

COLLECTIONS CORNER

BETULA MAKES MUSIC IN EUROPE: THREE BIRCH HORNS FROM KEW'S ECONOMIC BOTANY COLLECTIONS

Ethnobotanists often mention the use of plant materials to make musical instruments, yet seldom explore the importance of these artefacts. A look into the history of three instruments in Kew's Economic Botany Collections provides some fascinating details about the folk music of Europe. Made before the turn of the 20th century in Switzerland, Norway, and Finland, each one has a birch (*Betula* sp.) component and, more importantly, represents a key element in a folk music tradition.

The oldest of the three is a Swiss alpine horn (Fig. 1), which was donated to Kew in 1858 by a Dr Alexander. Known as a *büchel*, it differs from the well-known Swiss alphorn by its convoluted wind tube, which somewhat resembles a modern trombone (Geiser 1976). *Büchels* are also shorter in length than most alphorns, giving them a higher-pitched, less mellow sound. A faded note attached to the bell of the horn explains: "An alpine horn such as is used to call down the cows and goats from the mountains at nightfall."

Traditionally, Swiss herdsmen also relied on these instruments to signal danger and communicate with other herdsmen (Geiser 1976). *Büchels* were made of three pieces of spruce (*Picea* sp.) or poplar (*Populus* sp.), each piece cut in half length-wise and painstakingly hollowed out, then glued back together. The three sections were joined and, in the early summer when the sap was rising, a strip of birch bark was wound directly around the bare wooden tube (Geiser 1976). This wrapping not only helped to hold the pieces together but prevented the wood from splitting and causing air leaks which would result in poor sound quality (William Hopson pers. comm.)

As they watched over their animals the herdsmen began to create new melodies, extending the *büchel*'s use beyond the purely utilitarian. The tunes were never written down, but played from memory and improvised upon over generations. Especially during the 17th century folk music was not appreciated in Switzerland: herdsmen's melodies were considered frivolous

and inferior to religious psalms (Meylan and Baumann 2001). However, by the end of the 18th century alpine horn melodies began to attract attention from classical musicians. Johannes Brahms jotted down an alphorn tune that he heard while visiting Switzerland in 1868, which later turned up in the fourth movement of his 1st symphony (Geiser 1976). Today the alphorn has become a national symbol in Switzerland, and its relative the *büchel* is still made and played in the central cantons of the country (Veronika Gutman pers. comm.).

Similar to the *büchel* in use, but quite different in looks, is a Norwegian horn known as a *lur* or *näverlur*, donated to Kew in 1896 (Fig. 2). The *lur* was made by splitting one long piece of wood lengthwise, hollowing out the two halves, then gluing them back together (Kjellström 1984; Sevåg and Huldt-Nystrøm 2001). The wrapping could be birch bark, or in some cases slips of willow *Salix* sp. (Hooker 1837). The *lur* likely dates back to Viking times. A wooden horn similar to the one at Kew was found in the famous Oseberg Viking burial ship that was discovered in 1904 and dated to AD 834. It is thought that in Viking times the *lur* was used to signal between boats, and to communicate and summon during war (Grinde 1991).

The best known use of the wooden *lur*, however, is as a herding instrument, like the *büchel*. In summer, Norwegian farmers would move with their herds to the *seter*, a dairy farm in the mountains (Grinde 1991). They communicated with each other over long distances using vocal melodies, and called the animals using vocal song/shout combinations called *lokks*. The *lur*, with its far-travelling sound, came into use both as an alternative to vocal messages and to scare off wild animals. Norwegian folk music is thought to have emerged from this *seter* culture. But like the Swiss alpine horn melodies, Norwegian music was not systematically gathered and notated until the 19th century; and by 1900 the traditional use of the *lur* had largely died out



Fig. 1. A Swiss büchel, 102 cm long. (EBC 42474). (All photographs by A. McRobb, RBG Kew.)

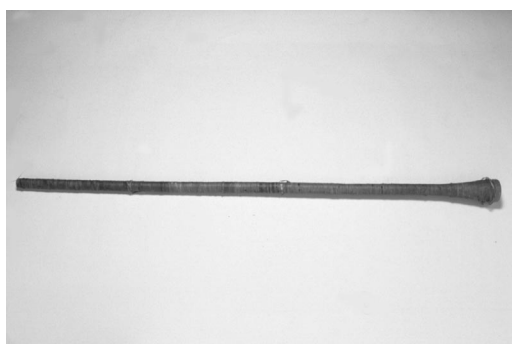


Fig. 2. A Norwegian lur, 158 cm long, (EBC 42476). It is on display in Kew's *Plants + People* exhibition.

with the advent of modern farming practices (Grinde 1991; Sevåg and Huldt-Nyström 2001).

The third and much the smallest of the birch bark trio was purchased by Kew in 1894 (Fig. 3). It is made of a hollow reed tube with a thin slit just beyond the end, as in a recorder, and has four square finger holes. A strip of birch bark wound into a tight cone serves as a sound amplifier at the end of the tube. An intriguing note found with the instrument proclaims: "Birch-bark bugle to frighten bears, Metsäperthe, Karelia, Finland." On another attached note is scrawled: "This one was made by Paraskovia the ancient runo singer. These bugles are very difficult now to obtain."

In fact, the artefact is not really a 'bugle' or 'horn': it was not played by buzzing the lips, as with a trumpet, but by simply blowing through the reed tube. It is also distinguished by the presence of finger holes, which functioned to modify the pitch of the sounds played. This makes the artefact closer to a clarinet in structure, and it is

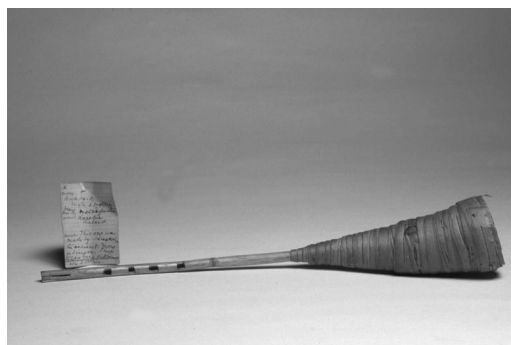


Fig. 3. A Finnish 'clarinet', 38 cm long (EBC 42407), made by the most famous Finnish folk-singer of all time. Only two such instruments can be found in Finnish museums.

actually considered by a well-known Finnish musicologist to be a type of archaic hornpipe, related to the Arabic *zummarā* (Timo Leisio pers. comm.). But who was this Paraskovia?

The most important aspect of the Finnish folk musical tradition is the *Kalevala*, an epic poem consisting of thousands of lines of verse that tell the story of Finland up to the birth of Christ (Hillila and Hong 1997). From its origins in the first centuries AD, the *Kalevala* was passed down orally. Verses were remembered by singing them to the tune of ancient melodies called *runolaulu*. Singers of this ancient poetry, known as runo singers, could sing thousands of verses from memory. The best of them came generally from Karelia, the easternmost region of Finland that now straddles the border with Russia (Hillila and Hong 1997).

Kew's specimen entry ledger for 2 November 1894 simply notes the price paid for the clarinet and 13 other Finnish artefacts purchased from a Miss A.M. Clive-Bayley of London. As it turns out, Clive-Bayley published a book the following year quaintly entitled *Vignettes from Finland, or twelve months in strawberry land* (Clive-Bayley 1895). She became interested in the runo singers after hearing the tale of a young man who had cut his leg badly but was saved when an old Karelian woman sang a special blood-stopping charm over him. The charm was apparently a common one among the runo singers, but no one in central Finland seemed to know exactly how it went. In June 1894 Clive-Bayley went to Karelia in search of the most famous runo singer of the time, called Larin Paraske. Paraske was an old woman whose talent had been 'discovered'

by a country pastor making his rounds of the remote countryside. She could sing a remarkable number of runos, more than any other singer in Finland at the time or since, and quickly became a national icon. Two famous Finnish painters came to paint her portrait, and the composer Jean Sibelius came to her for inspiration (Hillila and Hong 1997). Today, almost a century after her death, she is hailed as the single most important source of Finnish folk-poetry, her statue stands outside the Helsinki Art Museum, and her likeness even graces a postage stamp.

Clive-Bayley's description of the meeting with Paraske in Metsapirtti, her village in southern Karelia, is somewhat anti-climactic. She gives no impressions of runos, nor does she ever say whether she finally heard the exact wording of the blood-stopping charm. The ancient runo singer 'Paraskovia' mentioned on the label of Kew's clarinet certainly must be Paraske herself, yet Clive-Bayley's book makes no mention of the instrument. Although it is well known that Paraske often made embroidery and other traditional handicrafts to sell to visitors, she is not known as a maker or player of instruments (Senni Timonen pers. comm.). Clive-Bayley writes that "instrumental music is never used there for dances, nor does Paraske use it often in her songs . . ." (Clive-Bayley 1895, 283). The only mention of any such instrument occurs earlier on, when a Karelian cart-driver explains that bears will kill cattle if left alone, "but a boy is enough to keep any number of cattle safe. For the most part he carries a birch-pipe, on which he plays to amuse himself" (Clive-Bayley 1895, 192).

Why Paraske made the clarinet is a mystery. Perhaps she made it especially for Clive-Bayley, knowing she was a collector of all sorts of Finnish handiwork (Senni Timonen pers. comm.). There are only two clarinets like Kew's in the whole of Finland (Raila Kataja pers. comm.). They are rare examples of what once was a commonly used instrument in Karelian folk music, a vestige of a tradition that is still influencing Finnish musicians today (Austerlitz 2000).

Like many other activities linked to plant use, traditional music is endangered by the fading away of folk cultures. These three fascinating

instruments, in Kew's collection for over a century, represent the musical traditions of lifestyles now gone—and they are stunning examples of the skilful use of plants in everyday life.

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