



## A Report of an Alpine Peasant Woman in the Trentino, Italy: between Tradition and Modernity



The Thaler Alpine Farm in Proveis, Trentino, Italy

I'm Monica Brunelli, I'm from Cles (Trentino). After the marriage with Heinrich Thaler I became a farmer's wife in Proveis in South Tyrol. The "Thaler Bergbauernhof" has been owned by my husband's family for several generations. Today we lead him together with our four children. It is a closed yard at 1430 meters with steep slopes. On our farm we breed cows, pigs, chickens, geese, dogs, etc. and grow vegetables and fruits. For some years I try to conserve the traditional chicken breed of the mountain farms of the region, the "Proveis-Ultental-Mühlbacher chicken". The Mühlbacher chickens are well adapted to the mountain area. They are rustic, grow very fast and are very independent in the foraging. They are adapted to the harsh climate and give even in winter some eggs. This breed of chicken is also very social among each other and has a strong broodiness. The animals return alone in the stable

in the evening, just after sunset, and do not seek shelter on trees like other breeds.

The energy production on the Taler Hof is very ecological and modern: a solar thermal and a photovoltaic system provide heat energy and electricity. With that a ventilator runs that uses the hot air from the roof to dry the hay in the cell for the best possible forage quality.

The biodiversity of the mountain meadows is a symbol of intact nature. However, the people who have created and developed this diversity are barely noticed behind this mountain backdrop: nothing can and should be left to chance on the mountain farms in higher elevations. The daily work is as rough and exhausting as the climate in the mountain area.

Mountain farms have been handed over from generation to generation including much knowledge, rules, recommendations and agree-

ments. For example, there are precise rules that prescribe the number of animals to be kept per hectare in order to avoid an overproduction of liquid manure and pure manure that must be spread in the meadows, thus preserving the balance of flora, fauna and microorganisms in the soil. Steep slopes require a lot of manual labor. But they are still full of flowers, insects and other animals that almost disappear elsewhere. In the mountains, the time of growing and harvesting food and hay is very short. That is why flowers and herbs smell even more: a trick of nature to attract pollinating insects and complete the generative cycle. This means more flavor and aroma of the milk and meat of the animals fed with this hay.

For centuries, there are clear rules as to when mountain meadows can be mowed. In order to enable the development and natural reproduction by seeds of grasses and flowers on the mountain meadows and larch meadows, the mowing was allowed only on the day of Saint Magdalene on July 22. For this reason, the mountains in the area around Proveis were called "Maddalene".

### **Larch Meadows**

*The use of larch meadows and larch pastures in the South Tyrolean cultural landscape is a centuries-old, if not millennia-old alpine tradition. This form of culture occurs only in the mountain area between 1000 and 2000 m above sea level. In South Tyrol, some of the last, increasingly rare stocks have been preserved.*

*Traditionally used larch meadows and pastures represent a unique combination of two different ecosystems within the cultural landscape. Here, elements of the forest combine with elements of the ecosystem meadow or pasture. (Source: Traditional forms of agriculture and forestry in South Tyrol [http://pro2.unibz.it/ecoralps/\\_April2015\\_DT\\_small\\_format.pdf](http://pro2.unibz.it/ecoralps/_April2015_DT_small_format.pdf))*

A very important practice is the spring pasture and the late autumn pasture in the meadows of the farms by sheep and goats, which weaken the

weeds and strengthen the good grass without leaving any foot damage in the ground. The weeds grow first and are severely weakened by grazing - an intelligent agroeconomic practice, antique but also very modern. Imitation is worthwhile, so less chemical control agents are needed.



Proveis-Ultental-Mühlbacher Cock  
(Foto: M. Brunelli)

This is an aspect that is often ignored, but it is very important to improve the quality of the hay in certain parts of the meadow that would not be so good because of the altitude, exposure and soil conditions. Therefore, almost every farm, in addition to the cows, has its own small herd of sheep and goats that is far more than just a hobby.

Many years ago I made friends with Franz, who lived as a hermit on the horse farm on a very steep slope. He had some cows and calves of original Braunvieh, alpine goats and many chickens including the breed, for which I am particularly committed. The farm was compared to its creation in 1600 still almost true to the original. The kitchen was blackened, and above the table was a shelf of cups in which the milk of the different goats was separated. One day Franz let me taste his goat's milk and started with the red goat. Despite the special flavor of goat's milk she was very pleasant. He told me, "The red always looks for the greasy grass that grows around the stones. You can taste it, right?" Then he handed me another cup. This milk was much stronger, more aromatic and he said this milk is from the black goat, which always runs into the forest and sometimes even eats fir sprouts! He was a sommelier of goat's milk! Knowing the relationship of animals to the environment is almost a lost knowledge, yet so fundamental.

In recent years, the focus has been on native breeds. Black-brown mountain sheep, local goats, Krainer Steinschafe, Grauvieh, alpine pig. They are raised for breeding a high-quality niche production. Our task is to bring the value of traditional agriculture to the coming generation and to preserve the knowledge.





Finally, I would like to draw attention to a major problem for mountain farms: the repatriation / reintroduction of large carnivores. Small mountain farms are hardly able to implement the measures required by species protection organisations and society. Another reason for abandoning the farms and the traditional cultural landscapes and revert into

wilderness with fewer species.

As soon as we talk about the protection of large carnivores, the small mountain farms on the ridges and valleys, which are relatively densely populated in the Trentino, hardly attract any more attention. A problem which affects not only farmers and regional planners.

Find out more about our chickens here: [https://www.youtube.com/watch?v=MNnWlo\\_9hr8](https://www.youtube.com/watch?v=MNnWlo_9hr8)

Monica Brunelli Thaler

## Economics of Conservation: 3. IMAGE Dialogue Forum



In the frame of the H2020 (n° 677353) project IMAGE (innovative Management of Animal Genetic Resources) the third Dialogue Forum

took place in Zagreb, Croatia on August 24, 2018. "Economics of Conservation: Economic trade-offs between gene bank and in-situ conservation?" was the topic of this event. Introductory presentations led the audience into the topic:

Dominic Moran, SRUC (Scotland's Rural College), Edinburgh, explained a new scientific approach to a more efficient ex situ conservation concept. A gap was identified in harmonisation of ex situ collections, of genomic (e.g. DNA, blood, tissue) and reproductive germplasm (e.g. semen, embryos). One of the findings was a storing strategy which allows cross-border collections. But this is difficult to realise because of the trade and sanitary rules. Breed and gene bank selection clearly involves numerous biotechnological, institutional and economic challenges that can be informed by mathematical modelling of cost-effective breed conservation. Scenarios need to be explored which include economic returns associated with breed conservation by adding weights/rank of each breed based on their various attributes.

Adam Drucker, Bioversity International, Rome, presented an overview of Economics of Genetic Re-

sources their Conservation and Use from the perspective of in situ conservation. A range of valuation methods, decision-support tools and research results related to the economics of AnGR (animal genetic resources) conservation and use were presented. Studies were shown to give prominence to preference and ranking methods, to show the importance of AnGR values that are not reflected in the marketplace. These AnGR can only be secured through the implementation of on-farm conservation strategies. There is a relatively limited interaction between animal and plant genetic resource researchers and development practitioners. But it is clear that at least in the sub-field of economics of genetic resources use and conservation, there is a high potential for mutual learning and collaboration that should be further encouraged. Such collaboration would facilitate implementation of the Global Plan of Action and the Convention on Biological Diversity in the context of AnGR.

Next four questions have been discussed in working groups. The questions and results are summarized below:

1. *Do public preferences and trends play a role in what we should be spending on ex situ conservation?*

**Answer Summary:** The public changes its minds quickly and conservation is a long term issue. Therefore the public should not control the goals, but it is important to exploit the public preferences. Genebanks are often financed through public mon-

ey. Collecting the “right” diversity is a scientific issue.

2. *Does the livestock conservation / commercial breeding currently benefiting from the genetic variability that is stored in the gene banks? How to optimise the benefit?*

**Answer Summary:** The situation and conditions differ from country to country. The re-establishment of breeds and support of the breeding can take place through gene banks. This is not very exploited by the commercial sector. CRISPR/CAS9 may be a new technology for exploiting the potential and the existing collections. The ratio of entry and exit is unbalanced at the moment. Therefore the using of material should be more emphasized.

3. *What policy incentives should be in place to promote (on farm and in gene banks) conservation effort? Are there incentives more of a hindrance?*

**Answer Summary:** There is the obligation for the EU to secure all livestock. Therefore NGOs need to be included in the board of (public) cryobanks. It should be better considered what we are targeting with public subsidies. A better targeting of subsidies is needed: There are very large subsidies in the commercial sector, but less in the conservation sector-a better and more precise targeting is necessary in the conservation sector according to real costs and declared needs.

4. *In Europe there are about 25 gene banks (run by a host institution authorized and/or recognized by a national authority), the costs of which are covered by the respective state. Would one consolidated Pan EU resource bank be better than several – why?/why not?*

**Answer – Summary:** For those, who have not a national gene banks it could be helpful to have a central place to store the material. But sanitary- and trade rules may be a hindrance because of higher costs and risks. There are limiting zootechnical logistics: The material needs to be frozen in the country. A virtual central genebank is an objective



of the EUGENA project.

### Ethics

A variety of actors and stakeholders is involved in the management of farm animal genetic diversity. Cryoconservation of reproductive material is one of the complementary strategies for (long term) conservation and for the management of animal genetic resources. Therefore the ethical committee reviewing the project has asked for a report on the ethical considerations of stakeholders for the choice of breeds to be cryopreserved. The IMAGE consortium has prepared an anonymous survey in order to collect information on the viewpoints of a range of stakeholders regarding ethical considerations for the choice of breeds to be cryopreserved. In order to get as many different views as possible, also the participants in the Dialogue Forum were asked to fill in the survey.



### Field Trip

After an intensive discussion morning, a field trip took place in the afternoon to see the Posavje Horse in Bobovica near Zagreb. The horses were very tame and trusty and the farmer Juraj Čiček explained how he manages the animals. In former Times there were two Types bred: a type crossed with arab blood and a pure coldblood type. Today only the crossed type survived. There is an association with about 1200 breeders in Croatia, where the herdbook is kept. The mating takes place natural and no insemination. Up to now there is no semen in the genebank, but storage is planned later. The genebank is currently under reconstruction. The horses have a very good instinct: Already before the water rises near the river, the horses change to higher areas. In wintertime the horses are kept in a stable. They are treated with a paste against worms beginning winter and in spring before they are on the meadows again. Before the group went back to Zagreb, they were invited to taste the farmers' products like cheese and Salami of both horse and pig.

The presentations and also the results will be published on the IMAGE website (<http://www.imageh2020.eu/>) as soon as possible.

# EU Preparatory Action on EU Plant and Animal Genetic Resources in Agriculture II: Final Conference



On 6-7 September, the final conference of the EU Preparatory Action took place in Nantes, France. More than 130 participants were registered to get information about the EU actions and strategies.

The EU emphasises the sustainable management of genetic resources, including an action to conserve Europe's agricultural genetic diversity in the EU Biodiversity Strategy 2020. In this frame two "Preparatory actions on EU plant and animal genetic resources in agriculture" were launched by the European Commission (DG Agriculture and Rural Development) as a result of an initiative of the European Parliament in 2014. Aim of the first preparatory action was how to improve communication, knowledge exchange and networking among the actors in conservation of plant and animal genetic resources in agriculture. In a second preparatory action (January 2016 – December 2018) the valorisation of plant and animal genetic resources was the main objective. On [www.geneticresources.eu/ecompendium/valorisation-projects](http://www.geneticresources.eu/ecompendium/valorisation-projects) an e-compendium of the 52 valorised projects divided into 28 plant and 28 animal projects can be seen on a map. By clicking on the project, a pdf with information on the project and contact details is available.



Within the second Preparatory Action with the topic on valorisation four projects were under study. All projects could develop a suitable marketing strategy: From Monitoring of consumer groups, setup of farmer's production units for a better coordination of growing and selling, building up value chains and strategies for consumer communication and marketing as well as the cultural aspects of agrobiodiversity in a region the

various possibilities of valuation were shown. After presentations of the projects and a panel discussion, some of the presented products could be tasted at a very communicative and diverse stand-up snack in the evening.

The next conference day took place at the "Fête des la vache nantaise, le rendez-vous des races locales" in Dresny-Plessé near Nantes. Partner country of this festival was the Basque Country. In 8 working groups a draft of a "User guide for local project promoters for the initiating of valorisation projects" was intensively discussed. At the end, the participants could enjoy different Gwell dishes, out of the pid noir cattle valorisation project together with a local turkey lunch. One of the conclusions of the action was, that the state of the art in different species and projects for conservation of agrobiodiversity differs from place to place and from variety to variety. The dissemination of the foreseen user guide and also the outcomes of the action at all should be disseminated not only on EU level, but also within the non-EU countries especially to national rural networks.. Once more it was shown how important the multi actor approach also in operational partnership research projects is. Tools are on place to start activities like in the frame of EIP. A key element of EIP agriculture and innovation is the multi actor approach. At the moment there are expected 2300 operational groups (see: <https://ec.europa.eu/eip/agriculture>). SAVE foundation reported about EIP and the operational groups already several times on facebook and in articles.

The final publications of the practical action II will be published in the first quarter of 2019. It will be available also in the EU bookshop (<https://publications.europa.eu/en/web/general-publications>) and on the Commission DG Agri website (<https://ec.europa.eu/agriculture>).

After the end of the action, the results will be discussed in the EU parliament to decide, what will going on with the plant and animal genetic resources in Agriculture on EU level in the future. Therefore it is important to contact a EU delegate of your country and tell the arguments and wishes. We will keep you informed about any news!



## East Aegean Cattle Project



During a short visit in 2013 to Agathonisi Island of the Dodecanese, a small population of neglected and forgotten insular cattle type was „re-discovered“ by a member of Amalthia. Once upon a time, many parts of Greece including many islands in the Aegean had their own and unique domestic breeds. From old studies and pictures, Amalthia has now a good overview of the remarkable variety and agrobiodiversity that was present in almost all inhabited islands. The Agathonisi cattle type is one among the surviving autochthonous island cattle populations which were appreciated in the minor islands of the northern Dodecanese.

The animals are kept free range by a few breeders, living outdoor throughout the year, where they feed in the poor pastures. They are very resilient, need little care and are well adapted to the rough conditions on the island. This small sized type was mainly used as working animals and for meat production, and measures 112-115cm at the withers; cows can weight 100-150kg, bulls can reach 250kg or more if well fed. The coat colours vary from whitish-light grey, light to dark brownish, red-dish to black. The animals are locally well known for the excellent quality and taste of their meat. The preservation of this unimproved isolated population that has survived for centuries, is of the highest priority due to its hardness, longevity and frugality. These traits making it an ideal animal that can take advantage of the poor pastures of the Aegean islands in a sustainable way without destroying the fragile ecosystems already in danger from uncontrolled overgrazing.

In 2014, thanks to Amalthia's action, a pure-bred young bull

was purchased from one breeder and given to another breeder on the island to finally introduce a new blood-line in his herd after many years without a single animal being exchanged!

In 2016 a drastic plan to reduce the number of animals kept made Amalthia search for host breeders in the nearby islands. Luckily a farmer was found immediately on Lipsi island (16 nautical miles away) and a transport of the Amalthia bull plus two adult cows and a young female calf was organised immediately, all sponsored by our organisation.

The animals originating from both main Agathonisi bloodlines are kept throughout the year in a vast fenced plot of land characterized by typical Mediterranean „macchia“. They adapted immediately to the new but similar environment and their numbers doubled in two years. Meanwhile a hitherto unknown breeder was discovered on Lipsi island who owned a relict population that originally came from Agathonisi; a collaboration was started with them.

At present the adult population of these cattle on Agathonisi consists of around 20-25 animals, while so far on Lipsi there are 15 animals; an exchange of young bulls is ongoing between the two breeders there.

This characteristic East Aegean population is also a subject in a genotyping project (collaboration of the Universities LMU of Munich and Agricultural of Athens) involving the cattle populations/breeds sampled all over Greece in the last two years.

<http://www.amalthia.org/en>

*Stefano Dellepiane*



## Newsflash

### Sown Biodiverse Pastures Project



Terraprima is a business group formed by Terraprima-Serviços Ambientais (environment) and Terraprima-Sociedade Agrícola (agriculture). The Sown Biodiverse Pastures project aimed to promote the sustainability of agriculture and the mitigation of environmental impact through the enhancement of environmental services in Sown Biodiverse Permanent Pastures.

50,000 new hectares of Sown Biodiverse Pastures were sown under the project between 2009 and 2012, contributing to the sequestration of 1 million tons of CO<sub>2</sub>. The 1000 farmers who provided this environmental service were paid, making this the first demonstration project, on a large scale, of how

society can compensate farmers for the environmental benefits generated by good agricultural practice. Specifically, the objectives of the project were:

- an increase in the area of these pastures at national and international levels, focusing on degraded areas with low productivity;
- a detailed characterization of environmental services associated with these pastures, as well as the identification and development of mechanisms for evaluating these environmental services and paying farmers for carrying them out;
- a contribution to achieving the national objectives of the Kyoto Protocol.

The innovative nature of the "Terraprima" Project lies in the application of "Biodiversity Engineering" to improving environmental and economic performance of crop and livestock farming on a large land scale and with the direct involvement of farmers who constitute the Terraprima Network. More information: [www.terraprima.pt/en/projecto/2](http://www.terraprima.pt/en/projecto/2)



### Gallina Castellana Negra Herdbook officially recognised



After two years of intensive efforts, the Spanish Breeding Organization for the Conservation of the

Gallina Castellana Negra has succeeded in gaining the official recognition of the Spanish Ministry of Agriculture for the conservation of this domestic chicken breed. INIA ("Instituto Nacional de Investigaciones Agronómicas") supported the request and helped the breeders' organization with the administrative hurdles. This is another important step in securing the traditional Spanish chicken breed, which Isabella I was very fond of in the 15th century and which Christoph Columbus took to America. The breeders' association, which has been active since 2010, is committed to avoiding inbreeding through the exchange of cocks and markings among the breeding animals as far as possible. In addition, care is taken to consider and describe not only the morphological but also the performance characteristics of the breed.



## Food Forever



The Food Forever Initiative is an awareness campaign to help more people understand the importance of crop and livestock diversity for

our food systems. We are seeking inspiring success stories to share with our growing audience, and we would be delighted to highlight your work! Let us know what you or your organization is doing to achieve Target 2.5 of the United Nations Sustainable Development Goals (SDGs).

The aim is to raise awareness as a basis for implementation of Target 2.5 of SDG 2: achieve food security and improved nutrition and promote sustainable agriculture. This not only includes explaining the importance of biodiversity for our food systems to a wider audience, but also highlighting the

inspiring work of partners, their missions and success stories.

The Food Forever Initiative (FFI) was launched in June 2017 at the Stockholm Food Forum by the Crop Trust and The Netherlands Government that together provide the Initiative's secretariat function. FFI is composed of Champions, high profile individuals who have agreed to promote SDG2.5 in their spheres of influence, and Partner Organizations whose mandates contribute to implementation of the Target. A full list can be found at [www.food4ever.org](http://www.food4ever.org).

In addition to maintaining the biodiversity of crops, Target 2.5 calls upon the global community to maintain the genetic diversity of farmed and domesticated animals through in situ (live animals) and ex situ (cryobanks) conservation strategies at national, regional and international levels and promote access to and fair and equitable sharing of benefits arising from the utilization of animal genetic resources and associated traditional knowledge.

## Macedonian Ecological Society opens local office in Resen



For the first time since its establishment in 1972, the Macedonian

Ecological Society (MES), based in Skopje, has officially expanded its presence to the Prespa region by opening its very first local office, in Resen.

The opening of the Prespa local office is an important step forward, having in mind that MES is an active member and co-founder of the transboundary PrespaNet NGO network. The network was established in 2013, in collaboration with the Society for the Protection of Prespa (SPP), based in Greek

Prespa, and Protection and Preservation of the Natural Environment in Albania (PPNEA), based in Tirana, and has been implementing conservation activities in all three countries sharing the Prespa lakes ever since. The local presence of MES brings the partners closer to the local community on this side of the basin and will help in building stronger relationships for conservation in the area, joining the SPP, with many years in the region and PPNEA, which has recently employed a focal point in Prespa. SAVE Foundation is also a member within the PrespaNet especially according to the conservation of rare breeds like the Prespa cattle.

## Countries issue reports on the use of genetic resources in international commerce and research



Germany, Malta and Qatar published first reports on the use of genetic resources under the Nagoya Protocol on Access and Benefit-Sharing.

For the German report on the utilization of genetic resources through the Access and Benefit-sharing (ABS)

Clearing-House a checkpoint communiqué concerning research on ants from South Africa was issued. The ABS Clearing-House is a global repository of information that helps provide legal certainty and transparency in the context of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefit Arising from their Utili-

zation. Part of the role of the ABS Clearing-House is to enable countries to monitor how genetic resources are used along the value chain for commercial or non-commercial research, which is particularly useful when genetic resources have left the country.

The system for monitoring the utilization of genetic resources is explained in a short video:

<https://absch.cbd.int/database/VLR/ABSCH-VLR-SCBD-240572>.

The checkpoint communiqués from Germany and Malta also mark the first time that interoperability functions have been used to automatically publish information on the ABS Clearing-House. In this case, information published on the European Union's (EU) DECLARE tool, an EU-wide tool which



enables users of genetic resources to submit the required due diligence declarations, was automatically transferred and published on the ABS Clearing-House. Using interoperability mechanisms is a practical and efficient way for Parties to the Nagoya

Protocol to automate the publication of information on the Clearing-House..

## Hazelnut Farmers Conference and Network



Source: [www.rapunzel.com.tr](http://www.rapunzel.com.tr)

Hazelnut producer organizations from Georgia, Italy and Turkey, the largest countries of hazelnut producers, organized the first "International Conference on the Hazelnut Supply Chain" in Italy on 17 and 18 April 2018. The hazelnut sector plays a key role in providing incomes for numerous farmers in these countries. Investments particular from the private sector led to an increasing system of contract farming, which not really leads to an inclusive and sustainable development for the mainly small family farmers. The conference was attended by more

than 30 participants, including farmers, researchers, FAO staff, representatives from local municipality authorities and also two Italian Parliamentarians. The conference was organized by producer organizations which included the Biological Farming Association Elkana (Georgia), Çiftçi-SEN (Turkey), Nuovo Mondo Bio (Italy) and Biodistricts (Italy). Aim was capacity building of small-scale hazelnut producers and their organizations through knowledge and experience sharing on contract farming, the Principles for Responsible Investments in Agriculture and Food Systems (CFS-RAI) and the OECD-FAO Guidance on Responsible Agricultural Supply Chains.

At the end of the conference, the hazelnut producers and their organizations came up with an eight point [declaration](#) in which they called for the setting-up of an international network of hazelnut family farmers, increased public investments in family farming and small-scale farmers' cooperatives, and more inclusive and responsible investment in the hazelnut sector. See more at:

[www.fao.org/family-farming/detail-events/fr/c/1144081/](http://www.fao.org/family-farming/detail-events/fr/c/1144081/)

## Last but not Least Tomato Wine: a slightly different Use of Tomatoes



Who told us, that wine is only made of grapes? In Canada you can get nice white wine made from – tomatoes: It looks like white wine (tomatoes have no tannins), and it tastes incredible. The man behind Omerto is Pascale Miche of Belgium; his great grandfather had an excess of tomatoes during WWI, and turned them into wine to avoid food waste. The recipe has been passed down through the generations, and finally commercialized by Pascale in Charlevoix. In his large backyard, he grows six different kinds of heirloom tomatoes, cho-

sen from dozens of varieties. While his organic tomato 'vineyard' doesn't look large, it's home to 5,200 plants, each yielding 3-4 kilos and resulting in 34,000 bottles of wine a year. Two main wines are produced, each 16% alcohol, and each using a blend of three different tomato varieties.

The acidic Omerto Sec was somewhat like whiskey on the nose, and tasted of lime and grapefruit – similar to a Sauvignon Blanc. Never ever would we have guessed it was made with tomatoes, and apparently the sommeliers that have tried it haven't been able to tell either. If you wish to order Tomato wine for your next celebration, you can do this here:

[www.domainevb.ca/en/products/](http://www.domainevb.ca/en/products/) source:  
<http://edibleroadtrip.com/blog/2014/1/2/6tjqenl9l9r9h0yvk54aob7hms68f0>