

# HIDE TANNING AND ITS USE IN THE TAIGA: THE CASE OF THE OROCHEN-EVENKI REINDEER HERDERS AND HUNTERS OF ZABAİKALYE (EAST SIBERIA)

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## ABSTRACT

This article\* documents the way in which the Orochen-Evenki hunters and herders in northern part of Zabaikalye tan hides and produce gear in the post-Soviet era. Here, I wish to present the argument that it is difficult to understand the reviving of hide tanning in remote villages and the taiga without understanding how hunters and herders in this region adapt to the unstable post-Soviet environment. I suggest that hunters and herders aim to maintain their autonomy from goods and resources imported from cities, and, in spending little effort connecting with state powers in this way, securing their lives from socio-economic constraints.

KEYWORDS: Orochen-Evenki • reindeer herders and hunters • hide tanning • post-Soviet adaptations

## INTRODUCTION

The purpose of this article is to document the way in which the hides of game animals are tanned and used in gear production by Orochen-Evenki reindeer herders and hunters in Zabaikalye. Anthropologists describe how the removal of Siberian reindeer herders from their land also implied a withdrawal from social relations, loss of skills and knowledge causing trauma experiences even for the contemporary generation (see Vitebsky 2002: 182). At the same time, we find how reindeer herders and hunters take advantage of different opportunities arising from the collapse of the Soviet state, de-industrialisation and an increase in the market economy (Anderson 2006a; 2006b). In this article, I wish to argue that it is difficult to understand the use of traditional Orochen-Evenki handicraft knowledge and skills, such as hide tanning, without understanding how hunters and herders adjust their lives to the post-Soviet environment.

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Figure 1. Map of the Zabaikalye indicating my fieldwork site (see arrow for latter).

Zabaikalye is a vast territory stretching from 1000 km east of Lake Baikal to the confluence of the Argun and Shilka rivers in the west. In the north, it starts at the high mountain ranges of Patomsk and Severo-Baikal (Republic of Sakha), and extends 1,000 km south to the border of China and Mongolia. Recently Zabaikal Krai has become the official title of an administrative district corresponding to what was formerly Chita Oblast.

Zabaikalye has different geographic zones that vary from steppes to tundra. This region is also characterised by a continental climate exhibiting seasonal extremes. The high mountains in the north prevent warm and humid air masses from reaching Zabaikalye. This leads to a severe climate with tremendous fluctuations in atmospheric pressure and with temperature extremes from minus 60 degrees centigrade in winter to plus 40 degrees in summer. Glaciers are located in the highest treeless mountains and the rocky hill outcrops are often covered with larch and pine taiga.

Zabaikalye lies at the junction of Siberia, the Far East and Inner Asia, and is often referred to by local geographers as the “centre of Eurasia”. The name Zabaikalye means ‘the region behind Lake Baikal’, reflecting on a Eurocentric colonial view of the region. Indeed, the region served as a Russian empire support base for the exploration of minerals, silver and gold from the 17th century when Cossacks explored and militarised the region by establishing a system of forts. The Empires of China, Japan and Korea contested the region with Russia. The region became an important Russian colony involved with the increasing exploitation of iron, nickel, molybdenum, copper, titanium, aluminium, zinc, cobalt, brown and hard coal, and remained so until the end of the Soviet state. The local population of Zabaikalye has also supplied European and Eastern markets with sable fur, rare natural medicines and nephrite stones for at hundreds of years.

Zabaikalye became an administrative unit of the Russian empire in 1851. Prior to this, however, the name had already played a special role in popular and scientific literature as well as in local discourse. The proposed Zabaikalye covered what was Chita Oblast and Aga Buryat Autonomous Okrug in the east, and the Republic of Buryatia and part of Irkutsk Oblast (Bodaibo Rayon) in the west. In spring of 2008, Chita Oblast was

consolidated with Aga Autonomous Okrug and the newly established administrative region was renamed the Zabaikal Krai.

The Orochen-Evenki,<sup>1</sup> or the Reindeer People as they call themselves, live in Baunt Rayon (Republic of Buryatia) and Tungokochen Rayon (Zabaikal Krai) in the region of the eastern part of Lake Baikal at the border with Siberia, the Far East and Central Asia. Most Orochen-Evenki live in villages established in the 1930s by the Soviet state to sedentarise nomadic families. However, after the collapse of the Soviet system some Orochen-Evenki families privatised reindeer from liquidated state farms and established clan enterprises, spending all year migrating around the remote taiga with their reindeer herds. They use reindeer to transport gear and supplies to their mobile camps as well as transporting the carcasses of game animals. All Orochen-Evenki men and women spend a large part of the year hunting in the taiga for fur and game animals, although they remain based in villages. A successful hunter in the taiga can harvest a variety of animal hides. The hunted animals include moose (*Alces alces*), elk (*Cervus elaphus*), bear (*Ursus arctos*), boar (*Sus scrofa*), wild reindeer (*Rangifer tarandus*), roe deer (*Capreolus capreolus*), Siberian musk deer (*Moschus moschiferus*), sable (*Martes zibeline*), squirrel (*Sciurus vulgaris*), weasel (*Mustella sibirica*), ermine (*Mustela ermine*), lynx (*Lynx lynx*) and wolverine (*Gulo gulo*). There are also fish in the rivers, including taimen (*Hucho taimen*), burbot (*Lota lota*) and grayling (*Thymallus thymallus*).

There are a few short ethnographic descriptions of Orochen-Evenki hide tanning technologies used in early twentieth century (Shirokogoroff 1935; Vasilyevich 1969; Mazin 1992). Shirokogoroff (1935: 93) describes hide tanning skills and knowledge as a complex of Orochen-Evenki adaptation to the local environment in which hunter and herder are able to use materials what is 'found-at-hand' for their clothing, household and subsistence. Mazin (1992: 110–113) also gives an overview of pre-Soviet Orochen-Evenki material culture, stating that Orochen-Evenki knowledge and skill in tanning and craft making started to disappear with an inflow of newcomers. My research demonstrates that a collapse of centrally funded economic activities in villages made hunters and herders rely on the old ways of doing things, including the production of gear, camp establishment and the organisation of storage.

Today, the Orochen-Evenki intelligentsia perceive old handcrafts as a way to maintain indigenous identities and as continuation of Orochen-Evenki 'culture' (Rus. *kul'tura*). In recent decades classes and workshops were initiated in secondary schools or houses of culture (Rus. *dom kul'tury*), where indigenous children are taught by elders to process hides and to produce different items from hides in large villages such as Bagdarin (Republic of Buryatia) and Ust' Niukzha (Amur Oblast). Exhibitions of Orochen-Evenki crafts were commonly organised during different celebrations, for example festivals representing indigenous people in large villages and cities. Indeed, traditional crafts have been revived by the Orochen-Evenki alongside re-enactments of old ritual practices and the recreation of ritual sites (Lavrillier 2005). However, in taiga camps and remote villages, hide tanning has become crucial for the production of gear. Orochen-Evenki, as well as other hunters from different backgrounds, perceive such gear as part of success in subsistence. Today, the taiga, with an abundance of wild animals, has become the main source for cash income and food for many local families. Villagers rushed to the taiga searching for everything of value, to be sold, exchanged, or used in their households. Villagers with no jobs experienced shortages of cash, sup-



*Photo 1. Aleksei Aruneyev butchering the most desired animal: moose. Photo by Donatas Brandišauskas.*

plies and goods of proper quality in the remote villages and taiga. Therefore, many people became hunters, constantly visiting the taiga and learning new skills by joining organised hunting expeditions. At the same time different exotic animal parts and pelts became the main currency in the context of a shortage of cash and a 'wild market' (Rus. *dikii rynek*) (Anderson 2000). The taiga became full of people competing for different resources.

Therefore hunting success also became linked by hunters not only to elaborated hunting techniques or skills, but also to the use of appropriate equipment or gear or proper supplies with which to spend long winter seasons in remote places. Self-made gear from specially tanned hide became even more important when many market goods, such as canvas, cordage, etc., were in short supply in the taiga and very expensive to acquire. Such interest in the 'old ways' of crafting things is a way people strive to feel comfortable in a harsh environment, using everything that is found and striving to be less dependent on state resources. The use of proper gear is also linked with one's health and wellbeing in the taiga, and is linked to walking long distances, staying overnight in taiga camps and adapting to the local landscape and temperature fluctuations.

The research is based on my 16 months fieldwork among two communities of Orochen-Evenki reindeer herders and hunters conducted between 2004 and 2005 in rural areas of Zabaikal Krai and the Republic of Buryatia. The research was a part of my PhD project, which investigates how the Orochen-Evenki reindeer herders and hunters organise their subsistence activities in the post-Soviet environment of shortage and competition for resources. My research focused largely on the variety of skills and knowledge, including ritual practices, that is necessary in hunting and reindeer

herding in all seasons in the taiga. My stay with the Orochen-Evenki, both females and males, included constant hunting trips to different taiga areas of Tungokochen and Baunt rayons, visiting sites of ritual importance and places of seasonal harvest. These trips introduced me to different kinds of skills, production, crafts, and ways of accommodation in the taiga, including the performance of daily household chore by villagers, hunters, and herders. I had many hunters and reindeer herders of different ages and sexes as my mentors, whom I had a chance to observe performing different taiga activities and crafts, as well as the chance to imitate them. Furthermore, I have tanned many hides, produced sinew threads and footwear for myself and used them daily during my fieldwork.

An Orochen-Evenki handmade and tanned hide (Oro. *manivcha*, Rus. *polovinka*)<sup>2</sup> is a soft, porous material that is produced with the aid of the liver of wild animals, physical manipulations and rotten wood smoke. Such tanned hides with removed epidermis and hair can be called buckskin. This can be made from any ungulate animal such as deer, elk, moose, roe deer and musk deer. Such buckskin has qualities of fabric as well as qualities of factory-made leather. It is light, warm, strong, durable, breathable as well as soft and washable. Gear and footwear made from buckskin can be repaired well and re-used, producing other item suitable for different purposes.<sup>3</sup> These qualities are very important in the footwear, cloth and gear production that is crucial for subsistence and living for long periods in harsh taiga environments. The hunting and herding grounds are coniferous taiga, with conifers covering the hills and ridges. The highest rocky peaks of these hills, lying above the tree line, are covered with lichen and bush-like scattered spruce. The landscape is characterised by smaller and larger rivers meandering through valleys. The local land has permafrost quite close to the soil surface, therefore extra water is not absorbed in the earth and creates a wetland environment.

#### SELF-RELIANCE IN THE POST-SOVIET ENVIRONMENT: WALKING, AND GEAR PRODUCTION

Most of my fieldwork period was spent with Zhumaneyev-Aruneyev family reindeer herders and hunters, who were considered the largest reindeer herders owning up to 500 head. The government has officially designated a clan community, named in Orochen *boiun* (moose), for reindeer herding and hunting territory. The clan-community, established by 12 reindeer herders in 1992, consists of Zhumaneyev-Aruneyev kin and friends. The extended family migrates in the remote areas of the Kotomchik and Bugarikhta river basins (Tungokochen Rayon, Zabaikal Krai). Herders use an area that is located about 200 kilometres from Tungokochen village for grazing reindeer. The camps are hardly accessible from villages when moving between seasonal camps in the Karenga River basin near the Kotomchik, Bugarikhta, Poperechnaya and Bazarnaya rivers every 2–4 months. In the past the family did not use reindeer for commercial portage, and neither did they have regular trade relations with village people. Squirrel and sable pelts provided the main cash income for the family, while game animals were used for food. Once or twice per year the family used to buy some groceries. The family use mainly hand saws, did not own vehicles and reject the use of any electricity generators in their camps, although they inherited some equipment and log cabins from the collective farm. As most Orochen-Evenki hunters in the region, this group of reindeer

herders preferred to live permanently in canvas tents equipped with an iron stove, rather than using log cabins. Furthermore, it was almost impossible to predict family migration and find their camps because the family did not use any radio connection. Indeed, the family strove to be less dependent on any external social and economic constraints and supplies in the unstable post-Soviet economy. As a herder, Yura Aruneyev constantly repeated to me during my research, "I am the master of myself and do not need to report to anybody" (Rus. *Ya sam sebe khozyain i nedayu otchetu nikomu*).

Because of the shortage of good quality goods in the taiga, most hunters and herders, regardless of gender, started to tan hides and produce buckskin, also sewing footwear and clothing from this material that would be suitable for life in the taiga. Many Orochen-Evenki in their fifties say that they have never been taught to tan hides, although most of them saw their elders, parents or grandparents tanning hides during Soviet period. Indeed, many elders who were born in the pre-Soviet years, were known as very skilful hide tanners and even used hides in cloth production. At the time of the Second World War, Orochen-Evenki hunters and herders had a huge shortage of cotton material in the taiga, therefore, most hunters and herders produced clothing from buckskin themselves. As an example, Orochen-Evenki elder Olga Zhumaneyeva remembers how her family used to produce musk deer buckskin that was cotton-like for underwear. Therefore, contemporary elders remember how everyone knew how to tan hides in a great variety of ways.

During the Soviet period, the practice of hide tanning was mainly continued only by elders. With the establishment of collective farms, reindeer herds owned by Orochen-Evenki were confiscated. Reindeer herding was organised according to the recommendations of commissions (Rus. *komisii*) of urban specialists such as geographers, biologists and veterinarians. Collective reindeer herding was evaluated economically for the incomes generated from the sales of meat and hide. Reindeer were herded by indigenous brigades (Rus. *brigady*) of reindeer herders, equal in both status and the distribution of responsibilities, while soon the old way of herding (conducted by families) was changed by units of young herders working in shifts. There was only one woman (called a 'choom worker') attached to these units, and she was most often employed as cook (Vitebsky, Wolfe 2001). Through these collectivised herding practices, the family unit, which traditionally cared for the reindeer, was also destroyed. Males worked in the taiga camps the whole year, while females stayed in the villages. These brigades of reindeer herders were also supplied with food, gear, clothing and footwear to work in remote taiga camps. Collective farm planners even built permanent wooden houses equipped with sauna and different rooms for the reindeer herders 'to have a rest in comfort' in remote collective farm herding places. In villages, there was not good manner to dress in Orochen-Evenki way. Russian style clothing such as cotton jackets stuffed with wool, known as *fufaika*, became the most popular item in villages as well as in the taiga. Even today, Orochen-Evenki, who are the minority in most villages in Zabaikalye, often feel discomfort wearing clothing made from hides.<sup>4</sup>

Well known Orochen-Evenki craftsman Tamara Naikanchina told me, in Tungokochen village, that she was never taught hide tanning. Tamara was a medical school student in Krasnoyarsk, and that when she retired from her job she started sewing special shoes *untakar* (locally known as Rus. *unt*) and rugs called *muruko* (Rus. *kumalan*). As Tamara told me: "My mother never had time to teach us, so we learned by observation and trying to imitate her work." Today, hide tanning is again done by both males and

females of different ethnic background in the taiga and villages. However, some work, such as moose hide tanning is often done by males, while hide softening is mostly performed by children or females. Though each person has his own knowledge and experience in hide tanning, there are some common patterns in the northern part of Zabaikalye. Orochen-Evenki say that they remember every place they visited in their childhood, in the same way they know how to craft one or other item seen in their childhood. Every Orochen-Evenki family has inherited old scrapers for hide processing as well as special tools for hide softening that are used and shared for use again.

Today, when air and ground transport state system has collapsed, people have to rely on reindeer, horse, walk or boat moving in the landscape. Hunters and herders also use former farm territories finding own ways of accommodating in taiga. In this context, people started to use canvas tents equipped with iron stoves rather than log cabins. They prefer to use horse or reindeer when moving in local landscape rarely relying on different vehicles. Hunters and herders also collect and store different parts of hunted animals that can be turned into food or gear. Elders say that Orochen-Evenki used to leave out in taiga many parts of animals in taiga during Soviet times. Today, it is collected any part including any season hide of moose or deer as well as genitals and tails to be traded, exchanged and exported to China.

Hunting success was also dependant on one's skills and abilities of walking and transporting goods through swampy areas, rivers and steep rocky hillsides. Walking in the taiga is an activity of moving on foot, carrying personal belongings and tools, or transporting hunting and camping gear by reindeer or horse. As elders say: "Orochen life is entirely about walking" (Rus. *orochenskaya zhizn' – splshnoe peshkovye*). Indeed, reindeer herders and hunters constantly leave their camp for daily walks in the taiga when monitoring the movements of reindeer and wild animals, gaining knowledge from footprints that is crucial for their practices of subsistence. Hunters and herders walk for eight hours per day in summer or winter while hunting or searching for reindeer. Reindeer herders typically walk about six kilometres per hour. If a hunter starts tracking game animals such as sable in winter, then he can even cover a distance of up to 60 km in one day. Hunters talk about the success of one's subsistence in terms of walking: "The wolf is fed by his feet" (Rus. *volka nogi kormyat*). Hence, footwear made from tanned hides became a most desirable item among hunters and herders. When I brought large felt boots to a reindeer herders' camp, I was told that there will be no hunting success using those since those are cold, noisy and too heavy.

In winter, hunters prefer to wear light and warm footwear called in Orochen-Evenki *emchure*, made from depilated, grained, softened and smoked hide. Indeed, young hunters would complain quite often in winter that they could not hunt successfully because of inappropriate footwear. Successful hunter Aleksei Aruneyev says that he manages to wear out one pair of *emchure* per year. Indeed, skilful fixing of the raw-hide sole of *emchure* is almost a weekly activity in animal fur hunting camps. Hunters developed an elaborate technology of repairing footwear by sewing different patches. Aleksei's footwear also had pieces of leather attached to the sole that served as a tread. This is important since hunters and herders also have to walk large distances carrying some weight on their daily winter walks. One usually takes a small kettle (*kolokochan*) and cups for the midday break, with some bread (*kiltera*), sugar (*oloke*) and tea (each hunter brings their own supplies) in backpacks, called locally *poniaga* (a bag tied onto a wooden frame). Hunters of fur animals also take a rifle (*paktyravun*), a bullet bag

(*tauseruk*), a knife (*koto*) and a special belt (*chimka*) with a toggle on one end that is used to carry squirrels. A backpack is taken to carry some iron traps in winter. Most of this gear is made from hand-processed hides. People say that clothing and gear made from hides are durable enough to be worn in the taiga with many areas of dense bush. Furthermore, hide clothing is never destroyed by the hunted animals' blood as is the case with cotton clothing.

Moose hide, reindeer, wild reindeer, elk and musk deer are used for the production of different items of hunting and herding gear. However, moose hide is preferable for clothing and footwear production. In autumn or winter, moose leg hides, called *kamus* (Oro. *oso*) are used to produce the warmest footwear *untakar* (locally known also as *unty*), which is very popular among the villagers and city people of Zabaikalye. Some old-style *unty* have soles made from hide, produced from de-haired autumn male moose hides taken from the area of the animal's neck (*kukuio*). Others have rubber and wool soles attached by skilful village cobblers. About 6–8 *kamus* go for *unty* production. These hides are also left with hair and are usually very well softened, oiled and smoked. In some cases, they go through liver tanning. The production of *unty* takes about 2–3 days, and in the final stage they are handmade and attached to a sole made from modern materials. Such footwear costs up to 3,000 roubles (120 USD) in villages and up to 5,000 roubles (200 USD) in cities.

Orochen-Evenki produced a variety of gear that was used only in the early Soviet years in the taiga. Later, kolkhoz supplied hunters and herders with all kind of equipment, clothing and gear, therefore, a handmade gear became rarely used in their daily life. Today, hunters and herders started to produce a variety of handmade gear. They wear again buckskin pants (*urki*), long leggings with an attached foot (*aremus*), roe deer fur jackets (*kaidak*), reindeer fur jackets (*mukulmi*) in the coldest period of the year (from the end of December to the end of January). All clothing, gloves (*kokolda*) and shoes are made with all seams inside out, while the former have the hair side on the outside. A cap (*aun*) is usually made from rabbit or squirrel fur, or the feet of a musk deer or a newborn reindeer (Rus. *pyzhik*). Hides harvested in autumn are also used for knife sheaths (*unoki*), axe cases (*topku*), bullet bags (*tauseruk*), belts (*buso*), as well as special belts for squirrel fur (*chipka*). This stuff is usually made from fleshed and de-haired hide that is softened and smoked.

Softened hides with reindeer fur, wild deer, bear and wild boar fur are also used for mattresses (*girkovun*) and sleeping bags. Light reindeer hide (*boiuksu*) is humidity proof and warm and serves as a mattress in autumn, spring and summer, while bear hide (*amikaksa*) is mainly used as a mattress in winter since it is believed that it is the warmest and softest. Hide also can be used as a blanket (*sun*). A special rug called *muruko* (Rus. *kumalan*) made from winter scalp (*dori*) is used to cover the reindeer or decorate the tent and has great value in villages and cities. Orochen-Evenki females usually produce *muruko* in summer. Today, *muruko* plays an important role in representing handcraft culture as well as being valued as the source of cash income. During the rutting season, moose hides are the thickest, solid and tough and therefore it is well suitable for whips and straps. Neck hide (*kukuio*) is usually taken for socks while straps are made from circular cutting. Reindeer harnesses (*tynaptyl*, Rus. *podpruga*), curb (*usi*, Rus. *uzda*) as well as durable bags (*potol*) are also made for the transportation of meat, and other camping articles, by reindeer as well as horse. Some *potol* are made from *kamus* (*oso*), others are made from moose, wild reindeer or elk hides with the epidermis remaining.

## TANNING HIDES: OROCHEN-EVENKI BUCKSKIN

Hide tanning can be performed at any season of the year. However, most actively it is performed in summer and autumn before the fur hunting season, since the weather conditions are best for tanning at this time. In summer, hunters and herders have most free time since reindeer require less attention. In addition, summer hides fit the best for the buckskin suitable for clothing production. Buckskin made from autumn hides is mainly used for footwear production. Processing of hides into buckskin consists of several stages and special tools are used to achieve the desired results. Firstly, the hide must be carefully stripped of flesh, then dried, and can then be stored for some period. Flesh and epidermal hair is removed with a special tool and the hide is rubbed with liver, then softened and finally smoked. The so-called U tool, a short bent scraper is used to cut the hair and epidermis as well as for fleshing. The *chuchun* scraper, with a straight head and 'teeth', is made to smoothen the hide, and this tool also helps to remove flesh leftovers as well as drying the hide by friction. The tool also helps to stretch the hide and makes it softer before final softening by hand. The *chuchun* can also be used to press or hold the hide when it is cut. A rope can be attached to a *chuchun* to make it into a *chuchuvun* tool. Nikolai used a bent iron bed leg with a rope attached to produce such a tool. Hunters often tie the *chuchuvun* rope to their feet and soften hide with pressure from a foot. Another softening tool used to process large hides is the *ongnachevun*. This is a wooden U-shaped tool used for initial hide softening by pressing the hide with the ankle. The main softening tool is a *talki*, made from carved larch. It is used for the main hide softening and can be of two types: short, about one meter in



Photo 2. Softening moose hide using the *talki* tool in Tungokochen village.  
Photo by Donatas Brandišauskas

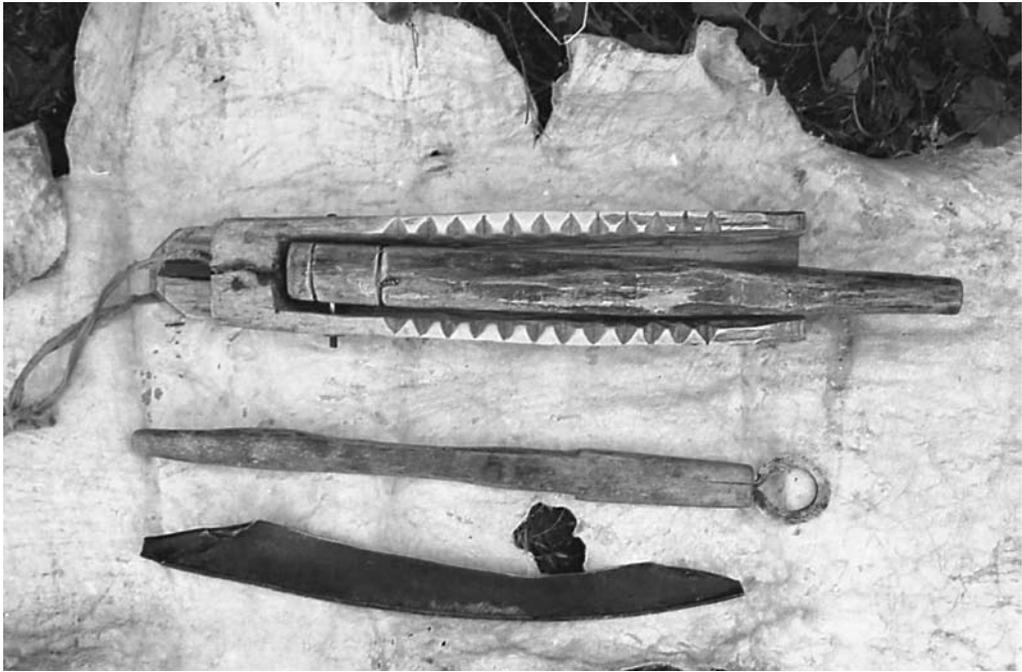


Photo 3. Hide tanning tools: a. talki (upper), b. chuchun, c. kedera. Photo by Donatas Brandišauskas.

length used for *kamus* softening, and about two meters in length for moose hide softening. The *kedera*, made from a scythe (Rus. *litovka*), can be used for cleaning leftovers of flesh or liver from the hide.

*Skinning* (itaksideran), *Drying* (olgideran) and *Storing* (guladeran)

In the unpredictable socio-economic environment, hunters and herders strive to maintain hunting luck (*kutu*). This success can be secured through proper butchering and disposing of the remains of animals (for Orochen hunting regulations see Shirokogoroff 1935: 89–92). Hunters believe that the special treatment of animal bones also helps to maintain an abundance of animals since ‘animals need bones for rebirth’.

It is also said that all of what a hunter kills must be consumed and nothing left to spoil. Otherwise, one can experience a misfortune, or even an illness or death. Places that contain spoiled meat are always avoided by hunters, since they believe that one will have no luck (Rus. *ne budet farta*) there. Butchering becomes an important skill. Large-hoofed animals are butchered with a 30 cm long knife (*koto*) cutting at the joints and in rare cases cutting ribs with an axe. One does not break any bones, especially large ones, when butchering. Furthermore, skilful butchering is linked to how one maintains a butchering or kill site. It is also important not to let blood spill on the ground in order not to spoil the place. According to Aleksei Aruneyev, the smell of spilled blood can also attract bears or wolves and then most animals would leave the area or even can attack near located humans. Hunters also put parts of carcass on specially made flooring made from branches, or they make a meat rack (*lokovun*) and hang the meat so as not to get the

meat dirty. Smaller animal can be hung on a tree, head down, and then skinned. Legs are usually cut and pierced with a branch. Usually, initial cuts are made and the hide is then pulled off. Hunters take hides off the animals flesh carefully, using a big knife about 30 cm long, leaving no meat on the hide and usually trying to avoid cuts and holes in it. If the hide is not suitable for the production of gear, then hunters immerse it in water with all the fleshing leftovers intact.

After the flesh is removed from the hide, it is usually stretched and attached with pins, to the ground along its perimeter in summer. Sticks or tiny pieces of chopped wood (*ivalda*) are usually used in winter to stretch the hide. I have seen that even a bear's hide was stretched using *ivalda*. A hide can also be stretched on the frame of the reindeer coral (*kure*), or stretched and nailed on the wall of log cabin or on specially made racks (*itaksa lokovun*). Dried hides are not always tanned right away and most often are stored in a cache (*gula*, Rus. *labaz*). The cache is built by Orochen-Evenki hunters and herders in remote places in the taiga to store all kinds of gear and food. It is a log structure elevated on four larch posts three meters off the ground. The supporting trunks are rooted and therefore one could expect it to offer steady support for a platform with some roofing and a log cabin-like construction for a long time. The roofing of the platform is made from a couple of layers of larch bark sheets that were flattened with a pole (*triovka*). Construction of such platforms provides the best conditions for storing hides. In the *gula*, hides are protected from moisture to avoid rotting, as well as attack from mice, dogs, ermine and bear. Hunters say that a winter hide loses its quality if it is frozen just after being taken from the animal. Therefore the hide is fleshed, depilated and the 'grain'<sup>5</sup> is removed before storing it in a cache. Otherwise, hunters say, that the excess water in the hide will break all the fibres when it freezes. Hides are most commonly collected and processed in summer and autumn.

*Depilating* (ismideran), *Fleshing* (uderan), *Oiling* (imuderan) and *Softening* (talkideran)

The Orochen-Evenki scrape the hair off the dried hide together with the epidermis, processing the hide into buckskin.<sup>6</sup> This could be done outdoors on the ground in taiga camps in summer as well as in log cabins in later autumn. The hide is pressed with the ankle, and a U tool is used to remove hair with the epidermis. If it is processed fresh and the hide is still wet, then it can be shaved with a knife or with a *kedera*. Fleshing is usually performed using the U scraper in the same way as hair cutting. Nikolai Kirilov says that one should cut flesh and fat carefully from the hide as soon as possible. This is important in order to make high quality buckskin. The female hunter Olga Zhumaneyeva points out that one should cut the web that is between the meat and hide. If the web is not removed, the oils that are in a liver will not penetrate the hide fibres properly. The hide is grained with any kind of fat (inner fat of moose, reindeer, elk, etc.); vegetable oil can also be used, but, as many hunters say, bear fat is not very good for hide processing. Fat penetration into the hide has many functions. The hide becomes waterproof and the dry hide can be softened to become elastic. Finally, fat allows the smoke/pitch to stick better to the hide.

If the hide is a large one and quite thick, the Orochen-Evenki put wet moss on the dry hide and leave it rolled into a scroll outside for a night to let it get wet with the dew. The hide is ready to be softened with a *talki* the next day. It is important to keep



Photo 4. Reindeer herder Nikolai Aruneyev processing hides in the taiga. Photo by Donatas Brandišauskas.

softening a hide until it gets dry, or soft enough. After this stage, the hide can be smoked and then finally softened with by hand. Such a hide is suitable for gear production. However, if one needs to produce soft buckskin suitable for clothing, which is a much more spongy material, then one must continue tanning the hide with oil from the liver.

#### *Tanning with Liver (bogodaderan)*

The dermis of the hide is composed of millions of threads that contain glue. Tanning with liver can give extra quality to the hide. Liver or milk oil penetrates completely through the dermis to coat all of the threads. Such a coating will help inhibit the fibre glue from locking the fibres to one another as they dry. The mixture that is applied to the hide is usually prepared from moose liver in the taiga. Moose liver is not consumed by hunters as food, since it is thought that a worm (*kulikan*) resides in the liver. Minced liver is usually left for a couple

of days until it starts to rot and smell bad. The mixture is applied to the hide and left for a few more days. It takes one day to oil reindeer, elk or roe deer hides and three days for moose hide. As soon as oiling is finished Orochen-Evenki put the hide on a larch beam (*niulivoun*) which stands on two legs or is leant against a tree and clean leftovers of liver using a *kedera*. As soon as the fibres are dry, their glue causes them to adhere to one another and create a hard sheet known as rawhide. To prevent this, the hide is smoked while physical manipulation does the rest.

#### *Main Softening (manideran)*

In the final stage the hide is processed with the *chuchun* tool, which helps to remove leftovers of liver and dry the hide as well as stretching it. People use both hands when working with the *chuchun*, putting in much effort. Again, softening must be performed until the hide is dry. Softening the hide helps to move the fibres so that they will not be able to lock together. People say that the final softening is the most exciting part of the tanning process. Most children and teenagers remember this process as part of long evening activities in the herders' camp. Often people soften hides with their hands in the final stage of tanning. Herder and hunter Gena Dushinov, who spent all his child-

hood in reindeer herders' camps, remembers it as an everyday obligation given by parents, tantamount to punishment. Softening was often done by groups of people. Big families used to pass the hide around the tent handing it to each person inside. Hunters say that softening by hand requires lots of patience. This process is usually done by the women and children, while cutting flesh or depilating is often done by adult men. Orochen-Evenki say that softening is a very sensory skill since one must feel the hide well and know how to move it depending on the thickness and softness of different parts of the hide.

### *Smoking (utorideran)*

If unsmoked hide gets wet it will shrink and dry hard. However, if liver oil penetrates with smoke, the pitch will waterproof the fibres. The hide itself is not waterproofed, but the hide will dry soft, since individual fibres will not let water penetrate and the glue in the threads will have no effect. Smoking also protects hides from rotting and kills any bacteria. The Orochen-Evenki of Tungokochen and Baunt rayons usually erect a conical building called an *utoreun* for the smoking of hides. The carcass of the *utoreun* is made from larch poles and the poles are covered with hides. All hides are covered with a second layer of canvas to keep the smoke inside the construction. There is usually a hole dug inside the building and red larch wood (*ilty*, Rus. *trukha*) is placed on the coal to be smoked. The hide is also inverted so that the warm dense smoke can penetrate through its thickest areas.

Nadya Kopylova, from Ust' Karenga village, gathers red wood in the taiga in summer. She searches for rotten wood that is damaged with a special fungus. Rotten red larch wood is rich in pitch and therefore most suitable for smoking. As the Orochen-Evenki reindeer herder, Nadya Kopylova told me that smoking is one of the most important stages in hide tanning. Therefore, Nadya pays a special attention to this activity and usually smokes the hide for 10–20 days. She stacks the tin bucket with wood, fires it, and brings it inside the *utoreun*. Since Nadya leads a semi-nomadic life, the *utoreun* is built in the backyard of her house in the village. She usually starts hide smoking in the morning and evening in the summer, when the weather is humid, since humid weather gives the best results because it helps the pitch to stick the hide. Rotten red larch wood produces a long lasting smoke. Wood must smoke through but not heat the hides. Smoke gives a darker colour to the hide. The hide can turn yellow or even brown. Smoked hides can be stored for a long time. According to herder Nikolai Aruneyev, when smoking hides special attention must be shown to sick reindeer. Such smoke, according to Nikolai, has many poisonous elements that will prevent reindeer from healing. Therefore, herders avoid smoking hides in spring when the reindeer are more vulnerable and exhausted after the long winter and the calving season.

### *Cutting (girdiam) and Sewing (uldidian)*

As in the time of Shirokogoroff (1935: 61), reindeer herder Olga Zhumaneyeva used her fingers to take measurements of the body for different gear production. She also used



Photo 5. My footwear: unty made by Tanya Naikachmina, and two types of emchure partly tanned and sewn by me. Photo by Donatas Brandišauskas.

processed sinew threads (*sumul*) that are valued as of the best quality in gear production. Reindeer herders and hunters use back sinew from the reindeer, moose and elk. Moose sinew is considered the thickest, although it is believed that sinew from wild or domesticated reindeer is the best for thin and strong threads. As soon as the animal is skinned, fresh sinew (*sikdel*) with flesh is cut from the back of the animal. It is quite a time consuming job to cut sinews from the animal's back. A hole is made and sinews are tied, and, with a strong push they are torn away from animal's back. The sinew must then be cleaned of meat and fat and left to dry. Sinew threads can be made at any time during gear production or fixing. It takes up to 5 to 15 minutes to soften and split sinews and produce a long thread. Then sinews are split into many threads by working with the sinew back and forth. Sometimes it is moistened first. Four threads are taken for sinew thread final production. I saw older people moisten threads by pulling them between their lips. Two pairs of threads are entwined by tying them, and are then united and entwined again in a different direction.

Hunters and herders believe that sinew thread is much stronger and more durable than modern thread. Such thread does not rot and often covers an entire hole in buckskin, making gear waterproof. Smoking footwear enhances the qualities of sinew, since sinew, Nikolai Dimitrov from Bugunda village says, "grows up with buckskin". Formerly, the Orochen-Evenki even used to pay attention in order to match the hide with the sinew. Hence, moose hide was sewn with moose sinew, while elk hide with matched with elk sinew. Reindeer herders and hunters believe that hide and sinew of the same animal has the same characteristics, therefore it expands equally, remaining waterproof.



*Photo 6. Tamara Naikanchina sewing hunting boots from reindeer kamus.  
Photo by Donatas Brandišauskas.*

## CONCLUSION

The main purpose of this article was to elaborate on contemporary Orochen-Evenki hide tanning technology and its use for gear production by hunters and herders in the taiga and remote villages of Zabaikalye. Hide tanning and craftwork has been an important identity marker and representation of Orochen-Evenki identity by indigenous intelligentsia in large festivals, conferences and political meetings for a few decades. Though Soviet ethnographers predicted the imminent end of Orochen-Evenki handmade gear in daily life, here, I have shown that hide tanning and craftwork have become important again for hunters and herders living in the taiga and villages. The collapse of Soviet collective farms provided a rewarding environment for Orochen-Evenki to privatise reindeer, access land and use a variety of taiga resource. Many unemployed villagers of different ethnic backgrounds also rushed to the taiga to harvest a variety of resources, spending many months, in different seasons, in remote areas. Hunting and herding of reindeer provides meat and fur as well as different sub-products such as hides, antlers and other parts of the animals that also bring value in trade, production of gear and medicine. If, in the Soviet period, most reindeer herder brigades were supplied with gear and food supplies, today they have to rely on own stock, supplies and equipment. Orochen-Evenki success in the post-socialist economy revolves around their ability to

take opportunities harvesting different taiga resources as well as the production of self-made gear and clothing from hides. Reindeer herders and hunters strive to learn, rediscover and rely on their traditional knowledge of craft-making aiming to maintain their autonomy from goods and resources imported from cities, while spending little effort connecting with state powers.

Hunting was often described by anthropologists as a “complex organization of behaviour” of hunters and gatherers, which included programming, scanning, stalking, immobilising and retrieving based on sophisticated knowledge of animals behaviour and anatomy (Lee and De Vore 1968: 303–320; Leacock 1982: 207). This article shows that reviving old practices of craftsmanship also parallels the hunters’ increasing interest in learning about the ethics of interactions with non-human beings as spirits and animals, and in ways to maintain hunting luck in Zabaikalye (Anderson 2010). In this context, Orochen-Evenki hunting is more than a biological mode of predation; rather it can be analysed as part of social interaction with non-human beings. Processing hides and crafting are guided by vernacular beliefs that condition how the hide is removed from the carcass, how it is fleshed and how the animal remains are treated. Rather than treating such hide tanning as aiming to maintain traditional Orochen-Evenki culture, these practices are best seen as the persistence of a type of intuition about how people use their environments to create successful living and working spaces in the taiga while adapting to socio-economic constraints.

#### NOTES

1 The ethnonym Evenki was chosen and adapted by the Soviet state as an administrative name in the 1920s. It was used after the civil war as unified reference to many scattered groups in Siberia and the Far East who spoke dialects of the Tungus-Manchu language groups. Tungus can also be used as an older colonial ethnonym for Zabaikalye hunter-gatherer and reindeer herding people who call themselves Orochen (pl. Orocher). Today, the Orochen also use the term Tungus to refer to Evenki people who raise horses and cattle and are known more widely as Barguzin Evenki (Republic of Buryatia) and Shilka Evenki (Zabaikal Krai).

2 Unless otherwise indicated italicised words are in the Orochen-Evenki language.

3 Hunters and herders can turn old buckskin trousers into footwear, and make knife sheaths from old footwear.

4 There are only about one hundred Orochen in Tungokochen village, which has a population of over one-thousand people. It has become more popular to wear fur footwear among Orochen hunters, after doing so became popular among the population of non-Orochen origin.

5 The grain is the layer of skin epidermis which contains the hair follicle.

6 Hide with hair is known in Orochen as *itaksa*, and without hair as *nanda*.

Table 1. Variations in Orochen hide tanning technologies.

Nikolai Dimitrov (Bugunda village, Republic of Buryatia)	Maria Fedorovna Taskerova (Ust' Karenga village, Zabaikal Krai)	Nikolai Aruneyev (Tungokochen Rayon, Zabaikal Krai)	Tamara Mikhailovna Malchiakitova (Chara Rayon, Zabaikal Krai)
<ol style="list-style-type: none"> <li>1. Hair cut with knife (<i>koto</i>) or <i>kedera</i> tool (skin must be wet).</li> <li>2. Fleshing, removal of epidermis with hair with U tool.</li> <li>3. Wet hide with moss.</li> <li>4. Soften with <i>ongnachevun</i>.</li> <li>5. Smoke.</li> <li>6. Rub hide with fermented liver and leave for a couple of days.</li> <li>7. Clean hide from liver leftovers with <i>kedera</i> tool.</li> <li>8. Soften by hand.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove hair, flesh and epidermis with U tool.</li> <li>2. Oil (<i>imuda</i>) with fat or vegetable oil (<i>bobo</i>).</li> <li>3. Smoke.</li> <li>4. Soften with <i>talki</i>.</li> <li>5. Tan with a mixture of boiled liver and milk yoghurt. Liver must be minced.</li> <li>6. Process with <i>chuchun</i> tool.</li> <li>7. Process with <i>kedera</i> tool.</li> <li>8. Soften by hand if <i>kamus</i>, or with <i>talki</i> if moose hide.</li> </ol>	<ol style="list-style-type: none"> <li>1. Cut hair with knife (wet skin).</li> <li>2. Cut flesh and epidermis with U tool.</li> <li>3. Rub hide with fat.</li> <li>4. Soften with <i>talki</i>.</li> <li>5. Smoke.</li> <li>6. Rub hide with vinegar and flour or soap instead.</li> <li>7. Soften by hand and <i>chuchun</i> tool.</li> </ol>	<ol style="list-style-type: none"> <li>1. Cut hair and epidermis with scraper (U tool).</li> <li>2. Cut flesh with U tool.</li> <li>3. Put fat on to softer hide.</li> <li>4. Soften with <i>talki</i>.</li> <li>5. Penetrate the hide with minced moose brains (leave skin for a night bundled and pressed).</li> <li>6. Soften by hand until dry.</li> <li>7. Smoke.</li> </ol>

Table 2. Autumn season moose (male) hide tanning for footwear production by Aleksei Aruneyev from Tungokochen village.

Depilate, remove flesh and epidermis from half of moose hide with U tool	52 min.
Oil the hide with vegetable oil	14 min.
Soften (half moose hide) with <i>talki</i>	1 hour 20 min.
Moose liver was minced, mixed with water and left to go off	3 days and nights
Removing excess liver with <i>kedera</i>	55 min.
Soften with <i>talki</i> until dry	33 min.
Smoking (in morning and evening)	3 days
Final softening with <i>talki</i>	26 min.
Softening by hand	3 hours

Table 3. Footwear production by Tamara Naikanchina from Tungokochen village.

Flesh four <i>kamus</i>	1 day (3–4 hours)
Dry <i>kamus</i>	3–4 days
Put oil on <i>kamus</i> and soften with <i>talki</i>	1 day
Leave <i>kamus</i> wrapped with wet moss	1 night
Soften by hand	2–3 days (3–4 hours)
Cut <i>kamus</i> into <i>unty</i> shape	1 evening (3–4 hours)
Sew ( <i>uldida</i> )	1 day
Decorate <i>unty</i>	4 hours

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