



WWF

2013



WWF Baltic Sea Farmer of the Year Award 2013

WWF Baltic Ecoregion Programme

WWF BALTIC ECOREGION PROGRAMME

THE FOLLOWING ORGANIZATIONS ARE LEAD PARTNERS WITHIN THE WWF BALTIC ECOREGION PROGRAMME:

WWF Denmark (www.wwf.dk)

WWF Finland (www.wwf.fi)

WWF Germany (www.wwf.de)

WWF Poland (www.wwf.pl)

WWF Russia (www.wwf.ru)

WWF Sweden (www.wwf.se)

Baltic Fund for Nature (Russia – www.bfn.org.ru)

Estonian Fund for Nature (www.elfond.ee)

Lithuanian Fund for Nature (www.glis.lt)

Pasaules Dabas Fonds (Latvia – www.pdf.lv)



Lithuanian Fund for Nature



**Pasaules
Dabas
Fonds**

in association with



IN COOPERATION WITH

The Baltic
Farmers
Forum for the
Environment



FEDERATION OF
SWEDISH FARMERS

Ltd "Latvian Rural Advisory
and Training Centre"



KNOWLEDGE CENTRE
FOR AGRICULTURE



VALSTIECIU
LAIKRASTIS



WWF BALTIC SEA FARMER OF THE YEAR AWARD 2013

PHOTO: DESIGN PICTURES / NORDIC PHOTOS (COVER), LIUDMILA GRIDINA (PAGE 2)
DESIGN: ODELIUS #87145



SVENSK
INSAMLINGS
KONTROLL



MIX

From responsible
sources

FSC® C006329



PHOTO: LUBOV GRIGORIEVA

AN AWARD FOR FARMERS WHO MAKE A DIFFERENCE

Many farmers take innovative measures to help reduce nutrient runoff to the Baltic Sea and achieve sustainable farming. With the Baltic Sea Farmer of the Year Award, WWF aims to highlight how important their work is and showcase their good examples across the region.

Eutrophication, or over-fertilization, is the single biggest environmental problem of the Baltic Sea. Farmers are often criticized for the problem given that agricultural activities account for almost half of the nitrogen and phosphorous input to the sea. But, as the Baltic Sea Farmer of the Year Award shows, many farmers are taking active steps to reduce their runoff and move towards more sustainable farming.

“Farmers have received a lot of negative feedback over the years,” says Elina Erkkila, working for WWF in Finland. “What we need now is co-operation and solutions in order to move forward.”

The award was first introduced as a way to inspire farmers and decision makers in the agricultural sector by highlighting concrete examples of all the positive things that farmers are doing around the Baltic Sea. The competition is now in its fourth year and has grown to receive strong interest from farmers.

“This year the competition has received even more interest than last time,” says Marta Kalinowska at WWF Poland and member of the Polish national jury. “We have received applications from farmers from all the country’s regions – even the southern parts that are far away from the Baltic

Sea. This proves that farmers are gaining a better understanding of the relationship between agricultural production and the surrounding environment.”

The competition for the Baltic Sea Farmer of the Year Award has been held in all nine countries around the Baltic Sea: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden. A national award has been presented to one farmer in each of the participating countries, and later an international jury has selected a regional winner who receives a prize of 10,000 Euros.

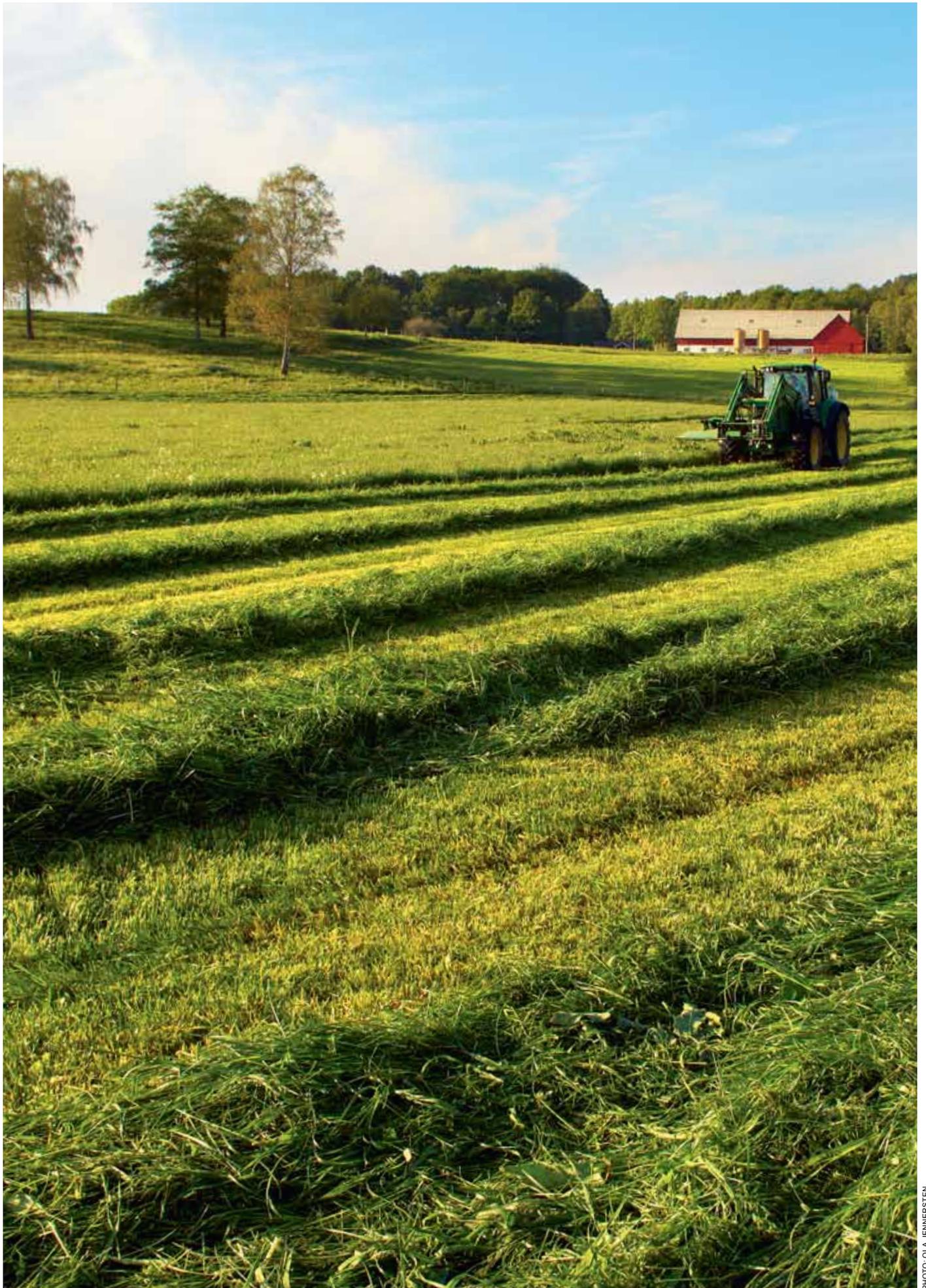


PHOTO: OLA JENNERSTEN

“

“By winning this award, my actions have finally been understood and appreciated. Farmer colleagues who were previously reluctant to the idea of environmental practices in agriculture now ask me about my methods and how to apply them – which is a big positive change.”

Marian Rak, winner of the Baltic Sea Farmer of the Year Award in 2011



PHOTO: EDYTA GAJOS

TAKE THE CHANCE TO BE A HERO

As agriculture accounts for nearly half of the nutrient input to the Baltic Sea, it also holds the power to drastically reduce nutrient overload and eutrophication. By taking steps towards a more sustainable agriculture, individual farmers are key players in the quest to achieve a healthy Baltic Sea.

When excess nutrients such as phosphorous and nitrogen are transported from land to sea, some species of algae begin to grow excessively and at the expense of other species. This can be seen as a green or brown layer on the sea surface during summertime – an algal bloom. When the algae die, oxygen is consumed as they decompose, and the end result are areas with so little oxygen that almost no plant or animal can live there. In this way, the process of eutrophication ultimately threatens to disrupt the entire Baltic Sea ecosystem.

“Today, the Baltic Sea ecosystem is under severe stress due to nutrient excesses,” says Dr. Steve Lyon, hydrologist at Stockholm University. “But, it may still be possible to counteract the pressures on the Baltic by, for example,

applying improved and targeted land management practices.”

It is in this context that farmers can play a very significant role. The last winner of the Baltic Sea Farmer of the Year Award, crop production farmer Marian Rak from Poland agrees: “I do realize that my farming activities can have wide-ranging consequences, because I know the effect excessive nutrients have on the ground water, the streams and finally the Baltic Sea. That is why I’m doing what is in my power to prevent it.”

Marian Rak has demonstrated how a progressive conventional farm can reduce nutrient leakage while simultaneously enhancing biological and landscape diversity. Winning the award gave him additional motivation to further develop his environmentally friendly

practices. For example, he has recently restored some of the streams and artificial ponds on his lands to help control water flows and nutrient uptake. Since winning the award, Marian Rak has also noticed a change in attitude towards him.

“By winning this award, my actions have finally been understood and appreciated. Farmer colleagues who were previously reluctant to the idea of environmental practices in agriculture now ask me about my methods and how to apply them – which is a big positive change.”

On the following pages you will have the chance to meet the winners of the 2013 competition and learn more about how they are collectively making a difference for the Baltic Sea – please read on and be inspired!

ESTONIA Juhan Särgava



“It is necessary to form, develop and boost positive attitudes towards environmentally friendly and organic production,” says Estonian winner Juhan Särgava.

Juhan Särgava established his organic Saidafarm already in 1992, when eco-friendly practices were not very common or popular in Estonia. As such, he is a pioneer in the field, and especially in large-scale organic farming. Saidafarm has 1,000 ha of land, 500 cattle and grows all the crops needed to sustain the animals on the farm. Seventeen different types of dairy products are manufactured and marketed at the farm, most of them certified organic.

For Juhan, the most central measure to keep his farming sustainable is to avoid the use of artificial fertilizers and agrochemicals completely. Instead, manure compost with straw and earthworms and a crop rotation with legumes keep the soil healthy and fertile.

“When I established my farm I knew I wanted to farm organically. Having previously worked at a large conventional farm, I had experienced what happens when mistakes are made handling fertilizers and pesticides,” says Juhan. “Our ancestors managed to grow organic produce just fine, and nature is built in such a way that, even today, it is possible to grow produce without using artificial products. It’s only a question of learning how.”

The farm aims to use resources economically and to reuse them as much as possible. Recently, an innovative water recycling system was constructed at the farm that reuses heat and water in a very efficient way. Every 24 hours, an average of 292 kWh of heat and 16 tons of water are saved. By-products from the dairy production are also reused, for example whey is spread on the pastures to provide water and nutrients. In addition, by being a traditional self-sustaining farm, producing all animal feed and processing all milk on site, the farm can avoid excessive transports and thereby save on non-renewable resources and avoid greenhouse gas emissions.

Juhan Särgava has been advocating



PHOTO: PERSONAL COLLECTION



“Winning this award helps to bring the organic farming initiative to the forefront, and dignifies organic farming as a whole. Competitions like this, and the media’s attention, can inspire like-minded people and motivate those who have only been thinking about becoming an organic farmer.”

eco-friendly farming for more than two decades and is concerned about the future of farming and its effect on nature and people in general.

“517 tons of pesticides were used in Estonia in 2010,” he says. “And their efficiency is estimated to be about 3 to 5% – which means that the rest will remain in circulation and pollute the environment around us.”

Still, he thinks that organic farming is just beginning to grow in Estonia and he is hopeful that even more

farmers will see the benefits of using its methods. In the light of this, he sees that motivating initiatives like the Baltic Sea Farmer of the Year competition are important.

“Winning this award helps to bring the organic farming initiative to the forefront, and dignifies organic farming as a whole,” says Juhan. “Competitions like this, and the media’s attention, can inspire like-minded people and motivate those who have only been thinking about becoming an organic farmer.”



PHOTO: PERSONAL COLLECTION

Saidafarm is a large-scale organic farm with 1,000 ha of land and about 500 cattle, including 200 dairy cows. The farm also grows all the crops needed to sustain the animals on the farm.

Juhan Särgava

Location: Lehetu in Harjumaa County
– Matsalu Bay catchment area

Type of farm: 1,000 ha organic dairy farm (500 cattle including 200 dairy cows) with grain and legume production

International jury motivation for the regional winner of the Baltic Sea Farmer of the Year Award 2013:

The jury is proud to present Juhan Särgava with the award for his success in demonstrating how a large scale organic farm can use innovative, diverse and cost effective methods to reduce nutrient runoff while producing high quality organic dairy products. Mr. Särgava has furthermore gone the extra mile on his farm by minimizing the use of natural resources and energy by using an innovative water recycling system. He has been a pioneer in the field of organic farming in Estonia since the early 90's and proven to be an exemplary ambassador for eco-friendly farming. The jury is delighted to acknowledge Juhan Särgava with this award and hope his positive example may now provide inspiration for other farmers across the Baltic Sea region.

Key practices:

- No use of artificial fertilizers/pesticides
- Manure compost used as fertilizer
- Crop rotation using legumes
- Whey used on pastures and to feed young animals
- Recycling system for water and heat



PHOTO: PERSONAL COLLECTION



Seventeen different types of dairy products are manufactured and marketed at the farm, for example curds, cheeses and yoghurts, most of them certified organic.

DENMARK Søren Ilsøe

With the goal of achieving “more for less”, Danish winner Søren Ilsøe works hard to optimize every aspect of his farming.

“I was surprised to get the award because I thought it would go to an organic farmer. But I was happy that the jury could see that I was using good measures from both conventional and organic farming systems,” says Søren.

In 1996, Søren decided to buy his childhood home, the farm Knudstrupgård on Zealand, leaving a career in IT to work closer to nature. He now runs 250 ha of crop production and raises 5,000 pigs every year. All aspects of his farming follow the principles of Conservation Agriculture – a growing system he is a very passionate advocate for. In short, this system calls for minimum tillage of the soil, a healthy crop rotation and year-round covered soil.

“The ‘green approach’ to farming was not something that I focused on in the beginning – I was a conventional farmer aiming for better results. But over time I realized that with this new way of handling the soil, we can keep or even improve the yields, and at the same time reduce the harm to nature,” Søren explains.

At Knudstrupgård, active work with crop rotation and catch crops ensures minimal nutrient leakage and high soil quality. This, in turn, has resulted in high biological activity in the soil – for example in the form of the many earthworms and insects that



PHOTO: ERNI



PHOTO: FRANK BONDGAARD



“I realized that with this new way of handling the soil, we can keep or even improve the yields, and at the same time reduce the harm to nature.”

provide a biological tillage of the soil. Above ground, Søren’s methods have resulted in a high number of nesting birds on the farm land, including partridges and skylarks. After being cut, the straw is left on the fields providing excellent camouflage for these birds.

Søren is also very active in the agricultural community – taking part in public debates concerning agriculture

and receiving many visits from farm groups and students. He hopes that winning the award in Denmark will increase the awareness of Conservation Agriculture methods and their diverse benefits. “Winning the award has already resulted in an increased interest from the Danish government and the politicians to learn more about this kind of agriculture,” Søren concludes.

Søren Ilsøe

Location: Fjenneslev on Zealand – Smålandsfarvandet catchment area

Type of farm: 250 ha conventional farm with pig and crop production (for example rape, wheat and barley)

Jury motivation:

Søren Ilsøe was selected by a unanimous jury for the great enthusiasm he has for running his farm, his strong commitment to reduced till-farming and his dedication to improve and maintain soil fertility, for example by working very actively with crop rotation. Søren is innovative and always ready to explore new methods. The measures on the farm are optimized on all fronts with the goal of achieving “more for less”. Søren is also very happy to share his knowledge and he voluntarily spends many hours informing farmers and other interested parties about his efforts to make his agriculture “greener”.

Key practices:

Reduced-till farming, direct seeding, crop rotation with catch/cover crops, buffer zones, precision agriculture technology including GPS auto steering and sprayer boom control

FINLAND Peppi & Marko Laine

Peppi and Marko Laine have implemented multi-functional measures to reduce the negative environmental impacts of their farming.



The Laine couple runs two farms located in the south western part of Finland – Mikkola and Muntola farms – where they breed sheep for lamb meat production and also grow crops on 190 ha of the land. As they both have advanced degrees in agricultural sciences, Peppi and Marko know how farming can be made more sustainable and hope that their efforts can serve as an inspiration for other farmers.

“There was a lot of negative publicity about farming and its effects on the Baltic Sea when we began our farming careers, and we wanted to show that there are many things that farmers can do to help reduce negative environmental impacts,” says Peppi. “We believe that positive information about different environmentally friendly farming practices is the best driver towards a more sustainable agriculture.”

The Baltic Sea and water protection are subjects very close to the Laine’s hearts, as well as biodiversity and landscape conservation. In collaboration with WWF Finland, they have constructed two wetlands on their farm land. These act to preserve nutrients by absorbing and storing them in plants and sediments, and can also improve species biodiversity.

To reduce nutrient loss, the Laines also use precise nitrogen fertilization, crop diversification and large buffer zones along the river – along with leaving parts of their land as natural fields for pasture. “Fields that are prone to erosion and hard to cultivate are excluded from intensive agriculture. The expensive production inputs are instead



PHOTO: AIRI KULMALA / MITK

used where the highest outputs can be achieved. This way we can optimize both economic and environmental aspects of our farming,” says Marko.

Peppi and Marko Laine were both happily surprised to get the Baltic Sea Farmer of the Year Award in Finland. “Getting this award serves as a great source of motivation and will certainly challenge us to try our very best also in the future,” says Marko.



PHOTO: KATJA NUORVALA

“We believe that positive information about different environmentally friendly farming practices is the best driver towards a more sustainable agriculture.”

Peppi & Marko Laine

Location: Salo in southwestern Finland – part of Purilanjoki catchment area

Type of farm: 430 ha conventional farm with sheep and crop production (for example wheat, barley and oilseed plants)

Jury motivation:

The Finnish jury unanimously selected the Laines as this year’s winners because of their commitment to water protection and biodiversity. They have, during a relatively short time, implemented multi-functional measures for reducing the negative environmental impacts of their farming – while also improving the economic aspects. As such, they set an ideal example of a conventionally cultivating farm. The Laines are willing to share their experiences and have hosted many national and international visitor groups. They are also full of innovations and are actively testing different methods in their farming.

Key practices:

Split application of nitrogen (according to crop potential and growth stage), direct seeding, grass buffer zones, crop diversification, plant-covered soil year-round, wetlands, natural pasture fields, solar energy

GERMANY Ulrich Bosch



At Brook and Christinenfeld Estates, large-scale organic farming methods are continuously adjusted and improved.

The Brook and Christinenfeld Estates have been used for farming since early medieval times. In 1994, after a shift in ownership, the grounds were converted to organic farming and the estates are now a member of the Biopark-Verband – a national organic farming association. Farm manager Ulrich Bosch and his crew of about 15 employees take great pride in implementing organic farming methods and overall good agricultural practices in all their daily operations.

“Practicing organic agriculture gives me great pleasure, and I can’t imagine using any other type of agricultural methods anymore. Of course, there are always new challenges when you work exclusively with what you’ve got – but it is an exciting and changing line of work,” says Ulrich Bosch.

A multitude of measures are used to optimize the utilization of nutrients and reduce nutrient losses. The most central one is a varied crop rotation – adapted to fit the different conditions of different sites on the estates. Both rotation of winter and summer crops, and rotation



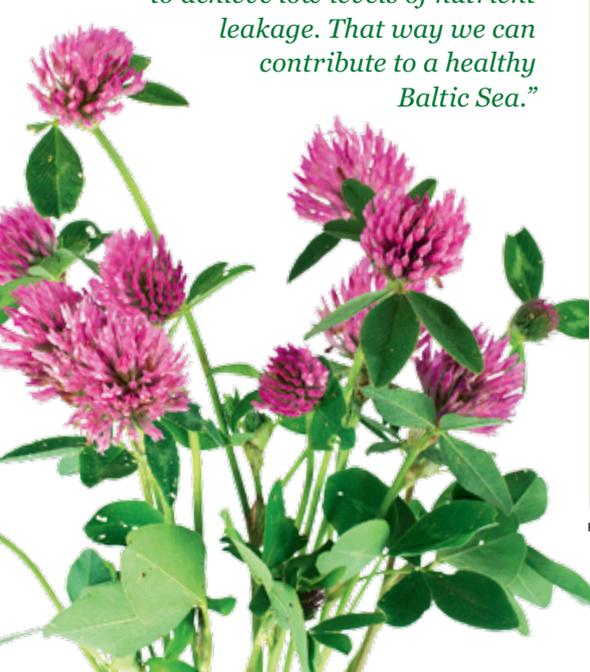
PHOTO: NORBERT FELLECHNER

of nitrogen-consuming and nitrogen-increasing crops are used. Also, the estates use up-to-date soil nutrient data and precise application of manure slurry to make sure that the right amounts of nutrients are added to the soil.

“For us, a diverse crop rotation and good nutrient management are very important to achieve low levels of nutrient leakage. That way we can contribute to a healthy Baltic Sea,” says Ulrich Bosch. “And, at the same time, a good utilization of nutrients allows our operation to have produce yields.”

Ulrich Bosch believes that while individual farmers can do much on their own to reduce their negative impact on the environment, it is important that governments do their part as well. “Each farm can make their contribution – as we do – but it is important that the right political frameworks for agriculture are established,” Ulrich explains. “At the moment, environmentally sustainable management is not rewarded, but rather short-term oriented practices. This is not in the best interest of any of us, especially not farmers,” he concludes.

“For us, a diverse crop rotation and good nutrient management are very important to achieve low levels of nutrient leakage. That way we can contribute to a healthy Baltic Sea.”



Ulrich Bosch

Location: Brook in Kalkhorst municipality – directly adjacent to the Baltic Sea

Type of farm: 1,400 ha organic farm with dairy (250 dairy cows) and crop production (for example cereals and feed crops)

Jury motivation:

The German jury was particularly impressed by the Brook and Christinenfeld Estates’ professionalism and its orientation towards sustainability, especially in soil and nutrient management and biodiversity. A multitude of measures are most favorably coordinated to optimize utilization of nutrients and avoiding nutrient losses. Moreover, crops such as oilseed rape and silage maize, which are quite demanding in an organic context, have also been successfully integrated into the crop rotation. Farm management is aimed at continual development and improvement with the interest to always be open to testing new ideas and measures.

Key practices:

Crop rotation, use of up-to-date soil nutrient data, precise application of slurry using a drag hose system, permanent grasslands, buffer strips, liming of soils

PHOTO: FOMAA

LATVIA Arnis Burmistris

“We are happy to improve our farming practices from an environmental point of view – both to contribute to sustainability and good local living conditions,” says Arnis Burmistris.

Arnis Burmistris runs the farm “Vilcini1”, founded in 1992 on 74 ha of reclaimed agricultural land. Since then, the farm has grown considerably and now includes over 2,100 ha of land for crop production. In 2003 the farm decided to start practicing precision agriculture to ensure that the right amount of nutrients are used and that any overlap in distribution is minimized. Many different technologies are employed on the farm, including agricultural software, machinery fitted with GPS automatic steering and an AO Green-Seeker optical sensing system for nitrogen application.

“By using precision agriculture we have increased our control over the farm and each plot of farmland. Also, we have improved the efficiency and thereby optimized our costs and reduced the stress load of intensive farming on the environment,” Arnis explains.

Besides using precision agriculture, several other activities are implemented on the farm to achieve sustainability. For example, the farm has its own meteorological station that makes it possible to plan work according to the best available weather conditions. Also, sharing of knowledge is important to Arnis and he has opened his farm to university students who study modern agricultural methods, in relation to environmental protection. In recent years Arnis has noticed an increased interest in his methods – and that younger people are especially interested in using computer technology in farming.

He hopes that winning this award will help spread the information about precision agricultural methods in Latvia even further. “Having won this award, we will continue to implement new technologies with even greater enthusiasm, and present our methods to students with greater confidence,” says Arnis. “We also hope that it will attract more farmers to our farm – in order to increase and transfer knowledge about our farming practices,” he concludes.



PHOTO: AJA KRODERE



“By using precision agriculture we have increased our control over the farm and each plot of farmland.”

Arnis Burmistris

Location: Jelgava region in southern Latvia
– part of Lielupe and Venta river drainage basins

Type of farm: 2,100 ha conventional farm with crop production
(for example rape, wheat and barley)

Jury motivation:

The Latvian jury chose Arnis Burmistris as their winner for his innovative use of precision agricultural technology. By using this technology across large areas, fertilizers are used efficiently and the risk of nutrients leaking into surrounding water systems is significantly reduced. Moreover, practicing precision agriculture has increased the farmer’s ability to control the management of the farm as a whole, and helped save resources. The jury was also impressed with the farm’s active interest to share knowledge with students studying modern agricultural production methods.

Key practices:

Use of precision agricultural machinery and technology, analysis of soil, monitoring of drainage systems and meteorological conditions, preserving landscape elements on fields



PHOTO: AJA KRODERE

LITHUANIA Erikas Laiconas



Lithuanian winner Erikas Laiconas' passion for preserving biodiversity has led to the establishment of a botanical reserve on his farm.

In the early 90's, Erikas Laiconas and his family decided to move from the city to the countryside as they wanted to live closer to nature. Over time they developed their farm, always with the goal of being environmentally friendly, and eventually reaching organic certification in 2006. While the farm's main source of income comes from crossbred beef cattle, the family also breeds small donkeys and grows organic vegetables for their own needs.

"From the very beginning, we developed our farm in a sustainable way," says Erikas. "We respect nature and only want to use its resources if we can also maintain its natural condition. Making money has never been the goal of our farming, but rather just earning enough to be able to enjoy living close to nature."

This respect for nature is seen across the structures and management of Erikas' farm. The barn has a solid foundation of concrete and is cleaned without using any water. This minimizes the risk of manure and urine penetrating into the groundwater. To reduce erosion and nutrient runoff, more than half of the farm land is semi-natural grassland managed by grazing. Pastures are divided into zones with different grazing



PHOTO: JULIA PETROŠIŪTE

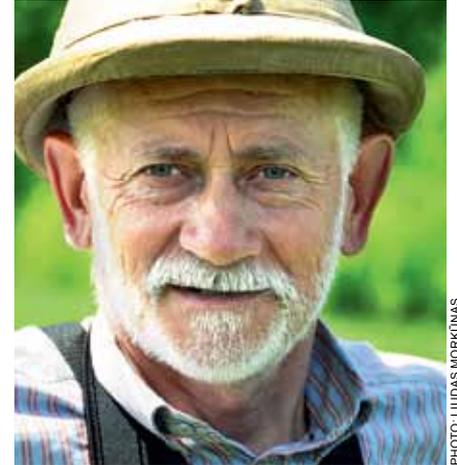


PHOTO: LIUDAS MORKŪNAS



"It is very important to show good examples and let farmers learn from each other, especially when it comes to organic agriculture."

intensity and single trees and shrubs are kept on the land. Erikas is very passionate about preserving local biodiversity and as a result of his efforts, the Margupis Botanical Reserve was established on his lands in 2012. He also has created the first private information center for protected areas in Lithuania and cooperates with researchers on biodiversity.

"It is very important to show good

examples and let farmers learn from each other, especially when it comes to organic agriculture," says Erikas. "At the same time, the right kind of support from EU could encourage more farmers to choose sustainable methods. Also, consumers play a significant role – if they want goods produced in a more environmentally friendly way, we as farmers have to provide that for them," he concludes.

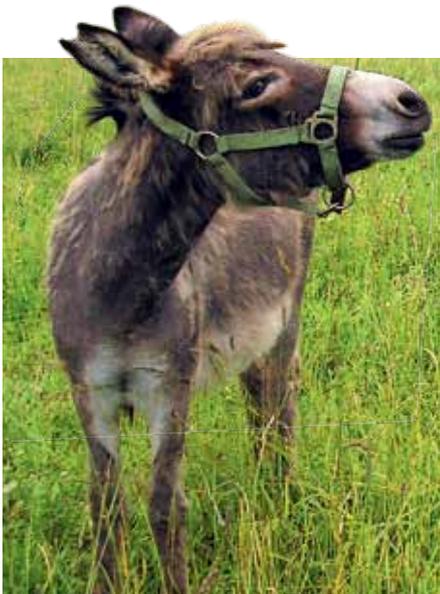


PHOTO: JULIA PETROŠIŪTE

Erikas Laiconas

Location: Islestakiai in Jurbarkas district – Dubysa catchment area

Type of farm: 51 ha organic farm with beef production

Jury motivation:

Erikas Laiconas has shown a dedicated commitment to protect valuable habitats and preserve biological diversity in the region. For example, a protected area has been established on his farm through the great efforts of Erikas himself. He has also established the first private information center for protected areas in Lithuania and visitors are always welcome on his farm. This shows his dedicated commitment not only to run his own farm in an environmentally sustainable way, but also to spread his valuable experience amongst the general public and farming colleagues.

Key practices:

Zoning of farm land, barn and manure storage foundations of concrete, cleaning farm facilities without water, keeping the barn at same temperature as the outside, crop rotation, lower levels of protein in the feed, permanent grasslands

POLAND Anna Stępień

Anna Stępień's family farm pioneered organic farming in Poland as one of the first farms to apply organic farming methods.



“In the past we have often felt that there is a lack of understanding from other farmers. We started our organic farming measures in 1989, when the idea of ecology was completely new and not at all popular in Poland,” says Mrs. Anna Stępień.

The family-based farm was originally established in 1938 by Anna's grandparents and later operated by her parents, Mr. and Mrs. Wegner, and Anna herself. Their organic production began with growing mostly ecological wheat for export, and has expanded to include many different types of crops and plants today. The farm also breeds pigs raised solely on their own organic crops.

Anna enjoys using a number of methods to reduce nutrient emissions from the farm, including crop rotation, monitoring of nitrogen and storing manure in containers. Also, to increase biodiversity on the farm, midfield ponds and forests have been established, along with nesting boxes for birds and bats.

“We started to use organic methods because we could observe the negative impact our farming practices were having on the soil and the surrounding biodiversity. We care about nature and didn't want our soil to be destroyed by chemicals,” says Anna. “Also, we wanted our farm to be a friendly place for animals. Today we can observe many different species of birds and bats on our land.”

To reduce greenhouse gas emissions the farm uses solar collectors to heat their water supply. They also cooperate with a number of research institutions and invite trainees from the agricultural technical school to the farm – all to help establish new methods for organic production and to disseminate the results to enhance ecological awareness.

“Winning this competition is a great honor for us – it will encourage us to continue to engage in the protection of natural resources. It will be something we present during our training and workshops held at the farm,” Anna concludes.



PHOTO: ANNA HADYŃSKA



“We wanted our farm to be a friendly place for animals. Today we can observe many different species of birds and bats on our land.”



Anna Stępień

Location: Tuchola in northern Poland – Brda river basin

Type of farm: 43 ha organic farm with pig and crop production (for example wheat, rye and vegetables)

Jury motivation:

Anna Stępień and her family have made outstanding achievements with regards to the implementation of agri-environmental practices. Their farm started organic farming in 1989, as one of the first farms in Poland, and despite a lack of understanding from other farmers the family's pioneer attitude made them continue their efforts – due to an extraordinary respect for the soil and its condition. They are not only applying organic production but are also eager to try new environment-friendly methods, such as solar collectors and machinery developed to the needs of their organic cultivation. Their manner of farming shows great understanding of the relation between land cultivation and water status.

Key practices:

No artificial fertilizers/pesticides, crop rotation with under-sown catch crops, storing manure on plate and in containers, ploughing manure directly into soil, drainage ditch with trees, multi-annual monitoring of nitrogen, mid-field ponds and plantation of trees and shrubs

RUSSIA Galina Anatolievna Letiagina



“We are happy to provide natural organic products to the people living around us,” says Russian winner Galina Anatolievna Letiagina.

In 2007, Galina and her husband bought their farm because they wanted to run their own business and provide organic products for their own family. The farmland they purchased had been poorly managed by previous owners and therefore they decided to start their farming careers by restoring the nearby natural grasslands and strengthening the river coastline. For example, they created ditches and planted native species of shrubs and trees. They now operate a small, successful organic farm producing diverse dairy products from both goat and cow milk. “We have a very unique production of organic yoghurts with local berries. These products are very popular among people in the region – something we are very proud of,” says Galina.

Already when establishing the farm, Galina and her family decided that they wanted to apply as many environmentally friendly farming methods as possible. Besides using no artificial fertilizer they plant nitrogen-fixing legumes on their land. They also produce a manure mix that is used as a natural fertilizer. “We use hay and sawdust in the cowsheds. This material is mixed with manure and left to rot as compost,” Galina explains. “Later on, the mix is used as a natural fertilizer on the farm and is also sold as a product to other farmers.”

Galina believes that it is important to motivate and support small farms that are thinking about developing their agriculture to become more sustainable. For that reason she thinks that the Baltic Sea Farmer of the Year Award is important – but also because it creates opportunities to share important knowledge. “I decided to take part in the Baltic Sea Farmer of the Year competition because I wanted to make new contacts and that way create opportunities to collaborate with farmers from other countries and learn from their experiences,” says Galina.



“I decided to take part in the Baltic Sea Farmer of the Year competition because I wanted to make new contacts and that way create opportunities to collaborate with farmers from other countries and learn from their experiences.”



PHOTO: LUBOV GRIGORIEVA

Galina Anatolievna Letiagina

Location: Korovino Seltso in Leningrad region – Pchiovzha river valley

Type of farm: 10 ha organic dairy farm (36 goats and 7 cows)

Jury motivation:

The Russian jury chose Galina as their winner as her farm is a good example of the introduction of organic farming in North West Russia. The farm produces competitive milk products – including fantastic yoghurts with wild berries. Also, the farmer cares for the local natural environment and wildlife and has spent a lot of time restoring semi-natural agricultural landscape near the typical spring-flooding river. Other measures, such as refraining from the use of artificial fertilizers, demonstrate that the farmer is trying to decrease the nutrient discharge from the farm.

Key practices:

No artificial fertilizers, manure mix used and sold as natural fertilizer, nitrogen-fixing plants, restoration of natural grasslands

SWEDEN Jan-Christer Carlsson



The Swedish winner Jan-Christer Carlsson operates a unique wastewater treatment plant that turns human waste into fertilizer for his lands.

The area around Hölö in south-eastern Sweden, where Jan-Christer Carlsson's farm Nackunga is situated, has had problems with eutrophication of its lakes for many years. In the late 90's, when the local newspapers identified farmers as the source of these problems, Jan-Christer had had enough. He wanted to prove he was not one of the 'bad guys' and started to map the nutrient content of his soil and joined the national network "Greppa Näringen" ("Catch the Nutrients").

"Yearly controls of the soil nutrient balance shows you exactly how much has been put into the system, what has been absorbed and the extent of the leakage," says Jan-Christer. "You know exactly what you are doing and where improvements can be made. Eventually you can reach a complete balance and not over-fertilize at all."

Other measures that Jan-Christer has taken to reduce nutrient leakage include establishing permanent grass buffer zones along river banks and structural liming of the soils. But the one measure that has received the most attention, both nationally and internationally, is the unique wastewater treatment plant that has been built on the farm. It's the first of its kind and handles wastewater from more than 500 private sewers in the coastal area. The sewage is turned into fertilizer that Jan-Christer uses on his fields, and brings both environmental and economic benefits to the farm.



PHOTO: STINA NYSTRÖM

"I believe that we as humans should be part of the natural cycle. This treatment plant makes use of human waste and returns important nutrients, such as phosphorous, back to the soil. Also, as a result, there is then no need to buy artificial fertilizers," Jan-Christer explains.

Jan-Christer believes that cooperation and communication are key factors to make farming more sustainable. Every month he meets with some of his

neighboring farmers to exchange experiences and discuss methods to improve the local environment. Also, he receives educational visits from schools and other groups.

"I hope that getting this award can help spread information, especially to the younger generation. The main message is to make good use of the resources we have locally and also to take advantage of our waste," concludes Jan-Christer.

Jan-Christer Carlsson

Location: Hölö in Södertälje Municipality
– coastal catchment area just south of Stockholm

Type of farm: 290 ha conventional farm with dairy (65 cows)
and crop production (for example wheat, rape and corn)

Jury motivation:

Jan-Christer Carlsson has been very involved and proactive in the efforts to improve the water quality in the Hölö area. His work shows a very good example of how to close the natural cycles and recycle important nutrients – especially phosphorus which is a finite resource. Jan-Christer Carlsson's work with the wastewater treatment plant, in cooperation with the local municipality, is an excellent example of how Swedish farmers work not only with their own farm's environmental concerns, but also become part of the important link in recycling between cities and the countryside.

Key practices:

Buffer zones, structural liming of the soil, soil mapping, manages a modern wastewater treatment plant on the farm

PHOTO: MADLEN

“Yearly controls of the soil nutrient balance shows you exactly how much has been put into the system, what has been absorbed and the extent of the leakage.”



CROSSING BORDERS

Agriculture around the Baltic Sea has already come a long way towards minimizing its impact on the environment and on the Baltic Sea.

The conditions for agriculture are different between countries with varying environmental, economic and legislative prerequisites. Farmers are increasingly demonstrating that cooperation and the sharing of knowledge is the way forward to bridge the gap and improve the overall sustainability of farming practices. The WWF Baltic Sea Farmer of the Year Award is only one of many initiatives in which farmers, agricultural experts and

authorities, scientists and NGOs are co-operating across borders, both national and institutional, to work together for a greener future. Each of the winners presented in this brochure have gone the extra mile to make their contribution to a healthier Baltic Sea. It is our hope that their work and their spirit will inspire others. Cooperation, across all borders, is the way forward!

MEATBALL – A Sustainable Agriculture Project

Meatball is a WWF project with the aim to create model farms that can spread knowledge about sustainable farming practices. A network of farms in Estonia, Latvia, Lithuania and Sweden are showcasing well-functioning environmentally and economically sustainable production and restoration methods that reduce leaching of nutrients to the Baltic Sea.

Examples of activities practiced on these model farms include management of semi-natural grasslands, long laying grass lays and management of wetlands. The results from the model farms are used to spread the message

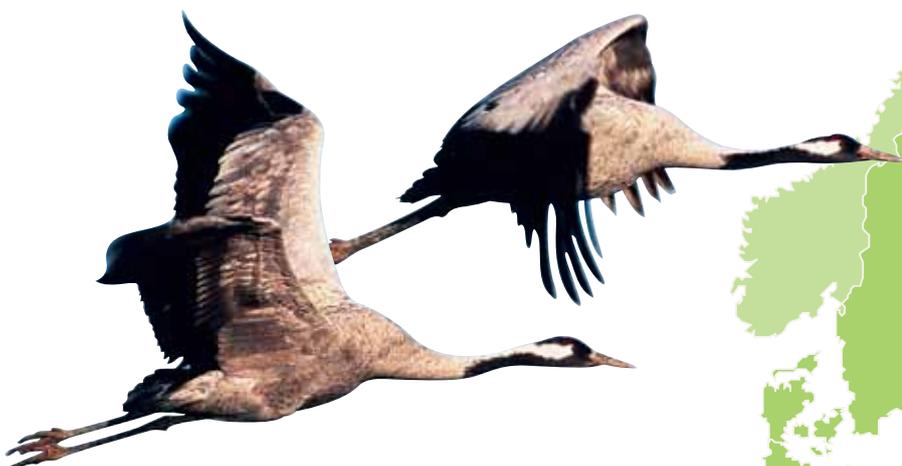
that agricultural practices can reduce eutrophication and increase biodiversity, while at the same time strengthen rural economies.

Farm and field visits from farmers, advisory services and politicians ensure that measures applied are shared with both the surrounding farming community, and the national rural development programmes. The model farms are also show-cased in cross border field visits, to enhance cooperation and spread best practices solutions in sustainable agriculture throughout the Baltic Sea region.

SNOWBAL – Saving the sea from Nutrient Overload by managing Wetlands/grasslands BALTically

SNOWBAL is an EU funded project aimed to raise the awareness of sustainable agriculture methods that reduce nutrient runoff to the Baltic Sea. The farms involved in the project showcase how farming, ecological functions, nature conservation and business can go hand-in-hand. The SNOWBAL methods utilize High Nature Value grasslands and wetlands to produce products such as meat and bio-energy. The methods represent an alternative to utilizing arable land that is ploughed and heavily fertilized. SNOWBAL's farming methods are spread and promoted to farmers and entrepreneurs through study trips and visits, workshops, work camps, village meetings, and outdoor exhibitions in order to further promote the application of these methods throughout the region. SNOWBAL is led by the Uppland Foundation and supported by WWF with partners in Estonia, Latvia and Sweden.

PHOTO: SANCHEZ & LOPE / WWF-CANON



BETTER POLICIES ARE NEEDED TO SAVE THE BALTIC SEA

Many farmers are committed to caring for the environment and making active choices to use greener agricultural methods – just like the examples highlighted in this brochure.



PHOTO: MIKS

Yet the “new CAP “ – Common Agricultural Policy – reformed this year is in many ways a step back in supporting farmers to deliver more sustainable agricultural practices, which are needed to maintain biodiversity, water and soil quality and climate gas emission reduction in Europe. Agricultural policies and associated subsidies continue to be an obstacle in reaching the goal of a more environmentally friendly agriculture, since many of these promote practices that are not sustainable.

In order to stop harmful agricultural practices on a large scale, a complete reform of agricultural policies within the EU is needed. Today, significant financial support (roughly 40% of the total EU budget supports the agriculture sector) is directed to farmers without requiring much in return in terms of public goods.

WWF has another vision. If this financial support was used to reach agreed environmental, social and economic objectives, instead of locking it

up in a system of environmentally harmful subsidies, we could both save the Baltic Sea and make better use of taxpayers’ money. Subsidies should only go to farmers who can clearly prove that they have taken concrete

measures to provide environmental and other benefits to society as a whole. As an alternative to existing policies, WWF believes a sustainable European agriculture can be within reach by following a few simple principles:

Principles to follow for a sustainable European agriculture:

- **Public payments for public goods.** Public money should only be used for provision of public goods and ecosystem services such as sustainable water management, preservation of biodiversity, maintenance of cultural and historic landscapes, rural employment and public access to rural areas.
- **The polluter pays principle.** All beneficiaries of public payments should be able to demonstrate compliance with the standards established by the EU, such as the Nitrates Directive, the Water Framework Directive and national legislation.
- **Payments linked to clear objectives and targets.** A thorough evaluation of each subsidy is necessary to see if it delivers to the sustainability objectives.
- **Fair and transparent distribution of funding.** The size of subsidies given to farmers who deliver public goods should be equal and neither depend on nationality nor on the division between old and new member states. Information on payments should be available in the public domain to ensure that the use of public funds is transparent and open to public scrutiny.

MEASURES THAT CAN REDUCE NUTRIENT LOSSES ON FARMS

Here are the main measures practiced by the current and previous winners of the WWF Baltic Sea Farmer of the Year Award:

Crop production

- *Crop rotation, intercropping and using cover, catch and under-sown crops* all help to optimize nutrient uptake by crops minimizing the need of added fertilizer. They also help maintain a good nutrient balance in the soil and can counteract establishment of weeds and pests. Many farmers use nitrogen-fixing plants in their crop rotation to ensure that subsequent plants have access to biologically fixated nitrogen.
- *No-till farming and direct seeding* saves resources as the soil is worked minimally. Also, the quality of the soil is improved and space is created for increased biodiversity.
- *Covered soil year round* means that there are always plants available to retain nutrients in the soil that would otherwise mineralize in the ground.
- *Buffer zones* along ditches, streams, ponds and lakes reduce nutrient runoff into surrounding waters.
- *Usage of precision agriculture equipment and techniques* minimizes resource use and the risk of over-applying fertilizers.
- *Computers and agricultural software* can be used to plan and follow up farming activities, such as crop rotation and fertilization.
- *Analyzing and mapping the soil and its nutrient balance* on a regular basis help determine the precise amount of fertilizer needed.
- *Monitoring of drainage systems* allows the farmer to administer the right doses of fertilizer and avoid using them in places of high risk of leakage.
- *Using only natural fertilizers and pesticide control*, as is common practice in organic farming, drastically reduces or eliminates chemical runoff.

- *Crop diversification* improves plant protection and soil quality, and also increases biodiversity.
- *Structural liming of soils* reduces surface water runoff of nutrients, particularly phosphorous. Better structure of the soil also facilitates tilling, thereby reducing fuel consumption.
- *Spreading composted manure* on fields is a natural way of fertilizing crops and adding sulphur and micronutrients to the mix help crops to use nutrients more efficiently. Manure should only be spread during the growing season and be ploughed into the soil right after distribution.

Animal production

- *A solid barn foundation of clay or concrete* prevents manure and urine from penetrating into the groundwater.
- *Storing manure in appropriate facilities*, such as containers and tanks with an impermeable base prevents leakage. Covering the facilities with lids or plastic, or letting a natural crust form, prevents gas emissions and rainfall runoff.
- *Reducing ammonia emissions* and thereby nitrogen losses, while improving local air quality, can be done by adding basalt dust to manure and installing air-filters in animal stalls. Also, using lower protein levels in the animals' feed and keeping the barn at a cooler temperature helps reduce ammonia levels.
- *Reducing the number of animals per hectare* helps to ensure that the soil can absorb all the manure.
- *Cleaning stalls without using water* prevents runoff to surrounding waters.



- *Keeping permanent grasslands for grazing* lowers nutrient runoff and helps store more carbon in the ground. They also act to preserve biodiversity.

General measures

- *Recycling of water, waste and other resources* helps close natural cycles. Water recycling systems can save both heat and water and waste water treatment plants can be used to turn human waste into fertilizer for crop production.
- *Zoning of farm land*, where different levels of farming intensity on different parts of the land, can optimize land-use to avoid nutrient leakage and preserve biodiversity.
- *Wetlands and ponds* on the farm absorb nutrients and store them in growing biomass and in sediments, thereby reducing nutrient runoff. They also create habitats for wildlife and plants.
- *Preserving trees and shrubs in and around fields* helps reduce nutrient runoff and erosion and also increase biodiversity.
- *Cooperation between farmers, organizations and other stakeholders* is a great way to share knowledge on environmentally friendly farming methods and can multiply the positive effects from using them.

FACTS ABOUT THE WWF BALTIC SEA FARMER OF THE YEAR AWARD

To show support for the agricultural sector and highlight good examples in the region, WWF – in cooperation with the Baltic Farmers Forum for the Environment (BFFE) and farmers' organizations around the Baltic Sea – created the WWF Baltic Sea Farmer of the Year Award.

This is the fourth year of the competition, which was launched in 2009 and is intended to inspire farmers from the entire Baltic region to take an active part in combating eutrophication. Applications have been received from farmers practicing both organic and conventional farm-

ing, as well as many different types of agriculture. The national winners, chosen by juries in each country, receive a prize of 1,000 Euros. From these national winners, an international jury selects a regional winner who receives 10,000 Euros.



Members of the national juries

DENMARK

Ella Maria Bisschop-Larsen, President, Danish Society for Nature Conservation
Jakob Bisgaard, Head of Department of "Rural areas, Towns and Culture" of the Municipality of Ringkøbing-Skjern
Torben Hansen, Farmer and Chairman of the Danish Agriculture and Food Council, Crop Production

ESTONIA

Aleksei Lotman, Marine Environment Expert, Estonian Fund for Nature
Kaia Lepik, Sustainable Agriculture Expert, Estonian Fund for Nature
Heiki Raudla, Editor, Estonian rural life newspaper "Maaleht"
Alar Astover, Associate Professor, Department of Soil Sciences and Agrochemistry, Institute of Agricultural and Environmental Sciences, Estonian University of Life Sciences

FINLAND

Kimmo Rasa, Senior Scientist, Agrifood Research Finland (MTT)
Tarja Haaranen, Environment Counselor, Ministry of the Environment (YM)
Markku Puustinen, Agronomist, Finnish Environment Institute (SYKE)
Antero Nikander, Senior Inspector, Ministry of Agriculture and Forestry (MMM)

GERMANY

Reinhold Stauß, Head of General Department, State Agency for Agriculture, Environment and Rural Areas
Herwart Böhm, Scientist, Institute of Organic Farming Johann Heinrich von Thünen-Institut (vTI)
Stephan Gersteuer, Secretary General, Germans Farmers Association Schleswig Holstein e.V.
Birgit Wilhelm, Agriculture Expert, Sustainable Agriculture and Resource Management, WWF Germany

LATVIA

Janis Rozītis, Director, Pasaules Dabas Fonds
Ingus Purgalis, Baltic Sea and Freshwater Programme Manager, Pasaules Dabas Fonds
Kaspars Žūriņš, Director, Latvian Rural Advisory and Training Centre
Ilze Skudra, Expert, Latvian Rural Advisory and Training Centre

LITHUANIA

Kristina Narvidienė, Senior Specialist, Lithuanian Agricultural Advisory Service
Agnė Prakapienė, Chief Specialist, Division of Environment and Ecological Farming, Resource of Quality Policy Department, Ministry of Agriculture
Petras Kurlavičius, Professor, Lithuanian University of Educational Sciences
Darius Dzekčiorius, Head of the Association of Lithuanian Beef Cattle Breeders
Nerijus Zableckis, Project Manager, Lithuanian Fund for Nature

POLAND

Anna Hadyńska, Expert in Agri-Environmental Policy, WWF Poland
Magdalena Siedlecka-Słowikowska, Chief Specialist, Ministry of Agriculture and Rural Development

Justyna Fila, Specialist and Agri-Environmental Advisor, Agricultural Advisory Centre in Radom

Ireneusz Gradka, Farming Economics Chief Specialist, Agricultural Advisory Centre in Radom

Marta Kalinowska, Baltic Sea Conservation Project Coordinator, WWF Poland

RUSSIA

Rustam Sagitov, Director, Baltic Fund for Nature and Chair of IUCN Russian National Committee

Evgeny Genelt-Yanovskiy, Project Manager, Baltic Fund for Nature

Yulia Danilova, Expert, Baltic Fund for Nature

Komov Viacheslav, Head of regional farmers' union

SWEDEN

Lennart Gladh, Specialist Baltic, WWF Sweden

Kristina Yngwe, Director, Young LRF (The Federation of Swedish Farmers)

Fredrik Wulff, Professor Emeritus in Marine Systems Ecology, Stockholm University

Members of the international jury

Johanna Helkimo, Expert in Agri-environmental Payments, Centre for Economic Development, Transport and the Environment of Northern Ostrobothnia

Enn Loigu, Professor, Institute of Environmental Engineering, Tallinn University

Carl Wachtmeister, Board Member, Federation of Swedish Farmers (LRF)

Viesturs Jansons, Head of Department of Environmental Engineering and Water Management, Latvia University of Agriculture

Dorota Metera, President of the board of Bioekspert Ltd. and Board Member of the EU group International Federation of Organic Agriculture Movement (IFOAM)

Ottília Thoreson, Programme Manager, WWF Baltic Ecoregion Programme

WWF Baltic Ecoregion Programme

MIXED
SOURCES

WWF · WWF BALTIC SEA FARMER OF THE YEAR AWARD 2013

COOPERATION

We promote constructive interactions to create awareness, spread ideas and stimulate discussion among stakeholders and partners

DELIVERING RESULTS

We are an active and effective change agent for the conservation and sustainable management of the Baltic Sea



INFLUENCE REGIONAL POLICY

We are a diligent watchdog that monitors how governments manage our common resource, the Baltic Sea

REGIONAL NETWORK

We represent the largest membership network in the region and are present in every country surrounding the Baltic Sea



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.panda.org/baltic

Please contact us for more information!
WWF Baltic Ecoregion Programme
www.panda.org/balticcontacts

© MAURI RAUTKARI | WWF-CANON

PANDA.ORG/BALTIC