Mersin Balıkları Populasyonlarının Mevcut Durumlarının Belirlenmesi ve Yetiştiricilik İmkanlarının Araştırılması

Project Leader: Dr. Bilal AKBULUT - CFRI

<u>Project Title:</u> Research on Present Status of Sturgeon Population and Rearing Possibilities

Organization: Central Fisheries Research Institute - Trabzon (CFRI)

Partners: Karadeniz Technical University - Rize Fisheries Faculty, Ondokuz Mayıs University - Sinop Fisheries Faculty, İstanbul University - Fisheries Faculty

Sponsor: Ministry of Agriculture and Rural Affairs - General Directorate of Agricultural Researchs

Project Period: 36 months

Start of the Project: February 2006 End of the Project: February 2009



Abstract

Andromous sturgeons species have been classified as endangered species in global scale and entered into Reddata Book in many countries. It is well known that there were 6 or 7 sturgeon species inhabiting around Turkish Black Sea coast and entering rivers, mainly Kızılırmak, Yeşilırmak, Sakarya and Coruh for spawning. Stocks of these species declined sharply during 1970s due to overfishing, dam construction. destruction and water pollution. As a result protection and mangement measurements have been implemented since then. However, situation of stocks and habitats has continued to worsen. On the other hand there has been

no comprehensive study on the life cycle, population structure and habitats of these species. Therefore, situation of stocks and factors threatening these species are not documented. It is fact that protection and sustainability of these anadromous species are our major responsibility and moral issue. The main aim of the project is to determine current status of the stocks, habitats, genetic variation and to develop conservation and management strategies and plans.

The Project consists of 7 Workpackage including population structure, reproduction, habitat assessment (migration routes and spawning grounds), genetic variation between and within stocks, in vivo conservation of specimens caught as bycatch or illegally, development of management strategies and plans. The project will cover Turkish Black Sea coastline and Yeşilırmak, Kızılırmak ve Sakarya Rivers. Sampled and/or accidentally caught specimens will be tagged using PIT tags and released after taking required measurements and tissue samples for genetic analyses.

Workpackages

- Workpackage: Research on Population-Habitat and Interaction with Fishing Activities of Sturgeon Which Inhibiting Turkish Coastal Waters and River Systems.
- 2. Workpackage: Genetic Analysis of Sturgeon Which Inhibiting in the Turkish Coastal Waters and River Systems.
- 3. Workpackage: Development of Conservation Strategies and its into Practice
- 4. Workpackage: Reproduction Studies
- 5. Workpackage: Water Quality in the Spawning Area
- 6. Workpackage: Nursery, Feeding and on Growing
- 7. Workpackage: Submision of the Project Outputs and Extension

1. Workpackage

Subject: Research on population-habitat and interaction with fishing activities of sturgeon which inhibiting Turkish coastal waters and river systems.

Purpose of work: To investigate status of population and habitat, relation about ecology, habitat, environment, human activities and management of fishery.

Responsible Person: Dr. Mustafa ZENGÍN

Researchers: Murat DAĞTEKİN, Mehmet GÜL

2. Workpackage

Subject: Genetic analysis of sturgeon which inhibiting in the Turkish coastal waters and river systems.

Purpose of work: To determinate genetic structure of sturgeon by MtDNA's tRNA-Progene section/D-Loop and Cyt-b section secants method.

Responsible Person: Dr. Yılmaz ÇİFTÇİ

Researchers: Oğuzhan EROĞLU, Şirin FİRİDİN

3. Workpackage

Subject: Development of conservation strategies and its into practice

Purpose of work: To come out importance in society, phrase of it's worth, inform public and get it's opinion and to make conscious of fisherman about sturgeon. Build up way to collaborate among authorities, fisherman and public opinion.

Responsible Person: Assistant of Professor Serap USTAOĞLU

Researchers: Fikret ALAGİL, Gökhan ERİK, Öztekin YARDIM

4. Workpackage

Subject: Reproduction studies

Purpose of work: In the spawning season, adult fish or nominate to spawning are collected within Kızılırmak and Yeşilırmak basin and artificial production will be tried in this Workpackage.

Responsible Person: Assistant of Professor Devrim MEMİŞ

Researchers: Dr. Ilker Zeki KURTOĞLU, Ertan ERCAN

5. Workpackage

Subject: Water quality in the spawning area

Purpose of work: Determinate water quality in the spawning areas in Kızılırmak and Yeşilırmak rivers and effects of pollutants on the spawning habitat of sturgeon.

Responsible Person: Ali ALKAN

Researchers: Serkan SERDAR, Bayram ZENGİN

6. Workpackage

Subject: Nursery, feeding and on growing

Purpose of work: Fish sampled from wild or obtained from hatchery is adopted in sea cages and tanks and their care, feeding and growing activities will have carried out in this workpackage.

Responsible Person: Eyüp ÇAKMAK – Engineer of Fisheries Technology

Researchers: Nilgün AKSUNGUR, Yahya ÇAVDAR, Hasan ERGÜN, Hacı SAVAŞ

7. Workpackage

Subject: Submision of the Project Outputs and Extension

Purpose of work: To give information to public about project and its outputs. To Organize meetings, seminars and workshops and to prepare related document which to be hand out and released in press.

Responsible Person: Erdal ÜSTÜNDAĞ Researchers: Muharrem AKSUNGUR

