

## THE ASSOCIATION OF TRADITIONAL MARINE MAMMALS HUNTERS OF CHUKOTKA

### Field report Coastal Observation Project 2010

Field studies in the spring and autumn 2010

#### **1. Introduction**

Project: Coastal observations of marine mammals CHAZTO and CSSG carried out in collaboration with scientists from ChukotTINRO and the Pacific Oceanographic Institute, FEB RAS for nearly two decades. During this time, scientists have optimized the guidelines and tables of observations, given that they will work sea hunters - the indigenous inhabitants. Journal of observations includes the basic parameters needed to determine the species of marine mammals, their numbers, directions of movement, the nature of the movement, describes the meteorological conditions (sea conditions, wind direction and force, ice conditions, etc.). See annex. Observers carried out searches from traditional places of observation of marine hunters near settlements (Cape, Hills) and document the information received at the end of the day of observation. Completed logs are collected by the district coordinator, who, after adjustments and then transmit them by fax to the Anadyr office for a brief analysis (for management purposes) and further shipment to email the project supervisor Vladimir Melnikov. This year, we started to practice the transmission of reports directly from the observer to the Anadyr office. The effectiveness of this method will be determined on the basis of information project scientist Dr. Melnikov.

#### **2. The work of coordinators and observers.**

Observations in the Chukchi area were organized with the help of coordinator Nicolai Kalyanto. He has provided observers with guidelines, picked up the candidacy of an observer in the new village for project which is Neshkan. In Uelen our choice was to seasoned observer with whom we have been working for many years - Jacov Vukvutagin.

Observations in the Bering Sea, we have organized by coordinators Protopopova Natalia and Natalia Kalyuzhina, observer in the village of Sireniki spring was Oleg Rahtilkun, in autumn - Alexander Inmuge, in New Chaplin - Pavel Lyuneut and Maria Panauge, in Yanrakynnot - Arthur Apalyu.

Overall coordination of the monitoring was conducted by Eduard Zdor, and in his absence, Lilia Zdor.

Observers fill out the report briefly and clearly. The information recorded by them, clear and understandable, does not cause ambiguity and different interpretations.

#### **3. Reports.**

Reports are filled by observers in the field at the end of the day. Coordinator communicates with the monitors once a week or as needed. Once every two weeks by the observer is obliged to transfer to coordinator or directly to the Anadyr office completed and signed Journal of observations.

Thus, as of December 15, 2010 all logs of observations submitted by email to scientific supervisor Vladimir Melnikov. Below is a brief description of the logged in observing information:

## Chukchi Sea

### **Neshkan**

June: The observer Rodion Rinetegin began work on June 15. Ice on the sea was 100 percent, but at the end of the month in some places there was water, breeding lagoons and near the lagoon neck and 4-5 km from the shore fast ice appeared. 1st bowhead was recorded on 29.06.

July: Until mid-July, the sea near the shore was covered with ice, July 9, the ice went away from shore and then cover the area decreased initially to 70 and in the last week of the month to 50% (in connection with this Ice conditions observer recorded only the seals).

August: The Sea, finally cleared of ice, but whales are still recorded in small amounts and very far from shore. So 08/07 to 25 km distance from shore was found 3 groups of bowhead whales of 3 individuals in each group. Approximately at the same venue on the day the hunters reported seeing six narwhal, moving westward at a distance of 35 km from the coast.

September: Observations began on September 15, the sea was ice-free and within a few days observer recorded on a daily basis feeding of bowhead and gray whales (10-20 individuals) at a distance of 5-10 km from shore. September 17, hunters from the village have harvested a female bowhead whale, the body length of 12 meters (Observer took a genetic test). Another biopsy specimen was taken by observer at sea from live whale. Since September 20 the storm began, which ended only in October.

October: The first half of the month was also inconvenient for observation because of the sea were constantly drifts. In the second decade of the month after the onset of good weather observer recorded every day of 5-10 bowhead and gray whales on the horizon line. October 14 saw three Minke whales, which moved to the east. From October 15 the sea was closed again with breakers, in the rare days when it became quieter (10/22, 10/27, 10/29) was seen on the horizon 1-2 Fountain of gray whales. October 19 at 15 km to the east and on October 26, 10 km west of the village carcasses of gray whales washed out on the beaches by the storms, killed by the killer whales.

November: From 1 to 7 November, the sea was in storm that stopped due to the formation of sludge. Prior to this, on November 5, two beluga whales washed out on beach. From 8 to 10 November there were several large groups of bowhead whales (up to 20 individuals) and 1-2 gray whales. From 16 to 22 November, the south wind blew, at times very strong, but the sludge still remained on the sea. 19<sup>th</sup> to end months on almost daily basis recorded bowhead whales sometimes in large groups, for example on November 19 20 bowheads were recorded at the same time and on November 24 a group of 10 bowheads, was spotted. The main direction of movement to the east, only on 25 of Nov. 2 bowheads moved to the west.

December: Sea in sludge, periodic southerly winds open the sea, but the constant bad weather did not allow to observe. December 15 observations were completed.

### **Uelen**

May: The observations started on May 15. Throughout May the ice was moving back and force from the coast, in general, we can estimate that at least 9 days, covering an area of ice ranged from 30 to 60 percent. In those days the observer recorded the feeding belugas and whales and he assumes, they cannot go north because of the solid ice in the north-east. Beluga whales in this period were especially numerous. On 05/15 220 recorded species, 05/18-19 – 150, 120 belugas, 05/24 – 110 belugas. The first bowhead whale observers spotted on 05/24 and they moved to the

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Bering Strait and in the next few days watching 1-3 bowhead whale is moving north. In a footnote Observer wrote that belugas for the first time appeared in the Bering Strait in March, they were also seen in April.

June: In early June, there was bad weather, but after improving from June 4, gray and bowhead whales appeared, which were in small groups 1-4 moving north, but on June 6 11 bowhead whales were recorded. June 10 fast ice took off from the shore. June 12 observers recorded the passage of 12 killer whales from the east to the Bering Strait. In the second half of June, bowhead whales are no longer detected. Met on 1-2 gray whales a day. June 27 two humpback for a few hours fed near the shore, and humpback was lonely moving toward the Bering Strait. During this period, Uelen is spring hunting for walrus and all the hunters indicated that whales were scarce. June 25 two boats went to Lavrentia along the Bering Strait, and they reported seeing many whales from Powten to Nunyamo (exit from the Gulf of Lavrentia).

July: In the first half of July constantly had strong winds due to the breakers, the observations were hampered. Breakers have stopped with the return of ice, which sometimes covered up to 70% of the sea. 1-2 whales were spotted from the observation point on of July 1, 3 and 4. On July 9 the bowhead whale passed toward the Bering Strait. And only on July 10 from a boat in the Gulf of Lavrentia 15 whales have been spotted.

October: Practically, the entire first half of October, there was bad weather, heavy surf made it difficult to monitor. From 1 to 12 October as a result only a few walruses and seals were recorded. From 13 to 16 October, large groups of humpbacks fed and rested near the village (they jumped out of the water and beat their tails on the surface). On October 15th observers counted 40 humpbacks in the distance of 2-3 km. Many more humpback (in groups and in pairs) could be seen on the horizon, but counting was difficult. In those days, walruses are also passed by the village. The general direction of the gradual movement in those days for all species of marine mammals – to the Bering Strait, although some moved to the north.

Later the wind increased, and only from October 23 the opportunity emerged to watch a small group of gray whales. On 10/27 approximately 1000 beluga whales in large groups passed to the north. 10/29-30 observers have recorded a lot of humpback whales from 20 to 30 per day at a distance of up to 2 km from the coast. Because of the storm it was difficult to determine the exact types of whales that could be seen on the horizon. On this day, still about 700 beluga whales were moving in different directions along the coast, the storm washed up on shore many hooligan fish.

November: From 1 to 7 November, a strong storm waves occasionally reach the coastal village buildings. From 8 to 19 November, observed a large number of whales (gray, humpback, bowhead, and beluga whales), and almost no walrus. November 9 recorded 50 bowheads, the next day the 90 bowheads (feeding) and approximately 1000 beluga whales (all in one group went wide front to the north for 2 hours), 11/11 - 40 humpbacks and on 13, 17 and 18 of October – 200-300 belugas (fed and rested on the water and in sludge). All mammals have passed close to the shore, from 500 meters to 2 kilometers. Some are so close that it was possible to see the particular colors.

In the following days before the end of the month, there were not so many whales, beluga whales prevailed but not in such large numbers. On November, 28 50 bowheads were recorded, and the next day 15. In the last days of the month multi-year ice appeared on the horizon with drifted walrus on it, once while on the umiaq we counted 1500 of them. On other days, despite the fact that the walrus was clearly more (they settled on the ice), counting was difficult. Then the weather really turned bad.

Observation period ended 30 November.

## **New Chaplino**

April: Some technical difficulties have emerged with the introduction of an observer at a given location. Initially it was assumed that we will try to organize spring observations at Cape Chaplino, but it was not immediately possible. Since mid-April to mid-May observations were led by Pavel Lyuneut, to do his observations, he traveled to the edge, located far from the village and this created considerable difficulties because of the extra fuel costs and erratic weather. Second half of April the sea was covered with ice for about 80 percent, but by April 29 the ice away from shore, the same day, the observer recorded the passage of a bowhead whale. Two days before a big herd of belugas passed to the north. After that, only the seals and walruses were periodically recorded in the log observer.

May 5 five gray and a bowhead whale passed through in different directions.

From May 14 Maria Panauge started observations at Cape Chaplino. She said that until June 10, the sea was covered with ice up to 60%. The first 4 bowheads were recorded on May 18, they were feeding a dozen meters from the shore. And until early June, she only periodically spotted a gray whale everyday near the coast.

Only on June 5<sup>th</sup> the group of 3 and on June 5 five gray whales. The next group consisting of 3 gray whales passed by on June 23. The entire observation period was good weather, only periodically for a maximum of one day the fog descended.

## **Yanrakynnot**

Due to the fact that observations at Cape Chaplino hampered for various objective reasons, we decided that the autumn observation is useful to conduct in the Senyavina Strait, and for this observer Arthur Apalyu of Yanrakynnot was hired. Apalyu for many years has been working for the Regional Park "Beringia", he is considered as one of the best rangers, observers of the park.

He began observations on October 14. The entire observation period the sea and the strait was ice-free and only in the last few days of November sludge formed in the Strait, but near the village, the sea was open to the end of observation period (December 15), the sludge is coming, then disappeared.

First gray whale was recorded on 10/19 and after that day 2 - 3 whales were spotted on a daily basis, except for storm days. October 30 and 31 observer wrote in a log book that a whale was scratching near the river mouth.

In early November, as in the north, was a strong northerly wind, which subsided by November, 8. During this time only on November 4 three bowhead whales were spotted, which were feeding at 1,5 km from the coast. After that, 1-2 gray whales were passing by for a few days near the place of observation toward the south-west.

Second half of November despite the fact that southerly wind periodically blew and sea conditions were good for the observations, there have been only 8 of bowhead whales (on 16, 19, 28 and 29 only 1 whale was seen, and on 23 – 4 whales). On November 28 there were 300 belugas recorded in the log. Seals recorded little, only on November 25 there was 23 ringed seals observed, and on November 29, 21 bearded seals. Walruses were practically not seen, despite the presence of a number of once a large coastal rookeries of walruses. The observer generally noted an anomaly in the fact that during the autumn storms there were no washed out dead walrus, which suggests that they probably were not on this area of the sea. In addition it was surprised that in early November at Penkinee there were no bowhead whales, usually at this time of year there are tens of them grazing.

In the first half of December, despite the fact that the sea has not been free of ice, there has not

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been a single whale spotted. Only the seals were resting in the sludge, or floating at the edge of the ice.

Observations finished on December 15.

### **Sireniki**

The observer Oleg Rahtilkun started work on April 15. On the same day he recorded two bowhead whales (female with baby). As usual in the sea around Sireniki it wasn't completely covered with ice, the assessment area of ice was about 10%. The remaining days of April to mid-May, near the village were only beluga whales (04/15 – 50 individuals, 04/18— 27, 04/28— 11, and 04/30 – 300 belugas, 05/02 – approximately 700, and during other days 10-40 individual whales). In all cases, whales were a few hundred meters from shore.

Only on 5/11 a gray whale passed by. In the second half of May, gray whales, one per day, were passing by the village more often. One bowhead passed by on May 17.

In June, the frequency of meetings with the gray whales remained at the same level, 1-2 whale passed by the village every other day within 0,5-1 km from the shore.

Spring observations ended June 15.

In October, to the observations began by Alexander Inmuge. The sea was ice-free the entire autumn period of observation. He recorded the not very significant number of walruses passing in different directions (1-2 day), as well as the rare gray whales. On 9 October 6 orcas were passing by within the 700 meters from the shore. Only on 10/18 three gray whales was recorded during the day and on 10/20 for the first time observed a bowhead whale. He saw on 10/25 two more humpbacks, and then storm started.

In November, the incidence of spotting of the bowhead whale increased, on 4, 6 and 8 of November, spotted one whale a day. In those days recorded by the passage of one gray whale a day, occasionally saw lonely walruses. By mid-November observations of bowhead whales became more frequent. For example on November 11-15 there were total 13 groups of 2-3 whales each recorded (once even 6), and 9 single whale. From Nov 17 to 22 there was a violent storm, thus observation was difficult. On November 24 four groups of 2-3 bowhead whale and 7 single whales were spotted, and also three gray whales passed. On Nov. 27 after a severe storm took place during the day there were 14 bowheads, 2 gray whales, and about 200 belugas passed by. On November 29 observers counted 413 belugas that were moving in different directions, at a distance from 5 to 100 m from shore.

Observation period ended November 30.

4. Collection of biological samples of bowhead whales.

Information on the collection of biopsies for genetic analysis is in the report of the Denis Litovka - employee of ChukotTINRO (attached).

Appendixes:

1. Sample Log of observations.
2. Report by the ChukotTINRO scientist Denis Litovka
3. Photos of the observers.

Eduard Zdor  
ATMMHC Executive Secretary



**Report  
on activities under the joint Agreement between  
ChukotTINRO and North Slope Borough**

1. 12 samples were remotely collected (data base is attached) under the Federal Ministry of Natural Resources' permit #45 from August, 2<sup>nd</sup> 2007 and under the recommendation of Federal Service of Natural Resources Control # 50/07-k from May, 7<sup>th</sup> 2007;
2. the Review of Chukotka Committee of Natural Resources of importance of the export and joint US-Russian investigation of Bowhead samples was received in January 31<sup>st</sup> of 2008 (attached) under the condition of receiving two more permits: from Federal Veterinary Service and Federal Agency on Transport and Export Control;
3. the recommendation of Federal Service of Natural Resources Control #060/08-c on exportation of 11 skin samples of Bowhead Whales from Russia to USA was received in November 5<sup>th</sup> 2008;
4. the approval of Federal Agency on Transport and Export Control was received (cannot provide the copy, because it is for internal use only);
5. the veterinary permit became very difficult to get in time – more then 40-50 days, because the Vet Inspection was divided to 3 different agencies. We should send all papers to one Agency, which sends papers to Moscow Vet Inspection Agency, which reviewing our papers for a month or so. Then this Agency sends papers to Anadyr to Veterinary Division of Chukotka Department of Agricultural and Commercial Politics, which is issuing the international veterinary permit.

The problem with veterinary permit became actual only in 2008, so we and ChukotTINRO and ATMMHC were surprised and shocked to know this. Especially it was very difficult to understand the procedure, because there was beginning of formation of those 3 agencies-inspections: nobody knew their responsibilities and functions, were trying to send us to the other agency etc. We've sent papers to Moscow, but the answer came back after the CITES permit was expired.

Also there was a problem with Bering Air Company, which said that they do not have the Cargo license any more. But it wasn't the truth, because they were sending cargo in 2008. Maybe it was because of worldwide terrorist paranoia and biological samples were almost equivalent to biological weapon.

So, first of all we need to solve the problem with Bering Air. If they decline to send samples as cargo, we'll need to create a plan or to find the valuable person, which will agree to bring samples across the border, of course with our support at Customs and other special services.

Second. Before I send all papers to proceed export CITES permit in Moscow I should have in hand actual or almost expiring IMPORT CITES permit. And I should be assured that this or another IMPORT permit will be postponed/prolonged till the period of time of receiving EXPORT CITES permit.

Cheers,

Dennis Litovka

Scientific coordinator of the project

Whale Research Executive of ChukotTINRO

## Data base for Bowhead whale genetic samples collected in Chukotka (Russia), 2007-2010

ID	Captain	Location	Date	Comments	Tissue	Behavior during approach	Behaviour after sampling	
								GPS Coordinates (N/W)
1	BW-1-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5-6 km from shore, ENE wind 8-12 m/sec	skin	playing with other whales	tugged quickly
2	BW-2-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5-6 km from shore, ENE wind 8-12 m/sec	skin	suddenly moved 8-15 meters	dived down rapidly
3	BW-3-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5-6 km from shore, ENE wind 8-12 m/sec	skin	surfaced, was very careful	tugged, moved 8m and dove down
4	BW-4-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5 km from shore, ENE wind 8-12 m/sec	skin	tugged by the head	quickly dove down
5	BW-5-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5 km from shore, ENE wind 8-12 m/sec	skin	sharply moved along ice crack	quickly dove down without showing body
6	BW-6-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5 km from shore, ENE wind 8-12 m/sec	skin	stood still and dove down its head	quickly dove down without showing body
7	BW-7-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5 km from shore, ENE wind 8-12 m/sec	skin	sharply dived down	huge waves after diving down
8	BW-8-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	5 km from shore, ENE wind 8-12 m/sec	skin	sharply moved forward	dove down with noise
9	BW-9-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	6.5 km from shore, ENE wind 8-12 m/sec	skin	whales were breathing calmly, one was sleeping	dove down calmly
10	BW-10-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	6.5 km from shore, ENE wind 8-12 m/sec	skin	sleeping in the crack 1-1.5 meter width	dove down calmly
11	BW-11-2007-RUS	SivSiv	Inchoun, Chukotka	27.11.2007	7 km from shore, ENE wind 8-12 m/sec	skin	was lying on the surface	rapidly tugged, moved up and dove down
12	BW-12-2007-RUS	Litovka	Al'katvaam, Chukotka	07.09.2007	sampled in village museum	baleen	whale was found ashore in 2003	
13	BW-11-2007-RUS	Litovka	Lorino, Chukotka	27.05.2010	male 15.5 meters, harvested	skin	a big dent/dint at the top of back probably from a satellite tag	no permit to collect

Note: up to 12 approaches whales did not allow to come within range. One whale dove down with the sampling dart. 3 times we missed the whale

Scientific coordinator of the project

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Dennis Litovka  
Whale Research Executive of  
ChukotTINRO

Observer’s photos



Artur Apalyu, Yanrakynnot



Maria Panaugie, Cape Chaplino



Rodion Rinetegin, Neshkan