication of effort, and to make the results available as soon as possible. Important aspects to consider are sociological (we should carry out studies to find out opinion and perceptions of all parties involved), economic (marketing studies should be carried out not only on the ecotourism potential of otters, but whether fish advertised as being produced using otter-friendly methods from places that protect otters would be an attractive product to the consumer), evaluation (independent estimation of otter damage is needed, along with clear guidelines on what 'damage' consists of, and compensation criteria), preventative measures (electric fences, repellents etc to deter otters from using particular locations) and education (the otters' attractive appearance and appeal makes it an ideal species for work with the public, school children and tourists, but a different kind of public relations work is needed for interest groups with years of negative attitudes to otters have to be overcome). The main conclusion of the workshop was that greater cooperation and exchange of information between people who work with otters is needed. Greater effort must be put into evaluating possible economic losses for fish farmers and fishermen, searching for alternative solutions that can change their attitudes towards otters.

INTRODUCTION

Throughout history, humans and otters have come into conflict when their usage of resources, e.g. fish, has overlapped. In the past, the most common method of reducing this conflict was to lower the number of otters. However, over this century, persecution and environmental degradation have resulted in the otter becoming a highly endangered species in Europe. However, in some areas, otter populations are now recovering and conflicts between the otter and fish farming are arising again. This is particularly so around Central Europe, where a centuries old tradition of semi-intensive carp farming is now facing new problems, e.g. a changing economic climate.

A short introduction was followed by a speech from Claus Reuther that brought up several viewpoints on the present situation in otter conservation and fish farming. He underlined that solutions for this immanent conflict have to be developed now - before an emotional and political based controversy arises on a wider scale. The argument that at present the conflict is restricted to some local focal points should not be seen as an argument to ignore the problem but on the contrary as a chance to find solutions before the conflict will escalate. He further recommended:

- Do not handle fishermen as enemies, make them partners.

- Co-operate with fishermen, try to learn how they think, how they work, and what problems they have.
- Take the problems of the fishermen seriously (their problems are your problems!).
- Be aware that it needs time to develop a base of confidence, don't give up too early, and be so honest as to admit that you also meet fishermen with distrust.
- Use the knowledge you earn from these contacts to define and to formulate clear targets for research and test projects.
- Don't formulate these targets on an academic base only; incorporate the practical experience of fishermen and the scientific knowledge of fishery research institutions.
- Make and keep contact with other otter people dealing with the conflict.
- Contribute in preventing 'double studies', co-operate with colleagues working on the same or a similar problem in a way that the output is increased and the results complement one another.
- Make results available as soon as possible and publish ideas for further questions that need answers.

Country reports were presented by Gilbert Ludwig (Finland), Rosemary Green (Great Britain (mainly Scotland)), Marcela Kucerová (Czech Republic), and Marcela Kucerová (on behalf of Michaela Bodner - Austria). In addition, at very short notice, summary reports were presented by: Aksel Bo Madsen (Denmark), Jerzy Romanowski (Poland), Marjena H. Adamik (Slovenia), Claus Reuther (Germany), and Linus Balciauskas (Lithuania).

Following the presentation of reports, 5 common discussion headings were identified, i.e. sociology (attitudes of fish producers), economy (development of marketing concepts for compensation of damages by a higher price level or by introducing other sources of income, prevention (development of technical or biological measures of defence or distraction), evaluation (how to verify damages in fish production facilities, especially related to the otter) and education.

SOCIOLOGY

When addressing a problem it is always important to find the opinion of the other side involved. Sociological studies (such as questionnaires) are one of the possible ways of getting the data required. Such information should be used for the preparation of not only protection measures but also future projects in otter research and conservation. Some countries (e.g. Czech Rep., Finland) have already undertaken such studies and differing results were found, highlighting the importance of assessing local opinion.

Several points were brought up:

- Opinions depend on the social status of the farmer (whether state owned, company, or private) = level of personal involvement.
- Answering can depend on the perceived level of the problem (no problem = no answer)
- When the problem is perceived as large, answers are frequently based upon emotion rather than analysis.
- Badly styled questionnaires can 'create' a problem - increasing the likelihood of the otter receiving the blame for damages - providing a 'scapegoat'.
- Surveys should be repeated at regular intervals or following protective measures.
- The questions should not be only about the otter, ask about other things also, e.g. poaching.
- It is better to use professionals – they are unbiased and can 'cover' the real aim of the study.
- It is recommended questions are asked through a personal interview, rather than by post or phone.

A careful survey will show the fisherman that you recognise his problems and that you are willing to listen and learn. The information received will help highlight problem areas and direct limited funds to those areas where work is needed most. Sometimes the sociological survey can give rise to new ideas and partnerships.

Projects suggested:

When funds are available, each country facing a problem regarding otter predation and fish farming should undertake a survey connected with this issue. It may be possible to get funds for surveys by highlighting cross border co-operation or by involving several countries.

ECONOMY

Some countries (e.g. Germany, Netherlands) have begun to use the otter as a marketing tool, i.e. fish produced in an area with a protected species - emphasise the positive public reaction to otter. With the breakdown of socialist style economies in Central and Eastern European countries, many traditional markets for fish have broken down due to economic pressures. Further, traditional farming techniques are becoming more intensive because of competition and the rush for profits (no State subsidies). Alternatively, new markets are opening as less red meat is being eaten and, in some counties, the public shows a preference for more extensive farming techniques.

Another possibility for a form of compensation for fishermen could be tourism, e.g. 'ecotourism' - taking holidays in an area famous for its otters (and other wetland species), or angling (this may bring in more money to the smaller businessman than selling the fish direct).

Recommendations:

- Undertake market studies in each country or apply studies undertaken in similar conditions – each country has different mechanisms/attitudes – there is no catchall method.
- There is an increase in recognition of 'the value of nature and natural systems' – use it; changing markets and tourism all offer new possibilities.
- Funding and experience - possibilities exist within the European Community for economic and marketing aid, funds for sustainable development and traditional techniques, professional assistance, etc.
- Test project proposed for Central Europe - new possibilities for carp marketing (Aqualutra Otterpark Leeuwarden, Netherlands and Czech Otter Foundation Fund - joint project in discussion).

EVALUATION

In this discussion, it was stressed that an independent assessment of any damage claimed is required and, when the level of damage is estimated, other factors, such as heron, mink, fish eagle, cormorant, mismanagement, poaching and 'natural' losses, should also be considered.

Three main fisheries groups were recognised, concentrated mainly in Scandinavia, Scotland, and Central Europe:

- Sea farming (trout/salmon), mainly in lochs or fjords.
- Freshwater farming (carp/trout/other) – either in farms (intensive) or ponds or lakes (semi/intensive or extensive).
- Rivers (stocking) - mainly for sport angling (is this "damage"?).

The main problem remains how to assess 'damage' and whether and how to compensate. The actual loss to fish stocks caused by otter can be split into primary loss (actual death, consumption) and secondary loss (loss of condition, injuries, stress - sometimes leading to death, particularly following winter). The lack of information on the possible effects of disturbance of fish during winter makes such assessment very difficult. Standard and objective methods for assessing losses have yet to be provided, the only extant method being the Austrian model (BODNER, 1995) which has not proved totally successful. A new method, which was presented at the VII. IUCN Otter Colloquium in Trebon 1998 (KUCEROVÁ, in press), is in preparation in the Czech Republic. A further problem connected with this issue is poor knowledge of 'other factors' involved in fish losses, e.g. the role of pH, acidity, temperature, phytoplankton, oxygen, etc.

Projects in preparation or suggested:

The impact of otters on fish mortality in fish ponds - a joint project with WWF Austria and the Czech Otter Foundation Fund, Czech Republic - in discussion.

The impact of otters on trout rivers with and without angling activities - Czech Otter Foundation Fund - in preparation.

PREVENTIVE MEASURES

Methods of preventing otter access to fish ponds might be used at those sites with the highest level of complaints.

- Electric fencing is already standard in Scotland, however, a number of problems have arisen with their use common to all areas. For example, there are health and safety problems, planning consent is needed, it is expensive, maintenance is high, they can be ineffective in bad winters, and they can reduce the quality of the landscape for wildlife (otters), particularly in winter.
- Normal fencing (e.g. 1m high chain link) suffers from most of the above points plus they are unattractive and cannot be used in protected areas, where ponds are large or where there are many ponds.
- Other possible methods include diversion ponds stocked with uneconomic species (this measure is presently being tested in a field study in Austria (BODNER – pers. comm.).
- Bird or seal scarers (noisy).
- High frequency noise (German Aktion Fischotterschutz will try to continue a study on hearing capacity of otters which was started some years ago, but which did not recognise the aspect of scaring otters by sounds, REUTHER - pers. comm.).
- Suggested projects or projects in preparation:
- Those technical measures that have not been tested yet should be tested for their effectiveness and suitability (e.g. bird or seal scarers, high frequency noise).

Other possible preventative measures should be investigated (e.g. repellent matters - natural or synthetic – partly undertaken at the Otter Station Pavlov, Czech Republic).

EDUCATION

The otters' attractive appearance and appeal makes it an ideal species for work with the public and school children (as well as tourists). However, public relations work of a different form is required with interest groups such as fishermen and hunters, where years of bias against the otter will have to be overcome. The otter has been successfully used in a number of countries (e.g. Germany, Great Britain, Netherlands), as an 'ambassador' species, to promote healthy wetland systems and sound management practices. These activities should continue and the countries with less experience in this subject could use knowledge of those more experienced.

CONCLUSIONS

The main conclusion stressed is a need for more co-operation and exchange of information between otter people. A focal point for exchange should be created (for this subject in the meantime, please contact Michaela Bodner, Marcela Kucerová or Claus Reuther) and new information and ideas should be passed more widely, using e-mail, the World Wide Web (WWW), and the IUCN Otter Specialist Group Bulletin. More effort should be put into evaluating possible economic losses to fish stocks, but also to other alternative solutions that could change the attitude of fish-farmers (e.g. new marketing strategies using the otter).

Probably the greatest threat to the continuing recovery of the otter in Europe is the possibility of future problems regarding new/old conflicts with fish-farmers. The problem should be faced now.

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RESUMEN: Nutrias y pesquerías – reporte de un taller

A través de la historia humanos y nutrias han entrado en conflicto cuando ha habido superposición en la utilización de recursos, ej. pescado. Las soluciones para el inminente conflicto entre nutrias y pescadores, resultado de la recuperación de las poblaciones de nutrias, especialmente en Europa central, deben aplicarse ahora, antes de que la controversia alcance una escala mayor. Se recomienda no tratar a los pescadores como enemigos, sino como socios, cooperar con éstos y aprender cómo piensan, cuales son sus problemas y cómo trabajan, tomar en serio sus problemas (que son los propios), ser consciente que requiere tiempo desarrollar una base de confianza, utilizar el conocimiento generado en los contactos para formular proyectos claros, mantenerse en contacto con otras personas vinculadas al conflicto, evitar la superposición de esfuerzos y hacer disponibles los resultados en cuanto sea posible. Es importante considerar los siguientes aspectos: 1- sociológicos (es importante conocer la opinión de la otra parte, se recomienda llevar a cabo estudios tendientes a recoger esa información), 2- económicos (se puede utilizar a las nutrias como herramientas de marketing, por ej. de peces producidos en áreas que las protegen, o como elementos atractivos para el ecoturismo, se recomienda llevar a cabo estudios de mercado y buscar nuevas alternativas económicas), 3- evaluación (es necesaria la estimación independiente de los daños; es problemático determinar cómo evaluar daños y cómo compensarlos), 4- medidas preventivas (es necesaria la utilización de medidas que eviten el acceso de las nutrias a los estanques de peces en los sitios más problemáticos, pueden utilizarse cercas electrificadas y normales, mecanismos para ahuyentar, repelentes, etc.), 5- educación (el atractivo de las nutrias las hace ideales para el trabajo con el público, turistas y niños de escuela; las relaciones con pescadores, cazadores y otros grupos de interés que conceptualizan de forma negativa a las nutrias deben ser manejadas de otras formas). La principal conclusión del taller es la necesidad de mayor cooperación e intercambio de información entre la gente que trabaja con nutrias. Debe ponerse mayor esfuerzo en la evaluación de las posibles pérdidas económicas para los pescadores y en la búsqueda de soluciones alternativas que puedan cambiar la actitud de estos.