



Agenda Item 6.2
For Information

Council

CNL(14)42

***The management approach to salmon fisheries in the Russian
Federation***

(Tabled by the Russian Federation)

CNL(14)42

*Management of single and mixed stock fisheries, with particular focus
on fisheries on stocks below their conservation limits*

A Theme-based Special Session of the Council of NASCO

Wednesday 4 June 2014

The management approach to salmon fisheries in the Russian Federation

Sergey Prusov¹, Konstantin Drevetnayk¹ and Elena Samoylova¹

¹*Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO),
6 Knipovich St., Murmansk, Russia*

Introduction

Anadromous Atlantic salmon is present in five regions of the north-western part of the Russian Federation: Murmansk region, Archangelsk region, Republic of Komy, Republic of Karelia and Nenets Autonomous Okrug (Berg, 1948). The great number of rivers indicates a large genetic diversity within Atlantic salmon populations in Russia, resulting in a huge production potential. The status of individual river salmon stocks varies considerably, but overall they have not shown the same negative trend in abundance as observed in other parts of salmon distribution range on both sides of the Atlantic (ICES, 2013). However, there is a number of stocks suffering reduced numbers of spawners due to the impact of anthropogenic factors such as poaching in coastal areas and in rivers, dams, pollution, etc. (PINRO, 2013).

Over the last two decades the effort in commercial fisheries has been noticeably reduced which aimed at conserving Atlantic salmon stocks and enhancing recreational fisheries. In recent years the total declared catch including all fisheries varied around 70-80 tonnes. The coastal catches in the White Sea fluctuated around 50 tonnes in 1990s and were around 30 tonnes since 2007. Nowadays commercial coastal salmon fishery in Russia is viewed more as a social measure – a traditional way of fishing by local people from Pomor villages along the White Sea coast whereas the recreational salmon fishery in the Murmansk region today is seen as one of the most prestigious in the North Atlantic.

Objectives

The Federal Law “On Fisheries and Conservation of Aquatic Biological Resources” (No. 166-FZ, 2004) prioritises the conservation of aquatic biological resources and their rational exploitation to their utilization as an object of the right of property or other rights.

The approach to management of Atlantic salmon fisheries in Russia is based on applying the Precautionary Approach, NASCO’s agreements and enforcing the adopted measures and existing fisheries regulations. The objectives are as follows:

- to preserve biodiversity and enhance the numbers of Atlantic salmon;
- to minimize the risk from management actions taken;
- to rationally utilize natural biological resource to ensure continuity of its reproduction;
- to preserve Atlantic salmon habitat;
- to resolve socio-economic issues by improving economic returns to local communities through salmon fishing.

Total Allowable Catch

The Total Allowable Catch (TAC) for anadromous fishes is established annually for each region on a river-by-river basis and based on advice from a fisheries research institution. TAC is estimated on the basis of reference points (e.g. conservation limits, management targets) and abundance forecast. Conservation limits have been established for all salmon rivers in the Murmansk region and for a number of rivers in Archangelsk region. Regional TACs are allocated to the subjects (regions) of the Russian Federation by the Federal Agency for Fisheries. TAC establishes a catch limit for catch-and-take fisheries, but it does not limit catch-and-release fisheries.

Quotas

Regional TAC is distributed as quotas among fisheries and allocated to users by the Federal Agency for Fisheries (federal regulatory, control and enforcement authority), its Territorial Directorates (regional control and enforcement authority) and by Regional Commissions on Regulation of Harvesting the Anadromous Fish (regional regulatory authority). There are six types of fisheries that are legally allowed. They are listed below in the order of priority in terms of quota allocation:

- fishery to support traditional way of living of indigenous small nations of the North;
- scientific fishery;
- fishery for enhancement purposes;
- educational fishery;
- recreational fishery;
- commercial fishery.

Annual quotas for scientific fishery, educational fishery and fishery for enhancement purposes are established on the basis of applications from scientific research institutions, universities and regional directorates for enhancement of fish stocks (Murmanrybvod, Sevrybvod, Karelrybvod and Komirybvod). The quotas are allocated to users by the Federal Agency for Fisheries based on approved scientific, educational and enhancement programs.

Quotas for recreational and commercial fisheries, quotas for fishery to support traditional way of living of indigenous nations of the North are allocated to users by Regional Commissions on Regulation of Harvesting the Anadromous Fish on the basis of recommendations from the fisheries research institute (PINRO). The information about quantities applied for by indigenous small nations of the North is provided by a Territorial Directorate of the Federal Agency for Fisheries and is taken into account when quotas are decided. Murmansk region is the only subject of the Russian Federation where indigenous nation (Sami) fishery for Atlantic salmon takes place. Commissions have the authority to regulate methods of fishing, fishing seasons and fishing areas. A Commission is chaired by the Governor/Head of the region. It consists of representatives of deferent authorities such as the Federal Security Service and Ministry of Defense, regional administrations such as Departments for Fisheries and Ecology, fishery research institute (PINRO) and from non-governmental organizations. Commission's decisions must be approved by the Head of the Territorial Directorate of the Federal Agency for Fisheries. Commissions are established in all five regions with Atlantic salmon stocks.

Fishing sites

Recreational, commercial and Sami net fisheries are allowed at fishing sites only. The fishing site boundaries are decided by a regional Commission on assigning the fishing sites on the basis of applications from users and recommendations from a scientific research institute (PINRO). A regional inventory of fishing sites is to be approved by the Government of the region. The inventory specifies the boundaries and the intended use of fishing sites (e.g. recreational fishery, commercial fishery, Sami fishery and aquaculture). Fishing sites are allotted to users on the basis of competitive tenders. The Territorial Directorate of the Federal Agency for Fisheries is the authority to organize tenders and a signatory of contracts for fisheries of marine species in coastal waters and anadromous fish fisheries at sea and in-river, whereas the Government of the region is the authority to organize tenders and a signatory of contracts for fishing sites for fisheries of freshwater species. A contract for the use of a fishing site can cover a period of up to 20 years.

Licences and permits

Each salmon fishery is licensed by a Territorial Directorate of the Federal Agency for Fisheries. There are three Territorial Directorates responsible for Atlantic salmon fisheries control and enforcement:

- Barents-Belomorskiy (Murmansk) is responsible for Murmansk region;
- Dvino-Pechorskiy (Archangelsk) is responsible for Archangelsk region, Komi and NAO;
- Severo-Zapadnyy (St.-Petersburg) is responsible for Karelia.

The Territorial Directorates issue licences for users of the fishing sites in accordance with the quota allocation made by the Regional Commissions on Regulation of Harvesting the Anadromous Fish. The licence gives legal rights to the user of the fishing site to organise salmon fisheries. The licences are issued for no more than 1 calendar year. The user of the fishing site is obliged to report catches to the Territorial Directorates of the Federal Agency for Fisheries twice a month. Once the allocated quota is fished the fishery must be closed. A user of the recreational fishing site is authorized to issue permits (tickets) to Russian and foreign anglers. Atlantic salmon recreational fishing is allowed on a permit basis only. Therefore, it is not possible to fish for Atlantic salmon outside the fishing site. However,

Atlantic salmon catch-and-release fishing is technically possible outside the fishing site as there is no requirement to have a permit for fishing other species outside fishing sites in salmon rivers.

Fisheries Regulations

All fisheries are conducted in accordance with the Fisheries Regulations in force. They set rules for fisheries in respect of areas, periods, gear and other restrictions. The current Fisheries Regulations were adopted by the Order of the Federal Agency for Fisheries in 2009 (No. 13, 2009). New Fisheries Regulations were developed recently and due to be adopted by the Ministry of Agriculture in 2014. Existing Fisheries Regulations prohibit by-catching Atlantic salmon and contain no rules for coastal salmon fisheries in the Barents Sea, which could be interpreted as a ban for such fishery, however, there is no explicit reference to this in the Regulations. New Fisheries Regulations in addition to current rules contain stronger measures to explicitly prohibit coastal salmon fishery in the Barents Sea and to restrict it in some areas of the White Sea: in the Kandalaksha Bay and in the area along the Kola Peninsula coast between Cape Svyatoy Nos and Sosnovka village. Fisheries for all fish species with nets are prohibited in the estuaries of salmon rivers at a distance less than 0.5 km from the outlet into the river and 0.5 km seaward from the river mouth all year round. Only trap nets with mesh size 40 mm are allowed for coastal salmon fisheries in the White Sea in the Murmansk region whereas gill nets can be used in Archangelsk region.

Mixed stock fisheries

Mixed stock fisheries take place in the Murmansk and in Archangelsk regions in the White Sea. Over the last two decades the effort in commercial fisheries has been dramatically reduced. Commercial coastal catches of Atlantic salmon in the White Sea in the period from 1983 to 2013 are shown in Figure 1.

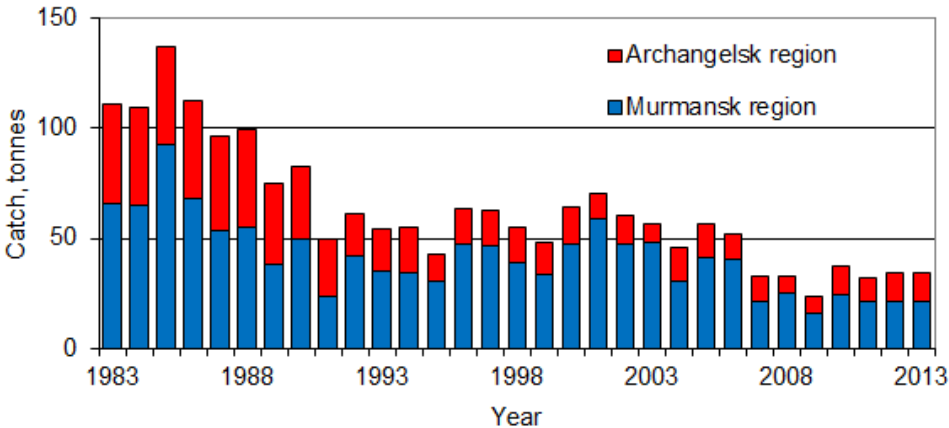


Figure 1. Commercial coastal catches of Atlantic salmon in the White Sea in 1983-2013 by region, tonnes.

In the beginning of the time series the total catches were above 100 tonnes and almost half of the catches consisted of salmon taken in Archangelsk region. Since the beginning of 1990s the catches taken in Murmansk region were accounted for over 2/3 of the total catch which fluctuated around 50 tonnes in 1990s and was around 30 tonnes since 2007. Pre-Fishery

Abundances (PFA's) for exploited salmon stocks were above the Conservation Limits (CL) and there were considerable surplus left for in-river fisheries (PINRO, 2013).

Nowadays commercial salmon fishery in Russia is viewed more as a social measure – a traditional way of fishing by local people from Pomor villages along the White Sea coast. The White Sea salmon fishery at sea fishing stations remains a main source of income for local communities, especially in odd years, when pink salmon come for spawning. The lifestyle of Pomors on the White Sea coast has been over centuries influenced by salmon fishing at sea fishing stations. There would have been no life in many Pomor villages and settlements, moreover, they would have never emerged in this area without a generous gift from Nature, such as salmon, to the people of the Kola North.

In 2010 the baseline for a number of Russian rivers was established through a pilot project to identify the origin of salmon in catches from coastal areas. The results from that project demonstrated that the GSI method could give reliable estimates of the proportion of salmon in the catches as well as estimates of how salmon from different regions and rivers were exploited in the coastal fisheries (Svenning et al. 2011). A further initiative to achieve this goal was taken by Norway, the Russian Federation and Finland. An EU project “Trilateral cooperation on our common resource; the Atlantic salmon in the Barents region” (Kolarctic salmon project - KO197) was implemented in 2011-2013. The project was supported by both EU-funding (Kolarctic ENPI CBC Programme) and national funding from Norway, the Russian Federation and Finland. The Kolarctic salmon project has generated one of the most comprehensive and detailed genetic datasets for any fish species. Results of the project provide first and comprehensive overview of spatial and temporal variation in stock compositions in coastal fisheries in the Barents and White Seas. The data from the project will provide managers with tools for regulating fisheries on a more informed basis.

References

Berg L.S., 1948. Fishes of fresh waters in the USSR and neighboring countries. USSR Academy of Sciences Press., Moscow. 466 pp. (in Russian).

ICES. 2013. Report of the Working Group on North Atlantic Salmon (WGNAS), 3-12 April 2013, Copenhagen, Denmark. ICES CM 2013/ACOM:09. 380 pp.

Svenning, M-A., Wennevik, V., Prusov, S., Niemelä, E., & Vähä, J.P. 2011. Genetisk opphav hos atlantisk laks (*Salmo salar*) fanget av sjølaksefiskere langs kysten av Finnmark sommeren og høsten 2008. Rapport, Havforskningsinstituttet, Fisken og havet, no. 7/2011. 34 pp (In Norwegian). English summary.

PINRO, 2013. Report on the status of aquatic biological resources in Murmansk and Archangelsk regions, Komi and Karelia Republics, Nenets Autonomous Okrug in 2012 and abundance forecast for 2014, PINRO, Murmansk, 2013, 169 pp. (in Russian).