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Warning

Be careful: ice-climbing is a potentially dangerous activity. Climatic conditions can vary rapidly and the state of the ice is subject to changes which can even be very sudden, provoked by external factors. A few itineraries are exposed to avalanche danger. Maximum effort was put in to guarantee the exact nature of the information contained in this guide, but they should nonetheless be verified each single time by experts who are able to evaluate the ice conditions. Listen to the avalanche forecasts and collect information regarding the area. The use of this guide book is at your own risk and under no circumstances can the author or editor be held responsible for any accidents which occur on any of the routes described.

To all ice-climbers who have explored many new areas and brand new lines because their work has favoured the development and growth of this wonderful activity.
To Giancarlo Grassi, Godefroy Perroux, Pavel Podgornik, Xavier Bongard, Andreas Orgler and to those like them who have shown the way.

Mario Sertori

ALPINE ICE

The 600 best ice falls in the Alps

France
Switwerland
Austria
Slovenia
Italy

EDIZIONI **VERSANTE SUD**

C. Moulin, J.B. Gras, *Nuit blanche,* Argentière *(ph.C. Gardien)*

An iced waterfall is a magical universe, due to its shapes, its colours, its light. What is really fascinating for ice climbers is the ephemeral character of its formations. To observe the water trickling down a rock face under its summer heat, a single rivulet just like a gushing waterfall , to imagine this flow suddenly immobilized into ice, to then climb it: this becomes a form of alpinism which is definitely exciting.

Ice falls are unpredictable lovers. They are never identical, they evolve without ever pausing; depending on their temperature, hygrometry or gravity. Sometimes they disappear, disappointing their admirers who are forced to go on the move for days or weeks. Climbers have got used to this nomadic life style throughout each ice fall season. You have to find yourself in the right place at the right time never hesitating to travel to make the most of the favourable season.

François Damilano and Godefroy Perroux, two pioneers of this field have named the network of friends who send them information on all the ice around the world "Ice Connection". Mario Sertori's book is part of this culture.

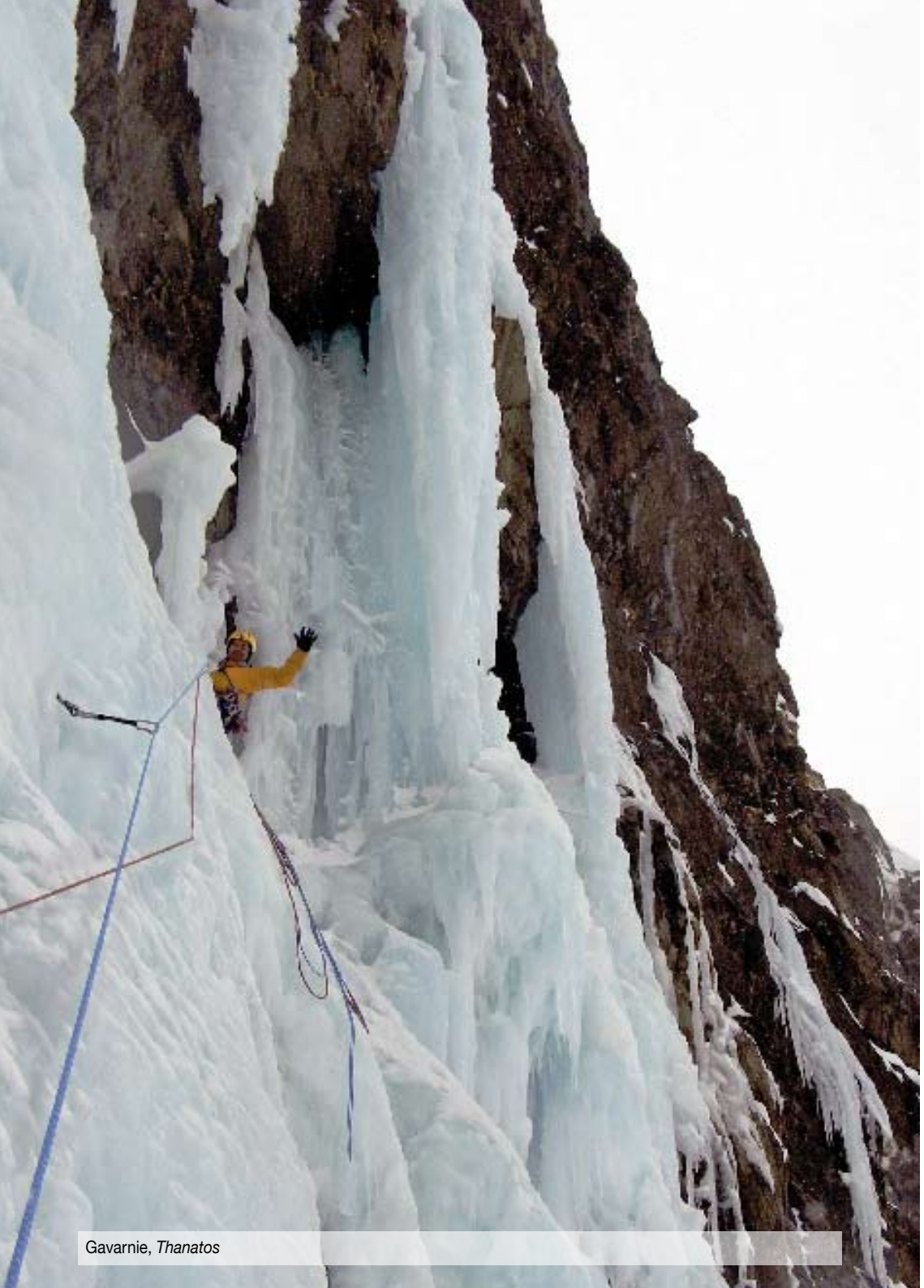
Ice is travel; ice and encounters go hand in hand, the idea of presenting a selection of ice falls in different European countries remains loyal to the reality of this sport.

This book consecrates itself to this discipline which has by now reached full maturity. From an eccentric speciality ice-climbing has become a rite of passage for any alpinist. Ice-climbing has considerably increased our knowledge in terms of alpine ice.

Getting used to overhanging evolutions, not only inside couloir's grooves; while becoming accustomed to steepness and fragility, increasingly bold and technical movements have forced the couloirs of the seventies to become classic ascents of an alpinism which is set in the past.

Today it is dry tooling which defines mountaineering on high mountains. On the north faces of the Alps and Himalayas you can hear the sound of crampons scraping rock, as well as the screech of ice picks on the holds which make it or break it on great ascents. But even if it is ice or rock it is always associated with pleasure. How can we not ice-climb if we love climbing? Mario's book helps us discover far away and unknown places. It is a true celebration of ice-climbing.

Claude Gardien
Director of Vertical Magazine



Gavarnie, *Thanatos*

The idea of writing this book came to me during the winter of 2006, a season with a generous supply of ice and water which gave ice-climbers an opportunity they had not had for a long time of climbing plenty of ice-falls.
Caught up like many others by the craving to possess, even for just a moment, the largest number of ice falls possible, I began my frenetic travelling around the mountains in search of my personal Holy Grail.

The number of areas to be visited meant that I was accompanied by a well furnished library which vied for space and priority with ropes, crampons and ice axes: in the car the books - numerous and heavy - took first place, talking conceitedly the most diverse languages and leaving in second place the modern ice tools. Carrying around a library by car certainly had its drawbacks.

I thought it would be good to find everything narrated and kept safely in one book, the most interesting ice falls in the Alpine arc, which guide books used to describe as being 'worth the trip' even on their own.

A very difficult undertaking, almost impossible for only one person, even if for my part I have covered the length and breadth of alpine ridges in search of ice for over twenty years. Fortunately many ice climbers helped me out by bringing me their pictures, precious news and important experiences. Each country's ice fall description is followed by a short interview with a 'well referenced' ice climber from that country: their names need no introduction, they are alpinists who have written the history of our sport with the tips of their tools. Finally a geographical annotation: I could not resist the call of the Cirque de Gavarnie, the only non-alpine site included, which represents, one of the most beautiful places to ice climb in Europe.

Mario Sertori, August 2008

 **Length**

 **Difficulty**

 **Approach**

 **Aspect**

 **Altitude**

 **Descent**

1 PSIHOANALIZA J. Makuc, D. Obid, 1993

 **135 m**

 **II 6**

 **1 h**

 **N**

 **1100 m**

 **On foot Abseil**

Descent: abseil to equip, or on the right hydrographic side, traverse and then go down a couloir and steps to the base.
Access: on foot from the power plant following directions for CAI Tarvisio's bivouac to Sagherza saddle for roughly 40 minutes. The ice falls can be seen after the bridge crossing a stream. Leave the path and walk up to the parallel falls.
Notes: Psihoanaliza is the route which climbs perfectly straight up the first pillar to the left of the three large ice pillars.

SOME CLARIFICATION IS REQUIRED:

• the name of the first ascenders has been left out due to uncertainty or lack of info. I apologise in advance for any unintentional omissions or inaccuracies.
• scale of difficulty: see next chapter
• each single ice-fall's approach should be integrated with the photographs present. The numbers found in the text are correlated to the numbers on the photographs
• the length of the ice-fall represents the total length of the ice-fall and not the vertical height gain.
• the ascent route has often been omitted since it can vary from season to season and to leave space for each individual's imagination in choosing their own line.
• the notes (N.B:) comment on the itinerary's beauty and characteristics as well as giving extra information about the ice falls.
• the approach time is calculated in terms of a fit climber's pace (with tracks); they can therefore undergo considerable variation depending on the snow conditions and the lack of tracks.
• when indicating "right" and "left" this refers to, if not otherwise specified, the direction in which you are walking.

EQUIPMENT IN SITU

The topos precisely express whether abseil anchors are equipped: this means that- if there is no specific information - abseils (or the anchors) need **to be equipped**. In any case you need to take into consideration the fact that there is a strong possibility that the equipment undergoes wear and tear and consequently deteriorates due to avalanches, rock fall etc. It is therefore good practice to bring with you "abandonment slings" to reinforce the existing anchors or to replace any damaged slings. It is recommended to learn the Abalakov technique (ice tunnels) in case you decide to climb ice falls which are not equipped with abseil anchors.

GEAR

As well as the gear needed to make progress on and protect the ice, it may be useful to bring a few rock pegs as well as a choice of nuts and friends. For safety reasons do not forget to bring an avalanche transceiver together with a shovel and probe. Learn how to use them.

EVALUATING DIFFICULTIES

The Roman numerals (from I to VI) express the evaluation of the total effort which has nothing to do with the route's technical difficulty and refers to indicators such as continuity and the ascent's total length, the possibility to retreat, the difficulty of the approach, the exposure to objective danger and the difficulties in descending. Only one of these indicators is sufficient to determine the evaluation of the total difficulty.
The Arabic numbers (from 1 to 7) express the technical difficulty calculated on the hardest pitch. This depends on the length of the vertical sections, the continuity, quality of protections and quality of ice depending on its thickness, its consistence and its form (cauliflowers etc).
The evaluation of difficulties in any case gives a rough idea, since ice falls form differently every year and the ice conditions are subject to changes caused by external agents (such as sun, wind, snow and sudden changes in temperature).

Credits
A. Anderle 197-198-210, **H. Barmasse** 320-324, **N. Berzi** 236-241-242-246, **T. Carasol** 28-30-32, **M. Cominetti** 404, **M. Croce** 263 **F. Damilano** 47-48-50-54, **P. Gabarrou** 47-54-55-82, **C. Gardien** 57-58-61-62-66 **K. Gričar** 186-208, **U. Golob** 210, **C. Heydel** 40, **D. Karničar** 216, **D. Koren** 192, **Z. Koren** 186, **P. Kozjek** 203, **G. Kresal** 183-188-189-192-197-203-214-222-224, **P. Lajevec** 207, **M. Lenarčič** 223, **E. Marlier** 298-305-306-332, **M. Mejovsek** 186-187, **P. A. Naudin** 53, **A. Notari** 108-110-111-112-337, **E. Panizza** 99-145 **A. Pečjak** 197-204-219-220-222. **G. Perroux** 39, **M. Piccione** 131, **S. Plano** 234-238-242-252-253 **P. Podgornik** 193, **U. Prinz** 100-103-104-151-154-155-156, **J. Skok** 213, **B. Sourzac** 64-65, **R. Stubelj** 195-207, **F. Tremolada** 404-407-415-416-417-418-431, **L. Turchetto** 107, **S. Turbil** 249-253 **L. Vuerich** 184-198-437-438-440-443.

ICE EVALUATION

I	short ice-fall, easy to reach, a descent which presents no problems.
II	an ice-fall which is easy to approach, one or more pitches. There are few objective dangers.
III	multi pitch ice-fall, a long approach walk is possible as well as the risk of objective dangers.
IV	difficult multi pitch ice fall, remote environment; difficult descent, objective dangers.
V	long or complex approach walk in a high mountain environment exposed to objective dangers; airy protections, difficulty in interpreting the ascent line, difficult descent which needs to be equipped.
VI	long itinerary in a high mountain environment with logistical problems, orienteering and choice of itinerary, exposed to objective dangers…and to the possibility of a bivouac.

TECHNICAL DIFFICULTIES

1	50/60° moves, experience in using ice axe and crampons required as well as belaying techniques.
2	60\70° moves but with good belaying possibilities.
3	70\80° moves, usually good ice. The vertical sections alternate with more leaning sections where you can set up good anchors.
4	75\85° moves and the possibility of a short vertical section. Usually good anchors and good ice.
5	a good technique is indispensable, due to the ice's quality and the ascent's difficulty, with a long section at 85\90°. There is the possibility of cauliflower formations.
6	one or more difficult pitches, difficult and precarious anchors, fragile or delicate ice. A good technique is indispensable.
7	as for grade 6, same characteristics, but more extreme.

X	indicates the risk of the whole structure collapsing!
R	emphasises climbing on thin ice
M	ascent with moves on rock (see below)

EVALUATION OF DRY TOOLING DIFFICULTIES.

These are ascents where ice sections are connected to rocky sections, always climbed with ice axes and crampons. The difficulty is indicated with the letter M followed by a number: M7 designates the "starting difficulty", but one has to keep in mind that who opened dry tooling routes considered their ascents as representing the maximum grade of difficulty on ice and therefore they considered their achievements as grade 7. The most difficult grades in dry-tooling are of grade M12/13. Now that this discipline is becoming more popular there are also M4/M6 grades, generally equipped with fixed protections on the sections of rock. Often this last is predominant and determines the difficulty of the route, also because the portion of ice is generally short compared to the whole ascent.