Geology of Yashima

Yashima is a mesa, or a flat-topped mountain surrounded by steep cliffs on all sides. Its unusual shape is the result of a volcanic event that took place here approximately 14 million years ago. Before that, what is now Yashima was a valley overshadowed by high mountains, some of them volcanoes. When one of the volcanoes erupted, lava was released into the valley, covering it completely. This lava solidified into a distinctive type of extremely hard black rock called sanukite (named after Sanuki province, the old name for Kagawa Prefecture). Over millions of years, rain and wind caused the mountains around the sanukite-filled valley to erode. The lowest point of the landscape eventually became the highest. The sanukite protected the granite base of the former valley from the elements, turning Yashima into the lone mesa we see today. Visitors can spot evidence of the mountain's volcanic origins here and there along some of the walking paths on Yashima. Layers of smooth sanukite and joints (horizontal breaks) in the rock are visible along the trail that circles the North Ridge, and at a few places near the path that leads from the foot of the mountain to Yashimaji Temple.