

Drei Zinnen/Tre Cime **Nature Park** 

PROVINCIA AUTONOMA DI BOLZANO - ALTO ADIGE

Ripartizione Natura, paesaggio e sviluppo del territorio

The loneliness of luminaries







Rittner Straße 4 39100 Bozen









Thus we can find mountain pine, whose undergrowth contains a mix of hairy alpenrose and other typical representatives of the alpine dwarf shrub belt. In the ongoing "dynamic equilibrium" that exists here with the increases and decreases in erosion activities, this shrub vegetation retreats and then soon returns to climb higher and higher. As soon as a stretch of scree has become stable, courageous larch and Swiss pine trees can be seen to raise their crowns above the mountain pine forests. They appear at an unspeakably slow rate. The increasing humus layer provides nutrients for millions of micro-organisms per square meter.

If these scree and rock debris areas are spared further rock falls or mudslides, they can in the long run once again become covered in tree forest. A characteristic inhabitant of the Alpine dwarf shrub belt is the black grouse. Each spring during the mating season it performs a characteristic love dance in an attempt to secure a mate among the hens through its movements.

Through extensive and sustainable cultivation of the land,

between nature and human endeavors can be seen in the sun-light

Campo di Dentro and Fischlein/Val Fiscalina valleys or the meadows

on the slopes of the Haunold/Rocca dei Baranci, on Mount Gsell

and below the Rotwand/Croda Rossa. At one time, the larch was

planted in the pastures. Its slender form and branches that allow

the light to pass through, allowe not only the use of its wood but

also haymaking activities. Its deep root system further stabilizes the

soil and does not compete with the shallow roots of the meadow

humans have also succeeded in creating new and interesting

landscape forms. One of the best examples of this symbiosis

bathed larch meadows at the entrance of the Innerfeld/Valle

Larch meadows

Despite the harsh living conditions and the sparse ground vegetation, the scree is nevertheless inhabited by various invertebrates, including beetles, spiders, butterflies, wasps, ants, and bees. Bird species, such as the black redstart, the wheatear and the Alpine accentor also live here and feed on these invertebrates. The most peculiar bird species found on the scree and rock faces is surely the wallcreeper. Its long curved beak, the gray-colored body and black, white and red wings make it resemble a hummingbird,

## The dwarf shrub belt

AUTONOME PROVINZ BOZEN - SÜDTIROL

Habitats, animals and plants

Rocks and debris

locations) thus take on special importance here.

Approximately two-thirds of the land of the Nature Park is covered by rocks and debris. Pioneer plants (plants that have especially adapted to being the first to colonize inhospitable

Some of the most beautiful flowers in the Dolomites have anchored themselves in crevices, fissures and outcroppings: the Dolomite cinquefoil, the dwarf alpine rose, the bear's ear, the moss campion, the paederota bonarota, the Dolomites devil's claw, the Dolomite Yarrow, the Dolomite columbine, the Dolomite Bellflower, and the Dolomite rock jasmine. As the epithet "Dolomite" suggests,

these species are usually endemic (plants that only grow in a

specific, well-defined spatial environment), and are found nowhere

else in the world outside of this mountain range. The most beauti-

ful edelweisses live on wind-exposed cliffs, often accompanied by wind- and cold-resistant naked rush sward (elynetum) and rock

sedge. These plants must also be able to stand up against the wind

and the snow crystals. A true treasure found on the barren scree is

the delicate golden Rhaetian poppy. Its roots anchor as much as

two meters deep in the rock debris. The round-leaved pennycress

deep among the crevices. The dwarf valerian, hornungia alpina

together with communities of alpine toadflax on the scree.

along with undemanding species of saxifrage and chickweed live

The clayey Raibl strata, on the other hand, are preferred by the

species that live on the rocky debris perform a particularly important

tender Monte Baldo anemone and the mountain dandelion. The

function. They form the first dormant islands in the debris stream.

Gradually other pioneer plants are able to colonize and slowly take

hold on the stony ground: blue grass or the cushion sedge, which

require decades to develop into a plate-sized island of vegetation.

Creeping willows push up just a few centimeters through the

rocks. It may take up to one hundred years before just one square

meter of the debris is covered by plants.

while its flight is more similar to a butterfly.

survives in the shifting rock debris on account of its buds, which lie

Where sufficient humus has formed thanks to the work of pioneer plants, shrubs have slowly crept higher up the scree slope. at right the Dreischus

herbs. On the contrary, the decomposition of larch needles provide a natural fertilizer for the herbaceous plants. Meadows dotted with larches enjoy healthy micro-climates that are protected from the wind and also endure well during hot and dry periods. The flowering of snowbells and crocuses is followed by lily of the valley, aster alpinus, orange lilies, grass-, martagonand paradise lilies, arnica, columbine and doronicum. Amid warms of innumerable insects, in the summertime the scantily fertilized meadows are bedecked with gentians, orchids, anemones, bluebells, primroses, ranunculaceae, faboideae daisies, umbelliferae and scrophulariaceae. The crowning moment of this splendid blooming period takes place in autumn when the pale purple crocus surrounds old tree stumps amid blueberries and cran-

The biodiversity found here is also due to the irregular humpshaped form of the terrain that encourages the development of ecological niches of different life forms upon sunny and shady slopes, dry, stony hills, and in moist and sandy hollows. Weathered hay barns, built of larch wood and roofed with larch shingles, complete the unique image of this landscape.

These extensive cultural landscapes do not lend themselves to our modern agricultural methods, and have thus been marginalized and either abandoned, or reforested. In places the larch trees have been felled and the ground levelled for machine use and heavily fertilized for intensive farming purposes. These activities, however, cause numerous habitats to be irretrievably lost. If the landscape is to be preserved, then greater compensation will have to be given for the work involved and less emphasis placed on the actual yield that comes from it – this is the quite reasonable assertion made by the farmers here.

The black grouse forests and the dwar shrub heaths.

Zwölferkofel/Cima Dodici lies at the heart of the Monumental di Sesto.

Fia. 7 perfect in its shape and color. This strictly species thrives in the calcareous soils of the pine forests in the Nature Park.

Fig. 8

a considerable amount of damming material from the Silvesterbach/Rio San Silvestro blocked off the valley, did the Sextner/ Sesto river bend sharply to the east near Innichen/San Candido and flow into the Drava and Danube to end up in the Black Sea.

Rock debris falls incessantly from the peaks, ridges and walls, forming enormous heaps below them. The Innerfeldtal/Valle Campo di Dentro, Fischleintal/Val Fiscalina and Rienztal/Valle della Rienza valleys were became filled in various places, and their streams began to flow in channels under the debris. These processes are ike an hourglass reflecting the eternal action of formation and disappearance.

The two sides of the Sextnertal/Valle di Sesto valley are geologically different structures: On the eastern side of the valley, the westernmost foothills of the gently rolling Carnic ridge and the Helm/Monte Elmo (2,434 meters) push upwards to Innichen/San Candido, whereas on the western side of the valley, the jagged north-easterly peaks of the Dolomites loom high above the forests. Uphill as far as the Kreuzberg Pass/Passo di Monte Croce Comelico (1,696 meters) we can see the series of layers of the Dolomites.

The orographic right side of the Sextner/Rio di Sesto river valley is made up of base conglomerates (coarse-grained sedimentary rock) that were mined for use as millstones in the Sextner/Sesto mills. The gentle, wooded valley slopes at the orographic left side of the valley are made up of Gardena sandstone, Bellerophon and Werfen strata up to an altitude of 2000 meters. The chalky Bellerophon strata are the source of the sulfur springs that feed the Innichen/San Candido and Moos/Moso thermal baths. Above this the white, rugged dolomite rocks jut strongly upwards: the stratified upper Sarl dolomite and Contrin dolomite and then the mighty, craggy Schlern/Sciliar dolomite walls which give the Haunold/Rocca dei Baranci, Birkenkofel/Rocca dei Baranci, and Dreischuster/Tre Scarperi their bizarre appearance.





The provincial government of South Tyrol has taken these considerations into account and today the traditional management of larch meadows is promoted through incentive programs that encourage protection of the landscape.

## The Human Factor

Man and nature – in the case of the Sextner/Sesto Dolomites many changes: living environment, tourist attraction, a paradise for mountaineers and climbers, and also the site of fierce and relentless trench warfare during the First World War. Until the middle of the 19th century, the area was rural and agrarian and constituted a rather remote area on the border between the Austro-Hungarian Empire and the Kingdom of Italy. Life here was dictated by the changing of the seasons and the locals struggled to get what they needed to survive from the ground. They created the larch meadows described above and cleared forests to provide pastures for their cattle.

This regular, relatively insular local lifestyle changed in 1871, when a railway line was built through the Pustertal/Val Pusteria valley. The upper reaches of the Puster Valley received great attention as a summer resort area and imposing hotels were built. Initially, most of the summer visitors were satisfied to admire the mountains from the bottom and only a few daring souls ventured up into the steep rock walls. But around the turn of the century, the Sextner/Sesto Dolomites saw their first mountaineering excur-

Tourism was flourishing when the First World War broke out. The Dolomites became the front line, and it was now that soldiers conquered the peaks. They laid mule tracks and via ferrata, like the Lago di Landro in the Höhlensteintal/Valle di Landro valley. However, the many small bodies of shallow water, such as the Zinnenseen/Laghi di Zinnen, Bödenseen/Laghi di Piani, and the Mitteralplsee/Malga di Mezzo are quite scenic indeed.

Schlern/Sciliar dolomite formation.

In the southern part of the Sextner/Sesto Dolomites the

Schlern/Sciliar dolomite only forms a basement for the monu-

kofel/Monte Rudo (2,799 meters), Paternkofel/Monte Paterno

famous Drei Zinnen/Tre Cime (2,999 meters).

mental peaks of this mountain group: Bullköpfe/Cima Bulla (2,848

meters), Schwalbenkofel/Croda dei Rondoi (2,800 meters), Raut-

(2,744 meters), Zwölfer/Cima Dodici (3094 meters), and the world

te. The broad plateaus from where the Drei Zinnen/Tre Cime soar

black, red and green marls, shales and gray dolomites can always

so elegantly are made of the Raibl strata. This colorful series of

be seen near the passes, such as Giralbajoch/Forcella Giralba,

Wildgrabenjoch/Passo Grande dei Rondoi, on the Schwaben

pasture, on Büllelejoch/Pian di Cengia and on the Innichriedl.

ned strata layers. On the ridges the Raibl layers are subject to

erosion by various weather elements and their fine-grained

deposits build up in crevices, where they form impermeable

rather made up of an older karstification interruption of the

These can often be seen in the mountain structures as well-defi-

layers that hold water that feeds green pastures and shimmering

lakes (such as, the Bödenseen/Laghi dei Piani). The famous Alpine

climbing ledges have nothing to do with the Raibl layers, but are

Only one large lake is found in the Nature Park: the Dürrensee/

These mountains are made up of evenly layered Main dolomi-



famous Alpine road, miles of trenches, and carved out shelters in the rock. The price for this grim, two-year long war of position was high: in the Winter of 1916/17 alone avalanches, landslides, cold and hunger claimed some 10,000 victims.

In the 1950s, mass tourism finally came to the Sextner/Sesto Dolomites. The Drei Zinnen/Tre Cime became a symbol for the unique mountain scenery of the Dolomites. But it was not only the Drei Zinnen/Tre Cime that drew thousands of tourists each vear. The Dolomites are known throughout the world as a spectacularly beautiful landscape, and as a paradise for hikers, climbers mountain bikers and skiers.



# **Dolomites UNESCO World Heritage Site**

In summer 2009, due to their scenic beauty and their geomorphological and geological significance, the Dolomites were added to the list of UNESCO World Heritage Sites. This carefully chosen list of sites includes the most outstanding and unique natural or cultural assets, whose protection is particularly important for the international community. The Dolomites and thus also the **Drei Zinnen/Tre Clme Nature Park** have thus been awarded the greatest recognition a natural asset can receive. Such recognition, however, also confers certain duties and responsibilities relating to the conservation and sustainable development of this extraordinary mountain region.





in the Fischleintal/Va

the local farmers.

Fiscalina valley are the

symbolic animal of the

Nature Park. The species faces and seeks its foc







The loneliness of luminaries

Bergsonnenuhr/Meridiana di Sesto.

valley for many hours.

**Geology and Hydrologic Balance** 

Alone with the mountain: the names of early mountain

climbers like Franz Innerkoffler, Emil and Otto Zsigmondy, and

Antonio Dimai are connected with the history of the Nature Park,

just as are the imposing mountains of the Drei Zinnen/Tre Cime,

the Dreischschustergruppe/Gruppo Tre Scarperi and the Sextner

In September of 1961, an enormous boulder broke away from the summit of the Haunold/Rocca dei Baranci and plummeted

down into the depths below along with the cross perched upon

Fischleintal/Val Fiscalina valley darkened the Sextental/Val di Sesto

eternity, are only a fleeting image of the formation process of the

Alps and the Dolomites. Some thirty million years ago they rose

up out of the sea, and ever since have been subject to erosion

that has worn them down thousands of meters in many places

sixty million years there may only be green hilltops left of the

and advanced them well into the foothills of the Alps. In another

The landscape is constantly changing. During the Ice Age, enough ice accumulated in the Pustertal/Val Pusteria valley to form

a glacier that extended through the Sextnertal/Val di Sesto valley

to the south – attested to today by the hump-shaped landscape,

glacial polish and boulders of the Pustertal/Val Pusteria valley.

and uphill over the Kreuzberg Pass/Passo Monte Croce di Comelico

Following the Ice Age, the Sextner/Sesto river still flowed into

the Rienz/Rienza and on down into the Mediterranean. Only after

The mountain giants, which to us may seem to be a symbol of

its peak with a tremendous roar. On a beautiful October day in

2007, a spectacular landslide from the Einser/Cima Uno in the



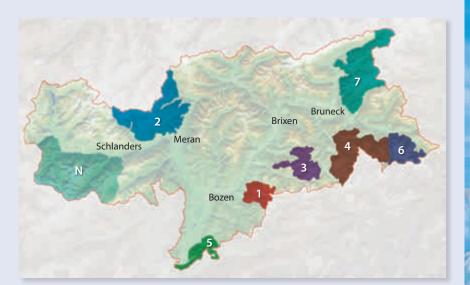


seen/Laghi dei Piani. Ir the background rises ree-standing Tobling Knoten/Torre di Toblin terspitze/Punta dei Tre Scarperi, Schusterplat te/Lastron dei Scarper and Innichriedlknoten, Crodon di San Candido.

Beautiful Dolomite flowers bloom amond the crevices, like the blue-green saxifrage

### Drei Zinnen/Tre Cime Nature Park (6)

Area: 11,891 hectares, established in 1987



- 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

Established in 1981, the 11,891 hectares of the Drei Zinnen/Tre Cime Nature Park includes territory around the towns of Toblach/Dobbiaco, Sexten/Sesto, and Innichen/ San Candido. Its northern border is formed by the Pustertal/Val Pusteria valley, that in the east by the Sexten/Valle di Sesto valley, that in the west by the Höhlensteintal/Val di Landro valley, and its border in the south is that of the Province of Belluno.

The Sextner/Sesto Dolomites are the northeastern corner of the Dolomites and include well-known mountain groups such as the Drei Zinnen/Tre Cime, the Dreischusterspitze/Punte dei Tre Scarperi, the Haunold/Croda dei Baranci, and the Sextner Bergsonnenuhr/Meridiana di Sesto. Several mountain valleys run from the valley floor up to the mountain plateau at the heart of the Nature Park: the Rienztal/Val Rienza, the Innerfeldtal/ Val Campo di Dentro, and the Fischleintal/Val Fiscalina. An extensive trail network allows many hiking and mountain experiences, and there are many alpine shelters that offer rest and protection on long hikes.

The three Nature Park communities are well-known tourist destinations.

Toblach/Dobbiaco was already a tourist destination and world-famous health resort at the beginning of the 20th century. The village boasts a beautiful Baroque church built in 1765, but is also home to elegant residences and townhouses. These attest to the town's former importance at the Pustertal/Val Pusteria valley intersection along the trade route to Venice, the so-called "Strada d'Alemagna".

Sexten/Sesto is first mentioned in a 10th-century document. The town is known for its magnificent scenery and beautiful view of the mountain scenery in the Fischleintal/Val Fiscalina valley. The Church in St. Veit/San Vito has ceiling frescoes by the Bozen/Bolzano artist, Albert Stolz. The cemetery is the location of the famous work "Totentanz" (Dance of the Dead) by Rudolf Stolz.

Innichen/San Candido was founded in the year 1173. Its 13th- century Abbey is considered the most important Romanesque monument in the Eastern Alps. The ancient sculptures and ornaments, and frescoes of Genesis in its dome and the im group have been preserved since its construction to the present day.





#### Visitor's Center at the Grand Hotel in Toblach/Dobbiac

Open: from early May to late October, and late December to late March. Tuesday to Saturday, 9:30 am – 12:30 pm and 2:30 pm – 6:00 pm. In July and August all day, also open on Sundays. Admission free! Ph. +39 0474 973017 info.sd@provinz.bz.it www.provinz.bz.it/naturparke.



Parking lot

Clodes road

Alpine hut

Tavern / rest station



----- Difficult path

Ski lift

➤ Pass/gap

+++++ Secured via ferrata

x•x•x• Provincial border

+++++ National border



- 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

# 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.

