## A Purely Natural Hot Spring

On the rocky coast of Fukue Island is the area's only hot, continuously flowing artesian well. Today, there are several *onsen* hot springs on Fukue Island, but most are a result of drilling, not nature. Arakawa *Onsen* Hot Spring is completely natural.

## Non-volcanic, But Still Hot

Arakawa is interesting geologically because it is of non-volcanic origin, which is unusual as most hot springs on islands are volcanic in nature. In a non-volcanic hot spring, rain seeps into the Earth, is heated, and returned to the surface by subterranean pressure.

Another interesting feature of Arakawa is that it is a "green tuff hot spring," meaning the hot water originated in a layer of greenish-hued rock composed of volcanic ash that collected after an eruption (tuff) and was compacted over time to rock-like hardness. The green tuff, which is found all along the coast of the Sea of Japan, was formed at the bottom of a giant lowland area that existed perhaps 20 million years ago between the Eurasian continent and what is now the Sea of Japan. Many volcanic eruptions occurred within that lowland area, and the material ejected as ash eventually became green tuff.

## A Recent Find

It is somewhat unusual to find a green tuff hot spring on an island, which makes this one even more interesting. The first discovery was relatively recent—an outflowing of hot water was found nearby in 1856. However, the current hot spring was discovered even more recently, in 1913, by a 12-year-old boy. Since then, it has been developed and has become an attraction for visitors to the area. Its heat is also used to warm a greenhouse.

The *onsen* hot spring is open to the public every day for a small fee. You should definitely stop here on your visit to the Goto Islands to relax and soothe both your muscles and nerves.