



Swiss Federal Institute for Forest, Snow and Landscape Research



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ICAR AND ITS IMPORTANCE IN AVALANCHE RESCUE

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Introduction

The International Commission for Alpine Rescue (ICAR, <http://www.ikar-cisa.org/>) was founded 1948 by influential representatives of the alpine rescue organizations in Austria, France, Germany, Italy and Switzerland. From the beginning of the partnership, the aim was to coordinate materials, techniques, strategies and information for alpine rescue-actions. At present, 33 organizations representing 22 countries (in Europe and Northern America) are associated in the ICAR. At the annual meetings, four sub-commissions deal with the different tasks of alpine rescue.



Beside climbing, glacier or cave accidents, snow avalanches are of eminent interest. Recommendations for safety measures in outdoor equipments are a strong tradition in the avalanche section of ICAR. We mention the harmonization of the frequency for avalanche beacons in 1989, which, after intense discussions, was fixed worldwide to 457 kHz after ICAR's intervention. Also 1993, when the avalanche warning services coordinated the avalanche danger scale, ICAR played a dominant role in the harmonization. In analyzing the questionnaires of the rescue teams and the characteristics of the winter progress, detailed information on avalanche accidents can be found and should stay a main focus. Today, efforts are necessary to merge the practical work of the alpine rescuers, avalanche warners and educators. Overall statistics for the last 20 years prove an annual mean of 106 avalanche fatalities in the alpine countries and 138 after adding those in Northern America.

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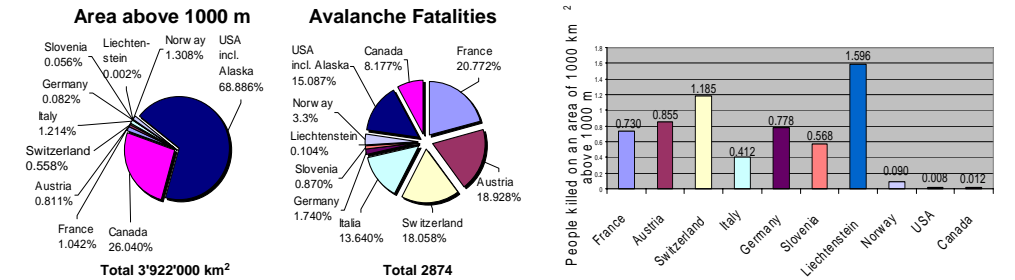


ICAR – Countries



Rescue mission with beacon, avalanche dog, Recco and probe.
February 2001, Zinal, Switzerland
Special efforts are sometimes necessary (e.g. artificial avalanche release) to reduce the risk of the rescuers themselves.

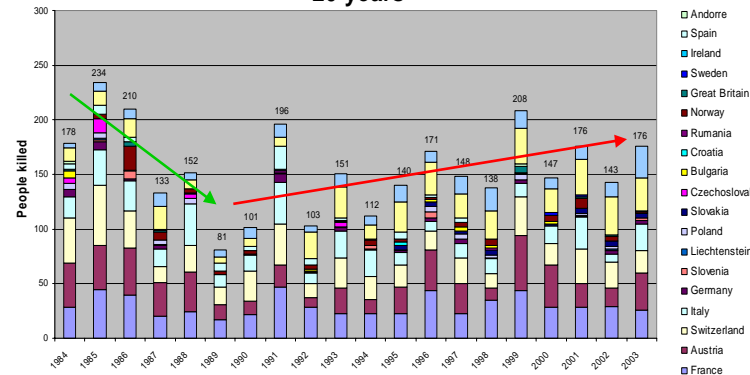
Avalanche Fatalities, 1983/84-2002/03, 20 years ICAR countries with complete statistical series



Comparing areas over 1000 m above sea level in the different countries and calculate the number of victims in relation to the area. The results are surprising. The Principality of Liechtenstein, with its small surface area, comes first, followed by Switzerland and Austria.

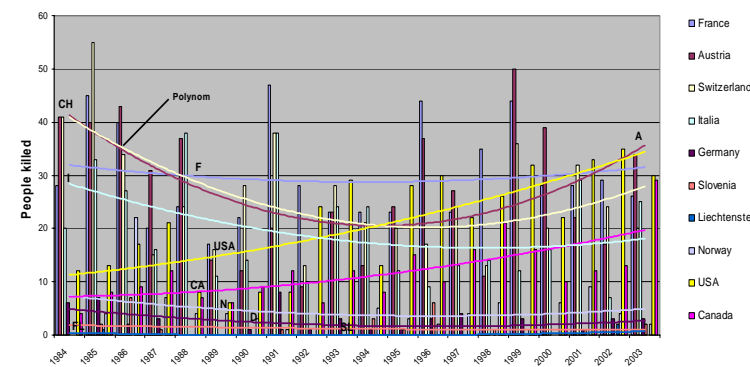
This presentation also very probably explains why avalanche accident data are viewed differently in individual countries, especially by policymakers. Consequently, it's not surprising that each country with similar numbers of victims has not developed similar or, in some cases, centralized institutions. It is important that the different surface areas of mountainous terrain are taken into account.

Avalanche Fatalities overall, 1983/84 - 2002/03, 20 years

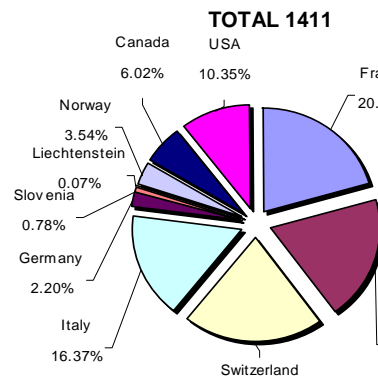


Visual trend overall countries.

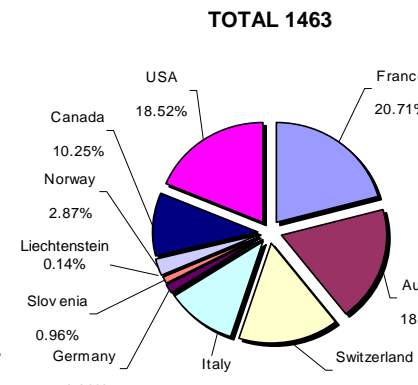
Avalanche Fatalities, 1983/84-2002/03, 20 years ICAR countries with complete statistical series



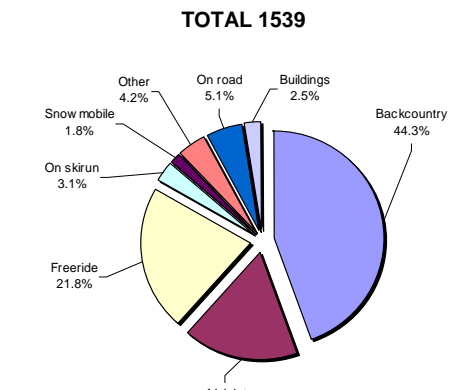
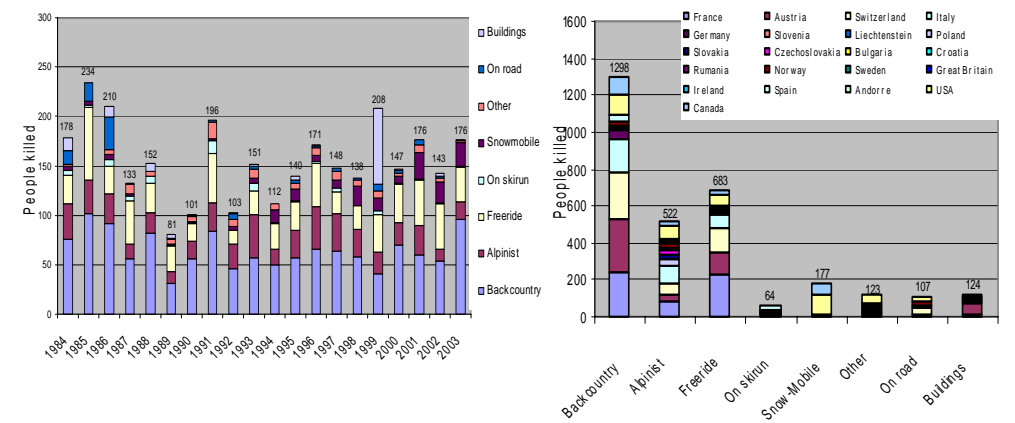
The experiences in the different countries have varied greatly. Following a marked downward trend (between 1984/85 and 1995/96), Austria and Switzerland have seen a clear rise in the number of victims in recent years. There are no clearly observable trends for France, Slovenia, Liechtenstein and Germany. In these countries, the number of victims remains either at a relatively high or relatively low level. By contrast, the numbers of victims in the United States and Canada are rising steadily.



Avalanche Fatalities, 1983/84-1992/93 and 1993/94-2002/03, 2 x 10-year periods, ICAR countries with complete statistical series.



Avalanche Fatalities, 1983/84 - 2002/03, 20 years Overall categories and member-countries ICAR



Avalanche Fatalities, 1983/84-1992/93 and 1993/94-2002/03, 2 x 10-year periods, categories trends.

