





Sea-Rocket Cakile baltica

ZIEMUPE SEACOAST

The village of Ziemupe is situated at the Baltic Sea, 17 km north of Liepāja. We are very proud of our area, and would like to welcome visitors to our village, where we can offer a range of guest houses for those wishing to see our beautiful landscape and habitats of international conservational interest as well as interesting cultural objects. On entering Ziemupe you will find information and guesthouses well signposted.

Beach

The characteristic beach habitat for Ziemupe is sandy/ gravel with pebbles. It is quite high in parts, occasionally forming small beach bars. The beach is rather narrow and it is periodically influenced by strong waves.

There are few plant species on the beach. Sea Rocket Cakile maritima and Prickly Saltwort Salsola kali have adapted to this harsh environment. Both are salt-tolerant - halophytes. Sea Rocket is an annual, with alternate succulent leaves and pink/purple aromatic flowers. Prickly Saltwort is also an annual, often found growing alongside Sea Rocket. It also has succulent leaves, which terminate in a thorn. The flowers are very small, found near the leaf axes and are only visible on close inspection.



Sandy gravel beach with pebbles



Prickly Saltwort



Bird`s-eye Primroses Primula farinosa



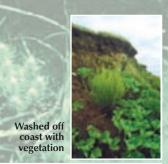
Washed off coast

Washed off coasts

The coast at Ziemupe is very unusual, being the only example of its kind in Latvia. The coast is subject to varying degrees of erosion. Where it is most prominent, as in the area near Ziemupe church, erosion is severe, with around 10 m of the coast having disappeared in recent years. The height of the steep coast ranges from 5 to 12 metres. Landslides still occur in some places.

In areas of little erosion, such as the area north of the Tenkši Ditch, the ground becomes covered in lime-loving plants, such as: Bird's-eye Primrose Primula farinosa which flowers in May, Common Butterwort Pinguicula vulgaris an abundance of Orchid species which are to be seen flowering in June. In Latvia such plant communities are very rare on the seashore. It is because of specific growth conditions: fresh-water springs flow from the slope between the blue clay sub-soil and overlying gravel, providing a humid, nutrient-rich environment and an alkaline soil, unusual for

Towards the Żożupe Creek, the coast is regularly disturbed, covered with species such as Coltsfoot Tussilago farfara, as well as many dune and meadow plants. Steeper slopes are colonised by Sand Martins Riparia riparia.



Early Marsh-orchid Dactylorhiza incarnata



Sand Martins *Riparia riparia* have settled into the steep coast



Lyme-grass Leymus arenarius in embryonic



Petasites spurius



Grey dune with lichens



Larva of Ant-lion Myrmeleon formicarius)



Old pine forests are habitats for rare species





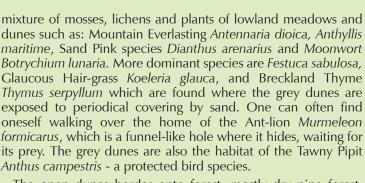
Dunes

In the middle part between the Žožupe and Laiku Creeks washing off coast reduces and primary dunes start to develop. They form when the wind blown sand stops against the plants or other barriers. At the beginning small sand "hillocks" - embryonic dunes are created. With the increase of embryonic dunes shifting dunes or white dunes develop.

Marram grass Ammophila arenaria is the most significant grass species responsible for the stabilisation of the dunes. It actually needs the accumulation of sand around it in order to thrive. In several places, the Butterbur Petasites spurius grows thickly in the shifting dunes. They look like Coltsfoot but differences are clearly seen on closer inspection: the lower side of Petasites spurius leavs is velvety white, densely covered with hair and the leaves are slightly in-rolled to protect them from the sun. The flowers are arranged in a yellow spike, appearing before the leaves appear.

Marram grass and Sea Pea Lathyrus maritimus are plant species that grow only on the seashore. This means that their habitats are very restricted. In total, there are about 50 such coastal plant species in Latvia. The Ziemupe coast therefore provides a significant habitat and it is essential that we play our part in the preservation of these plants.

Over time and with more stable conditions, the white dunes may develop into grey dunes. A wide variety of grey dunes have developed between Ziemupe and Akmenrags. They are to be found above the steep coast as well as between the shifting dunes and the forest. Older dunes in this area are characterised by a



The open dunes border onto forest, mostly dry pine forest. The pines are mainly 40 to 80 years old, but some are 120-160 years old. There are few remaining old pine forests. Pine stands frequently exchange with birch-stands. One can see a larger variety of forest types alongside small river banks. Black alders, for example, grow on the banks of the River Grigulupe. Soil is much more fertile there,t special microclimate and higher humidity encourage bushes and caulescent plants to grow. Deciduous trees within the pine forest are very valuable as they increase the

variety of habitats, thus promoting diversity of plant and animal species. Heading inland you come across pine forest on poor, wet, sandy soil. The Ziemupe area of the coast is famous for its picturesque sights. One can see different colours and patterns at eroded coasts, in the dunes and in the sand. Grey dunes are most colourful in June and July, shifting dunes and forests become more colourful

after the autumn frosts. Leaves of birch-trees and aspens fall off,

but dune grasses remain yellow all over the winter.



(Lathyrus maritimus)

Road through the forest in autumn



Pillow-like vegetation on grey dunes



Glaucous Mountain

Hair-grass Koeleria glauca Everlasting Antennaria dioica

Thyme Sand Pink **Thymus** Dianthus arenarius



Biting Stonecrop Sedum acre



ZIEMUPE NATURE RESERVE

Most of the Ziemupe coast is included in the Ziemupe Nature Reserve. There are two parts to the Nature Reserve: the sea shore from Ziemupe to Rudupe Rivers and the inland area to the east. The inland area has dry forests but for the most part, wet conifer forests prevail. Large stands of Bogmyrtle Myrica gale grow in open areas. Ziemupe Botanical Nature Reserve was founded in 1987 to protect this species. Further studies revealed that the Ziemupe coast is unique because of its dune plant communities and plant species, so Vērgale Municipality made a resolution in 1992 to create a protected area for the Ziemupe coast as well. The two areas were amalgamated in 1999, and the Ziemupe Nature Reserve was established with a total area of 2470 ha. A 300 m wide strip of the Ziemupe coast is included in the dune protected belt. Here in the coastal zone one can find 10 specially protected plant species. Shifting dunes, grey dunes and wooded dunes are also protected habitats in Latvia.

Ziemupe Nature Reserve is significant not only in Latvia but in Europe as well. It is included in the network on NATURA 2000 sites. It means that Ziemupe Nature Reserve is a specially protected nature territory of the European importance and Latvia has taken responsibility to preserve it. With this Vērgale and Saka Municipalities, as well as landowners have got the chance to receive financing from the European Union for coastal habitat restoration, management and tourism development.



GUESTHOUSES AND SIGHTSEEING OBJECTS PLACES OF VERGALE MUNICIPALITY

1. Laikas Guesthouse 3495465, 9432314 2. Ziemupe coastal parking place 8708186

3. Kaijas Guesthouse 3495825, 9454425 4. Guesthouse of Vērgale Municipality

Ziemupe, Kaiju Street 3 5. Akmeņkalni Guesthouse 3495825, 9454425 9554378 6. Indrāni Guesthouse 3495856, 9393866 7. Kalēji Guesthouse8. Smiltnieki Guesthouse 3495215, 9141389

3495200, 6307154

9. Līdumnieki Guesthouse 3495474, 9464082 3495222, 6540345 3495397, 9224893 10. Zariņi Guesthouse Recreation centre of Vērgale 3495366, 3495495 12. Vērgale museum and

Vērgale manor 9338335 3495391, 9363898 Vērgale Municipality

14. Information centre of Vērgale Municipality 9437166 15. Ziemupe Church 6378515, 9437166 16. Saraiķi Church 3495202 17. Vērgale Church 9338335, 3495366,

3495495 18. Akmeņrags Lighthouse 3499449 19. Kalniņmuiža Cafe 3495394

20. Aužuļu lime-tree

21. Juniper growth22. Stone Pile, the former Soviet military area23. Ziemupe Churchyard25. Anna C

25. Anna Churchyard Vērgale Churchyard 26. Roņu Churchyard



Skilled guides will help you to get acquainted with the large variety of plants, dunes and steep coasts. You can also visit the juniper growth, Aužuļu limetree (the third largest in Latvia) as well as the stone pile in the coastal forest next to the former Soviet military area. There are several notable cultural and historical objects of interest in Vergale Municilapity: Vērgale manor, Vērgale museum, Vērgale church, Saraiku church and Ziemupe church. You can go to Akmeņrags lighthouse via Ziemupe. It is also possible to fish, either in Vergale ponds or in the sea. You can see the most spectacular sunsets over the sea from anywhere along the Ziemupe shore.

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PROTECTION OF THE ZIEMUPE COAST

It is essential to consider the correct balance between nature conservation and management and organisation of tourism and leisure in the area, in order to protect the seashore in a way rare species of animals and plants can live and survive.

Several documents of the Republic of Latvia determine the protection and management of Ziemupe coast. The most important documents include "Law on Protected Belts", "Law on Protection of Species and Habitats", "Law on Specially Protected Nature Territories", "Regulations on the General Protection and Use of Specially Protected Nature Territories".

Let us remember

Photos: Māris Kreitenbergs

In the protection zone of coastal dunes it is forbidden to:

damage and destroy the natural vegetation of dunes.

- drive mechanical vehicles beyond regular roads
- make campfires and put up tents beyond the designated places park caravans and portable buildings

The seacoast is exposed to waves, winds and human activities. Dunes are among the most endangered nature territories. We have to perform special restoration and management work to use these places for rest and pleasure. The hosts of Ziemupe have started the construction of footbridges for paths and have arranged more places for resting. They hope to develop tourism in the area and to see more holidaymakers and tourists visit in the future. The Information Centre of Vergale Municipality will provide you with the necessary information about the Ziemupe coast.

