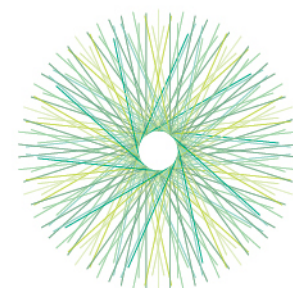


# Press article

## Wildlife and agricultural production

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### Press article long article

#### Italian Operational Group develops ultrasonic technology to protect crops from damage by wild animals

**The presence of wildlife is increasing in several parts of Europe. There are over 400.000 ungulates, mostly deer and wild boar, living in the Italian region of Tuscany. They may cause serious damage to farm crops, resulting in loss of income for farmers. The Operational Group ULTRAREP is working on innovative ultrasonic technology to protect crops from ungulates, in a sustainable way, while not harming the animals.**

"Farmers in Tuscany have to deal with wild boars in 80 percent of the cases, followed by roe deer and fallow deer. The situation is alarming and affects almost all viticulture, cereal and oil crops, fruit and vegetable companies. Especially those located in medium-hill areas. For every farmer there are now 5 ungulates, a number that almost doubled in five years. Therefore, we hope that ultrasound technology for the removal of wild ungulates can be an answer", says Massimiliano Biagi, agronomist and technical director of Barone Ricasoli farm. He is in charge of the Operational Group ULTRAREP, which stands for ULTRASound Animal REPELLer.

The consortium for the Operational Group consists of 10 partners, including four farms and two research partners. Two of the farms are located in the hilly vine/wine district of Chianti Classico, one in the area of Val di Cornia for horticultural production and one farm in a mountainous area for forest plants. Due to their geographical location, the farms serve as pilots to test the ULTRAREP system in different landscapes.

Biagi is farmer at Barone Ricasoli, which is a winery with vineyards in one of the wildest areas of Tuscany. Biagi: "The presence of ungulates is massive and creates enormous problems for the grape production. At the same time, we want to respect the environment and therefore we find metal fences not a good solution. Before setting up this Operational Group, I did an experiment in my vineyard with non-professional bollards. The devices emit a series of pulses in the ultrasonic range of frequencies. The ungulates find this extremely annoying and this persuades them to flee along "wildlife corridors". These corridors are pathways leading towards wooded areas or natural parks, thus preventing the animals from moving into the neighbouring vineyards. This experience led to the creation of an Operational Group to further develop this ultrasonic system. ULTRAREP is different compared to other systems such as shelters, fences with mesh or electric or olfactory bollards. These systems have often demonstrated a fairly limited effectiveness, and high installation and management costs."

Biagi is very positive regarding the opportunities that technology offers in finding solutions for the wildlife problems: "Especially in this case, innovation and technology offer interesting tools that can reduce damage in agriculture. I also believe that the results of this Operational Group can be used for predators too. Eventually we hope to transfer the experience that we gained in this project to other Operational Groups within the National Rural Network and the European Innovation Partnership for Agriculture, so that other farmers in Europe can also benefit from our efforts."

## Press article short article

### Italian Operational Group develops ultrasonic technology to protect crops from damage by wild animals

**The presence of wildlife is increasing in several parts of Europe. There are over 400.000 ungulates, mostly deer and wild boar, living in the Italian region of Tuscany. They cause serious damage to farm and forestry crops leading to loss of income for farmers and foresters. The Operational Group ULTRAREP is working on innovative ultrasonic technology to protect crops from ungulates.**

"Farmers in Tuscany have to deal with wild boars in 80 percent of the cases, followed by roe deer and fallow deer. We hope that ultrasound technology help scare wild ungulates away from farms", says Massimiliano Biagi, who coordinates the Operational Group ULTRAREP.

The consortium for the Operational Group consists of 10 partners, including four farms and two research partners. The farms are located in different areas, so they can serve as pilots to test the ULTRAREP system in different landscapes.

Biagi: "Before setting up this Operational Group, I experimented in my own vineyard with non-professional bollards. The devices emit a series of ultrasonic pulses. The ungulates find this extremely annoying and this persuades them to flee. I noticed that this worked and we created an Operational Group to further develop this system."

Biagi is very positive regarding the opportunities that technology offers for wildlife problems: "Especially in this case, innovation and technology offer interesting tools that can reduce damage in agriculture. I also believe that the results of this Operational Group can be used for predators too. Eventually we hope that other farmers in Europe will benefit from our efforts."

## Background information

### Project information

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- [www.ultrarep.it](http://www.ultrarep.it)
- [Operational Group project webpage](#) in the EIP-AGRI database

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## Pictures

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Farmers in Tuscany have to deal with wild boars in 80 percent of the cases. They may cause serious damage to farm crops.



There are over 400.000 ungulates, mostly deer and wild boar, living in the Italian region of Tuscany.



Biagi: "The devices emit a series of pulses in the ultrasonic range of frequencies. The ungulates find this extremely annoying and this persuades them to flee along "wildlife corridors".



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## More information on wildlife and agricultural production

The experts from the [EIP-AGRI Focus Group 'Wildlife and agricultural production'](#) cover the question 'How to promote innovative and sustainable practices to prevent and control wild animal damage on farms while at the same time protecting wildlife?' The Focus Group report - including a state of play, recommendations, ideas for Operational Groups and research needs on the topic - will be published in 2021.

## More information on digitalisation

- [EIP-AGRI Brochure Digital evolution in agriculture](#) – available in English, French, German, Hungarian, Latvian, Romanian, Slovenian
- [EIP-AGRI factsheet Digital \(r\)evolution](#), with EIP-AGRI scope and links to previous EIP-AGRI events, inspirational ideas, funding opportunities,... related to digitisation

**Websection 'digital agriculture'** at the EIP-AGRI website - To get inspired by existing digital technologies, projects and the agricultural community already working with them. - To find out how to improve digital skills and knowledge.

## EIP-AGRI

The European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI) has been launched by the European Commission in a bid to promote rapid modernisation of the sectors concerned, by stepping up innovation efforts. The EIP-AGRI aims to foster innovation in the agricultural and forestry sectors by bringing research and practice closer together – in research and innovation projects as well as via the EIP-AGRI network. Also grassroots ideas from farmers get developed into innovations through the so-called Operational Group innovation projects.

The EIP-AGRI aims to streamline, simplify and better coordinate existing instruments and initiatives, and complement them with actions where necessary. Two specific funding sources are particularly important for the EIP-AGRI: the EU Research and Innovation framework, Horizon 2020, as well as the EU Rural Development Policy.

### **EIP-AGRI Brochure on the EIP-AGRI Network**

(EN – BG – DE – ES – FR – GR – HU – IT – PT – RO)

## EIP-AGRI Operational Groups

- 98 Rural Development programmes provide support to EIP Operational Group innovative projects \*
- Over 3200 Operational Groups are planned to be established under the approved RDPs (2014 – 2020)
- Over 1500 Operational Groups projects have been selected for funding and are currently ongoing (or already finished)\*. Member States will still start more Operational Group projects which may run until 2023.

\* Information officially submitted to the European Commission by RDP managing authorities (May 2020)

EIP-AGRI Operational Groups **are groups of people who work together in an innovation project funded by Rural Development Programmes (RDPs)**. They bring together partners with complementary knowledge. The composition of the group will vary according to the theme and specific objectives of each project. Farmers, advisers, scientists, businesses or other relevant partners work together to find practical solutions for specific problems or opportunities for European farmers and foresters. Farmers and foresters need to be cooperating throughout the project to ensure that the innovative solutions are practical and likely to be quickly applied in the field. Read the [basic principles. Innovation support services](#) (including advisers with a focus on innovation), and in particular innovation brokering, can therefore play a crucial role in getting worthwhile projects off the ground by facilitating contacts.

Find out more in the [EIP-AGRI brochure on Operational Groups](#). The brochure on Operational Groups is available in English, Bulgarian, Czech, French, German, Greek, Hungarian, Portuguese, Romanian, Slovak, Slovenian and Spanish.

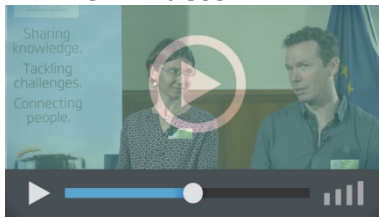
Operational Groups can benefit from networking and collaborating with organisations from outside their partnership and from other regions and countries, such as other Operational Groups, research projects, farmers' organisations or local authorities and European knowledge networks. Read the [EIP-AGRI Brochure 'Operational Groups – Collaborate to innovate'](#). It shows some examples of successful collaboration. It

provides Operational Groups with inspiration and tools for further knowledge exchange within the EIP-AGRI network. This brochure is available in English, Latvian, Romanian and Slovenian.

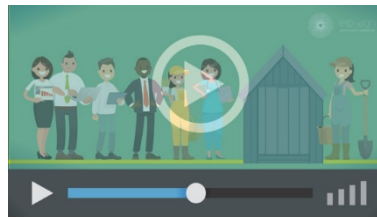
Check out the '[Operational Groups](#)' dedicated section on the EIP-AGRI website, including:

- More than 1500 Operational Groups available in the database
- detailed information on how to set up Operational Groups, on supporting networks and relevant EIP-AGRI seminars and workshops
- links to results and contact details of ongoing Operational Groups in the [EIP-AGRI database](#)
- a [list of all RDP Managing Authorities](#)

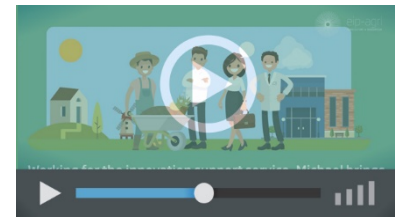
### EIP-AGRI videos



[Operational Groups – first experiences](#)



[Operational Groups – collaborate to innovate](#)



[Innovation Support Services, supporting innovation in EU farming and forestry](#)