

### PHOTO CREDITS

The 298 photos of this book were taken within the specific range or the surrounding mountains. No aerial photos were taken.

All photos were taken by the author with the exception of:

**Jean Bouchet** : 4<sup>th</sup> cover page, 69h, 74, 122, 154, 185S, 276S, 297b, 311

**Patrick Gabarrou** : 284, 287

**Volodia Shahshahani** : 111b, 133, 136b, 137b, 180, 202-203, 206, 209, 212-213, 213S, 216, 218-219, 230

**Pierre Tardivel** : 69b

*B=big ; S=small ; t=top ; b=bottom ; r=right ; l=left ; m=middle*

## INTRODUCTION

This volume, coming out at the same time as the Mont-Blanc volume, makes TOPONEIGE's coverage of what the French refer to as the "Northern Alps" – obviously not the case for Switzerland - complete. The area covered in this book is so vast that at the outset, two volumes were planned. It is not dividing up the area that proved challenging (between the mid-elevation mountains in the north and the high altitude mountains in the south), but rather, after taking inventory, the potential of this natural playground. Ski lifts occupy a considerable amount of terrain: the French-Swiss ski area "Les Portes du Soleil", the "Grand Massif" in the Haut-Giffre and a significant portion of the Aiguilles-Rouges above Chamonix. Add to that the Swiss ski area, Marécottes, and to the west (in France) a myriad of small ski areas that were set up at a period of time when significant amounts of snow stayed around all winter at low altitudes. Thankfully it is relatively easy to steer clear of this grid. City-dwellers unfamiliar with the region will be more than pleasantly surprised with the variety and vast expanse of relatively untouched terrain.

This region contains all of the key natural and human factors that explain its popularity since the birth of mountain tourism. Long ago, due to the relatively low altitude of its valleys being able to accommodate a minimum amount of agriculture, the thick forests on its mountainsides and the quality of its pastures, the Chablais was well populated. During periods of rural economy, these mountains flourished. Since the start of the industrial period, the exodus to urban areas was relatively low compared to other areas. Ruins here are rare. Headlands to the Lake Léman (*Lake Geneva*) area, these mountains have throughout history caught the eye of the romantics. No one doubts that Jean-Jacques Rousseau, who spent his childhood in Geneva, found inspiration for his revolutionary ideas on nature while spending time reflecting on the surrounding hillsides. The varied landscapes, the integration of traditional forms of human activity, the unique views from the small interior sea that is Lake Geneva (*or Léman*, see *pg. 320*) or, on the other end of the spectrum, the beauty of the various balconies opposite Mont Blanc, make the Chablais a place that one can not help but visit often.

The name "Chablais" is shared on both sides of the border for most of the area in this book, since the Valaisans include the Hautes-Alpes-Calcaires (high limestone Alps) and their high point, the Dents-du-Midi. For their continuation to the west (via the Dents Blanches) the Haut-Savoyards prefer to speak of the Haut-Giffre basin and the Fiz chain. Contrary to the well established French alpine tradition of pairing the Aiguilles-Rouges with the Mont-Blanc, this TOPONEIGE "Chablais" favors what one can do via skinning, snowshoeing or walking: the deep valleys used by a major highway separate the Mont-Blanc massif from the Aiguilles-Rouges and from the Perrons, and these crystalline mountains, interlinked with the limestone ranges to the north, allow link-ups where the rock structure underneath the snow matters little.

## Zones

**External limits.** To the south by the Arve valley, to the southeast by the Trient gorges, to the east by the Rhône river and capped to the north by Lake Léman.

**Internal subdivisions.** The descriptions cover twelve zones, going in counterclockwise order starting from the south. In each zone, the routes, numbered based upon the starting point, go in clockwise order.

**A, "Aiguilles-Rouges":** routes whose starting points extend from Les Houches to the Col des Montets.

**B, "Buet"** covers the Buet valley (left bank), the Tré les Eaux valley and the Loriaz cirque, starting from the small Buet and Couteray villages.

**C, "Ruan":** the routes within the Emosson basin and the Dent de Fenestral crystalline chain, starting from Finhaut.

**D, "Sallière":** the starting points are on the left bank of the Rhône river valley between Martigny and Monthey.

**E, "Dents-du-Midi"** describes the routes located on the right bank of the Illiez valley (the left bank has ski lifts) and the routes on the left bank of the Morgins valley.

**F, "Grammont-Oche"** covers the northern area of the Chablais with starting points in the Torgon, Miex, Novel and Bernex valleys.

**G, "Cornettes de Bise"** describes the routes in the Darbon, Bise, Ubine and Chevenne valleys on the right bank of the Dranse d'Abondance river.

**H, "Mont de Grange":** the routes on the left bank of the Dranse d'Abondance river and the Malève valley.

**I, "Hauts Forts"** covers the routes on the right bank of the Dranse de Morzine river all the way to the source of the Manche river.

**J, "Roc d'Enfer":** an independent chain in the western part of the Chablais that includes all of Mont Billiat's summits to the north and the Pointe de Marcelly to the south.

**K, "Dents-Blanches":** access this small chain either on the left bank of the Manche valley or on the right bank of the Giffre valley above Samoëns.

**L, "Tenneverge-Fiz":** the routes on the left bank of the Haut-Giffre valley and the right bank of the Arve valley between Bonneville and Servoz.

## Snow and climate (by Christophe Ancey).

As with other wet areas in the Northern Alps, the chains that stretch from the Arve valley to Lake Léman – that for the sake of ease we will call the "Chablais" – benefit from particularly favorable climatic conditions for skiing. Precipitation accumulation is significant and relatively consistent, guaranteeing that you will find snow even during dry years. Les Gets, at 1200 m elevation, receives approximately 430 cm of snow per year whereas Flaine at 1600 m receives up to 650 cm. The Brévent area, even higher, at 2050 m, receives an average of 8 m of snow during the ski season. Although annual precipitation totals (around 1500 mm at 1000 m elevation) are certainly far from the records measu-

red in the Prealps (2000 mm in the Chartreuse or the Bauges), they are nonetheless impressive for the Alps.

**As with the Jura, most storms track from the northwest or the west.** The terrain plays a major role in the spatial distribution of precipitation, mainly for longer storms (more than 12 h of consecutive precipitation), which explains the varied results in this region. At the same time, such a precipitation gradient tends to diminish the effects of altitude when only looking at liquid precipitation. Note that there is no clear correlation between daily rain totals and altitude. Ditto for annual results: in spite of the difference in elevation, it rains as much in Saint-Gingolph on the banks of Lake Léman as it does in Châtel at 1200 m elevation, and Abondance sees a 25% deficit in terms of annual precipitation totals relative to the two others.

The importance of precipitation gradient blurs when it comes to the intensity of a snowstorm or snowpack preservation where altitude clearly plays an important role. For big snowstorms, daily snowfall totals average between 50-70 cm in Abondance and Châtel (around 1300 m), 70-80 cm in Flaine (around 1600 m) and 80-100 cm at the Brévent (around 2100 m). Given the more defined mountain relief as we move south, we notice more significant snowfall and better snowpack preservation (Faucigny, Aiguilles-Rouges). Strangely enough, the south facing side of the Chamonix valley receives more snow than the north facing side: 790 cm for the Brévent compared with 680 for Lognan (both sit at around 2000 m).

## Snow accumulation over long periods can be significant.

Major storms each year drop an average of 120 cm of snow over a period of 3 to 8 days. Storms that drop 3 meters of snow over long periods (*one to two weeks non stop*) are rather frequent. From February 5th to February 12, 1988, Châtel received 301 cm of snow. During the same storm, only 88 cm fell in Chamonix (1050 m) and 156 cm in La Plagne (1970 m). 1988 seems to have been a record year for Châtel: in a two month timeframe 4 major storms dropped 8.5 m of snow. The 1980s were a decade of records. For example, if we look at major snowstorms where snowfall approached 2 m or more, since the 1970s we have: February 1984 (197 cm), December 1986 (205 cm), February 1999 (207 cm), January 1986 (212 cm), January 1983 (234 cm), March 1978 (274 cm), January 1984 (280 cm). At lower elevations the 1960s experience record snowfall totals for a given storm: Les Gets (1200 m) gets top prize with the December 1967 storm (256 cm), then January 1959 (236 cm), December 1968 (208 cm), March 1978 (185 cm), February 1999 (183 cm), March 1970 (177 cm), and January 1978 (175 cm). Rising temperatures as well as the location of depression centers in the North Atlantic during the bad season are the primary explanations for these changes.

**Significant snowfall also means high avalanche risk.** This area has seen intense pastoral activity since the Middle Ages, and the different village communities made significant efforts to protect themselves from avalanches. The first avalanche barriers were built in Vallorcine in 1721 (and reinforced in the 19th century). At the time most of the dwellings were clustered around the church, but during the Little Ice Age, the retreat of the forest and the climatic conditions created a situation where large avalanches occurred regularly. One avalanche destroyed a part of the village, the Vallorcins subsequently decided to divide the town into multiple small hamlets, which are today still separated by avalanche couloirs. They left the church and the presbytery in the same place, but protected them with a wedge shaped wall.

In these pastoral regions, they understood the important role that the forest played and local lords made many forests off limits to logging if that forest protected the village. In Vallorcine, the layout of the village that we see today is nothing more than a long process of trial and error, where the locals tried to build protective structures to last. Avalanches destroyed many buildings during the 20th century, such as the Tairraz Hotel at the Col des Montets or the Buet Lodge-Hotel, just a few years after being built. The cabins in mountain pastures also bear witness to man's battle with snow and avalanches; this explains why Commune's (Sixt-Fer-à-Cheval) cabins are protected by huge moraine boulders and are spread out along the fall line in order to avoid avalanches. In some cases, as with Rupes in Vallorcine, the cowsheds are partially underground.

### Geomorphology and skiing (by Louis Volle)

This toponeige regroups underneath the singular name "Chablais" a geomorphologically complex area. The term "Prealps", which works so well for the more southern chains of the Bornes, Bauges, Chartreuse and Vercors, indicates here simply a location west of the granite spine of the Alps. In reality the tectonics and morphology prove extremely varied and original. Within this relatively small area, the ski-mountaineer will be delighted to find almost the quasi-totality of different types of skiable mountain terrain.

In order to simplify, we have here an illustration of the extraordinary forces that led to the creation of the hinge line, the highest section of the Alps, Mont Blanc. It is of little use to sift through a century of prognostications, hypotheses and quarrels between specialists to first admit to and then understand how the sedimentary rocks of the Chablais, belonging to the larger igneous formation of the Grand Paradis, ended up 50 km northwest of the most prominent granite formation, the Mont Blanc Massif, and spanning its sedimentary cover. This occurred over an extremely long period of time, and not with the simple wave of a magic wand. During the tertiary period

when the internal crystalline chains (Grand Paradis, Pennine Alps) pushed up through the sea their sedimentary cover to the northwest (still underwater) was covered itself by other very heterogeneous sediments, layers of flysch whose extension we see in the southern areas of the Ecrins chain. When, later, maximal tectonic energy pushed up the external crystalline chain of Mont-Blanc, its own sedimentary cover was thrust to great heights but its flysch cover slid northwest to its current location, or rather crept, giving the impression that these layers parachuted in from somewhere other than the alpine arc. This is not geo-fiction but the result of the evolution of one century of geomorphological research.

For us skiers it is the astonishing result that counts: with the Aiguilles-Rouges we get to enjoy a small crystalline chain, the morphological coupling of the Mont-Blanc and Belledonne chains; with the Hautes-Alpes-Calcaires, we find similar mountain relief to that of the Bornes and the Aravis prealp chains but at higher altitudes; and finally with the Chablais layers, the similarity with the types of relief in the Briançon region is unmistakable. Erosion of the softer rocks accentuates, above the peaceful human populated basins, the proud jagged limestone arranged in a rather anarchical manner.

Skiing in the Aiguilles-Rouges means coming across all of the classic components of a crystalline chain: steep sides with big vertical drop (1700 m elevation difference between the Arve Valley and the Belvédère) often cut in two by intermittent flats, corresponding to glacial scouring and where every so often tarns (like Lac Blanc) sit - fantastic natural balconies from which to admire Mont Blanc: zones developed for tourism (ski lifts at Planpraz or the Flégère) and once upon a time for pastoral life (Loriaz). High above rises a festival of spires carved by erosion. The colors, subtle or vivid, provide so many simple and complex lines between the rocky walls and ridges, a rock climber's playground. For the Pouce, the Persévérance, Praz Torrent, the Perrons or Fenestral the balance between the appeal of the terrain for skiing and the inherent natural beauty of the landscape is exceptional. Above the "flat" areas, the rocky walls holding up the escarpment are cut through by large avalanche couloirs. Outside of these paths to lower altitudes, the skier should avoid those steep zones where the run outs are uncertain. The opportunities for excellent climbing abound whether it be the Aiguillette d'Argentière or Barberine's slabs. Access is only via the Arve, Eau Noire or Trient valleys since the Hautes-Alpes-Calcaires sit right up against this crystalline chain.

Here, for the skier, everything is different. Distance is added to big vertical gains. The powerful Morcles layer overlaps the usual prealpine sedimentary structure. This chaotic pile up of limestone or schist stratum is sometimes 2000 m thick such as with Tenneverge. To the west, in the Fiz chain, ski with care on the large inclined plateaus of limestone pavement such as the Désert-de-Platé, above and below some of the most spectacular limestone walls of the western Alps (Le Marteau, La Croix

de Fer). It is no wonder the ski industry developed Flaine in the tamer terrain of the area. To the east, it gets more complex with the elevation hovering around or exceeding 3000 m. One must ascend out of deep valleys, the "Bouts du Monde" or ends of the world if you will, often crossing through challenging series of cliffs via avalanche-prone terrain to come out on to wide, pleasant, hanging valleys just before confronting steep and exposed terrain that tops out on the lofty summits of the high limestone walls. To the south the contrast is striking when, in order to gain the high table-like peaks of Buet, Ruan or the Tour Sallière, one must cross through the crystalline barriers via Bérard or Emosson. The routes starting from Sixt or Champéry are typical of the complex route finding needed at lower elevations relative to the radiant and spectacular upper sections of a route. Winding through the heart of these limestone walls tormented by erosion, or between the strata folded in an almost surrealistic manner, always leaves one in awe. This is fantastic skiing in adventurous terrain. For the Dents-du-Midi, the Dents-Blanches, the Avoudrues, the Tour Sallière or in Finive one must ski "intelligently" to find the best path as well as to figure out how nature could have sculpted such formations. Further north, in the "real" Chablais with its layers made up of a variety of strata, the softer rocks dominate the lower elevations, allowing valleys to expand, multiplying the knolls and rounded summits, at one time the providence of pastoral life and a thriving logging industry. The ski industry took over, and practically every valley now has its ski resort: Les Gets, Morzine, Avoriaz, Chapelle d'Abondance, Châtel, Morgins ... to such a point that today with times being somewhat difficult, ski areas like Abondance have had to close their doors. The ski-mountaineer inherits the spectacular undeveloped terrain that remains even if the ski areas and their lifts sometimes find their way into the view. In the middle of the long line of limestone cliffs as with Mont Chauffé or the Cornettes de Bises, or fins such as the Dent d'Oche, numerous combinations for every level will charm you both by the variety of the scenery and their technical appeal. The large quantities of snow make up for the lower altitudes and provide a Himalayan feel to these modest summits that barely exceed 2000 m. The Dent d'Oche, the Cornettes de Bise or Grammont offer the entire range of skiing in limestone country among the alpine pastures. The Chablais is well suited for both easy backcountry ski outings with reasonable vertical as well as for steep skiing.

### Selection of routes

The stance of the TOPONEIGE collection is to be both exhaustive and to prioritize. This is why each range passed through a fine-toothed comb: all of the valleys are described and represented. However, in order to remain both readable and usable, all of the routes are not placed on the same map. Certain routes are primary routes (numbers without decimal points), others are considered to be supplementary routes or variations (with decimal points). The rule of prioritizing is useful in the following

three cases:

- repetitive: the same starting point, the same scenery and landscape, similar technical traits. The skier will visit the given valley at one point and, a few years later, will come back to ski a "variation". This also allows a backup plan when the first choice route is too crowded.
- introductory (level 1): true alpine touring; excluded are routes around a small village such as flat traverses, so as not to discourage the budding backcountry skier.
- steep skiing (level 5): retained are the most aesthetic and logical routes (even extreme) with a good chance of being repeated, but not every small strip of snow on a steep face that does not top out on a summit and that requires multiple rappels or systematically taking off one's skis.

After meeting with the selection committee, we have retained 191 primary routes and 300 variations or alternative routes.

### Skiing in the Chablais

By grouping the Chablais, Haut-Giffre and Aiguilles-Rouges chains, this TOPONEIGE covers a mountain environment of exceptional diversity particularly well suited for skiing. The variety of terrain, relief and elevations combined with significant snowfall means that one is able to ski here from November through June. The northern section lends itself well to winter and early springtime skiing. Level 1 is also well represented with quality routes, which allow us to avoid lower summits (*below 1800 m*) where the snowpack is uncertain and the routes too choked up with vegetation. In spite of the Chablais's exceptional morphological variety, the breakdown by difficulty is surprisingly similar to TOPONEIGE Belledonne. Here, level 3 (*the most sought after by backcountry skiers*), represents more than one-third of the routes. Level 5 is better represented here than with the Belledonne if we take into account all of the variations mentioned.

	Chablais		Belledonne	
Ski 1	10	5%	10	5%
Ski 2	42	22%	42	23%
Ski 3	72	38%	57	31%
Ski 4	45	24%	53	29%
Ski 5	22	12%	23	12%

*Lift accessed out of bounds and off-piste skiing*, which covers a considerable amount of surface area (see map pages 316-317), was not included in this book. In autumn, prior to opening, the ski areas with their equipped terrain make it possible to start the season early. We have included a few routes that start from the top of ski lifts in those areas where a one-ride lift ticket is possible and worthwhile (Flégère, Marécottes ...). In spite of being close to major urban areas (Geneva, Lausanne, the Rhône and Arve valleys), the mountains in between the Arve valley and Lake Léman see relatively little traffic. (*Certain steep routes*

sometimes see minimal crowding due to the Internet effect.) The local practice is day outings. This vibrant region, well structured for tourism (in both summer and winter), offers visitors multiple lodging options that can be used as a base camp. The vertical is usually reasonable (25% are less than 1000 m and almost 50% are between 1000 m and 1500 m) and the access points easy, so few huts are open. The multi-day tour is not a common practice here. However, the following "High Routes" will allow you to discover, over the course of 3 to 5 days, various areas via a traverse or a loop.

► **From the Aiguilles-Rouges to the Perrons.** The traverse journeys through the high crystalline chains of the south and the Haut-Giffre and Hautes-Alpes-Calcaires chains. Over 3 days it allows you to link Chamonix with Les Marécottes, staying overnight in small lodges (Buet, Finhaut), returning via train: *Day 1*, traverse the Buet (A2); *Day 2*, climb the Terrasse via B7, descend to Finhaut via C3; *Day 3*, C14 then descending to Les Marécottes via D1. With an extra day you can ski D7 via La Golette.

► **Lower Chablais circumnavigation.** A short 3 day loop starting in Novel; a very moderate endeavor that will provide you with a taste of the serene and beautiful summits between the Dent d'Oche, the Cornettes de Bise and Grammont with Lake Léman in the background: *Day 1*, ascend to the Col de Bise via F12.2, descend to the Bise hut; *Day 2*, ascend to the Col d'Ugeon via G6, descend to Taney via F6.1; *Day 3*, ascend to the Pas de Lovex via F6.1, descend to Novel via F11.2.

► **Chamonix-Lake Léman traverse.** Plan for a 5 day trip to complete this south-north traverse (*the descents are more interesting and appealing in this direction*) whose only drawback is having to traverse the Portes du Soleil. *Day 1*, A2 to the Pont d'Arlevé, climb up to the Chalets de Moëde and then the Tête de Moëde (L19), descend to Sixt via L5.1; *Day 2*, Dents-Blanches Occidentales via K5, descending to L'Erigné via K3; *Day 3*, ascend to Berthe via I15, descent via E11 and traverse the Planachaux and Crossets ski areas in order to descend to Morgins; *Day 4*, climb Mont de Grange via H2, descend to La Chapelle d'Abondance via H6; *Day 5*, climb the Cornettes de Bise via G17, descend to Novel via F11.2 (*Spend your nights in lodges in the valleys. Plan to take short shuttles between Sixt and Les Allamands, and between Morgins and Châtel.*)

► **Dents-Blanches and Haut-Giffre Circumnavigation.** This circumnavigation combines the most spectacular routes of the southeastern part of the area: traverse the Buet, and then descend via Les Beaux Prés, the Dents-Blanches Occidentales, the Dent de Barne and the Tour Sallière. You can add a day in order to do the Haute Cime, the highest point of the area. *Day 1*, from Finhaut, ascend to the Vieux-Emosson hut (*pick up the keys in Finhaut*); *Day 2*, climb Buet by picking up B8 below the Col des Corbeaux, descend to Sixt via L4; *Day 3*, the Dents-Blanches-Occidentales via K5 and descend to the Folly hut via K6; *Day 4*, the Dent de Barne via K8, descend to the Susanfe hut via E9.1; *Day 5*, Tour Sallière via D4 and return to the Finhaut via Emosson.

## MOUNTAIN HUTS

**Refuge du Vieux Emosson** (2160). Private; 16; untended (keys in Finhaut); +41 (0)27 768 14 21 (Nicolas Vouilloz); Finhaut (C5).

**Refuge de Salanfe** (1942). Evionnaz; 6; untended; +41(0)79 399 30 86 (Jean-Marc Paccolat); Marécottes (D4); les Granges (D5).

**Refuge des Dents-du-Midi** (2884). CAS ; 20 ; untended; +41 (0)24 466 15 30 (Huguette Wittwer); Marécottes (D4, D7); les Granges (D7).

**Cabane de Susanfe** (2102). CAS ; 71/30 ; untended; +41 (0)24 479 16 46; +41 (0)79 478 57 30 (Fabienne Debossens); Grand Paradis (E6, E7); Marécottes (D4); les Granges (D5, D4)

**Refuge de Chalin** (2595). CAS ; 8 ; untended; +41 (0)24 466 31 24 (Jacques Amiguet); La Meuraye (E2)

**Taney, lodges** (1415). Hôtel du Grammont : +41 (0)24 481 11 83. La Petite Auberge : +41 (0)24 481 10 40 ; Le Flon (F5).

**Refuge de Bise** (1502). FFCAM ; 70/25 ; untended; +33 (0)4 50 73 11 73; +33 (0)4 50 78 18 28 (André et Christelle Morcel); La Revenette (G5), la Chapelle d'Abondance (G14).

**Refuge d'Ubine** (1495). Les Amis de la Nature ; untended, keys provided upon reservation, pick them up in Vacheresse; +33 (0)4 50 81 04 34 (Delphine Lavaillotte); Revenette (G7.2).

**Refuge de Graydon** (1330). FFCAM ; 18 ; untended, keys at la Côte d'Arbroz; +33 (0)4 50 75 60 65; Essert-Romand (J4).

**Refuge de Bostan-Tornay** (1763). Private; tended upon reservation, weekend only; +33 (0)4 50 90 10 94; Les Allamands (K5).

**Refuge de Folly** (1558). Private; (70/30); untended; +33 (0)4 50 90 10 91 (Jean Moatti); Le Pied-du-Crêt (K7+K10).

**Refuge de Platé** (2032). untended; 30/5; +33 (0)4 50 93 11 07; Flaine (L13).

### Principal abbreviations used in this TOPONEIGE

mn,h	minute, hour
m	meter ( <i>for vertical</i> )
km	kilometer ( <i>for distance</i> )
V+/-V-sect.	vertical gain or drop section(s) – ( <i>to assess slope</i> )
approx.	approximately
alt.	altitude
pt.	point ( <i>on the map</i> )
circum	circumnavigation
E,N,W,S,A	east, north, west, south, all ( <i>aspect</i> ).

*Note: sometimes we use terms from ski-mountaineering jargon. For example "skin up" means "to ascend a slope with your climbing skins on your skis". The context will allow the neophyte to understand the meaning.*