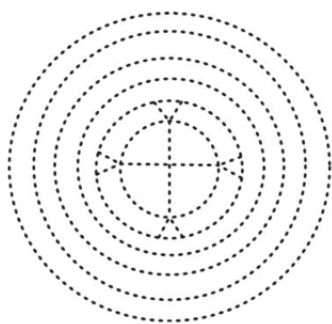


Collaborative Development of DIY Wool Embroidery Kits

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Partner: Taito Lappi

DIY Wool Embroidery Kits are co-designed by the VillalInno team as craft products for Taito Lappi as part of the project's efforts to revitalise wool embroidery traditions. The iterative design process included pattern exploration, product development, prototyping, material testing, visual development, package design, piloting, and final productisation.

In the framework of co-developing products and services for partner Taito Lappi, four VillaInno designers, Fabiola Hernández Cervantes, Minna Kovero, Tatiana Kravtsov and Elina Luiro, engaged in a collaborative design process, combining personal artistic exploration with ideas for a wool-based product rooted in wool embroidery traditions. The designers share a common background through their participation in the Embroidered Stances collective, a Rovaniemi-based artistic group focused on embroidery on black woollen fabric using naturally dyed wool. Their shared experience in natural dyeing and stitching provided a valuable grounding for the idea of a wool embroidery DIY kit.

The design team arranged several meetings with Taito Lappi representatives to identify the current situation regarding wool products and the need for new wool-based products and services. DIY knitting and tufting kits made at Taito Lappi are in high demand among customers. Based on these discussions, the idea of a smaller embroidery kit emerged, incorporating Finnish wool. The intention was to develop a high-quality product with locally made design and materials, highlighting the value and beauty of Finnish wool yarn.

Following the initial discussions, designers engaged in a collaborative design process, brainstorming concepts, selecting and testing different types of wool fabric, yarns, and needles. Parallel to this, the group moved into prototyping using vectors and creating stencils, as well as laser cutting and test-printing on wool. Alongside this, graphic design and packaging ideas were developed for the productisation of the DIY embroidery kit.

Alongside this collaborative process, each of the four designers began an individual design exploration, collecting background information and inspiration for their own patterns. The patterns reflect various aspects of revitalisation and connectedness with nature, including history, mythology, biodiversity, knowledge of northern plants, and cross-cul-

◀ **FIGURE 1.** Vectorised pattern designs: *Polar Night Sun*, *Bumblebee*, *Zigzag Clover* and *Swallow*. Sketches from left to right: Minna Kovero, Elina Luiro, Tatiana Kravtsov, Fabiola Hernández Cervantes, 2025.



FIGURE 2.
DIY Wool
Embroidery kits
displayed in exhibition
*Villalino: Patterns
between Cultures*.
Photograph: Minna
Kovero, 2024.



▲ **FIGURE 3.** For the sun theme, Minna experimented with printing on different colored fabrics to explore various light-related associations. *The Polar Night Sun* base model was tested for the first time using a range of colored fabrics and yarns during a workshop at the *Nordic Embroidery Symposium* in Murjek, Sweden. Photographs: Minna Kovero, 2025 & 2026.

tural as well as universal perspectives. The kits feature four patterns: *Polar Night Sun*, *Bumblebee*, *Zigzag Clover* and *Swallow*, all of which emerged from the designer's own explorations into symbols, heritage, nature and culture (Figures 1–2).

Based on the designers' experience with the larger-scale wool embroideries, the team selected 100% wool black fabric, which is also familiar from the traditional blanket embroidery and provides a strong contrasting base for the colourful stitches. Various colours of wool fabric were tested by Kovero to reflect the stories behind her pattern designs, the *Swan* and the *Polar Night Sun* (Figure 3).

The first embroidery tests were made with naturally dyed yarn intended for larger embroideries; however, the smaller fabric size and the delicate details required a thinner yarn. After a thorough search of the available materials on the Finnish online market, the team found a wide range of naturally dyed yarns, locally and sustainably made by Anna Vasko from Aurinkokehrä. The selection was made carefully to respond to the delicacy and colour palette of the designed images. Needles were also tested and selected with care, aiming to find

the most suitable embroidery needle with a large enough eye to insert the wool yarn, while thick enough to pass through the wool fabric smoothly.

The next step was to find a way to transfer the sketches of the designed images onto the fabric with productisation in mind. Luiro's expertise in digital fabrication techniques was essential for prototyping the stencil. The pattern designs were prepared as vector files for laser cutting and cut for fast prototyping from cardboard, and laser-suitable faux leather was also tested (Figure 4). The test prints were made with textile paints on wool (Figure 5). Following iterative testing to optimise stencil perforation and identify a durable, washable material, collaboration was established with a company specialising in laser-cut materials and services. Together with the company, Kainor, the final stencils were then worked on screen-printing plastic film.

Several packaging ideas for the DIY embroidery kits were brainstormed and tested. The package was chosen to be transparent, with the embroidery pattern sketch on the front side and the wool fabric with a printed pattern, wool yarns, and a needle on the



FIGURE 4.
Laser cutting of
stencils on cardboard
and laser-suitable faux
leather. Photographs:
Elina Luiro, 2025.

other side. The package also includes embroidery instructions with drawings of stitches and a short story introducing the pattern motif. In addition, the brochure tells the user about the ecological, ethical, and material value of Finnish wool from native sheep breeds. The packaging was designed to be simple and compact, enabling users to take the kit on a trip or send it by post as a gift in a flat envelope.

Piloting of the test kits took place at *Leimu Neuleleiri*, Svefi in Haaparanta (Figure 6). Each test package included materials, instructions, and a feedback questionnaire, which we asked to be filled in and sent to our team after completing the embroidery. Overall, the feedback was positive, emphasising interest in nature-related content and the high quality and sufficient quantity of the materials. Some improvements were suggested, such as adding a pattern sketch with stitches and a photograph of the finished embroidery. In addition, some participants noted that some of the yarns were fragile and needed to be cut into shorter pieces. Some participants recommended adding suggestions for uses of the ready embroideries; for instance, as a patch sewn as a decorative element on a cloth, mitten or bag, or sewn as a pocket.

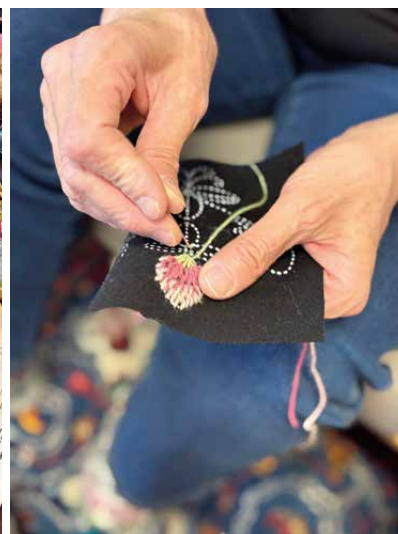
After feedback analysis, our team advanced the kits with final adjustments to the content, materials, instructions and graphic design of the packaging. Together with the final stencils, the team delivered the kits as a productisation package for Taito Lappi. The packages were designed in two languages, English and Finnish, to reach a bigger audience, including tourists. The DIY kits were marketed and sold during the Christmas market 2025 - *Taitava Lappi Joulumarkkinat* (Figure 7).

The development of the DIY wool embroidery kits combined collaborative co-design with individual artistic exploration. Through iterative experimentation with materials, techniques, and productisation methods, the VillaInno team created a compact embroidery kit that integrates Finnish naturally dyed yarn, and carefully developed content, visual elements and instructions. The process resulted in four distinct nature-related pattern designs. The revitalisation aspect is expressed through both traditional embroidery techniques and narratives embedded in the pattern designs, which reconnect historical and cultural meanings with contemporary craft practice.

"The package was fun and fast: I left with a feeling of wanting to do more."



FIGURE 5. Test prints made with textile paints on wool fabric using stencils. Photographs: Elina Luiro (left), Tatiana Kravtsov (right), 2025.



▲ **FIGURE 6.** Piloting of the test DIY wool embroidery kits took place at *Leimu Neuleleiri* in Svefi, Haparanda. Photographs: Tatiana Kravtsov, 2025.

► **FIGURE 7.** DIY Wool Embroidery kits displayed in *Taitava Lappi Christmas Market*. Photograph: Minna Kovero, 2025.

"If I was on a trip, I would buy it as a locally made souvenir for myself or a friend."

"Flower and animal patterns are pleasant: people like Finnish nature and forest themes."

