## Gathering Iron Sand: Kanna-Nagashi

The iron sand used in the smelting process was originally gathered by sifting riverbeds for sediment that had accumulated naturally. However, collecting iron sand in this manner was a time-consuming process. By the late seventeenth century, a more effective technique called *kanna-nagashi* had been adopted throughout the region.

Instead of waiting for erosion to occur naturally, workers dug into exposed cliffsides by hand. The crushed rock fell into manmade canals that were dug alongside the exposed cliffs and was carried downstream to a sorting station at the foot of the mountain.

The sorting station comprised a series of four terraced pools that separated the heavier iron sand from the rest of the sediment. Iron sand sank to the bottom of the pools, while everything else flowed out through openings between them.

These dioramas depict several scenes of *kanna-nagashi* on a snowy winter day. This method was not permitted during the growing season to prevent sediment from damaging rice fields downstream.

## Types of Iron Sand

Two different types of iron sand were gathered using the *kanna-nagashi* method: largegrained iron sand (*masa*) and fine-grained iron sand (*akome*). The large-grained sand was abundant in the San'in region (Shimane and Tottori Prefectures) and, being low in impurities such as titanium dioxide, was necessary for making steel. *Akome* iron sand was primarily used to make pig iron.