

**RUSSIAN NATIONAL PROGRESS REPORT FOR THE 21TH SC NAMMCO MEETING
MARINE MAMMAL RESEARCH IN THE NORTH ATLANTIC IN 2013 (PREPARED ON BASE
RESEARCHES WHICH WAS CARRIED OUT BY THE N.M. KNIPOVICH
POLAR RESEARCH INSTITUTE OF MARINE FISHERIES AND OCEANOGRAPHY (PINRO))**

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I INTRODUCTION

This report is presented the Russian research on Cetaceans and Pinnipeds carried out by PINRO in 2013 in the North Atlantic, and in the Barents, Kara and White Seas. Besides, various marine mammal research in the Russia by Scientific-Research Institutes and Institutions of Russian Science Academy, Russian Ministry Environmental Resources research Institutes are carry out traditionally. Also monitoring researches by various companies which work and exploit shelf of hydrocarbon raw materials in the Barents Sea is fulfilled.

II RESEARCH IN 2013

a. Species/Stock studied

Pinnipeds

- Harp seal *Phoca groenlandica* (the White/Barents Seas population) – White and Barents Seas
- Ringed seal *Phoca hispida* – White, Barents and Kara Seas
- Bearded seal *Erignathus barbatus* –White, Barents and Kara Seas
- Grey seal *Halichoerus grypus* – Barents Sea
- Common Seal *Phoca vitulina* – Barents Sea
- Walrus *Odobenus rosmarus* – Barents and Kara Seas

Cetaceans

- Minke whale *Balaenoptera acutorostrata* – Barents and Kara Seas, North Atlantic
- Fin whale *Balaenoptera physalus* – Barents Sea, North Atlantic
- Humpback whale *Megaptera novaeangliae* – Barents Sea, North Atlantic
- Killer whale *Orcinus orca* – Barents and Kara Seas, North Atlantic
- White whale (Beluga) *Delphinapterus leucas* – Barents, Kara and White Seas
- White-beaked dolphin *Lagenorhynchus albirostris* – Barents Sea, North Atlantic
- Harbour porpoise *Phocoena phocoena* – Barents and White Seas
- Sperm whale *Physeter macrocephalus* – Barents Sea, North Atlantic
- Blue whale *Balaenoptera musculus* – Barents Sea, North Atlantic
- Bowhead whale *Balaena mysticetus* – Barents Sea, North Atlantic
- Common dolphin *Delphinus delphis* – Barents Sea, North Atlantic
- Pilot whale *Globicephala melaena* – North Atlantic
- Northern bottlenose whale *Hyperoodon ampullatus* – Barents Sea, North Atlantic
- Bottle-nosed dolphin *Tursiops truncatus* – North Atlantic
- Sei whale *Balaenoptera borealis* – North Atlantic

b. Field Work

Pinnipeds and Cetaceans

February. Marine mammal sightings and surveys (distribution and number of meetings) during annual International bottom fish species trawl-acoustic survey (TAS) onboard Russian research vessel (R/V) "Vilnius" in the Barents Sea inside Russian Economic Zone (REZ) between 33°E and 52° from Kola Peninsula coastal line to 74°N were carried out. Total length of observed and surveyed transects was about 500 n. miles.

In **March** dedicated standard multispectral aerial survey (research) of the White/Barents Seas harp seal population pup production distribution and numbers was carried out. Special equipped two engine aircraft L-410 this purpose was used. The main area for this research was in the White Sea. Also some the Barents Sea adjacent waters were observed. The time for research was March 15-21. During this period 6 flights were carried out, their total duration was 31.5 hours, and surveyed area was about 2 050 n. miles². Infrared (IR) images numbers was 200 Gb, and digital photos numbers was 16 500.

March-April. This period marine mammal sightings and surveys during annual International pelagic fish species TAS onboard Russian R/V "Vilnius" in British Islands westward area were carried out. Total length of observed and surveyed transects was about 900 n. miles.

May-June. This time marine mammal sightings and surveys during International ecosystem survey (ES) of the northern seas in the Russian area secured (the Barents Sea southern and south-western areas) onboard Russian R/V "Vilnius" were fulfilled. Total length of observed and surveyed transects was about 350 n. miles.

June-July. This time marine mammal sightings and surveys during International TAS of redfish in the Irminger Sea in the Russian area secured onboard R/V "Vilnius" were carried out. Total length of observed and surveyed transects was about 1 420 n. miles.

August-beginning of October. This time marine mammal sightings and surveys during annual Russian-Norwegian ES in the Barents Sea in the Russian area secured onboard R/V "Vilnius" were fulfilled. These research all the Barents Sea area almost were covered including the far north-eastern part (area between Franz Joseph Land (FJL) and Novaya Zemlya (New Land in English) archipelagoes. PINRO research areas were located in the Barents Sea eastern, far north-eastern and southern parts including Pechora Sea. PINRO total length of observed and surveyed transects was about 3 450 n. miles.

During all above Cetaceans and Pinnipeds sightings and surveys methods and technologies identical for T-NASS were used and also in carrying out of International and Russian-Norwegian researches they between all participants were agreed.

June-July. Several coastal zones dedicated marine mammal sightings along the Kola Peninsula were carried out (so named coastal expedition). These works in the Barents Sea southern part (coastal zone) were done. They with using of PINRO taken methods and technologies were fulfilled which included observations coast and small boats. Total length of observed and surveyed transects was about 80 n. miles.

The main purpose above research activities was Pinnipeds and Cetaceans mapping and their meets account including study of their migratory routes. On base it in future was estimated influence of marine mammals to fishes stocks and other marine organisms, so named interaction between fisheries and marine mammals. Besides, total estimated calculations of animal numbers in research areas and time their carrying out including consumption assessment were made.

c. Laboratory work

Special laboratory work was not carried out in 2013.

d. Other studies

There were no additional studies in 2013.

e. Research results

Pinnipeds and cetaceans

February. In carrying out of annual International bottom fish species TAS in the Barents Sea southern and central parts partially inside REZ white-beaked dolphin, fin whale and harp seal were recorded.

Two small groups of white-beaked dolphin (on 2 and 6 individuals in each) in Rybachiya (Fisheries in English) bank in the area of fishery vessels work were recorded. In other area of TAS white-beaked dolphin was not observed. The main concentrations of white-beaked dolphin in time of research carrying out were located some in west from Russian TAS area, supposedly, in the area of high density capelin aggregation.

In the area of Zapadnyj Primbrezhnyj (Western Coastal in English) Region eastern part two meetings of fin whale were recorded (on 1 and 3 individuals in each). Earlier this cetacean in winter time here did not observe. Supposedly part of fin whale summer-autumn group did not make traditional returned migration to the Norwegian Sea and stayed at the Barents Sea area. All these animals probability fed on macroplankton and possibility on herring.

In Kanino-Kolguev shoal one individual of harp seal was observed, and she to south was migrated.

March. During raw data processing which were collected in carrying out of multispectral aerial researches with purpose of the White Sea harp seal population pup production distribution and numbers following main results were got:

- ice conditions was very closed for climatic situation;
- ice drift in time of aerial researches carrying out, and also some days before and after their was in the area of the White Sea mainly, carrying out of ices to adjacent area of the Barents Sea was absented practically;
- whelping patches in the Barents Sea adjacent area including Cheshskaya Bay and area around Kolguev Island were absented practically, the most density of them in area of first year ice with thickness 50-70 cm and concentration 70-90% were shaped. Under that the most density of whelping patches in the White Sea area named "Basin" and "Gorlo" were recorded;
- total calculated of the White Sea harp seal population pup production numbers is 128 786 animals with C.V.=0.237.

March-April. In carrying out International TAS of pelagic fishes in the British Islands westward area which was secured for Russia 5 Cetaceans species were recorded (common dolphin, fin whale, minke whale, pilot whale, sperm whale) were recorded in total numbers 323 individuals. The most numerous among them were from Toothed (Odontoceti) suborder. It was pilot whale and common dolphin, total 97.5% from total recorded animals.

Common dolphin in Ireland EEZ and Great Britain EEZ was observed as separate groups from 9 to 18th individuals in each, 45 as maximum, and it was closely of bar and deep considerable change. Total numbers of common dolphin meetings in 2013 was slightly decreased in comparison previous year but numbers of animals in separate groups was increased. This reason calculated numbers of common whale in comparison with previous year was some increased and formed 3 240 individuals (SE=1 888). Under trawl-acoustic data in area of survey common dolphins on blue whiting, mackerel and zooplankton aggregations were recorded mainly.

Pilot whale as local groups from 2 to 120 individuals was observed in time this survey. Calculated numbers this animals was 8 061 individuals (SE=5 428). Under trawl-acoustic data and trawling pilot whale in area of blue whiting, squid and zooplankton aggregations were observed the most often.

At northern survey tracks as single and pair fin whale was observed two times. On trawl-acoustic data here recorded animals supposedly fed on zooplankton organisms and mesopelagic fishes.

At the Great Britain coastal zone single meeting of minke whale was recorded. Here he fed by makroplankton. At western area of research single sperm whale was observed two times.

May-June. In carrying out of northern seas International ES in the Russian area secured in the Barents Sea in total 3 species of marine mammals (fin whale, minke whale and white-beaked dolphin) were recorded. Sum of them was 98 individuals. The main area marine mammal meetings were in western part of area research.

Among Baleen (Mysticeti) whales fin whale and minke whale were observed. Fin whale met as single and pairs in the western part of surveyed area closer to coastal line. The most eastern boarder of his recording was in 27°30'E.

Minke whale was met only one time, and it was in the Norwegian Trough. It is some decreasing in comparison with previous year. On acoustic data minke whale was recorded closely of capelin and herring aggregations.

Among Toothed (Odontoceti) whales in considered research only white-beaked was recorded, and he was the most numerous among all marine mammal species. White-beaked dolphin met by groups from 3-5 to 17 individuals almost in all western part of research area. The most eastern boarder of his recording was in 29°30'E. All animals closely capelin and herring aggregations with different density were concentrated. Calculated numbers of white-beaked dolphin at research area was 8 591 (SE=2 979) that almost in 1.5 times higher in comparison previous year.

June-July. In carrying out of International the Irminger Sea redfish TAS in Russian area secured marine mammal 6 species were recorded. It was fin whale, pilot whale, common and white-beaked dolphins, harbor porpoise and northern bottlenose whale.

About fin whale. He is one of the most distributed among marine mammal in considered research area. Fin whale as single and pairs was observed. Calculated numbers this specie was 405 individuals (SE=291). On base of trawl-acoustic data analyze the most part of fin whale closely mackerel and zooplankton aggregations was recorded.

The most numerous numbers specie in area of considered research was pilot whale. These animals met mainly as separate groups by numbers from 2 to 16 individuals. Sometimes several groups to 50-70 pilot whales in each were observed. Calculated numbers this specie was estimated as 11 067 individuals (SE=7 526). Analyze trawl-acoustic data showed:

- pilot whale who was recorded in the north-eastern part of research area closely squid concentrations were observed;
- pilot whale who was recorded in the central part of research area closely mackerel concentrations were observed;
- pilot whale who was recorded in the south-western part of research area closely zooplankton concentrations were observed.

About other dolphins - common and white-beaked dolphins. These species met as separate groups in 3-35 and 4-11 individuals in each, accordingly. These species are traditional for considered research area. In 2013 their total part among all recorded marine mammal was 24.2%. Analyze of trawl-acoustic data showed that common dolphin formed joint groups with pilot whale in the central part of research area closely mackerel aggregations.

White-beaked dolphin also together with pilot whale in the western part and south-western part of research area was observed, possibility closely zooplankton concentrations. Separate white-beaked dolphin groups in the northern part of research area were recorded. Here closely mackerel concentrations they were observed, in the north-eastern part of research area white-beaked dolphin closely squid aggregations was recorded. His calculated numbers was 3 439 individuals (SE=2 179).

Only one time in research area (closer to Iceland) harbor porpoise was recorded. Earlier under results of previous the same Russian surveys she did not recorded here.

In the western part of research area the northern track as single and pairs northern bottlenose whale was observed who under trawl-acoustic data closely squid aggregation was recorded.

August-beginning of October. In carrying out of annual joint Russian-Norwegian ES in the Barents in the area of Russia secured 10 marine mammal species were recorded (7-Cetaceans and 3-Pinnipeds), in total 318 individuals.

For getting of more correct and detail situation about marine mammal distribution in the Barents Sea in August-beginning of October Russian data and Norwegian data (from 3 R/V) were joined. In carrying out of considered joint research 11 marine mammal species (8-Cetaceans and 3-Pinnipeds) were observed, in total 1 511 individuals. Calculation of numbers for some marine mammal species were carried out on base of use Russian data only.

As in previous years the most often meeting specie among marine mammal was white-beaked dolphin who had broad distribution in research area, the most northern board was 81°20'N. Main recordings of animals were closely capelin aggregations with difference density as in previous years. It was between 74°-78°N in the western, central, and eastern part of research area. White-beaked dolphin the largest separate groups (to 45-55 individuals) in the area of Dimidov Bank and closely the Western Spitsbergen Island were recorded. Calculated numbers this marine mammal species was 26 584 individuals (SE=7 291) that is some decreasing in comparison with 2012.

Among Toothed whales (Odontoceti) sperm whale, harbor porpoise and killer whale were observed also. Sperm whale in the western part of research area closely great change of sea depth was met. In difference from previous years more far stopping this marine mammal species was recorded (the Barents Sea Central part to 35°E) that it is not typically for sperm whale. Possibly it connected with coming up here main object for sperm whale feeding who is squid. Harbor porpoise as small numbers groups in the northern and eastern parts of research areas to 71°35'N was observed. Animals closely herring, sand eel, and fry cod were recorded. Calculated numbers of harbor porpoise was estimate as 6 372 individuals (SE=2 845) that it is some more in comparison previous year.

Among Baleen whales (Mysticeti) the most observations numbers had minke whale, humpback whale and fin whale, in total it was 38% from all numbers of marine mammal recorded. Minke whale mainly in the northern part of research area was observed, rarely in the central and the south-eastern parts of research area. More considerable frequency of his meeting was recorded in comparison previous year including in far eastward direction to 76°E, it is the north-western part of the Kara Sea closely Novaya Zemlya archipelagos. Minke whale the most density concentrations in the Barents Sea higher than 79°N were observed, closely Bely (White in English) and Victoria Islands. Here this marine mammal species closely high level capelin aggregations were recorded. In the Barents Sea southern part minke whale closely high level herring and fry cod was observed, in the south-eastern part of research area it was closely polar cod, herring and sand eel aggregations, and in the Kara Sea northern-western part minke whale closely polar cod aggregations was recorded. Minke whale calculated numbers in Russian research area was 4 937 individuals that some higher in comparison previous year.

Humpback whale in research area more than 3 times oftener was met in comparison previous year. His main concentrations in area closely Nadezhda (Hope in English) Island, Persey Height, and Franz Josef Land (FJL) archipelago were recorded. Humpback whale calculated numbers was estimated as 534 individuals (SE=467).

For fin whale increasing meeting was recorded also. Main part of this specie observations was closely Spitsbergen archipelagos, Bely (White in English) and Victoria Islands where high level capelin aggregations was observed. Here animals fed together with minke whale and humpback whale. Calculated fin whale numbers was 246 individuals (SE=146). The Spitsbergen archipelagos northward blue whale was recorded that observed during last years.

Killer whale closely Norwegian coast was met where she fed by herring. Also this marine mammal species closely area of Edge Island and in the Kara Sea north-western part was observed where closely harp seal concentration she was recorded.

Among Pinnipeds harp seal, walrus and bearded seal were observed. Harp seal in the region of Spitsbergen and FJL archipelagos and also in the Kara Sea north-western part as single and groups to 25 individuals were recorded. In 2013 as in last year this marine mammal species density summer-autumn concentrations was not observed in the Barents Sea. Main reason is ice edge absent in the Barents Sea northern area closely the most northern track of ES. Two meetings of single walrus closely West Spitsbergen and Bely (White in English) Islands were recorded, and in northward of Spitsbergen archipelago single bearded seal was met.

June-July. In carrying out of dedicated coastal expedition 5 marine mammal species in area it were recorded. In difference previous year harbor porpoise was not met. Main reason it in our opinion is low density of feed object closely coastal line where expedition was carried out.

During survey minke whale 7 individuals were recorded. Mainly it was single animals who migrated along coastal line to east. Total numbers estimation here as lower than rate. Probability main group minke whale migrated to east along coastal line was earlier, in beginning of summer.

In carrying out of observations one white whale group was met, in total of 32 individuals who ran in distance from coastal in area between Cape Nokuev and Dvorovaya Bay. Usually more small groups this marine mammal as separate are met who search eat along coastal line. In our opinion so great single considerable group of animals passed to other region in search of food. Separate individuals did not observe. Total numbers can be estimate as lower than traditional for this area and summer time.

Bearded seal is widely distributed and permanent resident marine mammal species in the Kola Peninsula coastal zone. His total numbers here can be estimate as 500-600 individuals. In considerable survey and time 10 individuals this marine mammal species was observed. In 2013 bearded seal was not recorded in some areas where he observed earlier in previous years. Also decreasing his numbers in the mouth of Voroniya River, e Rynda Bay and in coming up to Podpakhta Bay was recorded.

In part of research area from Voroniya Bay to Kharlov Island grey seal was observed. His meeting was lower than traditional. Animals observed as single only in calling to Bayes. In part of research area from Kharlov Island to Dvorovaya Bay numbers of grey seal was increased, here was accounted 27 animals.

For study of common seal two places of his permanent resident (Voroniya River and Ivanovskaya Bay) were investigated. In Voroniya River decreasing of his numbers was recorded. This circumstance can be challenged by strong and early in river water temperature increasing and decreasing numbers of fishes who coming here. Common whale colony in Ivanovskaya Bay continue to exist in inside part of Bay only with minimum numbers after decreasing of total numbers in all Bay area that in previous years was recorded. Here to colony numbers not influences feeding situation, and anthropogenic factors (hunters and fisheries).

III ONGOING (CURRENT) RESEARCH

During 2014 past period following scientific-applied works included sightings and surveys of marine mammals (distribution and number of meetings) with purpose of study their place and role in marine ecosystem including preying to fishes and other marine organisms were carried out in realization:

- Joint Russian-Norwegian TAS of bottom fish species stocks in the Barents Sea (January-February);
- International blue whiting and other pelagic fish species stocks TAS in British Islands westward area (March-April);
- International ES of the northern seas in the Russian area assigned (the Barents Sea southern and south-western parts) – May-June;
- Annual Joint Russian-Norwegian ES in the Barents Sea in the Russian area assigned (August-beginning of October);
- Marine mammals sightings in frames of dedicated coastal expeditions along Kola Peninsula coastal line in the Barents Sea southern part.

IV ADVICE GIVEN AND MANAGEMENT MEASURES TAKEN

Understanding and studying with the White/Barents Seas harp seal population status is paramount and principal direction of the Russia and PINRO researches in the North Atlantic. This reason principal advices given and management measures taken for this marine mammal species will be presented below.

As it is known that principal advices and proposals on measures of management removal for the White/Barents Seas harp seal population develop during WGHARP meeting. Last meeting was held at the PINRO (Murmansk, Russia) in August 26-30, 2013 – WGHARP 2013. Advices this meeting were supposed in base of final solution taking about measures of adjustment for this Pinnipeds species which discuss, settle, and take during work of the annual Joint Russian-Norwegian Fisheries Commission (JRNFC). This circumstance is caused that the White/Barents Seas harp seal population stock exploits by Russia and Norway jointly.

During WGHARP 2013 taking into account of PINRO research results which in studying of harp seal pup production status, and taking into account also historical and modern data on animals biology including catch data the total numbers of the White/Barents Seas harp seal population stock on base of modeled calculation was preliminarily assessed as 1 419 800 individuals (CI=1 266 910 – 1 527 690). Final result will be got after in conclusion of rough data processing which was collected in carrying out of accounted multispectral aerial survey on pup production this Pinnipeds numbers assessment in the White Sea by PINRO specialists carried out in March 2013.

But nevertheless at present with high degree of probability can make conclusion that the White/Barents Seas harp seal population stock has stable modern low level in comparison with modern historical maximum which was recorded in 2002-2003, and it was 2.2 mill. animals. Above value of total stock abundance is in interval between N_{max} (maximum historical quantity of the White/Barents Seas harp seal population stock numbers) and N_{70} (70% of N_{max}). In accordance with principles of marine biological resources management and adjustment took by ICES including considered Pinnipeds stock the current status of the White/Barents Seas harp seal population stock can exploit on base principles of ecosystem and social-economical approaches. This allowed to consider in WGHARP 2013 following catch scenarios for the closest 10 years:

- a). Current catch level (average of the catches in the period 2008-2012);
- b). Equilibrium catch levels which are defined as the fixed annual catch level that stabilizes the future population adult part (1+ animals) under the estimated model;
- c). Catches that would reduce the population to N_{70} with probability 0.8 over a 10-years period;

Also as the White/Barents Seas harp seal population stock was defined as “data poor” under ICES approach as alternative Potential Biological Removal (PBR) approach was considered also.

Current catch level indicated an increase in the 1+ population of 13% over the next 10 years. The equilibrium level is 17 400 (100 1+ animals). A catch level of 26 650 individuals (100% 1+ animals) will bring the population size down to N_{70} with probability 0.8 within 10 years. This catch level indicates 8% decrease in the 1+ population in 10 years. The PBR removals are estimated to be 40 430 (14% pups). This catch option indicates 16% reduction of the 1+ population in 10 years.

In last JRNFC which was held at the Oslo, Norway in October 6-10 2014 under above WGHARP 2013 recommendations were took following solutions:

1. TAC for harp seals in the White Sea / Barents Sea in 2014 can be determined as 17 400 adult animals (1+ individuals), or an equivalent number of pups (where one 1+ seal should be balanced by 2 pups).
2. Norwegian quota during catch activity in the Barents Sea south-eastern part was determined in size 7 000 adult animals or pups equivalent numbers in ratio above. TAC remained part is Russian quota. Harp seal adult females catch in whelping patches for commercial purposes is banned it is possible for scientific purposes only.
3. Time for the White/Barents Seas harp seal population catch activity is from 20 March to 15 May in 2014. In case of necessity in scientific removals can be made exception, and here other dates for opening and closing catch can be established.
4. Catch activities are need to carry out from helicopter or/and vessels with ice class which would equipped special boats, and here would participate studied people who use guns.

These solutions can be brought changing on base of recommendations which will be taken in new WGHARP (17-21 November 2014, Quebec, Canada).

V PUBLICATIONS AND DOCUMENTS

As practically all Russian (PINRO) publications and documents are prepared in Russian below will be presented publications and documents which were prepared in English in 2013.

1. Zabavnikov V.B. *research of the White/Barents Seas Harp Seal Population on Whelping Patches with Use of Multispectral Aerial Surveys.*//Proceedings oof the 16th Russian-Norwegian Symposium “Assessment for Management of Living Marine Resources in the Barents Sea and Adjacent Waters – A Focus on Methodology”, Sochi, Russia, 10-12 September 2013, 13 p.;
2. Zabavnikov V.B. *Russian National Progress Report on Results of Marine Mammals Research in the North Atlantic which was Carried Out in 2012 (Prepared on Base Results of PINRO Researches).*//Working Documents (WD) for the 20th Session of SC NAMMCO Meeting, Reykjavik, Iceland, 13-16 November 2013, 15p.;
3. Zabavnikov V.B. Haug T., Oigard T.A. *Russian and Norwegian Catches of Harp and Hooded Seals in the Northeast Atlantic in 2012-2013.*//WD WGHARP, Murmansk, Russia, 26-30 August 2013, 5 p.;
4. Shafikov I.N. *Estimation of the Harp Seal the White Sea Population According to the Data from the Assessment of the Pup Production and Female Fecundity.*//WD WGHARP, Murmansk, Russia, 26-30 August 2013, 9 p.;
5. Shafikov I.N., Egorov S.A. *Airborne Surveys for Whelping Patches of the White Sea Harp Seal Population (15-21 March 2013).*//WD WGHARP, Murmansk, Russia, 26-30 August 2013, 7 p.

VI APPENDIX 1 - CATCH DATA

a. Pinnipeds

<i>Year, area and species for catch</i>	<i>Numbers</i>
2013	
<i>White Sea</i>	
<i>Harp seal:</i>	
<i>pups</i>	0
<i>animals 1+</i>	0
<i>Total catch</i>	0
<i>Bearded seal</i>	0
<i>Ringed seal</i>	0

Commercial removals of the White/Barents Seas harp seal population didn't carry out. The reason is new Russian Catch Fisheries Rules which ban to catch pups (1-) in white coat and beater stages which are the main for removals in Russian sealing. Catch for scientific purposes did not carry out also. In last time it was in 2010.

In the White and Barents Seas coastal zones catch of ringed seal and bearded seal by inhabitant for own needs was fulfilled. Correct information about size of removals is absented.

b. Cetaceans

Russia don't carry out cetaceans catches in the North Atlantic in commercial and research purposes. Nevertheless at present white whale catch is quoted, but removal is very rare and for scientific and cultural-educated purposes only.

VII APPENDIX 2 - BY-CATCH DATA

PINRO has not data on marine mammal by-catch during fisheries and other marine activities. Collection this information plans to organize and began to carry out in 2015.