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Korean Research Plan for Chum Salmon in 2005

by

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Korean Research Plan for Chum Salmon in 2005

Probably the effect of climate changes in 1997/1998 the return rates of chum salmon to the Korean waters have reduced seriously from 1.5% in 1990s to approximately less than 0.2% in 2000s, which were severely affected to the chum salmon propagation in Korea.

To overcome the low return rate and enhance the chum salmon resources in the Korean Waters, long-term plans are made from 2004 to 2013.

According to this plan the following projects will be carried out in 2005;

1. To study the mechanism of mass reduction during their early life in the rivers and coastal areas in relation to the low return rate
    A. Prey and predation of juvenile salmon
    B. Estimate survival rate after releasing in the river and coastal areas
    C. Monitoring river's and coastal environment, such as water temperature, chlorophyll, zooplankton biomass
2. Variations of returned season related with coastal and North Pacific oceanographic conditions
3. Monitoring the long term changes of biological characteristics of chum salmon returned to the Korean waters, such as growth, fecundity in relation to the environmental changes
4. To study the migration route and identify the Korean chum salmon in the North Pacific
    A. Tagging experiment
        i. Releases of coded wire tags with clipped adipose fin of chum salmon fries since 2003
        ii. Otolith thermal marking from 2006 release (2005 brood)
    B. Stock Identification
        i. To study on the parasitic fauna for the returned chum salmon to Namdae-cheon and determine the species for biological tags
        ii. To study the genetic variations and relationship between Korean and other countries chum salmon through mitochondrial DNA control region sequence analysis and microsatellite DNA analysis
5. International cooperative research in the Bering Sea
6. To increase the releases of fries, experiment on the early mature of chum salmon at sea caught by set net fishery