 whale hunting and use among the chukchi in northeastern siberia

著者: イキヤ カズノブ

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Abstract
The Chukchi are an indigenous people living in the circumpolar Arctic of northeastern Russia. In the second half of the nineteenth century ethnographers distinguished two groups, the “Reindeer Chukchi”, who tended reindeer herds, and the “Maritime Chukchi” coastal dwellers whose subsistence was based primarily on sea mammals. However, during and after the Soviet era, many Chukchi worked on state-run or autonomous okrug-run farms. This paper surveys Chukchi whale hunting culture over the past 10 years, and attempts to clarify social and economic changes in whale hunting and whale meat distribution. The author conducted research for 40 days every summer during the period 2003–2006 in Lorino village and its environs, located in the eastern part of Chukotka Peninsula. The population of the Chukchi in the study area in 2003 numbered 1,288, and other groups, primarily Eskimo and Russian totaled 130 persons. In this paper,
I examine the relationship between a new private company started by villagers in the study area in 2003 and autonomous okrug-run farms over quantities of whale hunting permitted by the IWC in the Bering Strait. Whale products serve many purposes for villagers, including meat for human consumption, oil for fuel in the village, and food for dogs used in seal hunting.

1. Introduction

1.1 Purpose and method

The Bering Sea, located at the border between Russia and the USA, is said to be the richest area for marine animal resources. As the Arctic sea ice melts, whales, walruses, and seals migrate seasonally. Having discovered the migration routes and breeding sites of marine animal resources, people occupy coastal areas that are convenient for their dependence on them.

Recently, cultural anthropologists have studied changes in sea-mammal hunting in Russia following the collapse of the Soviet Union (Kerttula 1997, 2000; Kozlov and Zdor 2003; Kozlov et al. 2007; Csonka 2007). In particular, the study by Kerttula presented information on sea-mammal hunting related to the ethnography of Sireniki Village in the Chukotka Autonomous Okrug of the Russian Federation (Kerttula 2000). In this paper, I describe the marine animal hunting villages of the Chukchi on the west side of the Bering Sea, and especially whale hunting, during the modern period. In addition, I consider politics relating to whale harvest limits. This paper presents information related to various aspects of whale hunting culture, especially the social and economic changes in whale hunting and meat distribution by the Chukchi over the past.

![Figure 1](https://example.com/figure1.png) Location of the survey site
10 years. The relationships between a new private company started by villagers in the study area in 2003 and autonomous okrug-run farms are discussed as they relate to whale harvest limits permitted by the IWC in the Bering Strait. Whale products serve many purposes for villagers, including meat for human consumption, oil for fuel in the village, and food for the dogs kept to hunt seals in winter.

The author conducted research for 40 days each summer from 2003–2006 in Lorino village, located in the Chukotsky District of the Chukotka Autonomous Okrug and its environs in the eastern part of the Chukotka Peninsula.

The Chukchi are an indigenous people living in northeastern Russia in the circumpolar Arctic (Figure 1) (Ikeya 2002). The population of the Chukchi in 1989 was about 15,000. In the second half of the nineteenth century ethnographers classified them into the “Reindeer Chukchi”, who tended reindeer herds (Ikeya 2001, 2004, 2005), and the “Maritime Chukchi” living along the coast and depending primarily for subsistence on hunting sea mammals. However, during the Soviet era, many Chukchi worked on either state-run or autonomous okrug-run farms.

1.2 Study Area

Lorino village is located on the Bering Strait, within the territory of a vast inland tundra. The population of the Chukchi in my study area in 2003 was 1288, and other groups, principally Eskimo and Russian, numbered 130. According to 2004 data, villagers are engaged in sea-mammal hunting, reindeer herding, handicraft production, and working in fur factories etc. Thirty-two sea-mammal hunters are among 175 people belonging to the Municipal Unified Enterprise of Agricultural Workers.

In 1924, Lorino consisted of 17 traditional houses, called Yalanga, and two European style cabins, according to my research about the historical documents kept in the village. In 1926 there were about 60 households including those in nearby settlements of Lorino, Akkani, Nuniamo, Raupelian, and Mechigmen. A total population of about 300 persons possessed 29 skin boats and 75 rifles. A primary school was opened and the Kolkhos built in Lorino. There were 19 Yalanga in Lorino in 1949, and power station was constructed in 1953. Living and administrative facilities of the village were reconstructed to use centralized heating. Akkani finally joined Lorino in 1970, and Nunimoa joined it in 1978.

Figure 2 shows the arrangement of buildings in the study area. There are many one story and two story residential houses that were built by the State on a coastal terrace, and a port covered by the sand in the eastern part (Photo 1). Facilities like a coal-fueled power station, the office of the national enterprise called “Kepper”, the skin processing company, a preschool, and a hospital are also located in the village. A brown fox-breeding facility is located in the northern part of settlement. I can observe stray dogs roaming alone or in groups up to 14 kept tight in the settlement (refer to Figure 2 and Photo 2).

Historical changes in sea mammal hunting can be summarized based on three temporal divisions of the village economy. The first is the era of the sea mammal hunting cultural complex. There were about 80–100 camps on the Chukoto Peninsula in
Figure 2  The arrangement of buildings in Lorino village
(Source: Interview and direct observation)

Photo 1  A port covered the sand in Lorino village
(Photograph by K. Ikeya)
pre-socialist times. The number of reindeer per herd is not large because of the severe climate and the shortage of grazing land. Almost half the people depended on marine foods and owned a skin boat and a dog team (Ikeya 2002: 291). This information is similar to that in ethnography by Bogoras (1904–1909). In that period the main animal eaten was walrus. The second temporal division is an era of sea mammal hunting managed by the nation during the socialist era, when people were forcibly resettled to the new settlement. The third temporal division relates to the co-existence of private and public companies. The contemporary Chukchi hunt sea-mammals under the influence of NGOs such as the Red Cross, and with the support of the Makah Indians.

2. Marine animals in the Bering Sea

In the Bering Strait, gray whales (*Eschrichtius robustus*), bowhead whales (*Balaena mysticetus*), walruses (*Odobenus rosmarus*), ringed seals (*Pusa hispida*), bearded seals (*Erignathus barbatus*), harbor seals (*Phoca vitulina*), and other species are hunted. Among them, first we examine the regional characteristics of Chukchi whale hunting, especially gray whales and bowhead whales, which is classified as “Indigenous Subsistence Whaling”.

The migration routes of whales in the Bering Sea are shown in Figure 3. Gray whales, 8–15 m long and weighing approximately 10 tons, are said to migrate in summer thousands of kilometers from the Bering Sea to an area off the coast of California, where they overwinter. The migration routes of bowhead whales, 15 m long and weighing some
15 tons, depend greatly on sea-ice movement; they migrate north during the spring and summer, when the ice is retreating northwards, and south during the fall, as the sea-ice develops.

The migration routes of walruses are determined by sex, age, and cohort. The stretch of coastline near the present Akkani hunting camp is known as their breeding site. Finally, ringed seal, beard seals, harbor seals, among other species also inhabit local seas.

A comparison of Chukchi vocabularies pertaining to whales and walruses demonstrates that although walruses have many names according to sex or age, those related to whales are less developed. Although the gray whale is called *iitiv* and the bowhead whale, *rav*, the walrus is called *ryrki* in general, males are called *katvae* and females are *nav ryrki*, yearlings are *penval*, the newborn are *kesyki*, and the solitary are *keqlus*.

3. Real conditions of whale hunting

Social aspects of whale hunting can be examined from three perspectives: 1) groups of people who actually hunt whales, 2) hunting activities, and 3) butchering and distribution.
3.1 Hunting group

The hunting group comprises only male employees of a public company of each village, called “Kepper”. The members of a Kepper are divided into four teams, each of which is headed by a chief called “Baligajir”. Several members chosen as hunters from each team gather in a boat. Among them, the division of roles, such as harpooner, gunner, and boat captain is decided in advance. Meanwhile, when they cannot go hunting, for example because of stormy weather, they perform various management tasks, such as accounting, that can be done within the settlement.

3.2 Hunting activities

Appropriate equipment is required to hunt sea mammals. A rifle, a darting gun (harpoon with a whale line), a harpoon with a drogue, as well as a boat with an outboard motor are necessary. In addition, hunting seasons differ by target species. In particular, the hunting season of gray whales is restricted to June–November, when they are near the coast of Lorino village. On the other hand, for bowhead whales, whose assigned harvest number is one, the hunters cross the village border and head out to deeper seas than the adjacent waters of village.

The start of the hunting season is decided by a director of the state-operated group, Kepper. The hunters line-up in front of the Kepper building awaiting instructions from the Director (Photo 3). When the weather is bad, however, they are sometimes assigned to tasks not directly related to marine animal hunting. At the wharf there is a line of huts

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Photo 3  The hunters stand in line in front of the Kepper building
(Photograph by K. Ikeya)
for storing the hunting equipment, all of which belongs to Kepper. The hunters busy
themselves preparing to depart for hunting as soon as they receive instructions.

There follows an example of a whale hunt (Photo 4). A couple of boats, partnered
mutually (as with private corporations), left the village at 11: 30 on September 17, 2004.
They sighted a whale at 11: 40. At 11: 59, they threw the first harpoon with a drogue to
prevent the whale from sinking. They fired 29 rifle shots, aiming at the neck or breast of
the whale for fear of its counterattacking. Then, at 12: 13, they fired the first darting gun
from a distance of about 10–15 m. Finally, they fired four shots from the darting gun. At
12: 27, they confirmed that the whale had died. The place where they killed it was about
8 kilometers distant from the village. At 13: 57, they arrived back at the village with the
whale in tow. At the beach, they measured its size and faxed this and other information
to the firm at Anadyr, the center of the Chukot autonomous region.

In this case, it took only 47 minutes to kill the whale from the time of first sighting.
Furthermore, it took only 14 minutes from the first shot from the darting gun,
demonstrating that the whale was killed quickly, and inflicting minimal pain.

However, the location of each whale killed cannot be mapped, because no
information is available. Most people engaged in whale hunting are members of the
state-run business unit (Kepper), and are grouped into four whaling teams. Their whaling
locations vary according to the seasonal migration of the target species, so that the
former settlement, as far as 10 km away, is sometimes chosen as a hunting camp.
Regarding resource use at sea, there is no clear territory among the four whaling teams.
In 2003, when bowhead whales were hunted, they would go considerable distances from
the village. They would also catch walruses from the whale hunting camps.

Table 1 summarizes the number of marine animals caught by each month in 2002. Gray whales were caught from June–October, including more than 10 in August. One

<table>
<thead>
<tr>
<th>Month</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>9</th>
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<th>11</th>
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<td>79</td>
<td>45</td>
<td>152</td>
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<td>beard seal</td>
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<td>1</td>
<td>0</td>
<td>15</td>
<td>48</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>36</td>
<td>49</td>
</tr>
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<td>41</td>
<td>18</td>
<td>4</td>
<td>43</td>
<td>54</td>
<td>0</td>
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<td>65</td>
<td>125</td>
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<td>0</td>
<td>0</td>
<td>4</td>
<td>13</td>
<td>7</td>
<td>12</td>
<td>11</td>
<td>1</td>
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<td>0</td>
<td>1</td>
<td>0</td>
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Source: Records kept by the state-run business unit (Kepper)

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<th>hunting day</th>
<th>numbers of caught</th>
<th>sex</th>
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<td>4 June</td>
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<td>M2</td>
</tr>
<tr>
<td>12 June</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>17 June</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>26 June</td>
<td>2</td>
<td>F2</td>
</tr>
<tr>
<td>28 June</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>2 July</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>9 July</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>17 July</td>
<td>1</td>
<td>M</td>
</tr>
<tr>
<td>18 July</td>
<td>4</td>
<td>M2, F2</td>
</tr>
<tr>
<td>1 Aug.</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>5 Aug.</td>
<td>2</td>
<td>F2</td>
</tr>
<tr>
<td>8 Aug.</td>
<td>2</td>
<td>F2</td>
</tr>
<tr>
<td>16 Aug.</td>
<td>1</td>
<td>M</td>
</tr>
<tr>
<td>20 Aug.</td>
<td>2</td>
<td>F2</td>
</tr>
<tr>
<td>23 Aug.</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>29 Aug.</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>7 Sept.</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>9 Sept.</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>16 Sept.</td>
<td>2</td>
<td>F2</td>
</tr>
<tr>
<td>27 Sept.</td>
<td>2</td>
<td>M, F</td>
</tr>
<tr>
<td>2 Oct.</td>
<td>2</td>
<td>M2</td>
</tr>
<tr>
<td>10 Oct.</td>
<td>2</td>
<td>M, F</td>
</tr>
</tbody>
</table>

Source: Records kept by the state-run business unit (Kepper)
bowhead whale was caught, in November. Walruses were caught in June and August–December, with the number of animals caught exceeding 150, the most during the year. No walruses were caught during January–May. On the other hand, ringed seals were caught in all months excepting July, August, and September and the number of animals caught in December was 125, the highest of any month. Harbor seals were not caught in April, July, August, or September.

From the information presented above, it is clear that hunting is year-round activity, with whales hunted during June–October, walruses in June and August–December, and seals in the other months. This harvest pattern is influenced strongly by the behavior of the marine animals, with whales and walruses being harvested during their migrations.

On the other hand, the numbers of animals caught by Lorino village hunters in 2002 included 42 gray whales (18 males and 24 females) and a bowhead whale. In addition, walruses (306 of 500 restricted animals), ringed seals and harbor seals were caught. Table 2 shows the daily harvest of gray whales, of which 1–4 were caught by 1–4 teams every 0–10 days from June 4 through October 10. Two gray whales were caught every day. The male : female sex ratio was 3 : 4. Presumably, this is related to the hunters’ inability to identify a whale’s sex before landing it.

3.3 Whale butchering and meat distribution

Various people butcher a whale at their own initiative villagers, according cut off a piece
Figure 4 The distribution of whale meat in Lorino village (K.Ikeya)

Photo 6 The officials of the Kepper weigh the portions of meat (Photograph by K. Ikeya)
of the hide or meat (Photo 5). Even people not belonging to a “Kepper” sometimes butchered whales.

The meat was sorted by use, with, or example, food for domestic foxes being put on the bed of a truck, or the meat for whale oil in other places, and so on (Figure 4). However, villagers do not acquire the meat or other products free of charge. Instead, the officials of the “Kepper” weigh the portions and the villagers pay later for the purchase (Photo 6).

4. Marine animal hunting and local communities

4.1 Whale hunting within the village economy

The marine animal hunting management of the Chukchi is affected by the agricultural agent’s policy in the Chukot Autonomous Region.

The number of workers of a “Kepper” according to occupation in the village of Lorino in 2004 was as follows: 32 marine animal hunters, 23 reindeer keepers, 48 folk handicraftsmen, and 33 domestic fox keepers. In other words, the total number of people engaged in marine animal hunting was 18%.

The meat of a marine animal caught by them is the property of the state-run business unit. Gray whales are used as food, feed for dogs and domestic foxes, and oil. When a hunter buys meat for food at 6 rubles (25 yen/kg), charge is subtracted from his salary. For dog food, however, 70 kg meat is distributed to each hunter free-of-charge.

The village has 14 dog teams used for pulling sleds during seal hunting in winter. In August and September they drag trolleys. Table 3 presents information about dogs kept by one Chukchi family. They kept nine dogs—seven males and two females—which were 3–10 years old, with two dogs each aged 4, 5, and 6 years. All dogs were named. One is named Putin after the Russian President, and another is named Yonasargin derived from the Chukchi language. All the dogs were always leashed with ropes, and are not

<table>
<thead>
<tr>
<th>Name of dog</th>
<th>Sex</th>
<th>Age</th>
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<tr>
<td>Putin</td>
<td>M</td>
<td>3</td>
</tr>
<tr>
<td>Sera</td>
<td>F</td>
<td>6</td>
</tr>
<tr>
<td>Marshall</td>
<td>M</td>
<td>4</td>
</tr>
<tr>
<td>Bethy</td>
<td>F</td>
<td>7</td>
</tr>
<tr>
<td>Orshin</td>
<td>M</td>
<td>10</td>
</tr>
<tr>
<td>Seliah</td>
<td>M</td>
<td>6</td>
</tr>
<tr>
<td>Mikupik</td>
<td>M</td>
<td>5</td>
</tr>
<tr>
<td>Kuzia</td>
<td>M</td>
<td>5</td>
</tr>
<tr>
<td>Ynnansal'gin</td>
<td>M</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Interview and direct observation
allowed to roam. A boy takes care of them by feeding whale or walrus meat.

In August, 2005, a new movement was undertaken by two groups of natives of different nationalities, both of which were engaged in hunting gray whales. For the first time, Makah Indians, who live in Northwest Washington State, USA, visited Lorino village. Although like the Chukchi the Makah’s ancestors hunted gray whales, hunting had ceased in the early 20th century. So they came to learn whale hunting from the Chukchi.

4.2 Two business units in the village: public and private corporations
4.2.1 Changes in the allowed whale catch

The annual number of whales assigned for hunting by business units is decided in a conference every January. Table 4 shows the changes in the number of whales assigned in Lorino village. First, is the change in the public corporation “Kepper.” In 1998–2001, the number was stable: 70–75. In 2002, however, it dropped to 48. It was explained that the decline occurred when whaling was started in a number of villages where it had not been done previously. Then, it decreased to 35 in 2003 and 32 in 2004, but it increased to 40 in 2005.

On the other hand, the private corporation “Akkani” began with 4 whales in 2003 and the number increased to 7 in 2004 (Table 4). In 2005, however, it decreased to 8 because of the restriction of numbers that could be hunted. It is suggested that the decrease resulted from the figure from the preceding year, only 7 animals, however, the leader of “Akkani” explained that it resulted from a fuel shortage. Further, the number was zero as of late-September, 2005 for many reasons, but mainly because there was no consensus with the government regarding a quota.

<table>
<thead>
<tr>
<th>Year</th>
<th>Gray whale</th>
<th>Bowhead whale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>75(72)</td>
<td>1(0)</td>
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<tr>
<td>1999</td>
<td>70(63)</td>
<td>1(1)</td>
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<td>2000</td>
<td>73(62)</td>
<td>3(1)</td>
</tr>
<tr>
<td>2001</td>
<td>71(66)</td>
<td>1(1)</td>
</tr>
<tr>
<td>2002</td>
<td>48(48)</td>
<td>1(1)</td>
</tr>
<tr>
<td>2003</td>
<td>35</td>
<td>12(4)</td>
</tr>
<tr>
<td>2004</td>
<td>32</td>
<td>10(7)</td>
</tr>
<tr>
<td>2005</td>
<td>40</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 4 The annual number of whales assigned in Lorino village, permitted by the IWC

( ) Shows the annual number of whales caught.

( ) Shows the annual number of whales assigned in the private corporation “Akkani”.

1 Shows the annual number of whales assigned in the public corporation “Kepper”.
4.2.2 New movement of the private corporation “Akkani”

The private corporation “Akkani” is a new organization consisting only of the leader’s family plus a few male members. The man acting as a representative formerly worked for the public corporation of Baligajir. Now he is also the representative of the Association of Chukchi Traditional Sea-mammal Hunters. He has participated in the International Whaling Commission (IWC) many times.

Next, I discuss the management of the new organization in 2004. They introduced a system to raise money from the villagers, and to distribute free whale meet them. The target villagers numbered 340. Every villager pays 100 rubles (400 yen), with pensioners paying 50 rubles (200 yen) for an annual portion of meat. The money raised from the villagers is used to purchase gasoline. Actually, 200 liters of gasoline is necessary to catch a whale. At 14 rubles per liter, it costs 2,800 rubles (11,200 yen) for gasoline to catch a whale, which is equivalent to about 100 dollars. In 2005, however, no money was raised from the villagers.

On the other hand, the relationship between the two business units is subtle. Sometimes, family members belong to the different units.

5. Conclusion

Chukotka is the most prosperous region in Russia for sea-mammal hunting. Walruses and seals as well as whales are hunted there. The number of gray whales caught by Lorino, the subject of this paper, is the most in Chukotka, owing primarily to the rich local sea mammal resource base, but also because of the long tradition of sea mammal hunting.

Whale hunting in Lorino village is conducted during June–November, according to the migration pattern of the whales. They have hunted various sea-mammals: gray whales, bowhead whales, walruses, and seals, usually from hunting camps well away from the village. However, the “hunters” of Chukchi differ greatly from those of hunting and gathering people who are able to hunt year-round.

To stress the significance of hunting in the village, Figure 5 shows interactions between whales, walruses, seals, dogs, foxes, and the local village economy/community. This figure shows that because a cash income outside the village cannot be derived

![Figure 5](image_url)
directly from whale meat, they gain indirect benefit by feeding the meat to dogs and domestic foxes. In addition, two business units co-exist in the village.

In addition, because of the contribution of whale meat, Chukchi are able to keep many dogs. The dogs are used for sled teams to hunt seals on the ice. So, it can be suggested that the dogs play an important role in maintaining the people’s identity.

In these years, I would like to consider the effects the decrease in whale hunting quotas assigned by IWC on the village. First, because whale meat is not a commercial commodity outside the village, the assignment of meat to each villager is relatively great. In other words, the decrease of the catch numbers by restriction cannot be a direct shortcoming for the village.

On the other hand, the environment around their whale hunting, such as a new hunting groups appearing within the village, has been changing. For that reason, they are facing problems within the village related to the number of whales assigned.

Acknowledgments

I wish to express my thanks to the officials of the Chukotka Autonomous Okrug for their cooperation and hospitality. I also would like to express my heartfelt thanks to many people in Lorino Village.

Notes

1) Reduction of incomes of reindeer herders from 1985 to 2000 was demonstrated (Abryutina 2007: 292).
2) See the changes in the sea mammal hunters’ diet at Lorino and Lavrentiya between Soviet and post-Soviet times (Abryutina 2007).

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