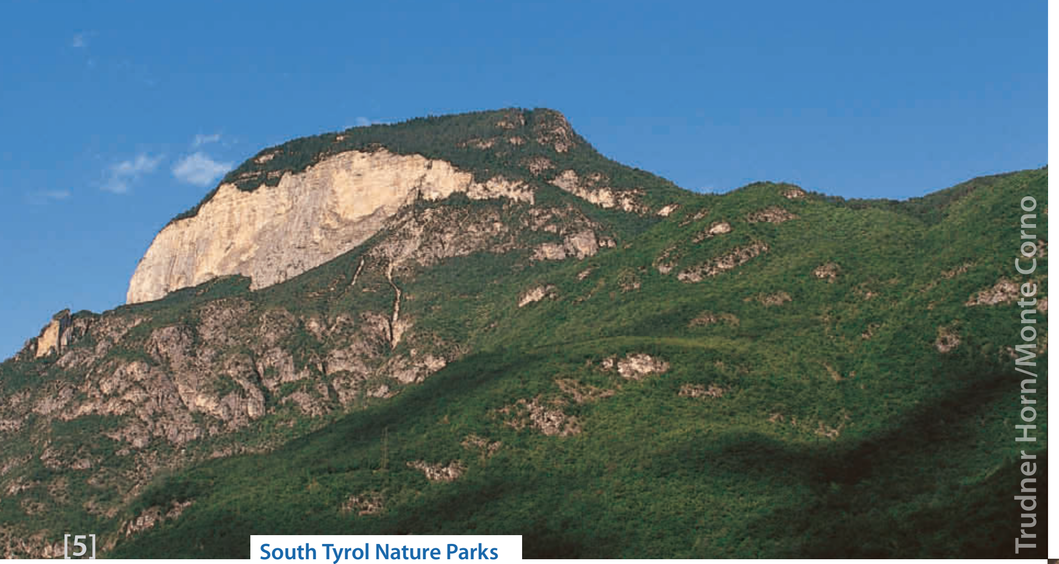

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South Tyrol Nature Parks

Trudner Horn/ Monte Corno Nature Park

Visible and invisible time

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Nature Park Trudner Horn/Monte Corno

Cover image
Madrutwand/Madrutta
Photo: Artur Kammerer

Visible and invisible time

The Nature Park comprises all the forest community types found in South Tyrol, from the mixed sub-Mediterranean forest to the larch-pine forest. While the great variety of colors and habitats is glaringly obvious, the abundant biodiversity of the area can prove more difficult to see.

Geology and Hydrologic Balance

The Trudner Horn/Monte Corno area consists of two completely different rock types: the orographically left side of the Etschtal/Val d'Adige valley consists of limestone and dolomite (Cislon, Königswiese/Prato del Re, Madrutwand/Madrutta, and Geier), whereas the center and eastern area of the Etschtal/Val d'Adige valley are made up of volcanic rock (Bozen/Bolzano quartz porphyry).

Some 290 million years lava spewed out of the ruptured crust of the earth, throwing tuff, volcanic breccia (sedimentary rock formed of coarse, square-shaped rock debris, incorporated in a fine-grained groundmass), and ash into the air. This volcanic effusion and ejecta solidified to form quartz porphyry and, with an area of about 6000 square kilometers, is the largest deposit of volcanic rocks in the Alps.

The mineral composition of the generally brown-red quartz porphyry is mainly grained feldspar, quartz and mica. The excellent resistance and good cutting properties of this material make it greatly appreciated for use as paving stones and slabs. In Cislon, Königswiese/Prato del Re, Madrutwand/Madrutta, and Geier we find classic Dolomite rock stratifications. The porphyry that lies directly next to Grödner/Gardena sandstone – which is the result of the erosion of the quartz porphyry and Brixen/Bressanone quarzphyllite in an arid climate – can be seen in the Trudnerbach/Rio di Trodena river gorge behind Neumarkt/Egna. In this area fossilized and charred remains of plants were discovered that have entered scientific literature under the name "Neumarkt Flora" (Flora di Egna), and which include fossil fragments of branches and leaves from primitive conifers, ferns and palms that were dragged along by the current and ended up in lagoons and were buried by mud sediment.

The Bellerophon and Werfen strata were deposited in the shallow lagoons of the primeval Tethys Ocean. These strata were several hundred meters thick and contained limestone, dolomites, marl, siltstone, sandstone and mudstone.

Contrin dolomite and Schlern/Sciliar dolomite formations extend as far as the Cislon and Geier plateau. The summits of the Königswiese/Prato del Re meadow and the Madrutwand/Madrutta, on the other hand, are composed of Main dolomite. A clay Raibl strata lies between these, and beneath its protective cover has formed a continuous ledge, which runs high above the Aaltal/Valle delle Anguille near Gfrill/Cauria and follows the Banklsteig trail. Springs emphasize the importance of the Raibl strata as a source horizon. These impermeable strata come up to the surface and are the source of multiple springs.

The Trudner/Trodena fault line is responsible for the dual lithology found in the Nature Park. The much older Etschtal/Val d'Adige valley volcanic group (porphyry) was raised up 2,000 meters by Alpine folding, and this is why it now sits atop the dolomite. During the Ice Age, glaciers smoothed the porphyry surfaces of the plateaus. The retreat of the glaciers removed pressure from the mountain slopes, and created deep crevices around the rock edges (such as those around Gstoag and the Kanzel), allowing huge rock falls into the valley below. The largest landslide pile stretches from the foot of the Madrutwand/Madrutta to beyond Laag/Laghetti.

Just like the lithology, the hydrological balance of the Park environs is characterized by sometimes contrasting elements. The porphyry plateaus covered by impermeable moraine debris have a large water supply with numerous wetlands and bogs. Karstification of the dolomite has, however, led to the formation of a highly ramified system of crevices and fissure that has created a large subterranean drainage system. The smaller streams are only filled with water during the rainy season, leaving only dry ravines as evidence of the fact that the water has disappeared below the ground.

Habitats, animals and plants

Altitude, climate, water, soil, sunlight and humidity all have an effect on determining the occurrence and location of plants. Man's influence can also be a determining factor. The Trudner Horn/Monte Corno Nature Park contains a wide variety of plant communities, ranging from sub-Alpine spruce forests (approx. 1,700 meters) to sub-Mediterranean brushwood (approx. 600 meters), which needs warmer temperatures to grow.

Just as with the geological formation of the Nature Park, the habitats found here are also dualistic. The calcareous soils are mainly covered by dry grasslands, brushwood, Swiss pine and mixed forest. The porphyry ridges with their abundant water supply, on the other hand, are covered by lush coniferous forests and interspersed with wetlands and bogs.


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Fig. 1
The Nature Park has extensive beech forests, which are only found elsewhere in South Tyrol in the Mendel/Mendola range.
Photo: Nature Park Archives Office

Fig. 2
A black woodpecker "carves" his nest hole.
Photo: Nature Park Archives Office

Fig. 3
Breathtaking autumn scenery near Rentsch.
Photo: Nature Park Archives Office

The forest dominates the Trudner Horn/Monte Corno Nature Park with its rich flora and fauna, diverse undergrowth and a wide variety of tree species. Dead wood provides an ideal habitat for bacteria, mushrooms, algae, mosses and insects.

Forests

The sub-Mediterranean forests of downy oak, hop hornbeam and manna ash extend almost to its northernmost limits here in the Trudner Horn/Monte Corno Nature Park (some stands may also be found in the Vinschgau/Val Venosta and Eisacktal/Val d'Isarco valleys). Along the sunny slopes of the Etschtal/Val d'Adige valley these formations reach up to 1000 meters above sea level.

These "perennial forests" may appear to be rather monotonous at first sight, however, they are home to a vast biodiversity throughout the year. In late winter the yellow blossoms of cornel trees, which bear a red, tart fruit in the summer, appear on the bare branches. In late April, the white umbels of the Mahaleb cherry, whose dark red bitter fruit matures already in July, can be seen.

As soon as the first cool autumn nights begin, the slopes take on dazzling colors. In spring, the Amelanchier blooms with white flowers and, in the fall, produces dark blue, powdery berries. The undergrowth of the sub-Mediterranean vegetation belt contains varieties of papilionaceae, numerous orchids, mint and lily plants. On the border between the forest and vineyards, one finds Star of Bethlehem, Aristolochia, grape hyacinths and black bindweed. Insofar as large trees grow in these warmth-loving forests, one can also find large, extremely interesting beetle species such as the stag beetle. This is also the realm of the harmless Aesculapian snake, one of the most beautiful native snake species. It is easily identifiable by its brown-green coloration and can be observed moving with great agility over trees and shrubs searching for eggs and nestlings. Among the mammals that are found in this habitat is the badger, which may be difficult to catch a glimpse of due to its nocturnal activity. It feeds mainly on invertebrates and plants. Another typical inhabitant is the dormouse, a small rodent that lives among the trees.

Scots pines, which need abundant light, predominate more than other more demanding species in the more barren places. Their sparse canopy provides an ideal covering for many plants in addition to the warmth-seeking plants of the brushwood, including erica, dwarf sedge, bearberry and bracken. The sunny porphyry slopes around Altrei/Anterivo are home to heather, bilberry and blueberry. A typical bird species found in the pine forest is Bonelli's warbler. Though this bird is not visually impressive, its warbling voice is quite distinctive.

Above Buchholz/Pochi and Mazon/Mazzon, in the Trudnerbach/Rio di Trodena valley, upon the northwest slopes of the Königswiese/Prato del Re and Cislon meadows grow magnificent beech and fir trees. These trees have deep roots and generally require a certain amount of moisture. In moist gullies, beech trees may extend down into the sub-Mediterranean zone (approx. 600 meters) and grow in communities with yews, little-leaf lindens, hop hornbeams and maples. Unique in South Tyrol is the occurrence here of evergreen holly on the northwestern slope of Geier mountain. While the undergrowth of the high forest is limited to shade-enduring species, such as sorrel, woodruff, mercury, wood anemone, liverwort and aspidistra, the glades are home to laburnum and daphne, striated daphne, numerous orchids, lilies and cyclamens.

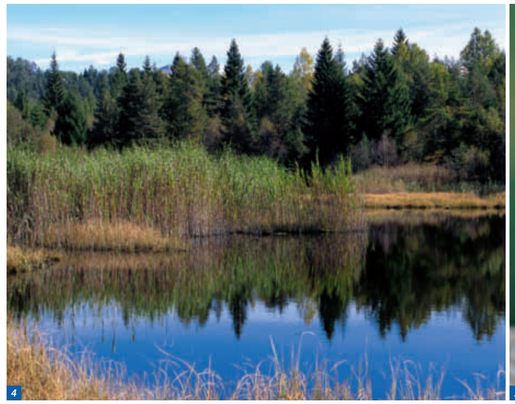
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Fig. 4
The Lange Moos/Palù Lunga is considered one of the most beautiful raised bogs in South Tyrol.
Photo: Nature Park Archives Office

Fig. 5
The typical call of the hoopoe is increasingly rare, as the old oak trees full of holes so vital to his existence have almost completely disappeared from the landscape.
Photo: Nature Park Archives Office

At about 1,000 meters above sea level, the fir and spruce forests supplant the thermophilic mixed beech forest. Larch, mountain ash, Alpine clematises and shade-loving species of undergrowth accompany the coniferous forests. These high forests interspersed with beeches provide a good habitat for the black woodpecker. He carves out his nest holes with the characteristic oval-shaped opening in large trees, mostly at the edges of clearings or in less dense parts of the forest. The nest holes serve an important environmental function: once they are abandoned by the black woodpecker, they are occupied by many other animals, such as the boreal owl, the dormouse, the nuthatch and by wild bees. For this reason and also considering the mostly low commercial value of the trees, it is important not to fell trees with black woodpecker nest holes in them. A sub-Alpine spruce forest (approx. 1,700 meters) covered with lichen and dotted with individual mountain pines covers the rugged terrain around the Hornspitz/Monte Corno and the Weißensee/Lago Bianco. Here, in the clearings, grow blueberry, cranberry, and rusty-leaved alpenrose. In this area it is still possible to see the increasingly rare grouse, which has been the subject of several different studies in the Nature Park.

Larch meadows

One of the most special features of this Nature Park are the flower-rich larch meadows nestled atop the wide porphyry ridge between Truden/Trodena and Altrei/Anterivo, above Gfrill/Cauria: here thrive Alpine snowbells, crocuses, lilies of the valley, mountain Aster, fire-, grass-,paradise and morgantal lilies, heather, autumn crocuses, blackberry, and cranberry. Various types of gentians, primroses, anemones, orchids and bluebells can be enjoyed by hikers.

The wet meadows are also home to various sedges, cotton grass, marsh orchids and peat mosses, butterwort, the bird's-eye primrose, fever clover and globeflower.

Dry grasslands

Where the brushwood begins to thin out, we can find the fragrant dictamnus, Alpine pasque flower, thyme, chicory, globularia, blue bonnets, grass lilies and steppe grasses. One also finds individual juniper bushes, Amelanchier, and the rare spherical rayed broom. Upon the rocks grow communities of the drought-resistant houseleek, sedum, dry ferns, mosses and lichens. The dry grasslands are home to the green lizard, a large species of lizard, whose males are recognizable during the mating season by their emerald green color and the big blue throat. On warm summer days, one can enjoy the singing of the cicadas, and observe the praying mantis or the Italian scorpion hunting over the rocks.

Fig. 6
The neotinea tridentate orchid is one of the many orchid species found in the Nature Park.
Photo: Nature Park Archives Office

Fig. 7
The sticky hairs of the round-leaved Sundew secrete a nectar-like substance to trap unsuspecting insects and digest them.
Photo: Nature Park Archives Office

Fig. 8
The green lizard lives in the dry grasslands and in the brushwood deep within the Nature Park.
Photo: Nature Park Archives Office

Raised bogs

The bogs of Weissensee/Lago Bianco, Schwarzsee/Lago Nero, Gampen and Langen Moos/Palù Longa are extremely rich natural treasures: each step one takes in this miry vegetation can cause severe damage. Willows and alders, reeds, sedges, cotton grasses, heather and cranberry gradually give way to the nutrient-depleted acidic bogs, with their high growth – so-called tussocks – of bog moss, in which grow bog bilberry, cranberry and the rare bog rosemary. Sundew and butterwort increase their nutrient intake with insects. Birch, pine and mountain pines eke out a meager existence here in most cases. The raised bogs are an important reproductive habitat for the grass frog, the common toad and the Alpine newt, the males of which are identifiable during the mating season by their serrated dorsal crest, orange underbelly and blue-colored sides. Among the most important ecological functions of the raised bogs is their ability to store large quantities of carbon dioxide. This helps to counteract – albeit to a relatively modest extent – the climatic changes brought on by greenhouse gases.

The Human Factor

Man has left his mark on the Trudner Horn/Monte Corno Nature Park in a variety of ways. He has cleared forests in order to create pastures or hayfields. By leaving the larch trees he was able to make a double use of the space: as pastureland or as a hay meadow, and also as a source of a particularly resistant type of wood. This is how the ecologically important and visually appealing larch meadows developed.

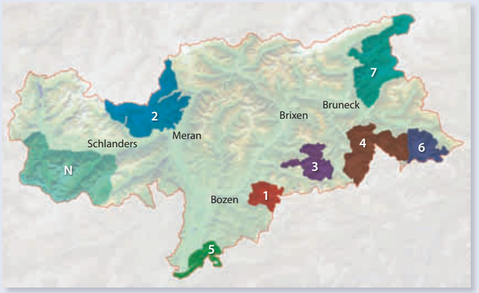
Even today "sap collectors" visit the Park to find larch trees from which the sap is collected. In the springtime, these collectors use a special instrument to make a horizontal hole about 20 inches above the ground in the tree trunks, which is then fitted with a tap. The sap is then collected once or twice a year. In this instance, a metal tube about 50 centimeters long is inserted into the hole to "scoop" out the sap by rotating it inside the tree and then scraping the sap off the device and placing it in a bucket. When the operation is finished, the tap is replaced. In the past, the sap was used to prepare ointments and impregnator for shoes. Today, it is also used to make bandages, as a plasticizer in certain coatings, as a binding agent in the production of natural colors, and as an ingredient in body oil, rubbing alcohol, bath and scented oils.

In addition to the larch meadows, the hedgerows on the Rentschwiesen/Prati Rentsch in Truden/Trodena were also created by man. For centuries, the hedgerows served as boundaries for meadows, fields and pastures. They protect against wind and erosion, give structure to the landscape and provide a source of food, nesting and a living habitat for many animal species.

Man has kept the natural conditions and the ecological balance of this area in balance for centuries. Here, so close to the densely populated Etschtal/Val d'Adige valley, we can still find pristine, undeveloped landscapes that have been spared the effects of mass tourism.

Trudner Horn/Monte Corno Nature Park (5)

Area: 6851 hectares, established in 1980, expanded in 2000



1 Schlern-Rosengarten/Sciliar-Catinaccio Nature Park
2 Texelgruppe/Gruppo di Tessa Nature Park
3 Puez-Geisler/Puez-Odle Nature Park
4 Fanes-Sennes-Prags/Fanes-Senes-Braies Nature Park
5 Trudner Horn/Monte Corno Nature Park
6 Drei Zinnen/Tre Cime Nature Park
7 Rieserferner-Ahrn/Vedrette di Ries-Aurina Nature Park
N Stilfser Joch/Stelvio National Park

South Tyrol Nature Parks

Nature parks are of particular importance for the preservation of nature and landscapes, education and research, and providing an opportunity to experience nature. The concept is based on a few clear principles:

1. South Tyrol Nature Parks protect and preserve the diversity of the mountains with their habitats, plants and animals.
2. Information, environmental education and a special nature experience offer visitors a new understanding of nature and promote good governance.
3. The Nature Parks comprise mountains, pastures and forests; permanent settlements are not part of the area.
4. Forest and alpine farming and transhumance are maintained using sustainable methods.
5. No construction is permitted (except for the forest and alpine farming and transhumance). No overhead lines, mines, gravel mines or use of water for hydroelectric or industrial purposes is allowed.

A Brief Overview of the Nature Park

The Trudner Horn/Monte Corno Nature Park is located in the Bozner Unterland/Bassa Atesina lowlands, about halfway between Bozen/Bolzano and Trent/Trento. The Park, established in 1980 and covering an area of about 6,851 hectares, consists of a mountain range that reaches its natural border in the west at Neumarkt/Egna in the Salurner Klause/Chiusa di Salorno of the Etschtal/Val d'Adige valley, in the southeast in the Zimmerstal/Val di Cembra valley, and in the north at the end of the Fleimstal/Val di Fiemme valley. The Nature Park is divided between the municipalities of Altrei/Anterivo, Neumarkt/Egna, Montan/Montagna, Salurn/Salorno and Truden/Trodena.

The porphyry and dolomite ridge extends from the edge of the Etschtal/Val d'Adige valley plain (220 m) to the subalpine zone around the Trudner Horn/Monte Corno mountain (1,781 m). An extensive variety of wooded habitats covers about 90% of this "forest park" as the Trudner Horn/Monte Corno Nature Park is often called. Unlike other areas, the Park is not characterized by steep spires and pinnacles, but rather for its remarkable plant and animal biodiversity. The Park boasts the most varied flora and fauna of all the Nature Parks in South Tyrol.

Winter starts later and ends earlier here than in other parts of South Tyrol, which is why there is almost always some plant species growing or blooming. The most beautiful landscapes are certainly those of the flower-bedecked larch meadows and Alpine pastures on the rear of the park, while numerous bogs and wetlands represent true ecological treasures.

Nature Park communities

Altrei/Anterivo: 383 inhabitants, Area 1,105 hectares, of which 878 hectares are part of the Nature Park; Tourist office: Ph. +39 0471 882077, www.trudnerhorn.com
Montan/Montagna: 1,648 inhabitants, Area 1,891 hectares, of which 1,017 hectares are part of the Nature Park; Tourist office: Ph. +39 0471 810231, www.castelfeder.info
Neumarkt/Egna: 5,028 inhabitants, Area 2,367 hectares, of which 1,412 hectares are part of the Nature Park; Tourist office: Ph. +39 0471 810231, www.castelfeder.info
Salurn/Salurno: 3,591 inhabitants, Area 3.320 hectares, of which 1,866 hectares are part of the Nature Park; Tourist office: Ph. +39 0471 810231, www.castelfeder.info
Truden/Trodena: 1,022 inhabitants, Area 2,070 hectares, of which 1,678 hectares are part of the Nature Park; Tourist office: Ph. +39 0471 869078, www.trudnerhorn.com


Nature Park Archives Office

Trudner Horn/Monte Corno Visitor's Center
in Truden/Trodena

Open: from Easter to late October, Tuesday to Saturday, 9:30 am – 12:30 pm and 2:30 pm – 6:00 pm. Also open on Sundays from July – September.
Admission free!
Ph. +39 0471 869247
info.th@provinz.bz.it
www.provinz.bz.it/naturparke

Nature Park Archives Office

Gfrill/Cauria Information Center
in Gfrill-Salurn/Cauria-Salorno

Open from April to late October, Tuesday to Sunday, 8:30 am – 6:00 pm.
Admission free!
Information: Trudner Horn/Monte Corno Visitors Center

Key

- Nature park boundary
- Access road
- Waters
- Waterfall
- Closed road
- Tavern/Rest station
- Castle or ruins
- Visitor's center
- Parking lot
- 12 Marked hiking trail
- Difficult path
- Pass/gap
- +++++ Provincial border

Alpine emergency signals

- Within 1 minute emit 6 audio/visual signals (at 10 second intervals)
- Pause for 1 minute
- Repeat the signal (until a response is received)
- Response: 3 signals within 1 minute

Emergency number for mountain accidents

Provincial emergency call center 118

Park regulations

- No motor vehicles, use public transport to access the Park.
- Stay on the trails.
- Avoid making noise.
- Do not throw anything away, do not take anything (mushrooms, plants, minerals).
- Tents? Camping? No. Please have consideration for the facilities of the Park.
- Fire hazard! No campfires, no grills. Cigarettes?
- Take your time, and enjoy the experience.