

### **【Matsunoyama Onsen】**

Matsunoyama Onsen was once the “hidden hot springs” of the lords of Echigo Province, the Uesugi clan. Legend has it that the springs were discovered in the fourteenth century by a woodcutter who saw a hawk fly to the same spot every day to nurse its injured wing. On closer inspection, local people realized that the hawk was resting over a hot spring that came bubbling up from the ground. According to records from the late fifteenth century, a girl from the Uesugi family was sent here to heal a serious skin condition before her marriage.

Unlike most Japanese *onsen*, which are fed by geothermally heated groundwater, Matsunoyama Onsen’s reservoir is filled with seawater. Approximately 12 million years ago, most of eastern Japan was still at the bottom of the sea. When two plates of Earth’s crust overlapped, creating new land, seawater became trapped between the layers. The springs’ high saline content allowed local residents to produce salt from the waters for a short period after World War II.

Matsunoyama Onsen’s waters have a variety of beneficial properties, and it has been referred to as one of Japan’s “Three Great Curative Springs” (*nihon sandai yakutō*). The waters contain 349.5 parts per million of boric acid—more than any other Japanese hot spring—which has antifungal and antibacterial properties that are effective for treating skin ailments. The gentle low alkalinity of the water and the natural moisturizing properties of the water’s metasilicic acid are said to produce moist, glowing skin.

The most recently tapped spring is Matsunoyama’s hottest. The spring water exits the source at 98 degrees Celsius, hot enough to cook boil-in-bag meals, and the *onsen* staff have been known to use it for that purpose. The geothermally heated water is also pumped up through sprinklers to keep the streets clear of snow, and local entrepreneurs are exploring ways to harness the steam to generate electricity.