

The Lahemaa National Park is extremely rich in erratic boulders, some of them being, with the circumference of over 25 metres or the diameter of more than ten metres, really huge. There are also plenty of boulder fields. The large erratic boulders already gave inspiration and evidence on the idea of the continental glaciation to the researchers of the 19th century. About 12,500 years ago, the continental ice sheet moved from Scandinavia's mountains and Finland slowly towards the south, tore off rocks from the earth of the Baltic Shield and carried them along on its journey, spreading them around at its melting stage. Most of the huge rocks have been carried to Lahemaa from Southeast Finland and the surroundings of Viipuri. This is proved by the existence of granite and rapakivi granite in the chemical composition of these boulders.

The Lahemaa National Park encompasses more than 50 significant huge boulders, out of which 27 boulders or boulder fields have been taken under protection. 21 of them lie in Harju County and six in Lääne-Viru County. Lahemaa's westernmost erratic boulder is **Tsitre Rock** – an old cupmarked boulder on the land of the Toomani Farm Museum in the village of Muuksi. The easternmost boulder, **Altiä Big Rock**, lies in the sea near the fishing net sheds in the village of Altiä. The rock was also known as the "Baby Rock" by the local people. The legend says that all the village's children were brought from behind this boulder or from behind **Mustkivi Rock**, which lies on the coast opposite the Viinistu Art Museum. When the children wanted a sibling, they went and knocked on the rock, and a new baby was born in the family. Estonia's fourth largest erratic boulder called **Majakivi** (*House Rock*) is located at the Majakivi-Pikantõmme Study Trail, which starts near the village of Virve on the Juminda Peninsula.



Photo: Purekari Erratic Boulder, L. Michelson

Distribution areas of the leading erratic boulders: 1. Rapakivi granite of Åland islands, 2. Red quartz-porphry of Baltic Sea, 3. Uralite porphyrite of Tammela, 4. Helisingite, 5. Uralite porphyrite of Pellinge, 6. Rapakivi granite of Viipuri, 7. Quartz-porphry of Suursaar



The neighbourhood of Viinistu, especially the flat land bays and coastal meadows to the north, is the area richest in erratic boulders in Lahemaa. On the coast of the land bay, **Joomakivi Rock** and **Launidu Rock** are situated. Although the name "Joomakivi" may be translated as "Rock of drinking", it actually derives from the dialect word "Joom", meaning the bay. Estonia's northernmost cape **Purekari** at the end of the Pärtspea Peninsula is densely dotted with erratic boulders. The mighty **Purekari Erratic Boulder** is said to have been thrown here from Finland by Kalevipoeg, the Estonian national hero. The legends about **Jaani-Mardi Big Rock** in the middle of Viinistu Village, however, tell us that Kalevipoeg wanted to throw the rock from Finland to Pärtspea, but as it often happened, he missed the target and the rock landed in Viinistu. On the coast between the villages of Viinistu and Turbuneme the colourful **Tiirikivi** (*Rock of terns*) lies, where once lots of terns were nesting, which clarifies its name. Lahemaa's symbol of its kind is **Jaani-Tooma Big Rock**, shaped as a cracked, sharp-edged pyramid, which lies in a juniper-rich wooded grassland in Kaspisa Village. At the tip of a small cape in the western part of the Pärtspea Peninsula, **Odakivi** (*Spear Rock*) is located. Once Kalevipoeg saw enemies coming to Cape Pärtspea and he threw his spear from Juminda Cape at them. But the spear, however, hit the rock which was called **Spear Rock** after that. **Tammispea Erratic Boulder**, the highest erratic boulder in continental

On both the present-day coast and the coast slopes of Lahemaa, dense **boulder fields** occur, which characterize the interaction of the sea and land: the sea heaped rocks up and the water swept off the finer material between them. That is why the northern coast and capes of the peninsula of Lahemaa are rocky but the mouths of rivers flowing into the bays are sandy.

On both the present-day coast and the coast slopes of Lahemaa, dense **boulder fields** occur, which characterize the interaction of the sea and land: the sea heaped rocks up and the water swept off the finer material between them. That is why the northern coast and capes of the peninsula of Lahemaa are rocky but the mouths of rivers flowing into the bays are sandy.

The prism-shaped **Lemeti Rock** is located on the coast near Kullihansu Rock lies two kilometres afar. Its real name is **Härikivi** (Ox's Rock) and the proper Community Centre, **Kullihansu Rock** lies. According to the folk legend, Epp the Witch lived in Vohma Village. She used to carry a rock in her apron. Once the rock became heavier and heavier, and finally fell down. When Epp tried to put the rock back into her apron, the rock grew even faster and bigger. But the rock was so soft that the witch's nail traces remained in the rock as if in wax. That is how the rock got its name.

The prism-shaped **Lemeti Rock** is located on the coast near Kullihansu Rock lies two kilometres afar. Its real name is **Härikivi** (Ox's Rock) and the proper Community Centre, **Kullihansu Rock** lies. According to the folk legend, Epp the Witch lived in Vohma Village. She used to carry a rock in her apron. Once the rock became heavier and heavier, and finally fell down. When Epp tried to put the rock back into her apron, the rock grew even faster and bigger. But the rock was so soft that the witch's nail traces remained in the rock as if in wax. That is how the rock got its name.

In a grassland 300 metres from the road near the Kolgaküla Community Centre, **Kullihansu Rock** lies. According to the folk legend, Epp the Witch lived in Vohma Village. She used to carry a rock in her apron. Once the rock became heavier and heavier, and finally fell down. When Epp tried to put the rock back into her apron, the rock grew even faster and bigger. But the rock was so soft that the witch's nail traces remained in the rock as if in wax. That is how the rock got its name.



Photo: Tiirikivi Rock, L. Michelson



Photo: Rock heaps of Näljakangur, L. Michelson

The most magnificent in Estonia is the **Käsmu Boulder Field** with its area of 400 hectares, located on the Käsmu Peninsula and designating the former coastline. It has come into being during the past 4,000 years as a result of coastal erosion and the pressure of sea ice. The rocks and boulders, already covered with moss, are in places stuck to or even piled on each other. Although a boulder field consists of mostly smaller rocks, some larger gigantic boulders also occur. The largest erratic boulder in the Käsmu boulder field is **Matsikivi** which lies at the Käsmu nature and cultural history trail, starting at the chapel. The same trail will also take you to **Vana-Jüri Erratic Boulder** at the tip of the cape. The six boulders of rapakivi granite, lying nearby on the coast, are also called the **Vana-Jüri Rocks**. There are rocks called **Meremunk** (Sea Monk) and **Metsamunk** (Forest Monk) within the boulder field. The oblong Meremunk has the shape of an irregular quadrangle and steep sides. The rock is cracked and its western side is broken, presumably caused by a lightning stroke. Metsamunk is steep-sided and spherical.

Another well-known group of rocks is the **Kloostrikivid** (Convent Rocks), also called as the Palmse Boulder Field, in the forest near the Palmse Manor House. The group consists of 13 larger and a number of smaller rocks of rapakivi granite. The sharp-edged rocks probably originate from one gigantic boulder which broke into pieces. A legend says that the rocks are devils who used to go and peep at the nuns at the Palmse convent. After the nunnery had been closed in the 15th century, the devils stayed waiting for the nuns until they petrified. Another story says that the rocks are nuns punished by Heavenly Father for their sins.

In a hayfield not far from the Palmse Manor, two huge rock piles called the **Näljakangrud** (Heaps of Hunger) lie. The Lord of the Palmse Manor is said to have given grain

for survival to the peasants at the time of the Great Famine in the late 17th century. When the famine was over, the peasants, expressing their gratitude, cleaned the manor's fields from rocks and heaped them up. Two heaps out of eight have preserved.

Several gigantic rocks of Lahemaa were already known by the famous naturalists of the 19th century, who visited the region and examined the boulders at the invitation of Alexander von Pahlen, the Palmse Landlord and President of the Baltic Society of Natural Sciences. Gregor von Helmersen, a member of the Imperial Academy of Sciences, was particularly enthused about the erratic boulders and he published the descriptions and drawings on some of them in the monography dedicated to Northwestern Russia's large erratic boulders. In his speech to the Society of Naturalists in Tartu in 1879, he called manor and land owners to protect all the erratic boulders with the girth of more than three metres. This appeal can be considered as the first initiative in the Russian Empire to protect inorganic world.

When you see damage done to the nature or visiting objects, inform the Environmental Inspectorate by phone 1313.



ADMINISTRATIVE AUTHORITY
Environmental Board
Palmse, 45435 Viitna
Phone +372 329 5535
lahemaa@keskkonnaamet.ee
www.keskkonnaamet.ee

ARRANGEMENT OF VISITS
Palmse, North-Estonian District
Nature Management Department
State Forest Management Centre (RMK)
Phone +372 329 5555
info@lahemaa.ee
www.rm.ee

Compiled by: K. Kingumets
Front page photo: Jaani-Tooma Big Rock,
L. Michelson
Layout by: Akriibia Ltd.
Printed by: Aktaprint PLC

©Environmental Board 2012

ENVIRONMENTAL BOARD



Publication supported by
Environmental Investment Centre



LAHEMAA
National Park
ERRATIC BOULDERS

