

## Biodiversity monitoring with farmers

Around 700 farms throughout Austria monitor rare plants and animals on their meadows and pastures in order to better understand the link between abundance of species and different farming practices.



### Summary

About 700 farmers throughout Austria, as well as students from 14 agricultural and forestry schools are observing the diversity of plants and animals on their own meadows and pastures. The program "Farmers keep an eye on plants and animals!" is part of Austria's program for rural development since the period 2007-13 and also in 2014-20. The program stands for the annual monitoring and documentation of plants and animals, as well as for the willingness to care for and sustain the extensive grassland. The program is part of the education measures of the rural development program, with the aims to raise awareness, to build knowledge among farmers about biodiversity on their meadows as well as to inspire them for biodiversity monitoring. This helps to better understand the relationship between grassland management and the abundance of certain indicator species. Regulations are not part of the program but only monitoring activities. Monitoring observations and management measures are reported on an online reporting portal. Farmers are paid a compensation for their monitoring activities, if they take part in further measures of Austria's Agri-Environmental-Program ÖPUL, namely CODE WF (€39/ha with a maximum of 3ha) or biological farming (lump sum of €57).

### Objectives

1. Biodiversity monitoring, conservation and protection of extensive grasslands by farmers, monitoring of 200 plant and 50 animal species throughout Austria
2. Awareness raising and knowledge about biodiversity among farmers via the observation and documentation of the development of plant and animal species and recognition of connections between management practices and abundance of certain species
3. Environmental consciousness raising among farmers
4. Citizen Science in order to gain knowledge about the effects of different land management practices



### Problem description

Since 1995, a huge number of farms within the framework of Austrian Agri-Environmental Program (ÖPUL) have adhered to the agreed management requirements of the nature conservation measure (WF) in the use of their species-rich meadows. However, it is assumed that only if farmers really understand why they are implementing certain management measures a long term effect will be the result. For nature conservation measures to work sustainably, more is needed than incentive payments and contracts designed as simple as possible. The sole advice of ecologists is not enough to achieve long-term awareness. This is where the project sets in and tries to generate long-term understanding among farmers by counting and observing the abundance of animal and plant species themselves and setting them in relation to management.

### RESULT-ORIENTED



The payment is not result-based but the contract solution can be defined as result-oriented.

### PUBLIC GOODS



Farmland biodiversity

### INDIRECT EFFECTS



Landscape and scenery

### LOCATION

### AUSTRIA



Participation is possible in whole Austria.

## CONTRACT

It is a private-public contract between the farmers and the financing party under the framework of 2<sup>nd</sup> Pillar payments.

Funding comes from the government (with and without EU-funding).



**Contract conclusion:**  
Written agreement

**Payment mechanism:**  
Incentive payment



**Funding/Payments:**  
Participating farmers receive expense allowance for monitoring. Farms participating in the ÖPUL nature conservation measure "Code WF" receive the so-called "monitoring surcharge" of € 39/ha. In total, participation is possible with a maximum of three field. For organic farms and other farms the fee is an annual flat rate of € 57 (gross)



**Start of the program:**  
2007  
**End:** ongoing

## Data and Facts - Contract

**Participation:** About 700 farmers throughout Austria, as well as students from 14 agricultural and forestry schools participate in this project.

### Involved parties:

**Farmers.** The observation is carried out independently by the farmers, usually once or twice a year, and for some animals (birds, reptiles) also continuously throughout the year. In the monitoring process, farmers experience their meadows in a completely new way. The focus is not on profitability of the management, but on special features that haven't been considered before and which can only be preserved by farming.

**Regional project representatives.** All over Austria farmers particularly committed to biodiversity monitoring are available to answer questions by other participants and introduce and advertise for the project in their region. The representatives organize guided tours on their own meadows or on other farms and they organize lessons in schools in their federal state.

**Students.** Currently 14 agricultural schools take part in biodiversity monitoring. The project team holds specially designed teaching units on the topic of "rough meadows" at these schools.

**Ecologists.** Ecologists train the farms at the beginning of participation in grassland biodiversity monitoring, they demonstrate to the farmers rare plant and animal species worthy of conservation on their farmland. They train the farmers to observe, count and document according to a certain monitoring design.

**Project team.** The implementation of the project includes a wide range of measures such as support for participating farmers, public relations work, the production of illustrative accompanying materials or the evaluation of in-depth observations of the farmers on animals and plants. To address these demands a project team consisting of different partners (project lead: Austrian Council for Agricultural Engineering and Rural Development, environmental consultancy, landscape planners, ecologists,) are responsible for the professional execution of the project.

### Management requirements for farmers:

No obligatory management requirements

**Conditions of participation:** All farms cultivating meadows with rare animal and plant species can participate. In most cases, participation in the measures "Conservation and development of areas of high nature conservation value (Code WF)" or "Organic farming" within the framework of the Austrian Agri-environmental Programme (ÖPUL) takes place simultaneously.

**Registration:** If farmers want to participate, they must get in contact with the project team and register.

**Enrollment:** An ecologist visits the farm and demonstrates which special and valuable species can be found on the meadows.

**Observe:** The selected indicator species are observed and monitored annually.

**Reporting:** The observations are entered on the reporting platform.

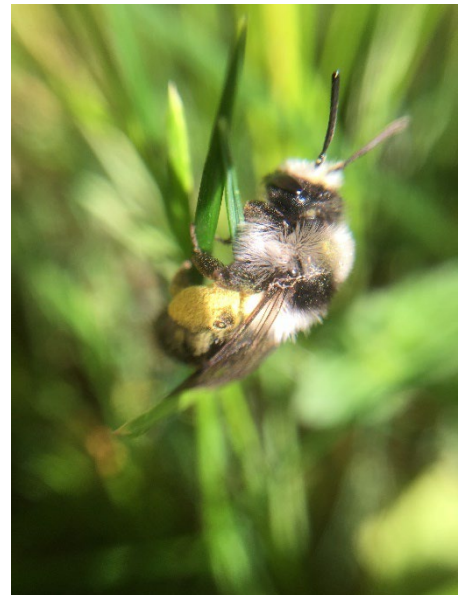
**Receive premium:** Farmers receive an expense allowance for monitoring

**Evaluation:** The observations are used anonymously to evaluate the development of nutrient-poor grasslands and the ÖPUL nature conservation measures.

## Context features

**Landscape and climate:** No specificities; Participation is possible throughout the whole country.

**Farm structure:** Mostly grassland farms with valuable nature conservation areas.



## SUCCESS OR FAILURE?



The Biodiversity monitoring presents a successful contract solution: The number of participants increased over the years. Right now around 700 farmers participate.

According to an evaluation of educational effects of the project carried out in 2018 (n=114 farmers), around 89 % of the participating farmers reported that they gained deeper understanding and appreciation for flora and fauna on their farmland. 94% of all participants quoted that they are more aware of the dynamics between agricultural management practice and biodiversity. More than 75% of all participants of the evaluation report that they are more motivated to continue extensive farming in order to protect biodiversity.

## Reasons for success:

- Farmers learn about the biodiversity on their meadows and pastures and develop an own interest to care for it
- The monitoring and also the reporting on the platform is easy and can be carried out without much effort
- The program bears no risks for the farmers as no consequences occur if the target species is not observed.

## SWOT analysis

