A National Park is a vast, mostly unchanged area of land or sea with exceptional and multiple natural values. It extends over one or more preserved or slightly changed ecosystems, and it is primarily intended for the preservation of the original natural values. A National Park has a scientific, cultural, educational and recreational function. Actions and activities that do not endanger the originality of the nature are allowed in the Park, while economic usage of natural resources is forbidden.

Law on Nature Protection (Narodne Novine)
Giant, seemingly bare blocks of rock with many cracks, dense woods, glades, small and large grassy karst valleys, pits, sinkholes, ice caves, ponds and karrens. Northern Velebit area is a true mosaic consisting of various habitats of different plant, fungus and animal species the wealth of which we just began discovering.

This variation of karst forms, living creatures and landscapes was the reason for the establishment of the Northern Velebit National park. Back in 1930, Ivan Krajač, a mountaineer and Velebit lover put this diversity into words in an unequaled way:

In a magnificent procession, the most distinguished Alpine glories are gathered here for eternity, as nowhere else on Velebit, in such multitude, and at such altitude and in a relatively small space.

Man has left a special mark on the Northern Velebit landscape. Man has created and maintained grasslands and ponds, built shepherd’s huts and drystone walls. Remains of old buildings and overgrown traditional paths remind us of this today. By creating new habitats - pastures, ponds and drystone walls – the man made life possible for many plant and animal species that otherwise would not be here. In this way the biodiversity of the National Park was enriched.
The value and the beauty of Velebit nature were recognized a long time ago. Within the UNESCO’s MAB program – Man and Biosphere, in 1978, the Velebit mountain was included in the network of World biosphere reserves. Three years later, Velebit became a Nature park. It includes two National parks – Paklenica National park, proclaimed in 1949, in the Southern part, and Northern Velebit, half a century younger, in the Northern part. This is why Velebit is rightfully called the Park of the National Parks.

The area covered by the Northern Velebit National park also includes previously protected areas – the Hajdučki i Rožanski kukovi Strict reserve, Visibaba Botanical reserve, and Zavižan-Balinovac-Velika kosa Botanical reserve, which hosts the famous Velebit botanical garden, declared a monument of park architecture.

Did you know?

The Northern Velebit is the youngest, eighth national park in Croatia. In 2009, the Park celebrated its 10th anniversary.
The area of Northern Velebit National Park consists of sediment rocks which gradually formed in an ancient shallow sea in which sea algae, fish and other animals lived and bread through long geological periods.

In such marine environment, which was only a few tens of meters deep, carbonate mud, sand and skeletal remains of the sea creatures precipitated out. The process of hardening or cementing turned this complex material into carbonate deposits hundreds and thousands of meters thick. These very deposits make the mountain mass we call Velebit today.

The sea bed moved slowly and the entire pre-Velebit area lightly bent, cracked, alternately sunk and rose as it moved in the northern-eastern direction. The movement of this ancient Velebit area was due to tectonic movements resulting from the pressure which the African plate exerts on the European one. This strong pressure caused more intensive elevations of the sediments above the sea level, in which they bent or folded and broke or faulted. All of this, coupled with the effects of water, ice and wind accelerated the destruction of sediments and rocks which is revealed in their physical and chemical weathering. Thus new blocks of masses, rock bits and fragments were formed. As they were carried off by streams, rivers and glaciers, they were deposited into depressions such as dolinas and bays where clastic sediment rocks were formed by their hardening. This way fragments gave rise to breccias, gravel to conglomerates, sand grains to sandstone, and their mixture to glacier moraine sediments.

Tectonic movements which subsequently happened elicited the cracking of Velebit rocks. Thus, we can literally say that when our visitors hop from one rock to another, they pass through tens of millions of years at once.
Did you know?

Velebit is a relatively young mountain. Its rocks began to elevate above the sea level approximately 40 million years ago with the period of strongest elevation centering around 23 million years ago. The pressure which the African plate exerts on the European one and the consequential elevation of Velebit are still going on to this very day and will most likely equally continue in the future.
Trace of water in stone
The landscape of Northern Velebit National park is characterized by an outstanding karst relief whose diversity, quantity and complexity of forms makes it one of the most interesting and attractive karst areas in the world. The crucial factors in the formation of this impressive karst relief were thick carbonate sediments, intensive tectonic activity which caused the unique shape of the relief as well as carbon dioxide enriched water which keeps incessantly dissolving carbonate sediments.

Karst is thus a specific type of relief created by chemical dissolution of carbonate rocks under the influence of carbon dioxide-enriched water. The corrosive activity of this water on the earth's surface gave origin to countless karst forms, from the smallest karrens to the large koks and stupes (resembling crags) and sinkholes.

**Karren** (grike, rillenkarren, kamenitza) is a rock crevice which can differ in shape and size depending on the amount of precipitation, composition of rock (percentage of calcium carbonate in a carbonate rock), the slope of the terrain and the intensity of rock cracking.

**Grike** is created by the corrosive activity of water along the fissure previously formed in the process of sediment deposition or at the time of rising, folding or faulting of sediments.

**Rillenkarren**, just like **kamenitza**, are formed in compact rocks under the influence of carbon dioxide enriched water.

**Sinkhole** is a depression in terrain which can assume the shape of a funnel, well, pan, or can even be irregular in shape. It is formed either by the collapse of the the roof of underground cavities in tectonically fragmented terrains or by the corrosive activity of water along the cracks.

**Kuk** and **stup** (resembling crags) are column-shaped forms created by selective weathering of harder rocks which are more resistant to chemical and mechanical weathering than their surrounding rocks.
A mysterious world
Hidden from your eyes, deep down in the bosom of Northern Velebit, is a realm of another world. This is an empire of underground karst forms – caves and pits, which are unique speleological features.

Pits are typical underground karst forms created by chemical and mechanical weathering of rocks in a tectonically broken terrain. They contain vertical or steeply tilted channels whose total inclination exceeds 45 degrees. Caves, on the other hand, are speleological objects which contain horizontal or only slightly inclined channels.

A total of 220 speleological features had been discovered in the area of Northern Velebit National Park by 2009. Over 95% of them belong to the group of pits. The Park area, especially the Strict reserve Hajdučki i Rožanski kukovi hosts many deep pits, so it belongs to the most interesting speleological localities in the world. The following three pits with depth over 1000 m have been discovered in the Park: Lukina jama – Trojama pit system, Slovačka jama and Velebita.

The pits are the home to quite a few unusual living creatures which are adapted to permanent darkness, high moisture and unchanging temperature. Thirty three species of these animals had been identified in 20 speleological objects within the Park by 2009. Some of these species are endemic, i.e. indigenous to Northern Dinaric Alps and Northern Velebit. Insects such as beetles live here and snails are frequent inhabitants as well. Pits are also home of millipedes, pseudoscorpions, spiders, crustaceans, polychaetes, and bivalves. The most popular underground species by far is the highly endemic species of Velebit leech. So far, it was identified in only four deep pits in Hajdučki i Rožanski kukovi Strict reserve (Lukina jama, Slovačka jama, Velebita and Olimp).
Lukina jama–Trojama pit system is located in Hajdučki kukovi crags. The entrance to Lukina jama is at 1438 m asl, and the entrance to Trojama is at 1475 m asl. This pit system has been researched down to 1392 m of depth, which is approximately 80 m asl. Speleologists discovered a new animal species, the Velebit leech, in Lukina jama in 1994.

Slovačka jama is located in Mali kuk crag. The entrance to the pit is at 1520 m asl, and its researched depth is 1320 m.

Velebita – Dva javora pit system is located on the hillsides of Crikvena peak. Its entrance is found at 1557 m asl, and the pit is 1026 m deep. It is characterized by the longest inner vertical wall in the world (513 m).

Patkov gušć pit is located in Gornji kuk crag, its entrance is found at 1450 m asl, and its depth reaches 553 m. This pit is totally vertical, all the way from top to bottom, and represents the second highest vertical wall in the world.

Lubuška jama pit is located in Hajdučki kukovi crags, at 1500 m above sea level. It has been researched down to 521 m.

Meduza is a pit located in Rožanski kukovi crags, at 1600 m asl. Its depth reaches 707 m. It contains a 450 m long vertical within itself, the second longest vertical wall inside a speleological object in the world.

Olimp is a pit located in Begovački kuk crag, at 1370 m asl, whose depth is 531 m.

Xantipa is a pit located in Vratarski kuk crag, at 1650 m asl. It is 323 m deep and mostly filled with ice and snow.
Did you know?

Almost every speleological research results in new facts about the living world of the Northern Velebit pits. The latest discovery is a new species of leech, previously unrecorded. The newfound leech has a greenish fluorescent glow and was discovered in Lubuška jama in August 2009. This is the second leech species in Northern Velebit National park. Most probably this species is new to science.

Although they belong to the greatest values of the Northern Velebit National Park, the pits remain hidden to most of the visitors.

No activities are allowed in speleological objects without a special permit issued by the Ministry of culture, and the visits to Hajdučki i Rožanski kukovi Strict reserve, where most of the pits are located, are limited. In addition, one cannot enter pits without special knowledge, equipment and skills. The surrounding terrain is extremely difficult, and can be very dangerous.

The pits still conceal many secrets waiting for the lovers of the underground, speleologists and scientist.
Between the sun, wind and snow

Velebit is the natural border between the continental and Mediterranean part of Croatia. Two different climates meet on its crest, the Mediterranean and the continental one. This causes unpredictable weather conditions. The Northern Velebit area is one of the coldest and most humid parts of Croatia. Zavižan is the snowiest, foggiest and windiest meteorological station with the lowest temperature in Croatia. The average snowy winter lasts longer than seven months, but it is not unusual for it to snow here in the summer months as well. In valleys and sinkholes snow remains longer, and in ice caves it is present the whole year round. One of the main climate characteristics of this area is bora – the wind which blows from the mainland to the sea mostly during the winter months, often reaching hurricane force. The bora blows on Velebit also in the summer, but with less power and in shorter periods. The influence of bora is visible on the vegetation – branches of exposed spruces show in the direction of the wind.

During the warm months of the year lightnings are very common, and one of the highest peaks in Northern Velebit was named Gromovača, due to frequent lightnings (=grom).

In the Northern Velebit National park, beneath the Vučjak peak, at the altitude of 1594 m the highest mountain meteorological station in Croatia is located. It started working on the 1st of October 1953 and has been working continuously ever since, despite rough weather conditions during the most part of the year. Meteorological data are sent daily to the State Meteorological and Hydrological Service in Zagreb, even during strong stormy winds, high snow blows or thunder. In the Zavižan meteorological station many parameters are measured and observed – air temperature, pressure and relative air humidity, wind direction and velocity, amount and type of precipitation, cloud cover and type of clouds, sunshine and atmospheric phenomena.

Due to its specific location the Zavižan station was included in the international register of meteorological stations and all international programs for monitoring flows and changes of physical and chemical composition of the atmosphere in the European and Mediterranean areas.
Did you know?

So far, 16 observers have worked in the Zavižan meteorological station. The first was Nikola Miškulin, and the most famous is family Vukušić whose members have been doing this job for over three generations almost half a century. The only female observer working in the station was Štefanija Vukušić.

Average annual temperature 3.3 °C
Maximum temperature measured +28 °C
Minimum temperature measured −29 °C
Maximum wind velocity measured 38 m/s or 136.8 km/h
Maximum snow depth 320 cm

22 Winter on Velebit
23 Lightning
24 Sunshine recorder (heliograph)
25 Thermometer screen box
A treasury of life
The air view of Northern Velebit National park reveals a fascinating mosaic of dark coniferous and mixed forests, steep rocky peaks and cliffs interwoven with grasslands of all sizes. These dark forests melt into the bright broad-leaf forests at the foot of the mountain, where the Western slopes of Velebit, covered in shrubs and macchia, seem to dive into the sea. The rough beauty of this place is shaped by climate – the bora wind, blowing at the speed of up to 144 km/h, winter temperatures dropping down to –25°C in the wintertime, and down to 0°C in the middle of the summer. Although often whipped by rain and snow, animals and plants here frequently lack water, because the majority is drained into the cavernous underground world. Plants, animals and fungi that live here must be adapted to extreme conditions. During ice ages, while the Northern parts were covered in ice, these species inhabited a much broader area in this part of Europe. Following the withdrawal of the ice border, they withdrew to the North and up the mountain peaks. This is why the species we find on most of European mountains resemble each other, and are very similar to the ones living far North. However, they are not identical: thanks to the centuries of isolation, the species developed unique versions - endemic species and subspecies.

Among many beautiful and stunning creatures living in Northern Velebit, are many rare and endangered species, such as the bear, wolf, lynx, chamois, capercaillie, golden eagle, ural owl, Tengmalm’s owl, alpine chough, three-toed woodpecker, apollo and purple-edged copper butterflies, *Gymnopilus picreus* and *Tetraea dumbirensis* fungi, great yellow gentian, common bearberry, fairy’s thimble, bell-flowers, Croatian cloves, Croatian pink, karst edelweiss, Bosnian lily and orange lily.

**Did you know?**

Northern Velebit National Park is a part of National Ecological Network, a system of most valuable areas with endangered species, habitats and landscapes in Croatia. It is also nominated for Natura 2000 network as a part of Croatian preparations to join the EU. Natura 2000 is the European ecological network, the basis of nature protection in the EU. To make sure the endangered species and habitats are in “a favourable conservation state”, monitoring is performed, i.e. the condition of the chosen species is being followed. In the Northern Velebit National Park the forest ecosystems, spruce bark beetles, rainwater, owls, woodpeckers and ortolan buntings are monitored, and monitoring of grasslands is in preparation.

26 Chamois (*Rupicapra rupicapra*)
27 The presence of large predators testifies that Velebit forests are well preserved
28 Edelweiss (*Leontopodium alpinum*)
29 *Tetraea dumbirensis*
Layers of green
One of the main characteristics of every mountain is vertical zoning – the transition of habitats from the maritime/continental ones into alpine ones. The mountaintops are inhabited by typical alpine animals and plants, while in lower altitudes, depending on the side of the mountain being observed, Mediterranean or continental species are encountered more and more frequently. The highest Velebit peaks are covered in mountain pine, spruce, beech and sycamore. The inland slopes are covered in beech and mixed beech and fir forest, while the seaside slopes are overgrown with downy oak, oriental hornbeam and European hop-hornbeam.

Thanks to the careful management of forests in the past, and also to the inaccessibility of this area, the forest ecosystems in the Park are very well preserved. The presence of dead and old trees in the forests provides the habitat for five out of nine European woodpecker species. They play an important role in the forest ecosystem, as their old holes are inhabited by many mammals and birds, such as Tegmalm’s owl and pygmy owl.

The Northern Velebit forests are extremely rich in fungi. Owing to the presence of old and decaying trees, here are found even those species which require large remains of trees, usually rare or absent in woods managed for logging. Besides the easily noticeable higher fungi (Basidiomycota), the Park is rich with sac fungi (Ascomycota). By decomposing, the fungi return nutrients to the natural circulation, and are thus essential to the health of the whole ecosystem.

**Did you know?**

A rare fungus from the *Hymenoscyphus* genus was found on the shedded spruce and fir needles in the subalpine zone. A similar fungus was previously known only from the Slovakian Tatra mountains. It yet remains to be determined whether it’s the same species, or perhaps a species completely new to science!

30 The trees of subalpine beech forest are pipe-shaped due to snow pressure
31 Young beech (*Fagus sylvatica*) leaves stand with their bright colour out from coniferous spruce (*Picea abies*)
32 White-backed woodpecker (*Dendrocopos leucotos*), can be seen in beech forests of Northern Velebit
33 A fungus from the *Hymenoscyphus* genus on spruce needles
A disappearing wealth
Grasslands open up the area and constitute a valuable segment of the landscape. They enrich the species and habitat diversity, as the animals and plants living on them are specific to grasslands. Although one might think that they have been here forever, almost all of Velebit grasslands have been created by man. This alone makes them an important part of the cultural heritage. Many of them host remains of old buildings. In order to find additional space for their grasslands, settlements and gardens, the inhabitants of Velebit cleared parts of forests previously covering the area. Once created, the grasslands were maintained by pasture, mowing and removal of trees and shrubs. As they have been abandoned and are currently not being maintained, the grasslands are gradually converting back to forests. Young trees and dense shrubs growing along the receding edges of a grassland is a very common site on Velebit.

Grasslands are thus the most endangered type of habitat in the Park, facing certain disappearance. This is why they require active protection: removal of trees and shrubs, mowing and pasture.

In the wealth of grassland flora and fauna, butterflies catch the eye. Very often, their presence depends on the feeder-plant for the caterpillar. While the adult butterflies are not so picky, the caterpillars are usually very particular when it comes to food. Besides the picturesque butterflies, there is a rich moth fauna, which are somewhat less conspicuous, but very beautiful and interesting. As there are many species and individuals, the butterflies and moths are very important in the food web, and are one of the main sources of food for numerous birds. Grasslands are also a valuable feeding ground for rare birds of prey of the broader Velebit area, such as the golden eagle and booted eagle. Birds of prey are often endangered, because they are at the top of the food web and need a large territory, peaceful habitat and adequate nesting and hunting grounds. Furthermore, they reproduce slowly and have a small number of offspring.

**Did you know?**

**Mountain alcon blue** butterfly uses a peculiar deception: the caterpillars live at first in the flower buds of cross gentian, but after their fourth molt they are taken by ants, carried into the anthill and there fed, as the ants believe them to be their own larvae! Although the mountain alcon blue caterpillar looks nothing like an ant larva, it succeeds in persuading the ants into it by means of an odorous secretion, as the ant world is governed primarily by the sense of smell.
Crude beauty
Rocky terrain is a specific and scattered, isolated, fragmented habitat, requiring special adaptations for success. This is why it has caused the development of endemic species and the survival of old evolutionary lines, such as the Balkan snow vole. The conditions on the rocky terrain are a bit like the conditions in the desert – there is no shelter from the sunshine, which is more intensive in the mountains due to thin air, and the water does not stay on the rocks for a long time. The rescue for animals are kamenitzas, shallow holes and cracks on the surface of rocks holding rainwater. Another important source of water in these conditions is the morning dew. The plants on the rocky terrain are mostly short, cushion-like, light in colour and hairy, in order to reduce the dehydration and endure this extreme climate. The rocky terrain is made of two types of habitats – the rocks and the scree. Although it seems bare and uninhabited, the surface of rocks is covered in lichen – grey and green patches on the rocks are actually living organisms! Less resistant living organisms find their homes in cracks among the rocks, where the soil accumulates so the plants can form roots. In these cracks also hide various insect species and other invertebrates, which are the food of small mammals. The endemic Horvath’s rock lizard also feeds on invertebrates. Thanks to its flattened body shape, it can crawl deep into the crevices in order to find food and hide from predators. The most famous rocky terrain inhabitant is probably the nose-horned viper (Vipera ammodytes), the most venomous snake of Europe.

Scree is a loose aggregation of broken rocks, often found on slopes. It is an unstable foundation, and the soil and water are located deep inside. The roots of the plants living on scree are much longer than the part of plant above the ground, as they need to reach deep for these essential compounds.

**Did you know?**

Croatian savory is a cushion-like plant with purple flowers. It grows in rock crevices in Dinaric Alps from subalpine to alpine zone. Although aromatic, it is not used as a seasoning like related winter savory and illyrian savory.

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38 Plants rooted in rock crevices
39 Balkan snow vole (Dinaromys bogdanovi) is a very old species
40 Nose-horned viper (Vipera ammodytes) is a regular inhabitant of Croatian rocky terrain
41 Croatian savory (Micromeria croatica)
The long presence of man has left a specific mark on the landscape of Northern Velebit. Shepherd’s huts, drystone walls, traditional paths and ponds are current reminders of this. Grasslands that give a special charm to this place were formed through clearing forest land for pasture and growing crops. Residents of settlements on Velebit littoral slopes used to graze their livestock on the mountain – sheep, goats, cows and horses. During the brief summer periods they used to farm small, cleared areas of land. The high part of the mountain was also the main source of hay for the animal feed during the winter months because the fertile land in Podgorje and the lower parts of the mountain was not mowed but cultivated.

Northern Velebit mountaintop had no permanent settlements – the climate was too tough for this. This is why the highest zone was used only during the warmer part of the year, and the seasonal moving took place in several „stages“, depending on the weather. According to the testimony of Mr. Drago Vukušić, an observer at the Zavižan weather station for many years, the family used to spend the winter in Gornja Klada, a village in Podgorje situated at the altitude of 300 m. From there they used to move to the village of Babrovača (900 m) in March or April, and in May or June to Vukušić duliba (around 1300 m). During the mowing season, in July and August, the residence was in the highest part of Velebit, at Vukušić kantunište (around 1500 m). In September people would already return to Babrovača where they used to stay until the first snow, after which they returned to Gornja Klada.

While staying in the mountain, people used to live in „summer huts“. These were simple housings built of roughly carved stone, with roofs covered by a wooden shingle. There are
records of numerous summer settlements with shepherd’s huts in Northern Velebit National park. They were abandoned by the middle of the last century and up until now the only active residences are those of Vukušić family in Babrovača. The largest and most well preserved complex of shepherd’s huts, drystone walls and water cisterns is located on Mirovo, a spacious valley at around 1350 m altitude.

To ensure sufficient water, which was always scarce in karst areas, people used to build stone reservoirs (cisterns). The livestock was watered in ponds that were built around by stone and regularly maintained. During the most severe heat, they brought snow and ice from ice caves.

For centuries man, living in harmony with nature, enriched and maintained the landscape and biological diversity of Velebit, creating new habitats – grasslands, ponds and drystone walls. Just like shepherd settlements, they are left today to their gradual disappearance.

**Did you know?**

Due to rich and dense spruce, fir and birch forests, forestry has always been one of the most important sources of income on Velebit. The first forestry office in Croatia was established in the very area of Northern Velebit, in the village of Krasno in 1765. Even today traditional timber pulling by pack-saddled horses can be seen in Park surroundings.

42 Remains of a summer settlement on Mirovo
43 Summer huts
44 The outer mouth of a cistern, carved from a single stone
45 Taking out timber on horses
It is usually said that mountains need to be conquered. Velebit is a mountain which conquers its visitors and there is probably no visitor that visited Velebit and did not wish to come back as soon as possible. Velebit has inspired visitor’s fantasy and curiosity since the beginning of the last century. The hikers of that time moved differently through the area. There were no vehicles or access roads, not even trails for quick visits of Velebit. The beauty was the same, but efforts mountaineers of the time made were much bigger. Only after 1933, when the Premužić trail was built, was it possible to move more easily through the most impressive and the most inaccessible parts of Velebit. It is interesting that the word used for a mountain in middle ages in Croatia was “velebić”.

The mountaineering of modern man has become a way and a style of living, and not aimless wandering through the mountains. Visiting nature and walking in the fresh air is an active way of relaxing that, in spite of the physical effort, fulfills with a new strength and satisfaction.

In Northern Velebit National park mountaineers constructed and marked many trails and paths, and the mountaineering possibilities are very diverse. The mountain peaks offer magnificent view of the Adriatic sea and islands as well as of the Lika inland on the continental side. The highest peaks in the National Park are Veliki Zavižan, Gromovača and Vratarski kuk with 1676 m, and the highest peak of wider Northern Velebit area, Mali Rajinac (1699), is in the very vicinity of the Park. There are two mountain huts and a shelter inside the National Park. The most famous destination is Zavižan mountain hut, one of favorite destinations for many mountaineers for the beauty of its surroundings and views, as well as for the warmth numerous hikers and housekeepers built into it. Rossijeva koliba, a shelter built in 1929, is on the Premužić trail beneath Pasarićev kuk crag and is a place for a break and a shelter from bad weather. The Mountain hut on Alan, a renovated ex-forester hut, is an excellent starting point for tours of the southern area of the Park. In the vicinity of the National Park are several other mountain huts which are suitable starting points for tours in the Park and the surroundings.
**Did you know?**

Many workers and craftsmen from Podgorje skilled in carving stone worked on the construction of Premužić trail. During the crisis in 1930s it was exactly the construction of Premužić that was an important source of income for numerous families in Podgorje.
Explore and experience Northern Velebit
Northern Velebit National park is the right destination for those preferring an holidays in nature – mountain climbing, walking, trekking, cycling. It is criss-crossed with approximately thirty mountain paths offering visitors various possibilities for recreation. Only by taking a walk will you discover some of the most beautiful and most charming places!

A Hajdučki i Rožanski kukovi
Strict reserve
B Zavižan-Balinovac-Velika kosa
Botanical reserve
C Visibaba Botanical reserve
01 Zavižan
02 Velebit botanical garden
03 Premužić trail
04 Lubenovac
05 Štirovača
06 Alan
07 Mirovo

50 Premužić trail – a favourite destination of all nature lovers
51 Conquering peaks
52 Cycling through nature
53 Climbing Gromovača
Zavižan

Zavižan is one of the most popular localities within the Northern Velebit National park. The Zavižan mountain hut is located at 1594 m asl, below Vučjak peak. This is the oldest mountain meteorological station in Croatia, founded in 1953. If you take an extra step and climb for another fifteen minutes to one of the surrounding peaks, you will have a beautiful view of the Kvarner islands and Lika inland. The Zavižan views are the very ones leaving our visitors breathless.

Did you know?

The Zavižan mountain hut was built on the foundations of the former Krajačeva kuća hut, built back in 1927.
Velebit Botanical Garden

In close proximity to Zavižan, some fifteen minutes on foot from the mountain hut, is the Velebit botanical garden, founded in 1967 on doctor Fran Kušan's initiative. The idea its founders followed is still living: to make the Velebit flora available, not only to scientists, researchers and Velebit lovers, but to all visitors of the area.

The Garden is located at 1480 m asl. In its central part is the Balinovačka ponikva karst sinkhole surrounded by a 600 m long stone path. Today, the Garden hosts around 500 plants. Some of them are native, and others were brought from other parts of Velebit. Among them are some rare Velebit species: Velebit degenia (*Degenia velebitica*), Croatian sibirea (*Sibirea altaiensis ssp. croatica*), Karst edelweiss (*Leontopodium alpinum ssp. krasense*), Velebit pink (*Dianthus velebiticus*), Kitaibel’s primrose (*Primula kitabeliana*), Kitaibel’s feather (*Aquilegia kitaibelii*), Croatian bittercress (*Cardaminopsis croatica*)... Particularly interesting is the large rockery with various attractive species. You will need around one hour of easy walk to tour the Garden. The best months for visit are June and July.

**Did you know?**

The logo of the Velebit botanical garden represents the endemic Velebit degenia in fruit, designed by the renowned academic painter Eduard Kovačević. Degenia is indigenous only to the central part of Velebit, while in the National park it can only be seen in the Velebit botanical garden, where it was brought by man.
Alan - Mirovo

Alan and its surroundings are areas of vast grasslands, valleys and picturesque peaks. Veliki Alan (1414 m) is one of the most important Velebit saddles, with the transversal Velebit road connecting Lika to the seaside passing through it. Below the Alančić peak, near the forest and close to the road, is the mountain hut Alan. Alan also offers a beautiful view of the sea and the islands. Very close to Alan is Mirovo, a former summer mountain settlement. Today, this is just another Velebit grassland with visible remains of drystone walls and old summer huts. In the past, Mirovo was one of the biggest settlements on Velebit, to which numerous remains of stone houses, barns, drystone walls and cisterns bear witness today.

Did you know?
The derelic ropeway that was used for transporting logs from Velebit, running from Alan to the Stinica cove on the Adriatic coast, is something of a monument to human absurdity. It was built under horrendous conditions by political prisoners of the Goli Otok penitentiary. Underused and economically unsustainable, it remained in operation for only a couple of years.

ALAN MOUNTAIN CABIN – IMPORTANT INFORMATION

www.plsavez.hr/hr/Planinarska_kuća_Alan

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SHOWERS NO; ELECTRICITY NO
**Premužić trail**

The Premužić trail is considered to be a construction masterpiece as it is built of stone – drystone, and laid in such a way as to lead us into the roughest and craggiest parts of the Northern Velebit - Hajdučki i Rožanski kukovi in a very easy way. It was built in the 1930s. It is 57 km long, and it is laid along Velebit mountain ridge from Zavižan to Baške Oštarije in Central Velebit. The trail was named after its designer and builder, forestry engineer Ante Premužić, a passionate mountaineer and Velebit lover. As there are no difficult climbs, it is suitable for visitors not used to mountaineering. From the Premužić trail branch a couple of climbs to the most beautiful peaks of Northern and Central Velebit – Gromovača, Crikvena, Šatorina, and others. The Northern Velebit National Park covers 16 km of the Trail. At approximately two hours walk from Zavižan there is a mountain shelter called Rossijeva koliba.

**Did you know?**

**TOTAL LENGTH OF THE TRAIL** 57 km  
**TOTAL LENGTH OF THE TRAIL INSIDE THE NORTHERN VELEBIT NP** 16 km  
**AVERAGE WIDTH** 1.20  
**HIGHEST POINT** 1630 m, Northern Velebit NP  
**LOWEST POINT** 920 m, Baške Oštarije, Velebit Nature Park  
**AVERAGE INCLINATION** 10%  
**MAXIMUM INCLINATION** 20%, Crikvena saddle, Northern Velebit NP

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60 On the top of Buljma peak  
61 Grasslands on the slopes of Alan  
62 Remnants of an ropeway  
63 A trail in stone  
64 Premužić trail in the southern part of the Park  
65 A monument to its builder
Štirovača

The Southern part of the National park covers a segment of Štirovača – a large karst valley at around 1100 m altitude, known for its vast preserved coniferous forest. Štirovača is one of the rare localities in the Park with a source of potable water and a few creeks supplying water to the surrounding grasslands.

In the past, Štirovača was a very lively place, especially during warmer summer months. There was a sawmill there, a restaurant, houses where farmers lived with their families, forest workers, sawmill workers... This is why Štirovača is still a favourite destination for a day trip with the local population, and a pleasant relaxation area for the rest of the visitors.

For your enjoyment of the unique Štirovača atmosphere we have reconstructed the well, placed benches for resting and outdoor grills for you to prepare a fine meal after a long walk and a day at the Park.

Did you know?

Štirovača was pronounced the first National Park, together with Plitvice lakes, back in 1928, but it maintained this status for one year only.
If you want to spend a day at the Northern Velebit National Park, we suggest a few trips, depending on the time you have available and your physical condition. The possibilities are, of course, much wider, but we will leave it to you to discover them.

As you are now in a mountain Park, almost every proposed trip includes a visit to a mountain peak, be it within the National Park, or the Velebit Nature Park. All of them offer beautiful views. From the peaks located on the West side of the Park, you will have a beautiful view of the Kvarner and the islands, but also a part of the inland, while the peaks on the East side offer you a nice view to the inland and Lika. When the weather is nice, you can see Učka, Klek in Gorski Kotar, and the highest Velebit peak, Vaganski vrh (1757 m asl), located at the Paklenica National Park.

All proposed tours will lead you through marked mountain paths. The Park also includes a network of forest roads which are suitable for bicycle trips, or combinations of cycling and walking.
STARTING POINT

ZAVIŽAN mountain hut

Tour of the Zavižan group of peaks

(hours) UP TO TWO HOURS

A 10 minute walk from Zavižan mountain hut will lead you to the Vučjak peak (1644 m). It is also easy to climb Velika Kosa (1623 m), from which you can go down a somewhat steeper path to the Velebit botanical garden, tour the circular path through the Garden and return to the mountain hut following the road or the path. This walk will take a little less than two hours. A more demanding and longer variant is a climbing trip from Velika kosa to the 1600 m high Balinovac (at one spot you will need to use a climbing peg!), and back from Balinovac down a scree to the circular path at the Velebit botanical garden.

Veliki Zavižan / (hours) UP TO TWO HOURS

You can climb Veliki Zavižan, one of the highest peaks of Northern Velebit (1676 m), by two ways. If you start next to the entrance to the Velebit botanical garden, you can take the easier route. You will walk through forests and meadows, and in the end through the krumholz mountain pine. The other path, starting at the Veliki Zavižan botanical garden circular path, is very steep, and it is better to use it to descend. The peak itself is rocky and bare, with an extremely beautiful view.

Pivčevac / (hours) UP TO FOUR HOURS

Starting at the Zavižan mountain hut you can climb the Pivčevac peak (1676 m), named after the capercaillie ("pivac" in Croatian). The peak offers a broad view to the whole Northern Velebit, Krasnarska jezera grassland, Hajdučki i Rožanski kukovi crags, and Mali Rajinac peak. From the peak leads a steep path down to the longitudinal Velebit road, which you can use to return to the mountain hut. Very close to the juncture of the mountain path with the road is Vukušić sinižnica – a small pit (1470-1450 m), located among rocks at a spot where the Sun never shines. This is why the snow stays there even during the summer months. In the past, it was an important source of water and ice for the Vukušić family it was named after.

Mali Rajinac – Rossijeva koliba

(hours) WHOLE DAY

Those wishing to spend the whole day on a circular tour, may start at the Zavižan mountain hut and climb the highest Northern Velebit peak, Mali Rajinac (1699 m) in the Velebit Nature Park. After you get down to the Zavižan – Veliki Lom road, you will need to continue across Škrbine drage, and climb to the Rossijeva koliba and walk along the famous Premužić trail back to the hut, enjoying the beauty of the surrounding crags.
STARTING POINT

ALAN mountain hut

Buljma / UP TO TWO HOURS
A circular ridge road will take you from the Alan mountain hut to Buljma, whose peak is at 1451 m asl. From the peak, you go down to the Southern part of the Premužić trail, and then you can follow the road back to the mountain hut. This short trip without steeper climbs, and with a beautiful view of the sea and the Mirovo valley will take around 1.5 hours.

Alančić / UP TO TWO HOURS
The Alančić peak (1612 m) is located around one hour’s walk from the Alan mountain hut following the Premužić trail towards the North. It is covered in grass, and it has a beautiful view of the Northern and Central Velebit, as well as the seaside.

Zečjak / UP TO FOUR HOURS
Climbing Zečjak (1622 m) will take around two hours in one direction. Start at the Alan mountain hut, and follow the road to Štirovača, then the Premužić trail towards the South, and climb Zečjak. You can return by the same path, or get down via Kita peak to the road near the Veliki Alan saddle. Zečjak is the second highest Central Velebit peak (Šatorina is the highest one).

Veliki Golić – Goljak / UP TO FOUR HOURS
You can get to the Goljak peak (1605 m) by taking a turn from the Štirovača road on the Veliki Lubenovac road. Soon after, a mountain path to Veliki Golić and Goljak branches off the road. Goljak offers beautiful views to Veliki Kozjak and Kita peaks, Bilenski padež valley, and other peaks. This circular road is attractive because it winds through grasslands, and it is not too demanding in the way of steep climbs.

Veliki Lubenovac / WHOLE DAY
You can reach Veliki Lubenovac, a beautiful grassland with remains of summer huts, from the Alan mountain hut by taking the Premužić trail towards the North, and turn right down a mountain path at the Krajačev kuk crossroad. You can return to Alan by a mountain path, and then by the macadam road passing along the Tudorevo grassland. For those who want a more demanding trip, we suggest a climb to Veliki Kozjak along the mountain path leading from Veliki Lubenovac. This additional climb to one of the most beautiful peaks of this part of Velebit will take two hours. This peak offers a beautiful view of Veliki Lubenovac grassland, Goljak peak, Hajdučki i Rožanski kukovi crags, North to Vučjak peak and the Zavižan mountain hut.
If you decide to take a walk along the Premužić trail, depending on your fitness and travel arrangements, we suggest a couple of options for visit.

You can organize a one-day trip, starting from the North (Zavižan) or South (Alan) to Rossijeva koliba. You will need around two or three hours, respectfully. You can return to the starting point the same way, or, if you are in the mood for mountaineering, descend via the Fabin dolac to the Lubenovačka vrata saddle. You can then return to Zavižan via Škrbine drage, or via Lubenovac and Tudorevo towards Alan. Your return trip will take longer, 4-5 hours. If you have a possibility to transport your vehicle, we suggest a walk along the Premužić trail from one mountain hut to the other. You will need 5-6 hours for this.
Educational trails

In order to make your stay at the Northern Velebit National Park more interesting, we placed educational panels along some of the existing mountain paths and shepherds trails. They will help you learn more about the natural and cultural values of this area.

**Staza zviri** (“Trail of beasts”) – it connects the Park entrance point – Babić Šića to Zavižan mountain hut. The walk takes around 1.5 hours. On this path you may see some interesting Northern Velebit animals or spot some traces of their presence.

**Trag čovika** (“Trail of Man”) – also connects the Park entrance – Babić Šića to Zavižan mountain hut, but on the seaward Velebit slope, by way of old shepherds trails. Walking time is around three hours. Along the path you can learn about the hard life of the people who lived in this area for centuries.

**Velebit botanical garden paths** – on the occasion of Garden's 40th anniversary, fifteen educational panels were placed along its paths which teach you more about the plants and their diversity, but also tell you of the effort, enthusiasm and love of many scholars, experts, workers, and gardeners who took care of the Garden.

**Premužić trail** – Along the section of the trail crossing Northern Velebit National Park, 26 educational panels are placed, forming an educational mosaic on the area’s geology, speleology, plants, animals and cultural heritage.
How to reach us

Northern part of the Park – Babić Siča Entrance – Zavižan, Velebit botanical garden

Babić Siča (1300 m asl) is in the Northern part of the Park and it is the main entrance for all those who want to visit the area of Zavižan and Velebit botanical garden. You can reach Babić Siča from direction of Oltari, by gently climbing the asphalt road in the length of 10 km. Oltari are 10 km away from Krasno and 12 km away from Sveti Juraj on the Adriatic coast. There are 7.5 km of non-asphalt mountain road from Babić Siča to the Zavižan mountain hut.

Southern part of the Park – Štirovača and Alan

If you want to visit the area of Štirovača, you can drive along the asphalt winding road for 29 km from Krasno. If you’re going to Alan, turn to the West three km before the descend to Štirovača valley, in direction of Jablanac and drive around 9 km on a non-asphalted road with no steeper climbs to Alan mountain hut. From the Adriatic motorway, above Jablanac, you can also reach Alan mountain hut taking a 25 km long asphalt, but pretty narrow road. You can reach Štirovača also by taking a forest asphalt road (a 3 km long section of the road is not asphalted) from Gospić, via Pazarište.

Roads leading to the Northern Velebit National park and through it are partly macadam. Please check their condition and the possibility of passing through with the Park Management. Check if you have enough petrol because there is no petrol station in Krasno and the nearest stations are in Otočac (25 km from Krasno) and Senj (35 km from Krasno). Make sure to calculate the distance you plan to cover by vehicle and get sufficient supplies of petrol.
Advice and rules of conduct

Northern Velebit National Park is an area of pristine, nearly untouched wilderness. The climate is unpredictable and quite changeable, and many wild animals find there peace here. They often avoid people, but if we provoke them or are careless, some of them, like the bear or the nose-horned viper, can be dangerous. By respecting the wilderness and behaving adequately you will make your stay at the National Park more pleasant and comfortable. Please respect the following rules:

- Always bring enough water – there are just a few water springs in the park, and the water from the cisterns next to the mountain huts might not be potable.

- Wear high and strong shoes – you will prevent falls, leg and foot injuries, or snake bites.

- Bring enough warm and waterproof clothes, and protect your head from the sun.

- Watch your step and check before you grab anything while climbing or descending – snakes can sunbathe on the mountain path or in the bushes; generally, they stay calm or try to run away, but if they are directly endangered, they might try to defend themselves by biting.

- If you see bears, do not try to follow them, but stay calm; do not, under any circumstances, try to approach cubs because their mother is nearby, and she will try to defend them.

- If you are forced to spend the night in the open, do not descend to the bottom of a sinkhole to find a place to sleep – the temperature is much lower there because of the inversion.

In the area of the Northern Velebit National park it is not allowed to:

- MAKE LOUD NOISE
- THROW WASTE
- LEAD DOGS NOT ON A LEASH
- PICK PLANTS AND MUSHROOMS
- DISTURB THE ANIMALS
- CAMP
- MAKE A FIRE
- MOVE OUTSIDE PATHS AND ROADS
Northern Velebit National Park’s main purpose is to protect, maintain and promote this unique area. The Park management is located at Krasno, a village in the picturesque Krasnarska dolina valley at around 800 m asl. The whole area of the Park belongs to the town of Senj, where there is also a Park information centre.

The “Northern Velebit” National park Public institution manages the Park based on the Law on Nature Protection and the Park Management Plan. One of our main activities is daily control of the Park grounds performed by our rangers. Our experts’ task, together with the scientists, is to record and present the natural and cultural values of the Park and create programs for their monitoring and protection. As the Park is open for visitors and intended for recreation, we invest a lot of effort into educating the visitors and the public through presentations, exhibitions, expert tours, educational trails, publication of expert guides, etc.

We co-operate with various scientific and expert institutions, the local community, schools, companies and the tourist sector.

80 „Make a superplant” – workshop for children
81 The National Park Headquarters
82 Inspection of traps used in longhorn beetle inventarization
83 Field tour with colleagues form other protected areas
“A National Park is a vast, mostly unchanged area of land or sea with exceptional and multiple natural values. It extends over one or more preserved or slightly changed ecosystems, and it is primarily intended for the preservation of the original natural values. A National Park has a scientific, cultural, educational and recreational function. Actions and activities that do not endanger the originality of the nature are allowed in the Park, while economic usage of natural resources is forbidden.”

Law on Nature Protection
(Narodne Novine 70/05)

Did you know?

As we live and work in a mountain area, we pay special attention to celebrating 12th December – International Mountain Day. On this day, the Park organizes presentations, exhibitions and a cultural and artistic program for the inhabitants of Krasno and the surrounding villages, including the unmissable village party.
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