## STONE AGE SPORT

The Origins of Skiing

Records show that skiing began in Australia in 1861, at the New South Wales gold mining township of Kiandra. Some historians have suggested that the first ski tracks in Australian snow may have been made a year or two earlier, and certainly there are vague hints that this may be true, but few query the well-documented date of 1861.

The question of who was the first man to don skis in Australia is quite another matter.

There are several claimants to the title. The best-loved, but probably the least likely, is a Swede with the improbable name of Bumpstone, who according to local tales, "... on a hastily-constructed pair of skis, ran from his home down the main street". Only slightly more plausible than the apocryphal Bumpstone is yet another Swede, a certain Krohn,

better known to the locals as Fatty Charlie. According to the suspiciously tall tales told by Kiandra old-timers, Fatty made his skiing debut on fence palings, which inspired the other residents to strip the town's fences of their pickets, in order to try the exciting new sport. Unfortunately, for those who fancy this yarn, Krohn's sensational inaugural run down Township Hill was said to have been in 1865, four years after the Sydney Morning Herald reported the first ski races held in Kiandra.

Five other people have been promoted at various times for the honor of having founded Australian skiing. The claims of the first three rest flimsily on family tradition and hearsay. They are Louis Elias Gottaas, a Norwegian seaman who jumped ship in Australia soon after gold was discovered at Bathurst in 1851 and

settled in the Kiandra area a few years later, a Norwegian-born timber cutter named Jems Olsen (later known as James Holston) who arrived in the Kiandra district in the late 1850s, and yet another Norwegian migrant named Amundsen, said to have been related to the explorer Roald Amundsen who, in 1911, became the first man to reach the South Pole.

The other two claimants can be considered a little more seriously. They are Carl Christian Torstensen Bjerknes and Soren Gregoriussen. Fragments of records in Norway show that both men were in Australia well before the Kiandra goldrush of 1859. As both were well-known in Norway for their skiing skill, it is reasonable to assume that if either found himself in snow country during winter he would have put his skill to good use.



Top: The Rodoy Man, a rock carving at Rodoy near Tjotta in Northern Norway, dates from the Stone Age almost 4000 years ago. It is the earliest evidence of skis being used in Norway. Above: Skiing in Australia: residents of Kiandra, New South Wales, photographed in 1898 at the annual Snow Shoe Carnival by Charles Kerry.

Whether or not either man did so prior to the widely-accepted date of 1861 has not been proven but, historian Jakob Vaage, curator of the famous Holmenkollen Ski Museum in Oslo, is convinced that at least one of them did. Unfortunately, Vaage's brief references to the subject in books, articles and letters show that he, too, is not sure which way to place his bets, favoring Bjerknes on some occasions and Gregoriussen on others.

Lacking conclusive proof, it seems unlikely that the identity of Australia's first skier will ever be known. But it is significant that all the claimants were Scandinavian and, if the legendary Bumpstone and Krohn are excluded, all came from Norway. Therefore, controversial though the subject may be, there is one thing on which you could safely bet your best ski boots: the founder of Australian skiing was a Norwegian.

Indeed, Norway can justly claim to be the home of skiing. While much of its skiing history is, like that of latter-day Kiandra, the stuff of which legends are made, there is proof more solid than mere folk-tales and songs that skiing in Norway dates back at least to the Stone Age. In 1933, a rock carving was discovered at Rodoy, near Tjotta in northern Norway, which shows a hunting scene featuring two men on skis. Scientists have determined that this carving is approximately 4000 years old.

Only one of the two skiing figures is intact but we know from looking at the Rodoy Man (as he is often called) that he was probably very skilled on his extremely long skis, since his bent knees and body position would be quite acceptable in most modern ski schools. His rabbit-like ears, on the other hand, have baffled people but scientists suggest they are the artist's interpretation of a Stone Age belief that the best hunters had a magical ability to assume the appearance of animals in order to stalk game.

Unfortunately, no trace has ever been found of the Rodoy Man's skis but a short, wide ski discovered by archaeologists at Hoting, in Sweden, is of similar vintage. There have been numerous finds in glaciers, Viking graves and bogs throughout Norway; a ski tip, 52 centimetres long, dug out of a bog at Ovrebo on the southern-most point of Norway and now in the Holmenkollen Ski



A drawing from a 1760 edition of Norse apic poetry depicts the winter god Ulli-

Museum, is approximately 2500 years old.

Of course, if you believe Norse mythology, the Rodoy Man and his hunting companions were not Norway's first skiers. That title was held by the winter god, Ullr and a beautiful goddess name Skade. Ullr, son of Odin, was said to have been so adept at skiing that no one could compete with him and Skade was obviously a very liberated lady for her times; apparently she was able to use a bow and arrow as well as ski, though whether she was able to do both at once, thus originating the sport of biathlon, is not clear.

Moving out of the realm of mythology, the first written references to skiing appeared in the early part of the sixth century, when the historians Procopius and Jordanes both mentioned skridfinnar. It has been suggested that the word means "sliding Finns" but the Norwegian skiing historian, Olav Bo, says that as skrida is the Old Norse word for "to go skiing", still in use throughout Norway, it suggests that skis and skiing were well-known to the Finns and the Norwegians.

Though generally depicted standing on the prow of a pirate galley, the sea-faring Vikings were equally at home on skis; documentary evidence shows that many of the Viking chieftains took great pride in their skiing achievements. It is known, for example, that Ragnvald, Earl of Orkney, introduced the sport to

Scotland in the ninth century. However, the Scots were unimpressed; it was not until this century, when an entrepreneur realized the tourist potential of the Cairngorm Mountains, that they took to skiing in any numbers.

There are a few scattered references to skiing in various parts of Europe during the Middle Ages but the practice apparently died out, and there have been no significant archaeological finds to substantiate it. In Norway, on the other hand, there has been an unbroken stream of writing from the time of Procopius, and many of the skiing heroes such as King Harald Hardrade, Young Heming, Trysil-Knut, Per Gynt and the Birkebeiner royalists, Skjelva and Skrukka, passed into legend. Though the name Per Gynt is the betterknown, thanks to the immortality bestowed upon him by the playwright Henrik Ibsen, perhaps the best-loved story is that of the Birkebeiner.

During the Norwegian civil wars of 1130 to 1240, when numerous pretenders struggled for the crown, one of the factions became known as the *Birkebeiner* or Birch-legs because, being mainly poor people on the run most of the time, they lived in the open and wrapped their feet in bark torn from birch trees.

In 1206, word came that the young Prince Haakon, whom the Birch-legs considered to be the rightful heir to the Norwegian throne, was to be murdered by the opposing faction. Torstein Skjelva and Skjervald Skrukka carried the 18 month-old prince to safety in an arduous, 56 kilometre journey from Lillehammer to Rena. He subsequently ascended the throne in 1217, as King Haakon IV Haakonson and reigned undisputed for 46 years over Norway, which was united at last.

The epic journey of the Birch-legs is commemorated annually with the Birkebeinerrennet (Birch-legs race) in which all participants carry a five kilogram pack representing the weight of the infant prince.

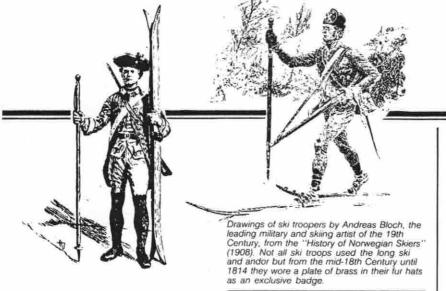
The Birch-legs' journey could be described as a military manoeuvre and the military use of skis has been significant in Norwegian history up to World War 2. According to some historians, a skirmish occurred in the middle of the ninth century in which civilians equipped with skis routed an invading army. Three and a half centuries later, in 1200, King Sverre used scouts on skis to help him win an important battle at Oslo.

However, for several centuries, there appears to have been a lull in the military use of skis by the Norwegians. The neighboring Swedes, on the other hand, continued to use skis for military purposes. The famous Vasaloppet race, held on the first Sunday of each March with about 10,000 skiers, commemorates an amazing 85.6 kilometre journey by the patriot king, Gustavus Vasa, from Mora to Salen in 1520, to rally supporters for a rebellion against the country's Danish overlords.

Needless to say, the Swedes often used skis in military forays against the Norwegians during the Scandinavian Wars which lasted from the 16th to the 19th century. Surpris-

The painting by Knud Bergslien, the Birkebeinerne (1898), is the best-known painting of skiers in Norway.





ingly, despite their long experience of skiing, the Norwegians often came off second best in these encounters. It was not until the early part of the 18th Century, when ski troops were organized on a formal basis, that the Norwegians regained their former superiority on skis. The first regular ski detachments were introduced into the Norwegian Army in 1742.

There is a belief in Australia that the Kiandra races of 1861 were the world's first downhill or alpine ski races. But this is not correct. Olav Bo says, that as early as 1792, the Norwegian Army was conducting regular skiing competitions which included downhill races in wooded country and downhill races "without riding one's stick to brake and without falling".

After the union with Sweden in 1814, the Norwegian ski troops were disbanded and for almost half a century, Norwegian skiing was at a standstill. This did not mean that no one skied. In a country snowbound for a large proportion of each year, rural settlers would have had to hibernate during the long winter season if they had not had skis. To make the best possible use of their equipment, young people were trained in skiing according to the

practical demands of the terrain in their region. This practical training was carried through in the hilly Telemark region of southern Norway, to include competitions in downhill skiing. The Telemark skiers subsequently dominated Norwegian skiing and started a new skiing tradition that spread right throughout the world.

The Telemark people competed in several different types of ski races including a slalom (a race run over particularly difficult terrain with only a slight resemblance to modern slalom), a kneikelam (an up-anddown race with a series of concave jumps down a steep hill for which, it was said, "a man needs good knees and lively skis") and later in the 19th Century, ski jumping. What distinguished the Telemark competitors in these events was that they believed a first-class skier should keep his skis so close together that no strip of snow showed between them.

Ski troops from Trondelag, Sweden, in training, advancing in three lines. Drawn by W Westall (1822), it illustrates the use of skis in military manoeuvres by Norway and Sweden.

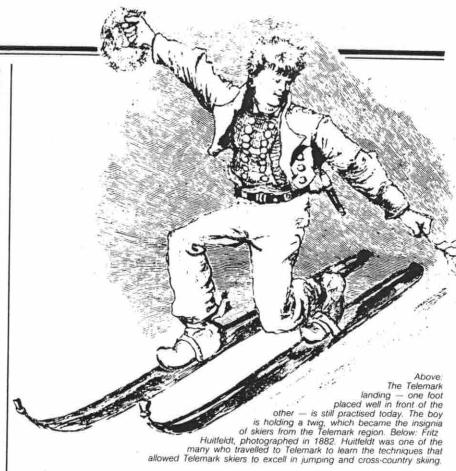


Another important contribution to the Telemark skiers' skill was, unlike most of their compatriots, they favored skis of equal length. These were especially suited to hilly, variable terrain and were easy to manoeuvre in any conditions. However, even this design left considerable room for improvement, and when a local named Sondre Nordheim devised a way of improving it, the scene was set for the skiers of Telemark to move into the national and international spotlight.

Sondre Nordheim was born in Morgedal in 1825 and, while still little more than a boy, had established a reputation throughout the Telemark region as an expert in the "daredevil races". At that time, most skis had nothing more than an osier toe-binding which functioned in the same way as the simple Kiandra kickdevised in Australia. problem with both was that during jumps or sharp turns, skier and ski tended to part company. irritated Nordheim so much that he set about solving the problem with a device so simple that it seems absurd no one had thought of it before: a heel band which held the whole foot firmly to the toe-piece in the same way as did the cable bindings worn by alpine and nordic skiers for several decades during the 20th Century.



Sondre Nordheim is considered the father of modern skiing. He introduced the stiff willow binding around the heel in 1850 and manufactured skis with concave sides, used as the model for skis throughout the world.

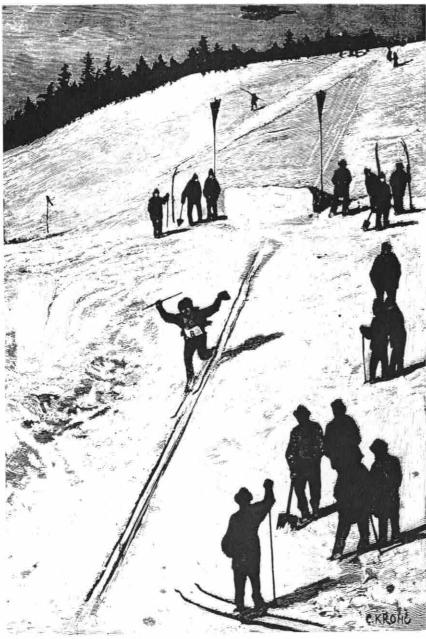


Having greatly improved the binding's efficiency, Nordheim then turned to the skis. He adapted the most common design and produced skis that resembled those used by the Kiandra pioneers. When combined with the new bindings, these skis were more manoeuvrable than their predecessors and enabled the Telemark skiers to perform more remarkable feats than before.

Though there was no doubt that the Telemark skiers were the pacesetters (even if the rest of the country was not yet aware of that fact), skiing as a sport was gaining favor in many other areas and, by the middle of the 19th Century, was well established throughout Norway as a competitive sport. Jumping, especially, proved to be a popular entertainment. By 1866, when the first major competitions were held in Oslo (then known as Christiania) several hundred skiers turned out to see the hero of the day, a tall, handsome young farmer named Elling Baekken, compete against the city slickers. Baekken won all events except the jumping "he had skied as well without a stick as anyone else with".

Cash prizes awarded at championship meetings were quite substantial





A Telemark skier depicted in the first Huseby competition in 1883, which became the Holmenkollen competitions in 1892. Drawing by Christian Krohg (1883).

and it was possibly this, as much as anything else, which motivated Sondre Nordheim — who was, after all, a poor crofter with a wife and several children to support — to compete in Oslo in 1868. He made the long journey to the capital on skis, accompanied by two young Morgedal farmers, Olav Drangstveit and Olav Bygland.

Elling Baekken was truly eclipsed this time as the three Telemark skiers swept all before them and created a sensation. Nordheim won first prize and, in a report for an Oslo newspaper, one spectator said, "There was something so outstanding about his skiing that one could not help thinking that for him this was the natural way to move . . . only when one has seen Sondre Ouversen Nordheim and recalls that he is now 43 years old, can one begin to imagine what could be achieved by a first-class skier in the flower of his youth."

Also watching on that memorable day in 1868 was a 17 year-old named Fritz Huitfeldt. He was very impressed by Sondre Nordheim's performance but less so by his equipment — revolutionary though it was at the time. Young Huitfeldt subsequently perfected the Telemark ski design and vastly improved upon Nordheim's binding. Patented in 1894, the Huitfeldt binding was, for several decades, the best available anywhere in the world.

After his startling debut in national skiing competitions, Sondre Nordheim starred in a number of competitive and exhibition events during the next decade. The Telemark skiers were courted by competition organizers, anxious to ensure the success of their projects by having the best skiers in the country take part.

In 1879, the first of the big annual ski meetings, which preceded the now famous Holmenkollen meetings, was held at Husebybakken just outside Oslo, in the presence of King Oscar 2 of Norway and Sweden, and Prince Hans of Denmark. On this occasion the Telemark skiers amazed the onlookers with performances in the jumping events and leading the Danish prince to remark to King Oscar, "It can't possibly be true! They're absolutely mad!"

One of the surprising aspects of the Telemark skiers' style was, like the best skiers in far-off Kiandra, they scorned the use of the long braking pole considered essential by most other skiers at that time. However, they still seemed to need something to hold, so they carried a twig in one hand and this became a club badge for the Telemark contingent.

The scene was described by English writer, Crichton Somerville, who lived in Norway for several years and in 1903 collaborated with E C Richardson on Ski-Running, the first skiing manual written in English:

"The Christianians rode their poles witches' broomstick style, making frantic efforts to check their speed — whereas the boys from Telemark, with nothing in their hands but a fir branch, swooped down the slope with ever-increasing impetus until, with a bound, they were in the air, clearing 76 feet or more with ease."

By this time, skiing had begun to

spread across the world. Norwegian seamen jumped ship in America when gold was discovered in the Sierra Nevada in 1848 and, at La Porte, Alturas, Onion Valley and other mining settlements, indulged in hair-raising schusses for big wagers. Some of them sailed for Australia when gold was found at Bathurst and they, and others who had jumped ship in Australian ports, eventually found their way to Kiandra in 1859 and 1860 — with the well-known results.

Meanwhile, alpine skiing had been introduced to Switzerland at Davos, Arosa and St Bernard in 1883. At first the new sport did not thrive but fate took a hand in the person of yet another Norwegian, Fridtjof Nansen, who captured the imagination of the world with a 500-kilometre journey across Greenland in 1888.

Nansen, who firmly believed in the value of skiing as a sport which would develop healthy souls as well as bodies, led a party which crossed southern Greenland from east to west. Throughout the 40-day journey, the men travelled on skis, dragging their sleds behind them. The book, Across Greenland, which Nansen published two years later, made his name and skiing known all over the world.

Nansen's wife, Eva, whom he married in late 1889, encouraged women to take up skiing as a sport. Country women had been skiing for generations, but only out of necessity; skiing for pleasure was deemed to be quite another matter. When the newly-wed Nansens skied across the Norefjell range to the northwest of Oslo, during the 1890 New Year holiday, Oslo society matrons were scandalized.

However, in spite of opposition, there were many young women who had formed ski clubs and arranged competitions, some even making so bold as to compete openly against men. When tongues started wagging about her, Eva Nansen came to the girl skiers' defence, stating publicly that the healthy outdoor life was far preferable to that of earlier days when girls "pale and miserable, went from one ballroom to another to be flirted with by blasé partners" and added, "Can anyone seriously try to maintain that ladies are going to become more immoral because they ski, even if they do ski with men?"

By this time, the principle of ski schools was more or less established. The first real ski school opened in Oslo in 1881 — admittedly for only a brief period — when some of the young Telemark skiers who had travelled to the capital for the Huseby competitions stayed on to teach the finer points of skiing to interested people. It is not known whether they charged a fee for their services but it is likely they did, as the Telemark men came from poor homes and the opportunity to earn money was always welcome.

By 1892, the Engadine area in eastern Switzerland was attracting a considerable number of winter sports enthusiasts although, at first, the visitors indulged in skating, tobogganing and sleigh-riding, rather than skiing. Then, an expatriate Norwegian named Odd Kjelsberg got the ball rolling by skiing down a small hill near Winterthur. Gradually, he gained a few disciples but some of them soon dropped out after being ridiculed by their friends. One of those who persevered was the creator of Sherlock Holmes, Sir Arthur Conan Dovle.

The early European skiers found

the very long, Norwegian-style skis and the Telemark technique difficult to use on the steeper slopes of the European Alps. An Austrian named Matthias Zdarsky decided to do something about it.

Practising alone in the mountains near his home at Lilienfeld, Zdarsky strove to develop improvements to the Norwegian skiing methods and equipment. By 1896, he had designed a fairly short ski, about 180 centimetres long, and patented the world's first metal binding. After considering the merits of using one pole or two, he settled on a single basketless pole which he called a "Lilienfeld lance without basket". Since the lance was also intended to serve as an avalanche probe, it was the object of much derision from some of Zdarsky's critics. Nevertheless, he enjoyed considerable success with the publication of the world's first book on skiing technique, Alpine (Lilienfelder) Skifahrtechnik Anleitung zum Selbstunterricht which translates as Alpine (Lilienfeld) Skiing Technique - A Guide to Self-Instruction.

After publication of his book, ski enthusiasts flocked to free lessons



A studio photograph of Fridtjof Nansen skiing, 1881.

given by Zdarsky every Sunday outside Vienna. Adopting a militarilyprecise method of teaching, Zdarsky schooled his devotees in snowploughs, stem, stem-Christianias and Telemark turns.

Several other people also were working on refinements of the Telemark technique and equipment. Not all of them agreed that Zdarsky had done it better than they and the differences of opinion were frequent and often acrimonious. On one occasion Colonel Georg Bilgeri, who had instructed Austrian alpine troops and evolved a skiing technique which included stem turns, with and without stocks, and Telemark turns, challenged Zdarsky to a duel. Fortunately honor was satisfied without either man suffering injury.

The Norwegians took no part in such vendettas. They thought the Lilienfeld technique was so absurd as to be beneath their notice. But people other than the peppery Colonel Bilgeri did take notice and for at least a decade after publication of Zdarsky's book, various enterprising in-

By the early 20th Century skiing had evolved to a popular sport. Photograph by Charles Kerry of the Snow Shoe Course, Kiandra, 1900. dividuals emerged with refinements of technique and equipment, which were described at the time as the ultimate in skiing technology. Fads came and went but one decisive step forward was the introduction of the stem-Christiania, first described by Carl J Luther, in the 1911 Leipzig Moderner Wintersport.

Within a year of Luther's report appearing in print, a young Austrian instructor from St Anton, Hannes Schneider, was seen on the slopes at Davos, endeavoring to do linked stem-Christianias in a strange, stooped posture which was quite different from the rather stately, upright stance required for the Telemark technique. Despite the oddity of this body position, few people paid much attention to him. However, after the interruption of World War 1 was over, Schneider and a colleague named Arnold Franck became the greatest skiing revolutionaries of all. They developed a "system of correct skiing and its application in alpine country" which they published in 1925, under the title, Wunder des Schneeschuhs. It became known as the Arlberg technique.

The introduction of the Arlberg

technique, with its emphasis on upunweighting, bent knees and pronounced rotation (later evolving into a thrust from the hips), did not prevent other experts from experimenting with technique and equipment. The French, in particular, evolved an extreme rotation style which retarded skiing for a while. But, it was the Arlberg technique which had the most permanent influence on skiing. Alpine skiers found they could handle steep slopes and tricky snow conditions that few would have dared try before and, although further improvements were made as time passed, there is no doubt the Arlberg technique was the basis of the methods now taught in modern ski schools.

By the early 20th Century, skiing had come a long way since the Rodoy Man hunted game with his long skis and magical rabbit ears. Modern skiers owe a huge debt to the Norwegians who, through the centuries, kept the sport alive and even today, dominate nordic skiing. But, with the advent of the Arlberg technique, the Norwegian domination of alpine skiing was broken and the pioneering days finally ended.

