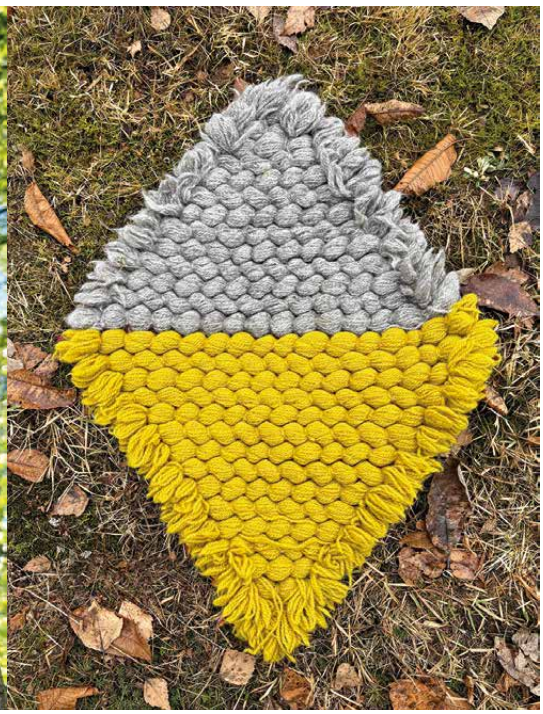


Aspen Diamond

Echoes from Nature Patterns

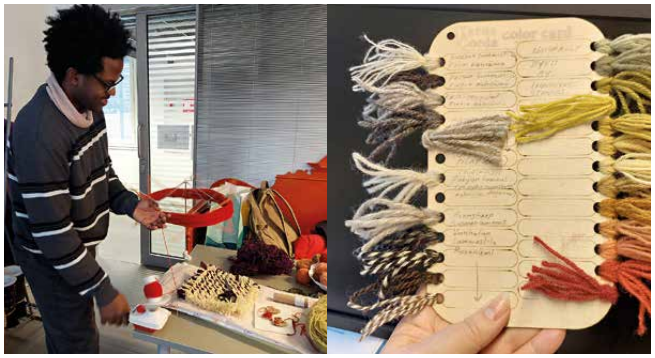
Tatiana Kravtsov & Minna Kovero
Co-design team: Andrew Ekhafe, Minna Kovero & Tatiana Kravtsov
Partner: Tonttula, Hullu Poro Oy, Kittilä

Aspen Diamond *is a woollen sitting cushion designed for outdoor use by visitors to Tonttula – Elves Village. Combining weaving and felting techniques, its diamond shape and colour palette echo the patterns found on aspen trees.*

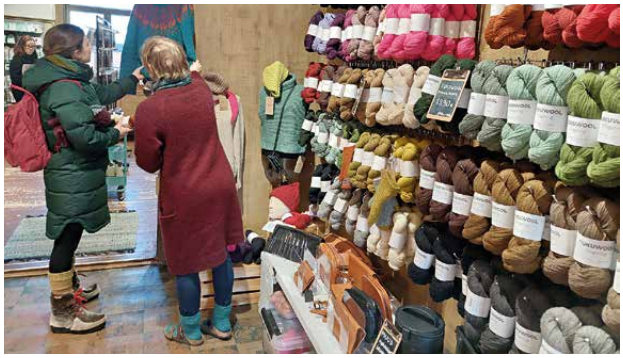
Aspen Diamond is a woollen sitting cushion designed for use on chilly days in Lapland. Its design reminds us of the organic patterns inherent in nature (Figure 1). Beyond its visual qualities, the cushion helps connect to nature through tactile relationships with the surrounding environment, offering warmth and comfort while resting during a walk in the forest.

The collaborative design process began during the team's visit to Tonttula, where the VillaInno team was exploring the place and the company's needs for new products and services. One of the ideas was proposed by Ekhafe, an outdoor seating cushion designed by aligning with the spirit and nature of Tonttula Village. Guided by his artistic vision, the VillaInno team searched for Finnish wool yarns in specific colours and thicknesses to match Ekhafe's concept and colour preferences, guided by the shades shown in the naturally dyed colour chart (Figure 2). Tukuwool yarns, spun and dyed in Finland, offered a wide range of shades, allowing us to find the most suitable colours (Figure 3).

Together we discussed possible wool craft techniques for making a seating cushion, encouraging Ekhafe to learn and experiment with knitting, weaving and felting. A weaving technique was chosen to begin with. He started the prototyping process by building a square frame, first made of card-

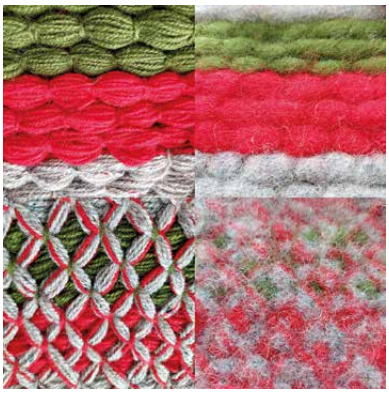


◀ **FIGURE 1.** Aspen tree and woven diamond. Photographs: Minna Kovero, Tatyana Kravtsov, 2024.



▲ **FIGURES 2, 3.** Ekhafe working with multiple yarns for his first prototypes. Inspired by a rich colour variation of Tukuwool yarns in the Tityy store in Jyväskylä. Photographs: Minna Kovero, 2024.

FIGURE 4. Weaving experiments with pin loom. Photographs: Tatiana Kravtsov, 2024.



▲ **FIGURE 5.** Collage illustrating the change of the wool texture after the felting process. Photographs and collage: Minna Kovero, 2024.

board and then of plywood, in which the loom was warped by tying yarn from one nail to the opposite nail, both horizontally and vertically. The experiments with pin loom weaving resulted in a three-dimensional square shape, revealing the weaving base crossing thread layers on one side and textural ribs pattern on another (Figure 4). Though the woven pieces looked visually appealing, the structure felt a bit too loose and impractical for the intentional use. This caused the team to ponder about the pin loom weaving technique for creating the cushions, and alternative craft techniques were discussed.

We decided to test the felting method by washing the woven pieces in the laundry machine. During the felting process, the originally square shape transformed into a firm diamond shape with a three-dimensional texture, smoothing the colours and softening the connections between the wool yarns (Figure 5). This transformation was surprisingly interesting, reminding us how nature can co-design with us: an aspen tree revealed the same colour and pattern combination.

Although the *Aspen Diamond* concept was not developed further for the partner, the design process itself became a valuable learning experience for the co-design team. Despite challenges with the weaving technique, this collaborative development process demonstrated how intuitive experimentation with materials and methods can give unexpected results. While learning new techniques through hands-on material exploration, the process also taught to observe the natural surroundings more attentively, recognising patterns and colours rooted in the local environment. *Aspen Diamond* illustrates how a simple pattern can subtly enhance the value of an object, bonding it and the user with the local nature.