Tools for the Snow, Snow as a Tool

Over millennia, the people of Tokamachi have developed a multitude of specialized tools to manage the heavy snowfall. In winter, snow reaches an average height of 2 meters, and more than 50 centimeters may fall in a single day. The Tokamachi landscape is a world of white for half the year, from the first flurries around late November until the last snowmelt in April.

To deal with the snow, residents need tools to move, remove, and compress it. They also need the means to move themselves and goods around. Many of their tools, like sleds and shovels, have easily discernible uses, but the purpose of others may be less apparent. One example is the long, serrated blades called "snow saws" (yukikiri-nokogiri) that are essential to clearing snow off roofs. First, a paddle-like tool (koshiki) is used to scrape off looser snow from the roof's surface and expose damp, compacted snow that has become hard as ice. Snow saws are used to remove this hardened snow in large chunks.

Other snow-related tools may be more universal but have unexpected features. The flexible, oversized snowshoes called *sukari* have a rice-straw rope that runs from the front of the bamboo frame to the wearer's hand. Normally, *sukari* would be too long to walk in, but the wearer can use them like regular snowshoes by pulling the front of the frame up and back with the rope. Releasing the rope, however, creates more surface area for tamping down snow. In this way, wearers can cross deep, unbroken snow and make a path for others not wearing snowshoes. Today, *sukari* have largely been replaced by snow blowers and other mechanized or mass-produced tools, but they were traditionally used to create communal pathways. Older residents would set out in the early morning to clear routes for children going to school.

Some tools relate to food preparation and preservation. These include the grid-like wooden racks (*hidana*) used to hang vegetables over hearth fires to dry, or the woven straw mats laid over piles of snow to prevent them from melting in summer. Thus protected, blocks of snow could be cut from the piles with snow saws and used for refrigeration in the hotter months.

During the long winters, when people were largely confined indoors and agriculture ground to a halt, residents turned their hands to making and maintaining these life-supporting tools. Using natural materials, such as rice straw, bamboo, and ramie plant fibers, they crafted everything from clothing to fishing baskets. Many of these items were cured and strengthened using the snow itself. In a process called *yukizarashi*, the materials were first laid out on the snow. Over time, ultraviolet rays from sunlight and hydrogen ions released by melting snow bleached and softened the fibers.

These tools tell the story of life in snow country. They also demonstrate the human ingenuity, communal solidarity, and connection to the natural world that are Tokamachi's heritage. Collectively, the tools have been designated Important Tangible Folk Cultural Properties.