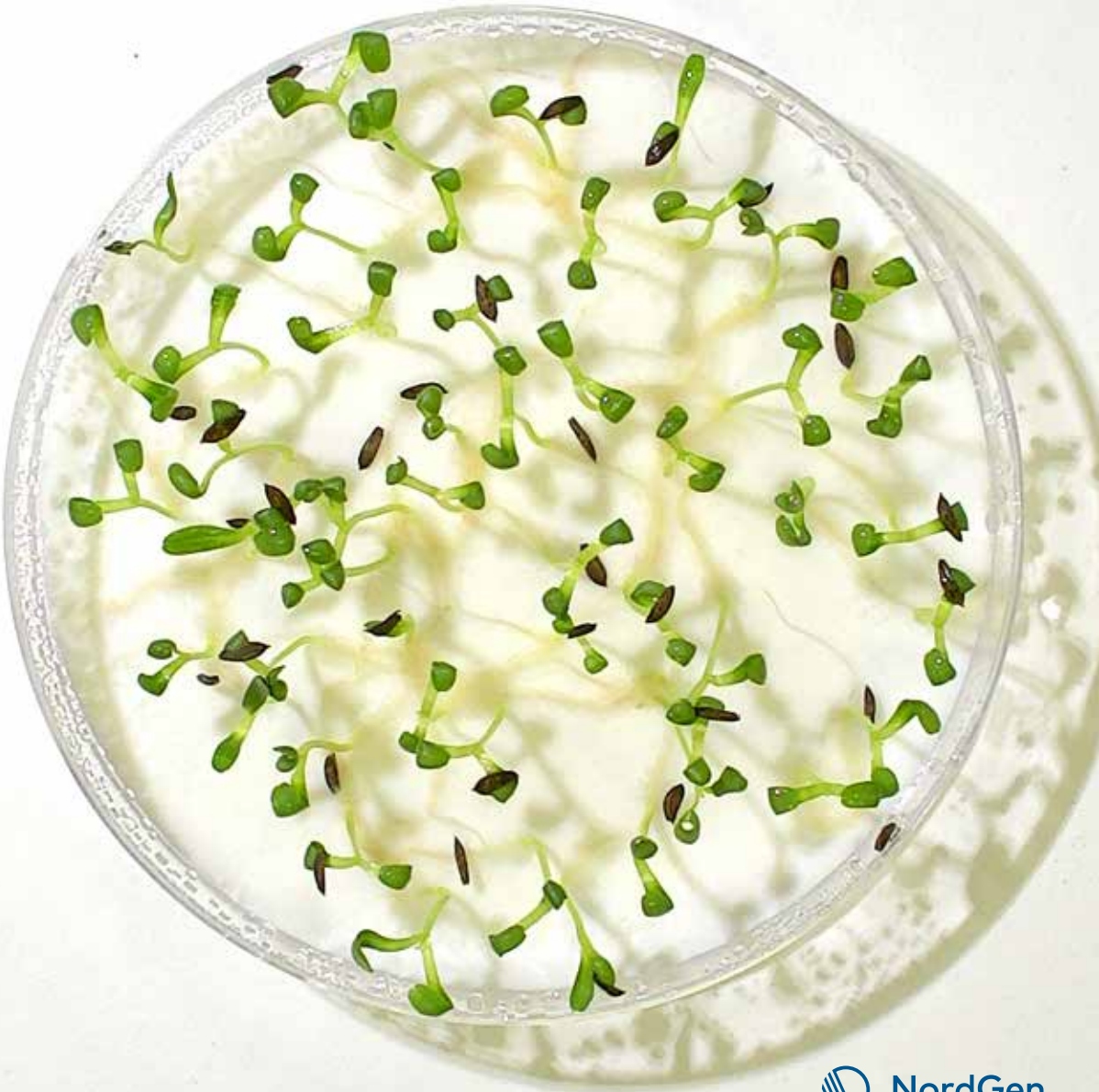


NORDIC COOPERATION ON GENETIC RESOURCES

- WHAT'S THE POINT?



Nordic Cooperation on Genetic Resources
- What's the Point?

Front page: Germination test of salad seeds on agar plate.

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NordGen - Nordic Genetic Resource Center - is a Nordic institution dedicated to conservating and facilitating the sustainable use of the genetic resources of our plants, forests and farm animals in the Nordic countries.

We work on behalf of the Nordic population, through the Nordic Council of Ministers, to fulfill the international agreements signed by each country, committing them to preserve genetic and biological diversity. As a gene bank we are closely linked to UN:s goal 2.5 for sustainable development.

Additionally, NordGen, along with our partners, are responsible for Svalbard Global Seed Vault which is a long-term back-up layer, securing plant genetic resources from gene banks all over the world.



WE WORK ON BEHALF OF FUTURE GENERATIONS

- BUT MAKE A DIFFERENCE EVERY DAY

ONE SEED. It's so small, but still contains so much. I never cease to fascinate of how a seed, given the right conditions, can grow from a state of seemingly dead to a tasty vegetable or a mighty tree.

SEEDS CARRY in their genes information that regulate if they are to become a crop with resistance to unknown diseases or if it's a tree thriving in a future warmer and wetter climate. This information is absolutely essential for our future food security.

THE GENETIC RESOURCES that surrounds us as crops, forests and farm animals are exactly that – resources. It's a treasure the nature offers us to safeguard. If we do it well, we secure that our children and grandchildren also are able to eat, keep warm and enjoy the biological diversity around us.

NORDGEN HAS BEEN GIVEN the prestigious, but also extremely demanding, responsibility to not only preserve, but also to facilitate the use of our genetic resources in the Nordic countries. This is important, since the genetic resources, just as any other natural resources, have an immeasurable potential of promoting a sustainable development as well as creating economic growth.

ALTHOUGH NORDGEN work for future generations, we are immensely important today as well. We send seed samples from our collections to researchers in all parts of the world. We help companies to develop pioneering products. We bring people together in networks where new ideas and cooperations are born.

On the following pages we will give you a few examples of visible and distinct change in the society which we have contributed to.

READ – AND BE PROUD!

Be proud to live in the Nordic countries, where we cooperate over the national borders in fundamental issues – both today and for the future!



Lise Lykke Steffensen
CEO, NORDGEN



OLD VARIETIES OF BARLEY FLAVOUR NEW KINDS OF BEER

IT ALL STARTED WITH A DARK CELLAR BEING CLEANED OUT IN THE PREMISES OF CARLSBERG. IN A DUSTY CONTAINER, A BOTTLED TREASURE WAS FOUND – A NEARLY 150-YEAR-OLD BEER WITH YEAST CELLS STILL ALIVE. NORDGEN DELIVERED BARLEY FROM THE SAME YEAR AND THE BEER “CARLSBERG 1883” WAS BORN.

Small seeds, easily broken ears and lack of frost hardiness. Compared to our modern barley, the old variety Gammel Dansk wasn't anything to cheer about. However, in the end of the 19th century, it was popular and actually grown all over Denmark before it was ousted by other more efficient varieties. Almost 150 years later, NordGen went through its cereal collections and gave a sample of Gammel Dansk to the large beer producer Carlsberg.

– We wanted to create a historical beer which was as authentic as could be. When we found the old yeast cells in our cellar, we turned to NordGen and asked for barley from this time. We got a sample and propagated it in Denmark and New Zealand to get enough barley to brew the beer, says Erik Lund, Head Brewer at Carlsberg Research Laboratory



To develop the beer Carlsberg 1883, Carlsberg Research Laboratory used the same ingredients, recipe and brewing techniques as in the end of the 19th century. When it was launched commercially in 2017, it was the first new, alcoholic beer Carlsberg released in more than 20 years.

– But without the collections of NordGen we hadn't been able to brew the beer as authentically as we wanted and also wouldn't been able to tell the same history of its origin, Erik Lund says.



BITTER MEDICINE: OLDER SORTS VEGETABLES ARE GOOD FOR YOU

OK, THIS MIGHT NOT BE WHAT YOU WANT TO HEAR: BUT YOU NEED TO EAT COARSE VEGETABLES. PREFERABLY THE VARIETIES GROWN A LONG TIME AGO AS THEY ARE GOOD FOR YOUR HEALTH. IN OTHER WORDS, NORDGEN HOLDS A POWERFUL POTENTIAL TOOL FOR IMPROVING THE PUBLIC HEALTH IN OUR COLLECTION OF SEEDS.

Research shows that many of the vegetables grown years ago, often have a bitterer taste but in return have many positive effects on your health.

– These bitter taste substances are the vegetable’s natural protection against insects but have often disappeared in the breeding for a higher yield and sweeter taste. But for us humans the substances seem to have positive effects that might be protect against type 2-diabetes. There are also some signs that they could decrease the risk of evolving cardiovascular diseases and different kinds of cancer, says Hanne Lakkenborg Kristensen, research group leader at Århus University.

Her and her colleagues’ research project, MaxVeg, ran from 2010 to 2015. Now the project has taken the next step. In cooperation with, amongst others, the food deliverer Årstiderna, the vegetable grower Månsson Øko Aps and Randers Region Hospital, the old varieties are to reach a wider audience. But also smaller vegetable growers see the economic potential in marketing vegetables which have the same effects as pills on prescription. One of them is Knifholt Naturbrug who got seeds from NordGen in 2015.

– We would love to grow these old varieties to an even larger extent than we do today, but our problem is that we can’t find the larger quantities needed. None of the larger seed companies have them in their assortment today. On the contrary, we see that fewer and fewer vegetable varieties are grown today. That’s why NordGen play such an important part when they’re preserving vegetable seeds for the future, John Mathiasen at Knifholt Naturbrug says.

There are other advantages. Many job opportunities would arise if we ate more coarse vegetables and the cost for treating diabetes type 2 only in Denmark would decrease with 1 billion Danish kronor each year. These old vegetables are also particularly suitable for ecological farming, leading to gains in for both the public health and the environment.



STUBBORN AND ENDANGERED – BUT READY FOR A COMEBACK

THE FAROE PONY IS ONE OF THE MOST ENDANGERED HORSE BREEDS IN THE WORLD. TODAY, ONLY 85 INDIVIDUALS REMAIN BUT AN INTENSE WORK IS BEING DONE FOR SAVING THIS STRONG, STUBBORN BREED WHICH LOOKS A LOT LIKE THE ISLANDIC HORSE.

The slaughterer was booked. The last Faroe Pony of the world was to be killed. But in the last minute, a farmer took pity on the horse and brought it home. Thanks to that whim, we today have a good chance of saving the Faroe Pony from extinction.

– Today we have 85 horses, all of them here at the Faroe Islands. We need to reach 200 breeding animals before we can relax but the future of the Faroe Pony finally looks quite bright, says Dorthea Joensen, who keep ten horses at her farm Signabøgarður.



One reason to why the future for the Faroe Pony looks bright again is that NordGen has contributed with advice and analysis for sustainable breeding as well as a long-term strategy for how to save the breed.

– We also use the data program EVA, designed by NordGen, to chart the genetics of the horses and avoid inbreeding. I would say that its largely thanks to the efforts of NordGen that the future of the Faroe Pony looks so bright today, says Trondur Levinson, director at the Agriculture Agency of the Faroe Islands.



The Faroe Pony haven't always been threatened. In the middle of the 19th century there were more than 800 horses on the Faroe Islands. But the industrial revolution led to more advanced and heavier farming machines which had to be drawn by stronger horses. So stronger horses were imported from Norway, whereas the Faroe Ponies were exported to England.

– They were used in the coal mines. Since they're small but still strong and stubborn they were well suited for the work there. And the farmers were well paid, sometimes they got more than a month's pay for one horse, says Dorthea Joensen.

Today, she tries to get her Faroe Ponies to pull a carriage - an activity she hopes will be appealing to the growing tourism sector. So don't miss a ride with the breed that was only a whim away from extinction, next time you visit the Faroe Islands!



NORDGEN'S CARROTS BRING US MORE NATURAL FOOD

A LARGE PART OF THE GROCERIES WE BUY CONTAIN COLORANTS. THEY MAKE US FIND THE FOOD TASTIER. BUT MANY COLORANTS ARE PRODUCED SYNTHETICALLY ALTHOUGH THE DEMAND FOR NATURAL ONES IS HIGH.

Chr. Hansen is a Danish company producing colorants. In a project they now cooperate with Copenhagen University to find new carrot varieties with such strong pigment that it can be extracted to produce natural colorants.

– Commercial varieties of carrots only have a limited amount of carotene, about 0,0015%. But in NordGen's collections we have found important genetic resources that can be used to develop new varieties with a higher content, says Bjarne Joernsgaard, Crop Science Manager at Chr. Hansen Natural Colors, who is performing field trials in the picture to your left.

In the project, orange and purple carrots from NordGen's collections are used. And it is evident that natural colorants is preferred by both consumers and producers.

– Synthetic colorants are cheap to produce in large quantities and are often more stable than most of the natural colorants. But although there are synthetic colorants that are perfectly harmless, there is an ever-present discussion of whether some of the substances in our food could be allergenic or in other ways bad for our health. Therefore, there has been a growing interest to replace the synthetic colorants with natural ones based on juice concentrate from fruit and vegetables, says Sabine K. Clausen, post-doc at Copenhagen University and responsible for the research project.



The orange carrot is actually quite a new invention. It was developed in the 18th century in the Netherlands but had an immediate success as it reached the Nordic countries. Today, NordGen keep seeds of more than 100 different carrots of various colours. And some of them are now used to develop more natural food.

– This is a perfect example of how important it is that NordGen keep a broad collection. No one could have foreseen that we could make use of these characteristics, but without NordGen's work they would be lost forever, says Bjarne Joernsgaard.



THE FARMER'S BREAD FROM GÅRDENS GODA IN ISGÄRDE, ÖLAND:

50 grams yeast
1,4 liters Ölandswheat
0,5 liters milk
1 teaspoon salt
1 tablespoon oil/ 25 g butter
0,5 deciliter honey or syrup.

Crumble the yeast into a bowl and add the heated milk (about 37 degrees C). Add the rest of the ingredients. Work the dough for about 10 minutes and let it rest for 20 minutes. Divide the dough in 4 parts and make 4 flat cakes. Let rest for at least another 20 minutes. Bake for 20 minutes in the oven at 200 degrees.

www.gardensgoda.se

FORGOTTEN WHEAT IS YUMMY FOR ALL BREAD LOVER'S TUMMY

SOFT, SAVORY AND WONDERFUL TO BAKE WITH. BREAD LOVERS ARE SINGING PRAISE TO ÖLANDSWHEAT, THIS FORGOTTEN, LOW -YIELD WHEAT VARIETY THAT NOW IS EXPERIENCING A RENAISSANCE.

It all started in 1995 when the plant breeder and researcher Hans Larsson fetched seed samples from different old cereal varieties in NordGen's collection. He sowed the seeds, harvested and ground them before he baked bread with the flower. His love to the older cereal varieties was instant and ready to be shared.



–The Ölandswheat first became popular in Denmark. Then a TV-chef used it for baking in Sweden and the trend spread there as well. I think it's the taste of it that makes it so popular, Hans Larsson says.

Today, the love of the formerly forgotten wheat is greater than ever. Christine Heger is one of its many vivid supporters.

– I am very fond of Ölandswheat. With Ölandswheat the dough gets a lovely elasticity and the loafs a nice volume. I also like the taste of it, which is somewhat nutty and sweet, says Christine Heger who is the owner of Bröd och Kvarn, a company that evolves around flower in different ways. Through it, Christine sells small kitchen mills, write books and keep a blog as well as lead baking courses.



Ölandswheat was commonly grown until the beginning of the 20th century when the wheat breeding focused much on increasing the yield. But while chasing larger yields, many other important characteristics disappeared, such as the high protein content found in Ölandswheat. The wheat variety is also well suited for ecological farming as the straws are tall, which makes it difficult for weed to grow in the field.

–The older cereal varieties contain larger amounts of minerals and antioxidants, says Hans Larsson and Christine Heger adds that many find that they feel better when they're eating the older varieties rather than the modern, white flower.

Ölandswheat is today expensive to buy and used in the finest bakeries. Among other places, it's served at New York Central as well as exported to Germany. Not too bad for an old forgotten wheat variety that once only existed at NordGen.



AT THE seed orchard in the northern parts of Iceland, Siberian larch is planted on the left hand side and European larch is planted on the right hand side.

WHEN THEY have been cross pollinated by hand they form a hybrid larch, called HRYMUR, which thrive in the Icelandic climate with cool summers and mild winters.

ANCIENT GIANT HRYMUR MIGHT BE THE FUTURE FOR ICELAND

A COLD, OPEN LANDSCAPE WITHOUT TREES. THOUSANDS OF GRAZING SHEEP AND AN OCEAN THAT SLOWLY EATS INTO THE LAND. ON ICELAND, THE AIM IS TO INCREASE THE FOREST COVERED AREA. NORDGEN CONTRIBUTE WITH A MEETING ARENA WHERE THE NORDIC COUNTRIES EXCHANGE KNOWLEDGE AND CONTACTS.

When settlers came to Iceland from Norway some 1 100 years ago, about one quarter of the country was covered of forests. But with the settlers came grazing cattle and the need for fire wood. That lead to that the forests only covered 1% of the land area in the 1950's. Today, many people are committed to increase the forests on Iceland again. But how is one to find a tree that thrive in a country that haven't had any forests for several hundred years? The answer might be found in a greenhouse in Akureyri, on the north coast of Iceland.

– In here we have planted Siberian larch on one side and European larch on the other side. The trees are crossed by hand and form a hybrid larch, which we call Hrymur after an ancient giant in the Icelandic saga. This variety of larch does very well in Iceland, much better than its parents, says þróstur Eysteinnsson, director of Icelandic Forest Service.



One of the reasons why it's important to plant forests in Iceland is the problems with erosion. But there are other reasons as well. Many of us probably remember the chaos Eyjafjallajökull's volcanic eruption in 2010 caused in the flight traffic. In Iceland one must count on volcanic eruptions every third year. The ash that cover the ground during the eruptions are devastating for all vegetation, except trees. Forests thereby has an important role to play in Iceland, but there are few people working in the sector.

– That's why the co-operation with NordGen is so very important. The contacts we make and the knowledge we share with the other Nordic countries is absolutely decisive for us to reach our goal of increasing the forest-covered areas and manage to get the erosion under control, says Árni Bragason, director at Soil Conservation Service of Iceland.





TASTY PEA FRITTERS:

(4 portions)

100 g polenta

1 egg

2 table spoons of water

175 g frozen peas

1 table spoon lemon juice

1 tea spoon sambal oelek

2 table spoons oil

salt and pepper

Mix all the ingredients.

Form fritters and fry on medium heat for 3-4 minutes on each side.

MIDNIGHT SUN PEAS BECOMES A PROTEIN SOURCE TO COUNT ON

THE PLANTS IN THE NORDICS HAVE SUPER POWERS DEVELOPED DURING HUNDREDS OF YEARS OF GENETIC SELECTION. THEY CAN SURVIVE LONG, DARK WINTERS AND FLOWER WITHOUT BEING STRESSED BY THE BRIGHT SUMMER NIGHTS. THESE PROPERTIES ARE VITAL WHEN WE TRY TO FIND OUR FUTURE PROTEIN SOURCES.

Most of us are probably aware that meat isn't the most climate friendly thing you can eat. But we still need to eat protein in some shape. In the project "Artic Peas" NordGen is trying to find peas that thrive at the northernmost latitudes, where the sun shines all night long during the summers.

– Peas are a good source of protein that can replace a large part of the meat we eat today. And with a warmer climate in the future the northernmost places in the Nordic will be able to grow vegetables in a way that isn't done today. To meet the demands, it's important that we know which varieties that work well in the long, bright summer nights there, says Ulrika Carlson-Nilsson, Senior Scientist at NordGen.



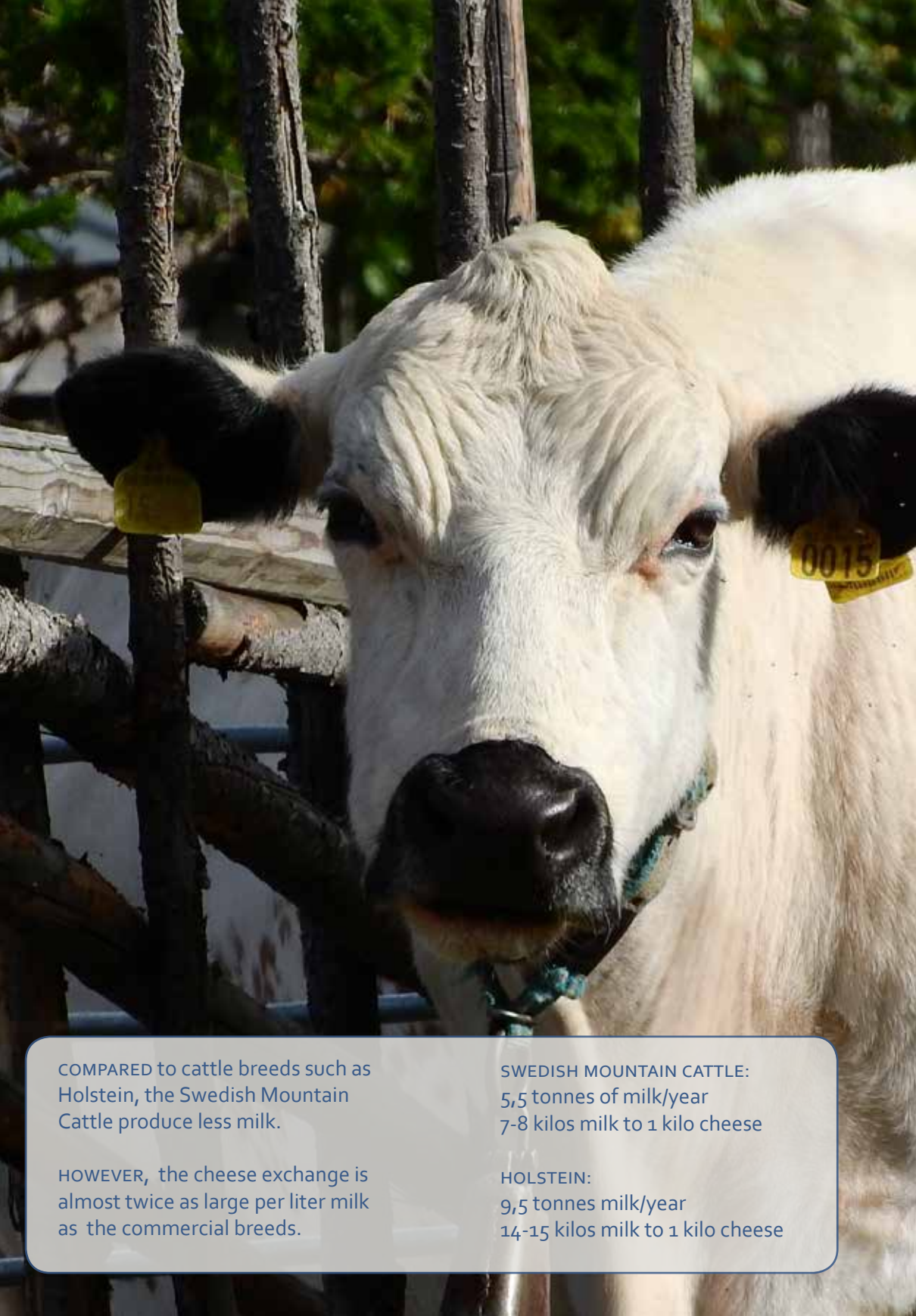
Although NordGen does some research, a large part of our work includes to deliver plant material to external researchers, making them able to develop new and better solutions to the challenges we encounter. One example of that is Copen-hagen University, that has been given samples of 300 kinds of peas from NordGen.

– Old pea varieties can contribute to the modern agriculture in many different ways. In these peas we can, apart from a high protein content, find a robustness towards weather and wind as well as resistance to different diseases, says professor Søren K. Rasmussen.



NordGen has also delivered peas to the EU-project "Protein2Food" which aim to find and develop new sorts of prtein sources. The vision of the project is to find innovative, high quality and protein-rich crops to maintain the health of humans, the environment and the biological diversity. The aim is to increase the protein production from plants in Europe with 25%, among other things, through plant breeding.

That sums up to lots of tasty pea fritters.



COMPARED to cattle breeds such as Holstein, the Swedish Mountain Cattle produce less milk.

HOWEVER, the cheese exchange is almost twice as large per liter milk as the commercial breeds.

SWEDISH MOUNTAIN CATTLE:
5,5 tonnes of milk/year
7-8 kilos milk to 1 kilo cheese

HOLSTEIN:
9,5 tonnes milk/year
14-15 kilos milk to 1 kilo cheese

THIS CATTLE BREED IS NEARLY EXTINCT BUT YOU CAN HELP IT

ONCE, THEY WERE A COMMON SIGHT IN THE FINNISH AND SWEDISH LANDSCAPES. THE WHITE, BEAUTIFUL CATTLE WHICH RETURNED BY ITSELF TO THE FARM AT NIGHT. BUT BOTH NORTHERN FINNCATTLE AND SWEDISH MOUNTAIN CATTLE ARE ENDANGERED TODAY. HOWEVER, THEY MIGHT BE SAVED THROUGH A NORDGEN PROJECT.

The Northern Finncattle and Swedish Mountain Cattle breeds are adapted to a colder climate and are therefore smaller than other cows and give less milk. In the project "NordMilk", NordGen test the milk of different Nordic native breeds. The aim is to find niche products that can make it worthwhile for the farmer to choose threatened breeds instead of the modern, high-yield breeds. The farmer Robert Nilsson did that. He keeps Swedish Mountain Cattle and is committed to saving the breed.

– The Swedish Mountain Cattle have a great milk quality and since it contains the protein kappa-casein B, you get a lot of cheese per liter milk. And it's a very high-quality cheese, says Robert Nilsson, who owns Swedish Mountain Cattle and also is committed to saving the breed.




Today, about 600 Swedish Mountain Cattle are left in the northern parts of Sweden and about 850 individuals of the related Northern Finncattle. But the last decades, the number of cattle has decreased rapidly.

– A large part of the farm animal breeds we had before the modern agriculture are today endangered. Often, it's due to the fact that these breeds give less in return. That is, they produce less milk, lay fewer eggs or grow less rapidly than the breeds used in food production today, says Mervi Honkatukia, Section Leader at NordGen Farm Animals.



But the cattle also carry characteristics that might prove useful in the future. Their robustness and ability to survive on simple grass may be vital for our future food production. The native breeds are also an important part of our history and are often called our living cultural heritage. But a farmer can't make a living on keeping cultural heritages. So how do we preserve them? Well, the best way actually is to eat them, or at least in this case, its milk and cheese.

Consequently, the next time you're buying cheese - look for Mountain Cattle cheese. In that way, your choice can help save an endangered breed!

A close-up photograph of several green ryegrass stalks against a clear, bright blue sky. The stalks are in various stages of growth, with some showing developing seed heads. The lighting is bright, creating a high-contrast scene with some highlights on the grass blades.

WITHIN PPP there are many different working groups targeted at different crops. The cooperation to develop ryegrass involves plant breeding companies and universities in Denmark, Finland, Iceland, Norway and Sweden as well as Estonia, Latvia and Lithuania.

COOPERATION ACROSS BORDERS FOR FUTURE FARM ANIMAL FOOD

SOME PEOPLE DISMISS FORAGES AS WEED. BUT FEW COWS AND SHEEP WOULD AGREE. WITHOUT CLOVER, TIMOTHY AND DIFFERENT KINDS OF GRASS, WE WOULDN'T BE ABLE TO EAT MEAT THE WAY WE DO TODAY. NOW RESEARCHERS AND THE PRIVATE SPHERE WORK TOGETHER, FINDING WAYS TO GROW FOOD FOR OUR ANIMALS.

In the future, climate change will lead to entirely new growing conditions in the northern parts of Europe. The season will be extended with 1-3 months and we will have warmer autumns and winters with more rain. And these changes happen swiftly, so fast that the natural evolution won't keep up. That's one of the reasons that plant breeding, that have been ongoing since the human started with agriculture, is so important.

– One example of an important forage crop that only can be grown in the southern parts of the Nordics in the climate we have today is ryegrass. In a co-operation project with different Nordic and Baltic breeding companies and universities, we now work on breeding new varieties of the grass specie that is well adapted to the present and future Nordic climate, says Anna Palmé, Senior Scientist at NordGen and part of the working group for forages.



The fact that we have the possibility to grow here in the Nordic depends on the fact that we, for generations, have made selections among the crops best adapted to our farms and fields. We have had a more organized plant breeding in the Nordic countries and have bred on many different crops. But today, the plant breeding is to a large extent taken over by great, multinational companies. That means that a small market like the Nordics, with very special demands on frost tolerance and daylight are easily overlooked.

– That's the reason the Nordic cooperation for pre-breeding called PPP was formed in 2008. The aim of the cooperation is to secure that the Nordic agricultural crops can fulfill the demands, both concerning climate change and from the consumers who want tasty and healthy products, says Annette Hågenfelt who is responsible for NordGen's role as a secretariat for PPP.



PPP is an abbreviation for Public Private Partnership for Pre-breeding. The aim is for the public and private sphere to exchange knowledge and with common resources work more efficiently.



NORDIC BROWN BEES IS THE NEW BUZZ IN THE HONEY BUSINESS

BUSY AS A BEE? WELL, THE NORDIC BROWN BEE SURELY IS. THE BREED IS CALM, PRODUCTIVE AND ACTIVE EVEN AT LOW TEMPERATURES. THE ENDANGERED NORDIC NATIVE BEE IS NOW ON THE RISE AND GAINING IN POULARITY.

A peaceful buzzing sound comes from the hives containing thousands of brown bees - our native Nordic breed which for hundreds of years have adapted to our cold climate but today is at risk of being extinct. Along with the Norwegian Bee Keepers Association, NordGen has worked hard for saving the brown bees.

A network for beekeepers has been formed and a conservation plan has been published. And the effort has paid off. According to Tor Erik Rødsdalen, leader of Norsk Brunbielag, the bees have a brighter future than ever before.

– Right now, we can't find the time to produce enough brown bees to all the keepers that are asking for them. In Europe, there's a great interest for brown bee queens now. This year we could easily have sold 1 000 queens in an instant, if we only could produce as many, he says.

Tor Erik Rødsdalen have almost 200 colonies of bees in Rena, close to Lillehammer in Norway. For 40 years he has kept brown bees, the native breed of the Nordics which was here long before modern breeds like Buckfast was imported. Today, the brown bees (or black, or dark bees which they're also called) are endangered. Though, there is a population in Norway, where the honey from brown bees also is actively marketed.

–The preservation of the brown bee is not something which is done at a museum. The brown bee needs to be in good health and productive. That's the way forward - to have more bee keepers choosing the brown bee breed and, in that way, securing its future, says Linn Fenna Groeneveld, Senior Scientist at NordGen Farm Animals.



Bees of all shapes are important pollinators. If they were to disappear, our entire food system would be at risk and it would also cause economic repercussions. The honey production in Norway alone is worth 200 million Norwegian kroner.

In other words, there are plenty of reasons to keep brown bees or at least buy a jar of brown bee honey.



NETWORKING AMONG ROOT AND NEEDLE CREATE BETTER FORESTS

MIGHTY SPRUCE AND PONDERING PINE. IN THE FOREST, THE RAW MATERIAL FOR OUR FUEL, PAPER, HOUSING AND MANY OTHER PRODUCTS, GROWS. BUT TREES HAVE A LONG LIFE SPAN AND WHAT WE PLANT TODAY MUST THRIVE FIFTY YEARS LATER AS WELL. HERE NORDGEN PLAYS AN IMPORTANT PART IN FORMING NETWORKS WHICH CAN DELIVER SOLUTIONS TO FUTURE CLIMATE CHALLENGES.

Antti Lännenpää is one of the owners of the Finnish company Finforelia Oy, which produce plants to the forest industry. But he is also one of the young foresters granted a NordGen scholarship for a study trip to Sweden. Along with a colleague, he visited several different forest enterprises, among them Södra in Falkenberg. Here, they saw Södra's solution to protect small spruce plants against insect infestations - a white, flexible coating applied on the lower part of the plant.

– In Finland, we have only just recently started discussing non-toxic alternatives to plant protection. It was very interesting to see this solution and we were surprised to see that there were also many other widely used non-toxic treatments. This is important knowledge that we bring back home, Antti Lännenpää says.



Each year, NordGen grant scholarships to promote the Nordic cooperation on forestry. Additionally, two thematic days and one forest conference is arranged on different sites in the Nordic countries each year. The aim of these meetings and scholarships is to create an environment for conversations about our future forests. Often the trees planted remain here longer than the person planting them. Considering that, how do we secure that the plants are well equipped to tackle climate change? How do we create a resilient forest? These are subjects discussed by the Nordic forestry when they're gathering at NordGen's events.

– The focus of NordGen Forest is to contribute to sustainable regeneration and genetic diversity in forests. This makes our forests resilient and stronger, in a future where diseases and insects probably will be more common with a warmer climate, says Kjersti Bakkebø Fjellstad, Section Leader of NordGen Forest.





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