

2023

PARA NORDIC SKIING  
WORLD  
CHAMPIONSHIPS

ÖSTERSUND



# EDITORIAL IDEAS



ÖSTER  
SUND 

## RESEARCH

### New Swedish-Norwegian study during the Para World Championships in Östersund

Researchers will investigate how factors such as terrain and track profile affects the performance of para-athletes in cross-country skiing and biathlon. During the World Championships the skiers will be equipped with sensors for various measurements.

Not much research has been done for para-athletes in cross-country skiing and biathlon, but the area is extremely interesting and important as there are many different factors and parameters to take in consideration.

- We hope that our research will provide increased knowledge about what is required and contribute to the development of the athletes, says David Sundström, researcher at the Sports Tech Research Centre at Mid Sweden University.

During the World Championships the athlete's position and acceleration are measured along the entire course and can show facts on speed and how the different terrains affect the athletes in different ways. In addition, the skier is weighed using a snow-covered scaled that is placed in the warm up area to be able to estimate the impact of external forces.

**Contact:** David Sundström, Sports Tech Research Centre, Mid Sweden University in Östersund  
[david.sundstrom@miun.se](mailto:david.sundstrom@miun.se) + 46 10-142 86 94.

### Unique tests are carried out with a digital guide for para-athletes

During the World Championships tests will be carried out with digital companions for visually impaired athletes. The tests are a part of a research project conducted at the Mid Sweden University by researchers at the Sports Tech Research Centre and the National Winter Sports Centre. The skiers will be equipped with a digital device/guide that guides athletes with a visual impairment by emitting sound signals. The technology is developed by Nordic Evaluation and is being evaluated within the research project.

For media there will be an opportunity to follow the tests on Friday 20 January at about 10.30 at the ski tracks in Remont-hagen, Stuguvägen. On Saturday 21 January there will also be tests for alpine skiing conducted at Ladängen Ski slope at 10.30.

Test will also be conducted Monday and Tuesday 23 and 24 January between 09 and 12 AM. Meet up point at the wax cabins at the ski stadium.

**Contact:** Jonas Danvind, parasport coordinator at Mid Sweden University  
[Jonas.danvind@miun.se](mailto:Jonas.danvind@miun.se) +46 70-332 33 56

### Number One in Sweden in Sports Science

The National Winter Sports Centre (NVC) at Mid Sweden University is ranked among the world's 100 best universities regarding Sports Science by the prestigious, internationally acknowledged Shanghai Ranking (ranking of universities).

The Shanghai Ranking recently published a list of the world's top universities and departments in sports relations in 2022. NVC was ranked as the only Swedish institution among the top 100.

- We see this as proof that the NVC conducts sports research of exceptionally good quality, even though we are quite a small unit. It shows that our research environment makes it possible to deliver world-leading research, says Glenn Björklund, head of National Winter Sports Centre.

**Contact:** Glenn Björklund, National Winter Sports Centre  
[glenn.bjorklund@miun.se](mailto:glenn.bjorklund@miun.se) +46 70-337 01 60



## PARASPORT FOR EVERYONE

**Parasport for elite athletes is growing in Östersund. But the City of Östersund strives to make parasport accessible for everyone. Sustainability and inclusion are cornerstones of the City's strategies to consciously invest in parasport for everyone. Some examples of inclusive sports are:**

### **Ski Club ÖSK (Östersund Skidårkarklubb)**

ÖSK is Sweden's first and largest cross country ski club for children with intellectual disabilities. There are now 20 active athletes. ÖSK has two training groups, one for adults and one for children and youths aged 7-14 years. Both groups train once a week and their core values are joy, friendship and development.

**Contact:** Richard Söderlund, +46 70-973 63 42.

### **Happy Hoops Östersund**

Happy Hoops plays in the Basketball Special League, Sweden's highest league for people with intellectual disabilities. The team has trained twice a week for seven years. The team travels and plays basketball cups in other places in Sweden – the players' highlights of the year.

**Contact:** Viktoria Winberg, Coach, +46 70-316 16 77

### **Enhanced Accessibility at Östersund's Ski Stadium**

The most used ski track in the Östersund Ski Stadium is now accessible for sit skiers in winter, and for roller sit skis in the summer. There are disabled parking spaces right next to the track. Thanks to our snow system, we can ensure an early start and a long season in our system of ski tracks.

**Contact:** Göran Matzén, +46 76-836 45 43

## VIABLE CITIES

### **Östersund a Climate Neutral City 2030**

Östersund is one of 23 Swedish cities that are part of the Viable cities program Climate Neutral Cities 2030. The mission of this program is to accelerate the work towards climate neutrality with a good life for all within planetary boundaries. The Climate City Contract is one of the most central tools in achieving the mission. Östersund recently signed their first version of the contract with six national government agencies, mapping out the road ahead.

**Contact:** Caroline Hildahl, local project manager, +46 76-117 42 40

## SUSTAINABLE BUSINESS INITIATIVES

**- "I think there are few municipalities of our size that have as much going on as Östersund has right now", says Fredric Kilander, Head of Business Administration at Östersund Municipality. Among the investments, a couple of sustainable investments stand out:**

**Synsam Group**, Sweden's largest optician chain, has moved its eyeglass production home from Asia to Sweden. The company now has a brand new factory and innovation center in Östersund.

**Woolpower**. Manufactures warm undergarment and reinforcement garments. They differ from most of the clothing industry having all production in Östersund. The company has just opened a new modern factory.

**Contact:** Fredric Kilander, +46 73-074 50 24



## CULTURE & HISTORY

### Nordic Nature at Jamtli National Museum

Jamtli National Museum is a branch of the National Museum in Stockholm. The current exhibition displays "Ideal and reality - Nordic nature" - how the Nordic nature is depicted in art and crafts from the 17th century onwards. During different eras, nature has been perceived as a source of beauty experiences, as an object of research and as an identity-creating.

The museum is also opened Wednesday evenings until 20.30

**Contact:** Christina Wistman, Assistant Museum Director, +46 70-249 19 93

### Överhogdalsbonaderna Viking Tapestries – Europe´s oldest pictorial tapestries at Jamtli Museum

One of the most remarkable Viking-age objects found in Jämtland and Härjedalen is the Överhogdalsbonaderna – woven textiles containing motives and symbols from both the Norse mythology and the entry of Christianity. Through C14-dating it has been concluded that the tapestries were made some time between 1040 and 1170, which makes them the oldest tapestries in Europe found above ground. The tapestries are now on show at Jamtli, Jämtland's county museum.

The museum is also opened Wednesday evenings until 20.30

[www.jamtli.com/en/exhibitions/overhogdalsbonaderna](http://www.jamtli.com/en/exhibitions/overhogdalsbonaderna)

**Contact:** Christina Wistman, Assistant Museum Director, +46 70-249 19 93

### The Great Lake Monster – one of the most famous inhabitants of Jämtland

The first known written recording concerning a monster in Lake Storsjön dates back to 1635. Today there are more than 200 documented witness accounts from more than 500 people that have seen the Great Lake Monster. All documentation has now been collated at Jamtli, the Jämtland county museum, which also exhibits trapping equipment that was used at the end of the 19th century when a company was created to capture the Great Lake Monster.

**More information at:**

[www.jamtli.com/fasta/storsjoodjuret](http://www.jamtli.com/fasta/storsjoodjuret)

### Birger – The Great Lake Monster´s cub and the official mascot of the World Para Nordic Skiing Championships

Birger is a small lake monster that lives deep down in Lake Storsjön with his dad and his friend, Yellow Fish. Birger loves to eat cake, go on treasure hunts and tickle swimmers on their feet. The first book about Birger was released in 2008, and since then, another seven books (3 released in English), a puzzle book and a cuddly toy have been added to the series. The books have been very successful and received glowing reviews. Today Birger is active on Facebook and Instagram. Birger is also the official mascot of the World Para Nordic Skiing Championships.

**More information at:**

[www.nestorville.se/forlag](http://www.nestorville.se/forlag)

[facebook.com/storsjobirger](https://facebook.com/storsjobirger)

[instagram.com/birger\\_storsjoodjuret](https://instagram.com/birger_storsjoodjuret)



## EVERYDAY LIFE

### Cold water swimming

Going for a dip in a frozen lake is the trendiest thing ever. Cold-water swimming is said to make us happier, healthier and exhilarated. What happens in your body is actually a cold-shock response. When you lower yourself into the water your blood vessels contract, your pulse goes up and your blood pressure rises. The stress reaction gives you an endorphin high, which is why ice-bathers often feel enthusiastic and energized afterwards.

At Surfbukten in central Östersund, winter swimmers gather daily to take a dip through the maintained hole in the ice. At Vinterparken in the harbour area a sauna, hot tub and hole in the ice is provided to the general public twice a week.

**Contact:** Östersund Vinterbadare Facebook group

### Aurora Borealis

The natural phenomenon, the Northern Lights, has always intrigued and inspired, and sometimes even scared man. Experiencing a really powerful display of Northern Lights takes both patience and a little luck. Up here in Northern Sweden, the best chances of spotting the Northern Lights come during clear nights from September to March, when the sky is at its darkest. If you want to keep your eye on the forecast to see the light, there are lots of different apps and websites available. Search for "aurora forecast" in your app store. You can also go to [spacewahterlive.com](http://spacewahterlive.com) for more detailed forecasts.

The best way to see or photograph the Northern Lights is to find a place with a somewhat dark horizon to the north, with no disturbing lights.

Places for Northern Lights spotting near Östersund: Bynäset and Stocke Titt at Frösön.

Photography tips from Astro Photographer Göran Strand:

A camera with manual exposure settings, a tripod and a wide-angle lens (14-20 mm), exposure times of 5-20 seconds at ISO 1600-3200, depending on the brightness and activity, warm clothes

## FOOD & BEVERAGE

### Sav - a unique, sparkling beverage produced in Östersund

Since time immemorial, birch sap has been used as an important nutritional supplement. The birch trees absorb the mineral-rich waters from the bottom of Lake Storsjön when the ground frost thaws in spring. The trees convert the liquid to sap that can be tapped from the tree and later drunk.

Based on an original recipe from 1785, Peter Mosten has converted the liquid into a unique sparkling drink that cannot be found anywhere else in the world. Sparkling Sav is made according to the "méthode traditionnelle" of champagne and is stored on its lees for a year before being released on the market. Peter Mosten, who is an eco-engineer, happened upon the old recipe for birch champagne in an archive, and after years of hard work and exploding bottles he has established his product on the global market.

**Contact:** Peter Mosten, +46 70-321 81 92  
[savhuset.se/index.php/en/](http://savhuset.se/index.php/en/)

### The Swedish Semla

February 21st Sweden celebrate Fettisdagen (Shrove Tuesday), but already from New Year and onwards we Swedes eat more than 40 million semlor (from New Years to Easter)

The Swedish semla, or Shrovetide bun, is a custom that dates back to the Middle Ages. Sweden was a catholic country before the reformation, and ahead of Lent people ate and drank heartily. It was important to build up stocks of energy before fasting. The custom of the Shrovetide bun came from Germany and spread to Sweden during the 17th century, but in the beginning only the richest people could afford such a bun made from white flour and sugar.

Our modern version, filled with cream and almond paste, did not become commonplace until the period between the two world wars. The semla is a bun made from wheat flour, milk, butter, sugar, yeast and cardamom. The bun is split into two halves. Marzipan is piped onto the bottom half of the bun and whipped cream goes around it. The lid or top part of the bun is placed on top of the cream with a sprinkling of icing sugar dusted on top. The Swedish king, Adolf Fredrik, is said to have died from over consumption of these buns.

Make sure not to miss out on this typical Swedish dish while in Sweden!



## UPCOMING MAJOR EVENTS Q1 2022

### Arctic Cat Cup 21- 22 January

Arctic Cat Cup is Europe's largest snowmobile cross competition, celebrating it's the 50th anniversary. This year the competitions take place, for the first time, at Östersund's Motorstadion on a brand new course for snow mobiles. Arctic Cat Cup is a competition with an extremely high status within snowcross and the competition attracts the best drivers from all over Europe. It is also a competition that is open to everyone, which means that it is the only time in the season when the best and the amateurs can compete in the same heat.

**Contact:** Roger Strandberg, +46 70-623 53 59

### Östersund Winter Sports Camp 18-26 February

Winter Sports Camp in Östersund offers training for young athletes, sports clubs and para-athletes looking for an active week during the Swedish winter holiday break (18-26 Feb).

During the week, well-known coaches, and former elite skiers such as Helena Ekholm, Britta Johansson Norgren, Viktor Thorn, Torsten Stenersen and others, will give qualified training sessions. In addition, lectures on sustainable sports are arranged and various social events. Sports to choose from are cross-country skiing, biathlon, figure skating, curling, ski-cross and alpine skiing.

**Contact:** Kjell Lundberg, Östersund Winter Sports Camp, +46 70-325 40 73

### Nordic Youth Games 24-26 February

The Nordic Youth Games was organized for the first time in 2017 for young athletes from 8-16 years. 2022 there were twelve sports and more than 2 200 starters from all over Sweden and this winter we have added three more sports. This winter, everything starts on February 24 with a cross-country sprint on the towns square, Stortorget, where a ski arena is being built for cross country, biathlon, free ski and snowboard. Participating sports are: cross country skiing, biathlon, downhill skiing, ski cross, snowboard, free skiing, figure skating, ice hockey, ice skating, track and field, tennis, curling, padel and air rifle shooting.

**Contact:** Kjell Lundberg, Nordiska Ungdomsspelen, +46 70-325 40 73

### BMW IBU World Cup Biathlon 9-12 March

During three days in March the world's best biathletes will gather in Östersund to compete for some of the last remaining World Cup points this season in Individual, Relay and Mass Start competitions.

- 9 March 13.15 Individual Women, 16.20 Individual Men
- 11 March 14.00 Relay Women, 16.30 Relay Men
- 12 March 13.00 Mass Start Women, 15.45 Mass Start Men

**Contact:** Victor Agestam, Svenska Skidskytteförbundet, +46 767-84 94 85

## FOR MORE INFO AND QUESTIONS:

Meet us at the Visit Östersund Info Pop Up stand at Östersund Ski Stadium 20-22 January or call Elisabeth Richardsson, Media Manager, Destination Östersund +46-70-221 22 36

**FREE ÖSTERSUND PICTURES / MOVIE CLIPS ON  
[WWW.OSTERSUNDSPULSEN.SE](http://WWW.OSTERSUNDSPULSEN.SE)**

