

BUILDING BIRCH BARK CANOES IN SIBERIA

By Artem Lemberg (translated by Gaby Triess and edited by Claire Chi and W. Fitzhugh)

I grew up in a little village located in the middle of the Siberian Taiga near the River Kasyr. The upheavals and unrest of the early 90s made my parents leave the city in exchange for a secluded, humble life there. My childhood and youth were shaped by simple life in the village. Soon, I discovered a passion for woodworking. I carved wood, built models of houses and ships, and when I wanted to learn to play the guitar, my father and I repaired an old guitar. When I was 15, I moved to Krasnoyarsk, a large city in Siberia, to earn my living as a carpenter. It was an exciting time for me; I made lots of new friends, played music, was out on the town at night, and built roofs during the day. However, the hard work in temperatures of up to -40 degrees Celsius (-72 Fahrenheit) and the bad air took its toll on me. A few years into the job, I caught a severe case of pneumonia that I was lucky enough to survive. I realized that I wasn't happy working with cheap and low-quality materials, which were harmful to the health of the people living in the houses we built. At the same time I became inspired by some of my oldest friends and started questioning the habits of our society, our relationships with resources, the production and quality of our everyday objects, and the resulting effects on the environment.

I felt it was time for change. I met a German guy who led a youth club in Germany and was running international wilderness and adventure projects for young adults in Siberia. We clicked immediately and I started working with him. My German improved quickly as I studied a lot and ended up spending two years in Germany. That's where I made an encounter that would profoundly change my life. I was invited to take part in a workshop organized by a boat builder named André Rissler. He told me about canoes made from birch bark that used to be produced in the region where I came from. I started exploring the topic and I could not stop thinking about it. I knew that birch bark had been used for the production of storage containers, buckets, bags, and floats for fishing nets—but canoes?

Back in Siberia, I collected all the information I could get my hands on. I read books, watched video clips, and interviewed older people to pick their brains. But the elders in my village only remembered seeing dugout canoes made from a hollowed-out tree during their childhood on the River Kasyr, and none used the bark of birch trees. The River Kasyr flows into the River Yenisey, where birch bark canoes used to be used in the past (Luukkanen, Fitzhugh, 2020, p.115). It was not until many years later when a friend and I came across people from another region who were able to tell us more about the lost art of building Siberian birch bark canoes.

For the time being, I stuck to building traditional dugouts. However, the time would come for me to try my



A modern Siberian dugout canoe



My first birch bark canoe construction in Siberia

hand at my first birch bark canoe. The season for harvesting bark from birch trees was approaching in July, so two friends and I packed our bags. With nothing but a few manual tools, a tarp, and a big pot, we made our way to the Taiga in search of a suitable area. We set up camp at a spot near the river in a mixed forest with plenty of birch trees. The next few weeks were incredibly intense. We lived in our tent, and every minute when we weren't eating or sleeping was spent building our birch bark canoe. Since we barely had any information about Siberian birch bark canoes, we followed sources from Northern America and Canada. We had no idea that the northern white cedar (*Thuja occidentalis*), often used in America and Canada, is actually a completely different type of tree from the tree we knew as simply cedar (*Pinus sibirica*) in Siberia (Adney, Chappelle 1983:17). Luckily, this tree turned out to be rather useful for the production of ribs, sheathing, and gunwales. The particular tree we felled had a terrible twisted grain and was difficult to split, making the task very laborious. However, it was all worth it in the end; three weeks later, we left the taiga in our very own birch bark canoe.

In the following years, I built many more birch bark canoes based on the American and Canadian models. While I could use resources from those two regions to teach myself the artisanal skills necessary, the choice of suitable materials was something I could only approach through trial and error. I spent weeks in the woods, observing and analyzing trees.

As mentioned, we discovered by chance that the Siberian pine (*Pinus sibirica*) is well suited for building birch bark canoe frames. Siberian spruce (*Picea obovata*) is also excellent, as it is slightly lighter than Siberian pine. Its roots are suitable for sewing the bark, just like the roots of other types of spruce. Not only is the type of tree critical, but its growth is also of major importance. The greatest challenge was assessing the tree before felling it. It would be a huge waste to fell a tree that took many years to grow without being able to actually use it. Ideally, the tree should have as little twisted growth and as few branches at the trunk as possible. With Siberian spruce trees and Siberian pine trees, this demands an expert eye, as the root flares at the trunk are not always pronounced, making the amount of twist hard to see.

Given that the wooden parts for the birch bark canoe are being split by hand rather than sawn, trees with narrower annual rings produce more stable and light parts. The slower a tree grows, the narrower its annual rings. Having grown up in a family of musicians worked in my favour here. After many attempts, I realized that tapping on the bark of the tree and hearing the resulting pitch of the sound helped me make a conclusion about its growth. A high pitched sound means the wood has a high density. From this, I was able to tell that the tree had grown slowly and had narrow annual rings. The location and direction of the wind are also important factors when choosing a tree.

Another challenge I encountered was finding the right type of birch tree. Where I come from south of Krasnoyarsk, there are many different types of birch, but not all are suited for building canoes. For instance, birch that is used for weaving bags or containers is not ideal for making canoes. At first sight, the bark is wonderfully elastic and stable. What makes it so perfect for basket weaving is that it's easily split. However, when this birch is used for making canoes, it creates blisters and makes the canoe prone to damage. Another type of birch I experimented with seemed to have stable bark at first, but when I looked closer, I could see that the grain was growing through the different layers,

making it more susceptible to tears and leaks. The best type of local birch has thick, stable bark without knotted grain and is hard to split. Paper birch trees (*Betula papyrifera*) only exist in Northern America, but I have seen trees in Siberia that are similar, though I have not been able to identify the exact species yet.

When deciding on the right time for harvest, I consult with the local folks who make containers and bags using bark. The first weeks of July, when the flow of sap is slowing down, is the best time to harvest this species in my region. The exact point in time depends on the weather and location; even just a few miles can make a significant difference.



Finishing canoe lashings in my workshop



My latest project: An American Indian canoe built from Tappan Adley's design drawings

For the last few years, I've been living with my wife in Germany, where we run a small workshop for birch bark canoes. A little while ago, I received a note from a member of the Anishinaabe, a group of indigenous peoples native to the Great Lakes region in Northern America. He was very upset that I was building birch bark canoes modeled on the American and Canadian style and accused me of cultural appropriation. There was so much anger and pain in his writing that I was taken aback. Was I doing something wrong? Was I taking something away from others? It was not his fury that gave my work a new sense of direction towards my own people's culture, but a quote from Marcel Labelle, a maker of birch bark canoes, whom he mentioned.

“According to Labelle, the skin of the human body is represented by the birch bark on the canoe. The muscles are represented by cedar sheathing. The ribs and sternum are represented by the spruce cross pieces. The tendons that hold things together are the spruce roots, and the blood that flows and holds everything together is the spruce gum. ‘The blueprint for the canoe is our body. The passengers represent the spirit. A birch bark canoe represents our connection and dependence on Mother Earth,’ he says” (MacColl, 2011).

This quote really touched me and brought a plethora of new questions and thoughts. If the blueprint is contained in the human body, it is within me, too. But

what is my individual blueprint? My parents identified as Soviet citizens and no one was really interested in where exactly we came from. All I know is that my ancestors came from several Siberian regions, with my paternal grandmother being Tatar, but all traces beyond the generation before her had been lost. How did the 'blueprint' of the people in my home region manifest itself? If you consider this 'blueprint of the inner workings' a holistic construct, then it goes beyond just the body, I think, and contains everything that makes up culture. But it's also the individual personality of each person building the canoe that influences the work. How should I conduct my quest for the birch bark canoes of my region in a way that all these aspects are considered?

After spending lots of time studying suitable materials in Siberia, the types of local canoes from my region became more important to my current work. I began to study the cultures and birch bark canoes of Siberian people. The more I studied the topic, the more my passion grew to take on this new challenge. Slowly, a plan began to emerge. I am going to return to my home country in search of the birch bark canoes of Siberia. For this reason, I bought a plot of land in the region of Krasnoyarsk. I will set up a workshop there, which I will use as a base to travel around the country, bit by bit, to find existing canoes and people who can tell me about them.

Based on the size of Siberia and the vast number of tribes who used to build birch bark canoes, I am fully aware that this is going to be a lifelong commitment. I want to find the birch bark canoes that are still in existence and analyze them thoroughly to see what techniques and materials were used. I would also like to get in contact with the respective local people to involve them in this project. I am hopeful that I'll be able to reconstruct the various types of canoes of the region and build smaller, accurate models before tackling canoes in original size.

I see the disappearance of birch bark canoes from the rivers of Siberia as a huge cultural loss. My biggest dream is to bring back the birch bark canoe to where I'm from. I dream of setting up a workshop and a school on my land, where people from Siberia and all over the world can re-learn the old methods of building Siberian birch bark canoes. They will experience what it is like to create something unique with their own hands, using ancient techniques that connect them to past generations and to the nature around them. This is not only completely sustainable; it also helps them detach from the stressful lifestyle of living in the north.

This project will require many people's involvement along with their knowledge and financial help. I am currently in the process of creating a non-profit association in order to, with the help of the community,

turn this special cultural asset back into a common good of the Siberian people.

Luukkanen, Harri, and William W. Fitzhugh. 2020. *The Bark Canoes and Skin Boats of Northern Eurasia*. Washington DC: Smithsonian Books.

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A JAPANESE MYSTERY OBJECT SOLVED BY TEAM EFFORT

By Aubrey MacKenzie

[Editor's note: The Smithsonian receives hundreds of communications from the public asking curators to identify unknown objects. Aubrey's 'what is it?' inquiry piqued my interest because of its similarity to Siberian Nenets reindeer training bridles and grew into a fascinating piece of material culture research.]

I didn't know what it was. But I wanted to find out. Over the past eleven months, it took the efforts of people in ten countries and four continents, plus a stroke of luck, to figure out what my grandfather and I had found. Shortly after dinner in January 2021, my grandpa called to tell me about an auction listing on Yahoo! Japan Auctions, Japan's largest online auction platform. Throughout his life my grandpa has been an avid antique collector, and for the last year he had been teaching me about Japanese folk art called mingei. In return, I was teaching him how to use the internet to find antiques all over the world. He was a quick learner.

The auction was for a carved bone, roughly 21 centimeters in length, with a heavy patina from years of use. It had two holes carved in the middle and open holes at both ends. The piece was decorated with crosshatching and a simple motif in the middle, consisting of one central dot connected to six outer dots via straight lines.

The seller noted the object was of Ainu origin (Japan's indigenous group), but it didn't look like anything I had seen while researching the Ainu, and the Ainu are not especially known for fashioning tools from bone—they typically use wood. My grandfather and I were the only ones to bid on the item. We began to ponder its function even before the object arrived. Our first guess was that it was some sort of perforated baton, a tool used to straighten arrows, or perhaps to throw arrow-darts. My grandfather recalled seeing similar objects in museum collections.