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منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Organización de las Naciones Unidas para la Agricultura y la Alimentación

EUROPEAN INLAND FISHERIES ADVISORY COMMISSION

TWENTY-FIFTH SESSION

Antalya, Turkey, 21–28 May 2008

PROGRESS REPORT
SUB-COMMISSION III – Protection of the Aquatic Resources

Chairperson: G. Castelnaud (France)
Vice-Chairperson: E. Ciccotti (Italy)
Rapporteur: C. Popa (Romania)
Technical Secretary: U. Barg (FAO)

This Sub-Commission includes four ad hoc Working Parties. Activities and achievements of the Sub-Commission during the intersessional period are summarized as follows:

Ad Hoc Working Party on the Methodologies for Rehabilitation of Lakes and Reservoirs

Convener: H. Lehtonen

A final draft of the manual on Rehabilitation of Lakes and Reservoirs for Fish by H. Lehtonen, I.G. Cowx and R. Müller, is available and has been circulated to experts for feedback. The text still requires some figures and photos. Mr Jagsch offered to provide photographs as appropriate. Blackwell Publishing is willing to publish the document. It is recommended this WP be discontinued as confirmed by the Meeting of the EIFAC Executive Committee in 2007.

Ad Hoc Working Party on the Handling of Fishes in Fisheries and Aquaculture

Convener: R. Rösch

The Convener, Mr Rösch, has gathered a core group of seven persons in order to produce a draft EIFAC position statement, as requested by the Twenty-fourth Session of the Commission. The WP has delivered at the end of February the second draft for the EIFAC position statement on "welfare of fishes in freshwater aquaculture" (as provided in Annex I). The Convenor emphasizes that a position statement should be short and precise, not going into detail, but only summarizing the relevant fields. The WP is inviting suggestions from EIFAC on the presentation and contents of such a position statement, based on which the document could be further developed. If agreeable, the WP would also begin with drafting a similar statement for inland capture fisheries. This field is even more "delicate", but it is necessary to cover it.

Ad Hoc Working Party on Prevention and Control of Bird Predation

Convener: P. Heinimaa

During the Twenty-fourth Session of the Commission Mr Petri Heinimaa became the new Convener. The Commission agreed with Mr Heinimaa that new TORs would be formulated and new experts identified.

The ad hoc Working Party on Prevention and Control of Bird Predation held a Workshop on an European Cormorant Management Plan in Bonn, Germany from 20 to 21 November 2007. The Workshop was held at the German Ministry of Food, Agriculture and Consumer Protection and attended by 29 persons from 13 EIFAC member states. The workshop report will be published online on the EIFAC home page, together with materials presented during the workshop.

The Workshop recognized that there are rising problems for fisheries and aquaculture due to the impact of a growing number of cormorants. Isolated actions to reduce the population size have failed. Therefore the initiative to start to work on a pan-European management plan is urgent.

The main conclusions of the workshop are:

- *The enormously increased impact of cormorant predation on fish species conservation and the losses caused to aquaculture pond owners, professional fishermen and anglers has reached unacceptable levels.*
- *There is a need to reduce the reproductive success of the Great Cormorant population in order to achieve a reduced population size and distribution, which is still compatible with a favourable conservation status, but also compatible with acceptable impacts on fish species conservation and on losses in enterprises living from fish.*
- *The coordination of fish and bird interests makes it necessary to explore the possibility of establishing an achievable and acceptable size and distribution for the total European breeding population.*
- *There is a need to explore the consequences of moving the cormorant to the status of Annex II, 2 of the EU Birds Directive 79/409/EEC (non-protected species).*
- *there is a need for urgent and coordinated action to manage the European cormorant population in order to reduce its impact on fish species conservation and to mitigate the losses caused to aquaculture pond owners, professional fishermen and anglers.*
- *EIFAC should take the initiative to promote the preparation and effective implementation of an European Cormorant Management Plan (ECMP) using all information from previous projects such as FRAP, INTERCAFE and others.*
- *the ECMP should include elements that can be extrapolated from the local to a pan-European level. A mechanism is needed for continued monitoring, evaluation and iterative adoption of the ECMP.*

The workshop recommendations were stated as follows:

1. *Coordinate the isolated national efforts by promoting the preparation and the implementation of an effective European Cormorant Management Plan (ECMP), involving all relevant stakeholders.*
2. *Establish a central mechanism for coordinating, monitoring and evaluating actions on cormorants.*
3. *Reduce the reproductive success of the Great Cormorant population to achieve a reduced population size and distribution, still compatible with a favourable conservation status for the cormorants.*
4. *Explore the consequences of moving the cormorant to the status of Annex II, 2 of the EU Birds Directive (not protected species).*

Ad Hoc Working Party on EU Water Framework Directive (WFD)

Convener: C. Argillier

The Twenty-fourth Session of EIFAC had decided to create a new ad hoc Working Party in charge of the questions associated with the implementation of the WFD, as recommended by the 2006 Mondsee Symposium. The new Convenor, Christine Argillier (France, Cemagref) had agreed to prepare draft Terms of Reference for this Working Party and to identify possible experts to join it.

A set of draft Terms of Reference for this WP were developed in discussion with the officers of this Sub-Commission and are proposed as follows:

- Identification of the European fisheries legislation applied to the freshwater ecosystems (stocking, catches limitation, etc.); consequences on the observed communities in terms of presence/absence of species and age structure of the dominant species populations at the European level.
- Compatibilities between WFD and fisheries legislation in the different European countries.
- Analyses of fish management practices (habitat modification, fish manipulations, etc.) as a function of water body types and the natural environment, in the member states involved in the implementation of the WFD; consequences on the fish community characteristics.
- Analyses of fishery activities as a potential indicator of the water body status and/or of the human pressure intensity. How to improve water body status by reducing or modifying fisheries?

Mrs Christine Argillier is negotiating funds with the French Ministry of Ecology to assist the activities of this WP and is planning to organise a first meeting in 2008, in order to identify the members according to the TORs and to plan the future activities.

ANNEX I

Draft of EIFAC position statement

on

Welfare of Fishes in Freshwater Aquaculture

The Twenty-fourth Session of EIFAC in 2006 recalled the significance of fish welfare issues in commercial and recreational fisheries and aquaculture and confirmed its decision of 2004 that a draft EIFAC position statement on handling of fishes be prepared for consideration by the Commission. Mr R. Roesch, the new Convenor of the EIFAC ad-hoc Working Party on "Handling of fishes in Fisheries and Aquaculture" gathered a group of experts to prepare a draft EIFAC position statement, with particular emphasis and focus on freshwater aquaculture. The following provides an initial draft for possible text of such a position statement, for consideration by EIFAC.

1. Preface

A wide variety of fish species are reared in European freshwater aquaculture. The rearing systems extend from semi-natural ponds up to re-circulated systems with low water requirement.

Welfare and quality of cultured fish are closely linked, i.e. maintaining good welfare is in the farmer's own interests. Only healthy fish, reared under optimal conditions, show good food utilization and good growth. Such rearing techniques also influence final product quality.

Views on the welfare of fish vary widely, although anthropomorphic views must be avoided. It is common sense to take care of the fish in a responsible manner and to reduce stress as much as possible. However, Some level of stress is unavoidable and is a normal situation in the wild as well as in aquaculture.

Welfare should not be considered for single steps of production only, but for the whole life cycle of the animal as an holistic approach: from egg incubation until slaughter prior to marketing. Disturbances in early life stages may have long-term consequences for the fish.

Each species and each life stage has its own requirements. Among others, this concerns water quality (e.g. optimum, acceptable and safe ranges for temperature oxygen, etc.), rearing conditions (rearing devices, light, etc) and nutrition (food quality and quantity).

The aim of this position statement is to provide a general idea on welfare of fishes in freshwater aquaculture, not a compendium on the actual knowledge or research activities. Only general topics are addressed, which are valid for all species and all rearing systems used.

2. Welfare

The following section is subdivided into rearing, responsibility of the stockman and transport. A few suggestions for further research are included.

2.1 Rearing

- The site of the rearing unit should be chosen according to the requirements of the respective species
- Rearing units/equipment should have smooth surfaces i.e., no sharp edges, etc.
- If available or necessary, only use of strains of fish with low incidence of deformities, higher stress tolerance, etc.
- Each species/stage has its own requirements for water quality. Water quality parameters should be maintained at optimum levels for the respective species, i.e. not exceeding a maximum value (example: Ammonia, etc) or a minimum (example: oxygen content).
- Fish density should be adjusted, such that the above mentioned water quality criteria are fulfilled.

- Diets shall cover the requirements of the respective species and age/size. Here the responsibility of the feed industry is involved, as commercial are in common use and unbalanced food composition may compromise welfare. Special attention should be paid to the incorporation of plant sources as (partly) replacement of fish meal and fish oil.
- In technical rearing systems: redundant technique, with the most relevant water quality parameters under permanent control with effective alarm systems, in case of system failure emergency system(s) available.
- Disease free stock prevention or vaccination are preferable to treatment. This includes also careful documentation of the history of fish stocks (import, export, disease cases, treatments, etc.)
- Handling/grading of the fish only when necessary, for instance in order to avoid cannibalism or antagonistic behaviour.

2.2 Responsibility of the stockman

- Well trained, skilled staff.
- In technical systems redundant technique with alarm systems, fish under permanent control.
- Feeding in a manner to enable all fish have even access to the diet provided, thus avoiding unnecessary competition for food and consequences such as uneven growth and unnecessary grading, etc.
- Management procedures (handling) reduced to a minimum.
- Culture environment maintained so as to ensure minimal stress to the fish.
- Equipment (tanks, nets, etc) should not to harm the fish (no sharp edges, smooth surface, etc.).
- Close collaboration with veterinarians in order to monitor health status and to detect diseases at an early stage.

2.3 Transport

- Tanks constructed in order to minimize stress to the fish.
- Only healthy fish, previously fasted should be transported.
- Transport equipment should be maintained so as to ensure good water quality over the duration of the transport, changes in water quality parameters as little as possible.

2.4 Killing for slaughter:

- Stunning before killing should be as effective and humane as possible.

3. Suggestions for further research

In most cases it is extremely difficult to determine if welfare criteria as given above are fulfilled. Therefore it is necessary to develop **operational welfare indicators (OWI**). OWI must be easy to be determined and easy to be used.

29 February 2008

Roland Rösch

ANNEX II

Terms of Reference for a new EIFAC Working Party in charge of the questions associated with the implementation of the European Water Framework Directive (EWFD)

Considering that according to the EWFD:

- fish fauna is a key quality element of any given aquatic system (i.e. lake, river with their estuary and any others transitional water) valuable for their assessment and that fish-based assessment methods like indices, are under development for rivers, coastal waters and lakes at the European scale;
- "**high status or Reference Conditions** should reflect a state in the present or in the past corresponding to very low pressure, without the effects of major industrialisation, urbanisation and intensification of agriculture, and **with only very minor modification of** physicochemistry, hydromorphology and **biology**"
- reference conditions provide a baseline against which to measure the effects of past and present activities. The ecological status varying from good through moderate and poor to bad, is defined regarding the deviation of the quality element from reference conditions ;
- fish and fisheries management practices, fish manipulations and lake restoration tools are widespread practices modifying the natural fish communities, but also, if correctly dealt with, can promote the maintenance of the quality, diversity and availability of living aquatic resources.

The Terms of Reference of the Working Party are defined as follows:

- identification of the European fisheries legislation applied to the transitional and freshwater ecosystems (stocking, catches limitation…),with their consequences on the observed communities in terms of presence/absence of species, relative abundance and age structure of the dominant species populations at the European level;
- compatibilities between EWFD and fisheries legislation in the different European countries;
- evaluation of the impact of EWFD on the socio-economical dimensions of inland fisheries;
- analysis of fish management practices (habitat modification, fish manipulations …) as a function of the water body types and the natural environment, in the member states involved in the implementation of the EWFD including analysis of consequences on the fish community characteristics;
- analysis of fishery activities as a potential indicator of the water body status and/or of the human pressure intensity.

These ToR will be proposed for endorsement at the next session in Antalya. If they are endorsed, the Convener plan, after this session and before the end of the year:

- to continue to identify the members of this WP in connection with the information delivered to EIFAC delegates in Antalya and diplayed by them in their countries;
- to hold a first meeting to organise the work of the WP, to analyse the representativity of the participants and the coverage of fields and coutries in order to complete the WP in the future, to begin to discuss and explore the ToR, and to decide what can be covered and how.