



Shared Innovation Space for Sustainable Productivity of Grasslands in Europe

Project Acronym: Inno4Grass

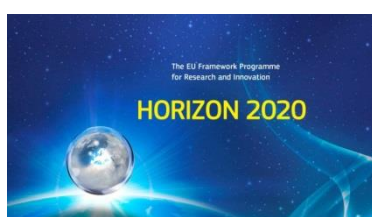
Project Number: 727368

Deliverable No. 4.4 – M24

Updated versions of *Encyclopedia pratensis* including information from farmers groups

Responsible partner: INRA, France

Submission date: March 2019



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727368

Content

ONE-STOP SHOP	4
BROKERING SYSTEMS	6
CONFERENCE PAPERS DATABASE	7
INNO4GRASS CATALOG	8
Farmer portraits	10
Case studies	12
Practice abstracts	14
Innovation analysis	16
VIDEOS	18
NEWS	20

Encyclopedia pratensis is the first encyclopedia dedicated to grasslands and forage crops. It was built on the basis of international scientific literature and enriched by the practices from farmers.

It is the result of several national and international research projects. It was initiated as a work package of the European Project Multisward whose the main objective was the development of multi-species swards for multi-functional grasslands.

Encyclopedia pratensis is in the heart of the Inno4Grass Information management system (IMS). It gathers all information and knowledge produced by the project.

24 months after the beginning of the project Inno4Grass, a list of products is already available on the *Encyclopedia pratensis*. It aims at showing all information arising from the range of activities of Inno4Grass. It includes:

- An easy access to a large range of decision support systems available for grasslands and that were assessed during the project,
- A description of the grassland-oriented brokering systems in the various European countries,
- An easy access to papers of academic and applied sciences, that are relevant to the various grassland issues,
- And, above all, all the materials written from the description of the farm portraits and the case studies, the analysis of innovations and the practice abstracts that were prepared from this very broad and large survey.
- After completion of T4.2, the cognitive maps corresponding to each case study will also be implemented on *Encyclopedia pratensis*.

www.encyclopediapratensis.eu



One-stop shop

One-stop shop for grassland tools/methods for grazing management supports (D5.2)

www.encyclopediapratisensis.eu/grassland-tools/

- *Direct access from the Encyclopedia pratensis home page*

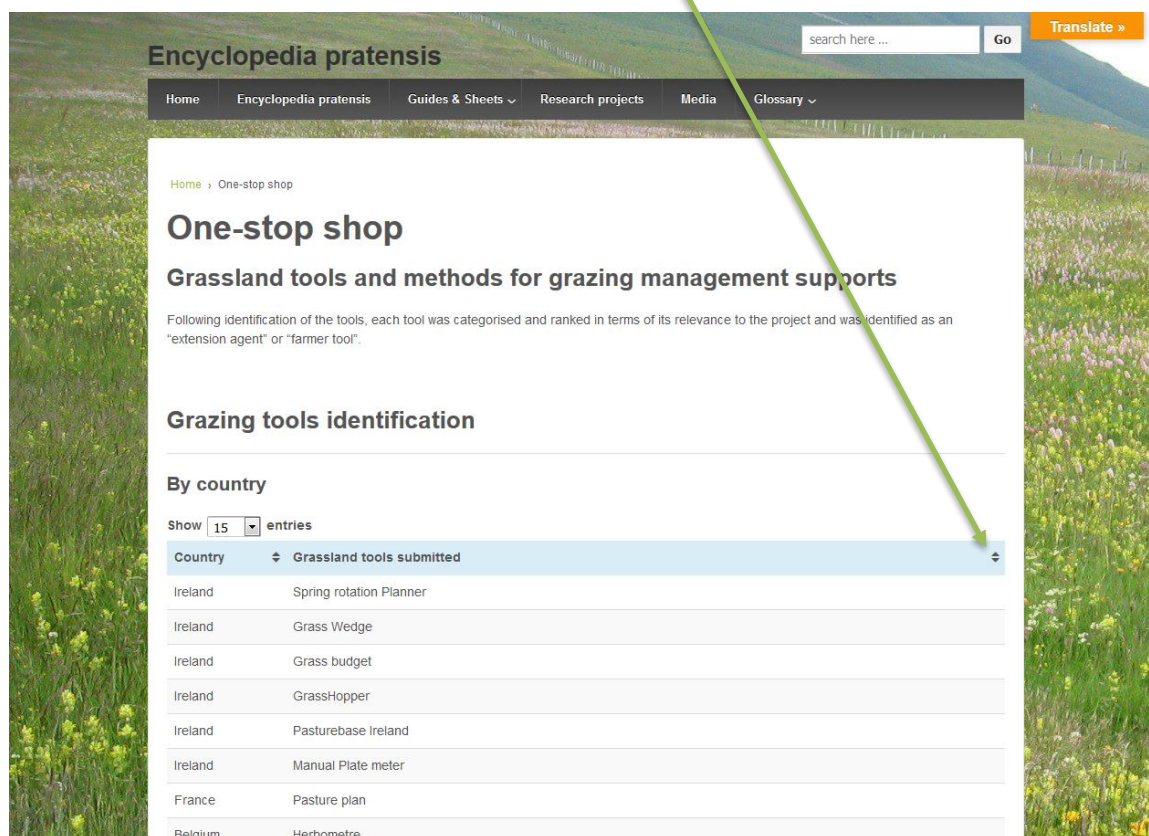


- *A page with different lists*

Grassland tools are listed by country or functionality and categorized into the following categories:

- Grassland Hardware
- Budgeting
- Grassland Decision support
- Grass Quality
- Fertiliser
- Weather
- Grassland Renovation
- Feed costs
- Ecology

Each list can be filtered by the header of the table



Encyclopedia pratensis

search here ... Go Translate »

Home Encyclopedia pratensis Guides & Sheets Research projects Media Glossary

Home > One-stop shop

One-stop shop

Grassland tools and methods for grazing management supports

Following identification of the tools, each tool was categorised and ranked in terms of its relevance to the project and was identified as an "extension agent" or "farmer tool".

Grazing tools identification

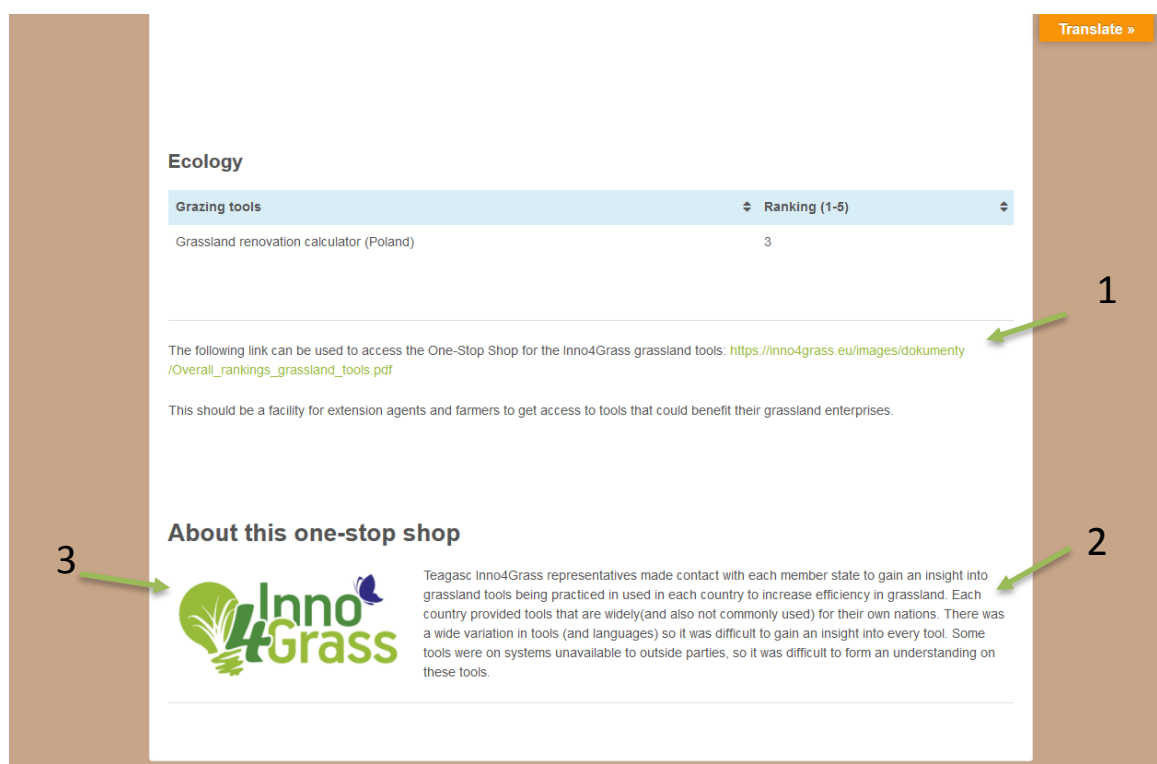
By country

Show 15 entries

Country	Grassland tools submitted
Ireland	Spring rotation Planner
Ireland	Grass Wedge
Ireland	Grass budget
Ireland	GrassHopper
Ireland	Pasturebase Ireland
Ireland	Manual Plate meter
France	Pasture plan
Belgium	Herbometre

At the bottom of the page are available:

1. a link to the pdf of the deliverable D5.2,
2. a presentation of the Inno4Grass project,
3. a link to the Inno4Grass Website behind the logo.



Translate »

Ecology

Grazing tools	Ranking (1-5)
Grassland renovation calculator (Poland)	3

The following link can be used to access the One-Stop Shop for the Inno4Grass grassland tools: https://inno4grass.eu/images/dokumenty/Overall_rankings_grassland_tools.pdf

This should be a facility for extension agents and farmers to get access to tools that could benefit their grassland enterprises.

About this one-stop shop

Teagasc Inno4Grass representatives made contact with each member state to gain an insight into grassland tools being practiced in used in each country to increase efficiency in grassland. Each country provided tools that are widely (and also not commonly used) for their own nations. There was a wide variation in tools (and languages) so it was difficult to gain an insight into every tool. Some tools were on systems unavailable to outside parties, so it was difficult to form an understanding on these tools.

Brokering systems

Inventory of innovation brokering systems in Europe that are active on grassland or have the potential to be active on grassland (D3.1)

www.encyclopediapratis.eu/encyclopedia_pratis/about-grassland/the-actors/brokering-systems/

This inventory is one of the pages of the encyclopedia (1).

- About Grasslands, yesterday and today > The Actors > Brokering system

The Inno4Grass website is accessible from two places:

- at the end of the introduction (2),
- behind the logo in the sidebar (3).

Encyclopedia pratis

Home Encyclopedia pratis Guides & Sheets Research projects Media Glossary

Home > Encyclopedia pratis > About Grasslands, yesterday and today > The Actors > Brokering systems

Brokering systems

Among European countries, the innovation brokering systems are organized in different ways. They are mostly broader organised in agriculture or part of the broader national innovation development strategy. The innovation brokering systems within the 8 countries (Belgium, France, Germany, Ireland, Italy, Poland, Sweden and the Netherlands) involved in the Inno4Grass project are described here.

Belgium

Innovation brokering system was funded by the EAFRD. The activities are realized in different ways:

- The Support Unit of Walloon Rural Development Network (RwDR) establishes connections between rural entrepreneurs, specially farmers, and researchers through 6 workshops taking place in 2016, 2017 and 2018. A final seminar will take place in the first half of 2018 with the ambition to involve European partners.
- The Agency for Enterprise and Innovation (AEI) proposes to support the growth of Walloon companies, innovation and in particular open innovation as well as the development of new economic activities.
- DiversiFerm aims to offer its support to those wishing to develop products from the agriculture of Wallonia. It is a structure of technical and technological assistance and supervision.
- Fourrages Mieux ASBL is a non-profit organization active in the advice and valorization of agricultural techniques linked mainly to grasslands. The organization brings together the different actors from Wallonia involved in valorization and research at grassland and forage level.

In Flanders there are several important innovation brokering systems active:

- ILVO (Instituut voor landbouw-, visserij- en voedselonderzoek) stands for

Search in Encyclopedia

search here ... Go

Inno4Grass

Table of contents

- What are Grasslands?
- About Grasslands, yesterday and today
 - Historical Context
 - The Actors
 - Seed Companies
 - Brokering systems
 - Policies and Regulations
 - Societal Threats, Environment, Research, and Farm Life
 - Selection of Varieties
 - Genetic Research
 - Farm Life

Conference papers database

Enriching innovative grassland practices with literature results (T3.3)

grassland.uni-goettingen.de/index.php

The direct access from the *Encyclopedia pratensis* home page includes a short presentation, a link to the database and a link to the Inno4Grass website through the logo.



Inno4Grass catalog

A catalog for the different Inno4Grass products includes farmer portraits, case studies, practice abstracts and innovation analysis.

The Inno4Grass logo present on all page/product links to the project website:

www.inno4grass.eu

The screenshot displays the 'Encyclopedia pratensis' website with the Inno4Grass section. The header includes a search bar, a 'Go' button, and a 'Translate' button. The main navigation bar lists 'Home', 'Encyclopedia pratensis', 'Guides & Sheets', 'Research projects', 'Media', and 'Glossary'. The Inno4Grass section is titled 'Inno4Grass' and 'Innovations for sustainable productivity of grasslands in Europe'. It shows 'Showing 1–16 of 281 results' with a 'Default sorting' dropdown. The main content area features a grid of 16 product cards, each with a thumbnail image, a title, a brief description, and a 'Read more' button. The cards are organized into four columns and four rows. The right sidebar contains three filter sections: 'Product type' (Case study (85), Farmer portrait (171), Innovation analysis (3), Practice abstract (22)), 'Domains of innovation' (animal feeding management (42), animal type (breed) (36), farm system (86), forage conservation technique (38), forage mixture (75), grazing management system (147), landscape (25), legume management - Annual legumes (10), legume management - Perennial legumes (27), machinery, tools (49), marketing (53), product processing (29)), 'Main types of animal' (beef cattle (48), dairy cattle (212), dairy goats (6), dairy sheep (33), meat sheep (26)), and 'Farming system' (conventional farming (203), organic farming (83)). The bottom of the page shows a pagination bar with links 1, 2, 3, 4, ..., 16, 17, 18, and a 'Read more' button. The footer includes the copyright notice '© 2019 Inno4Grass'.

Encyclopedia pratensis

search here ... Go Translate »

Home Encyclopedia pratensis Guides & Sheets Research projects Media Glossary

Home » Inno4Grass

Inno4Grass

Innovations for sustainable productivity of grasslands in Europe

Showing 1–16 of 281 results Default sorting

Product type

- Case study (85)
- Farmer portrait (171)
- Innovation analysis (3)
- Practice abstract (22)

Domains of innovation

- animal feeding management (42)
- animal type (breed) (36)
- farm system (86)
- forage conservation technique (38)
- forage mixture (75)
- grazing management system (147)
- landscape (25)
- legume management - Annual legumes (10)
- legume management - Perennial legumes (27)
- machinery, tools (49)
- marketing (53)
- product processing (29)

Main types of animal

- beef cattle (48)
- dairy cattle (212)
- dairy goats (6)
- dairy sheep (33)
- meat sheep (26)

Farming system

- conventional farming (203)
- organic farming (83)

Country

- Belgium (37)
- France (46)
- Germany (30)
- Ireland (30)
- Italy (45)
- Poland (30)
- Sweden (30)
- The Netherlands (33)

© 2019 Inno4Grass

In the sidebar, products can be filtered by:

- the product type (farmer portrait, case study, practice abstract or Innovation analysis);
- 3 types of descriptors selected in the deliverable D4.1 - List of descriptors and indicators to be used for running the characterization of farms and case studies: Domain of innovation, Main types of animals and Farming system;
- the country (8 countries members of Inno4Grass).

Example: 8 farmer portraits concern an innovation on grazing management system for dairy cattle in organic farming in France

The screenshot displays the Inno4Grass website interface. At the top, there is a search bar with the text 'search here ...' and a 'Go' button. Below the search bar is a navigation menu with links: Home, Encyclopedia pratensis, Guides & Sheets, Research projects, Media, and Glossary. The main content area is titled 'Inno4Grass' and features a grid of 8 results. Each result includes a thumbnail image, a title, a brief description, and a 'Read more' button. The results are as follows:

- 2 milking parlours with only 1 equipment**: Image of a milking parlour.
- A system focused on autonomy and work conditions**: Image of a cow in a stable.
- Grazing and economic efficiency in organic production**: Icon of a farmer in a red hat.
- Intensification respectful of the means of production**: Icon of a farmer in a red hat.
- Maximal grazing with automatic milking**: Image of a cow in a field.
- Maximize grazing with diverse and productive grasslands**: Icon of a farmer in a red hat.
- Permanent grasslands renovation after intercrops sowing**: Image of a field with green plants.
- Priority to harvested forage quality and grazed grass**: Icon of a farmer in a red hat.

On the right side of the page, there is a sidebar with the Inno4Grass logo and several filter sections:

- Product type**: Farmer portrait (8) (selected with a red X).
- Domains of innovation**: animal type (breed) (1), farm system (2), forage conservation technique (2), forage mixture (1), grazing management system (8) (selected with a red X), landscape (2), machinery, tools (1).
- Main types of animal**: dairy cattle (8) (selected with a red X), meat sheep (1).
- Farming system**: conventional farming (1), organic farming (8) (selected with a red X).
- Country**: Belgium (4), France (8) (selected with a red X), Italy (2), Sweden (3), The Netherlands (4).

A 'Translate »' button is located in the sidebar. The background of the website is a lush green field with yellow flowers.

Farmer portraits

Identifying innovative farmers T2.1

www.encyclopediapratensis.eu/product-category/farmer-portrait/

The 171 farmer portraits are now available in the catalog.

Each product “Farmer portrait” includes (see below):

1. links to the pdf of the English version and the version in native language when appropriate.

And can be enriched with:

2. links to the factsheets in English and in native language when appropriate;
3. video of presentation;
4. image gallery;
5. related products (case study, practice abstract, innovation analysis); and other media...

Example: www.encyclopediapratisensis.eu/product/inno4grass/schornhof/

Encyclopedia pratisensis

Home Encyclopedia pratisensis Guides & Sheets Research projects Media Glossary

Home / Inno4Grass / Farmer portrait / Grazing management with suckler cows and regional marketing of beef products

Grazing management with suckler cows and regional marketing of beef products

Schornhof/Markus Lintner

1

2

3

4

5

Description

The organic farmer of the "Schornhof" keeps suckler cows and beef cattle of the races Grauvieh and Original Braunvieh on his dairy cattle farm since 2006. The cattle are kept on hay meadows and on ecologically valuable, extensive pastures without import of off-farm forage. The practiced grazing management system is a flexible rotational stocking. The agricultural area of the farm is 60 ha, of which 24 ha are used for forage production, consisting of 11.4 ha lemnery grazed sward pastures (no fertilisation additionally to the animal dung) and 12.6 ha grassland combining mowing (1-2 cuts) and grazing. The animals are grazing from the end of April until the middle/end of October. In this period, they do not receive any additional forage. In the winter months, they only get hay from the own meadows. Breeds suitable for a grazing management on moderately steep slopes are crossed with a beef breed for meat production.

The meat of the 16 fattened ows and -heifers is marketed under the regional label "BioBief". The marketing is done by the cooperative "Bio regio", a group of 23 South Tyrolean organic mountain-farmers, conducting suckler cow keeping. The beef is slaughtered after 10-11 months by a butcher and divided up into mixed meat packages. The main customers of this packages are private persons, hosting companies and public facilities. The slaughter-free feeding with only hay is a mandatory criterion for the cooperative members.

Reason for the innovation

- Processing products (pasture-based meat)
- Short marketing chain
- Curiosity in the subject/technique, personal motivation about seeking for a nutrient cycle closed within the farm

Farm description

Environment

- Main soil types: sandy loam, limestone
- Climate: temperate continental climate
- Average altitude (m a.s.l.): 1400
- Average slope (%): 17

Grassland management

- Grazing: Yes, partly combined with cut use
- Grazing management type: flexible rotational stocking
- Grazing duration (month/year): 6
- Number of cuts on mowed areas: 1-2 cuts/year
- Forage conservation type: hay
- Average fertilisation rate: a 96 kg N/ha, slurry in the areas surrounding the farm buildings, only animal dung on the ecologically valuable, extensive pastures

Structure

- Annual Work Unit: 1.5
- Agricultural Area (ha UAA): 24 ha
 - 11.4 ha pasture
 - 12.6 ha mowed pasture
 - 0.05 ha arable land (vegetables, crops, potatoes)

Animal performance

- Breed name: Grauvieh, Original Braunvieh, Limousin (bull)
- Total Livestock Unit (LU): 27
- Average stocking rate (LU/ha UAA): 1.1
- Average acquisition rate roughage: 0%

Why it is working

The whole family shares the aim of a sustainable, closed nutrient cycle within the farm.

The farm fulfils the requirements for grazing management (size and topographic features, water supply on the grazing areas) and uses animal breeds suitable for grazing under the given farm conditions.

You may also like...

Grazing management (rotational stocking) combined with mowing

Grazing management with suckler cows and regional marketing of beef products

Grazing management with suckler cows and regional marketing of beef products

Case studies

Creation and monitoring of case studies T2.3

www.encyclopediapratisensis.eu/product-category/inno4grass/case-study/

The 85 case studies are available in the catalog.

Each product “Case study” includes (see below):

1. link to the pdf of the English version
2. link to the 85 case studies in one file in pdf

And can be enriched with:

3. image gallery;
4. linked products (farmer portrait, practice abstract, innovation analysis); and other media...

Example: www.encyclopediapratisensis.eu/product/inno4grass/grazing-management-rotational-stocking-combined-with-mowing/

1 Grazing management (rotational stocking) combined with mowing

2 Case studies

3 Schornhof - Pasture management

4 You may also like...

Practice abstracts

Practice and science meet in at least 144 discussion groups T3.4

www.encyclopediapratensis.eu/product-category/inno4grass/practiceabstract/

The first practices abstracts are available in the catalog (20).

Each product “Practice abstracts” can be enriched with (see below):

1. video of presentation;
2. image gallery;
3. linked products (farmer portrait, case study, innovation analysis) and other media...

Example: www.encyclopediapratis.eu/product/inno4grass/grazing-management-with-suckler-cows-and-regional-marketing-of-beef-products/

Encyclopedia pratis

Home Encyclopedia pratis Guides & Sheets Research projects Media Glossary

search here ... Go

Grazing management with suckler cows and regional marketing of beef products

Schornhof/Markus Lintner

Practice abstract

Categories: Inno4Grass, Practice abstract Tag: Practice abstract

Description Additional information

Description

Intensive dairy farming with all year-round stall-feeding of lactating cows is the most common form of livestock farming in the mountain environment in South Tyrol. Due to unfavourable topography and climatic constraints (short vegetation period) the grassland management as meadows has a long tradition.

The innovative organic farmer strikes unusual, even if not new, paths in both respects by keeping suckler cows and beef cattle on hay meadows and pastures during the summer season. In the winter months, the animals are kept in a loose housing system where they only get hay from the own meadows, without import of off-farm forage.

Breeds suitable for a grazing management (Grauvieh, original Braunvieh) are crossed with a beef breed (Limousin) for meat production. The practiced grazing management system is a flexible rotational stocking, partially combined with cut use.

This operation mode leads to a reduction of labour intensity compared to indoor feeding, especially during the summer months when the animals are grazing.

The produced high-quality meat is regionally marketed by a cooperative.

This operation mode could also be profitable for small-structured farms in the mountain environment and is well combinable with a part-time job.

Prerequisites are the acceptance of the shift of the criteria to evaluate the personal success from maximum yield (revenue-oriented) to an economic productivity of the labour (income-oriented), the fulfilling of the necessary requirements for grazing management (size and topographic features, the use of animal breeds suitable for grazing etc.) as well as the consumers' demand for a seasonal, high-quality product.

In der Bergregion Südtirol stellt die intensive Milchviehwirtschaft mit ganztägiger Stallhaltung der laktierenden Kühe die häufigste Form der Viehwirtschaft dar. Aufgrund der ungünstigen Topographie und der kurzen Vegetationszeit hat die Nutzung der Grünlandflächen als Wiesen eine lange Tradition. Der biologisch arbeitende Innovator beschreitet in beiden Hinsichten unübliche, wenn auch nicht unbedingt neue Wege, in dem er Mutterkühe und Mastbinder, ohne Zukauf von betriebsfremden Futter das halbe Jahr über auf Mahwiesen und extensiven Weiden hält.

In den Wintermonaten befinden sich die Tiere im Freiluftstall und erhalten ausschließlich Dürffutter der eigenen Wiesen.

Die weidetauglichen Rinderrassen werden mit geeigneten Rassen für die Fleischproduktion gekreuzt. Die Beweidung erfolgt aufgrund eines flexiblen Koppelsystems, welches zum Teil mit einer Mähnutzung kombiniert wird.

Diese Art der Viehwirtschaft resultiert in einer Reduzierung der Arbeitszeit während der Sommermonate gegenüber der traditionellen Milchwirtschaft, da die Tiere im Sommer über nicht im Stall, sondern auf der Weide sind.

Das qualitativ hochwertige Fleisch der Tiere wird regional, im Rahmen einer Genossenschaft, vermarktet.

Diese Form der Bewirtschaftung könnte auch für andere kleinstrukturierte Betriebe in Berglagen, die im Nebenerwerb geführt werden, gewinnbringend sein.

Als Voraussetzungen gelten der Perspektivenwechsel von einer umsatzorientierten auf eine ertragsorientierte Strategie, das Vorhandensein der betrieblichen Voraussetzungen (Größe, Topographie, Haltung weidetauglicher Rassen usw.) sowie die bestehende Nachfrage seitens der Kunden für ein saisonal verfügbares, qualitativ hochwertiges Produkt.

You may also like...

Grazing management (rotational stocking) combined with mowing Read more

Grazing management with suckler cows and regional marketing of beef products Read more

Grazing management with suckler cows and regional marketing of beef products Read more

Schornhof – Pasture management

Schornhof – Farm infrastructure

Schornhof – Direct marketing

1

2

3

© 2019 Inno4Grass

Innovation analysis

Analyzing and synthetizing information T2.5

www.encyclopediapratis.eu/product-category/inno4grass/innovation-analyses/

Presently, 3 innovation analyses are in the catalog.

Each product “Innovation analysis” includes (see below):

1. links to the pdf of the English version and the version in native language when appropriate.

And can be enriched with:

2. video of presentation;
3. image gallery;
4. related products (farmer portrait, case study, practice abstract), and other media...

Example: www.encyclopediapratisensis.eu/product/inno4grass/ia-shornhof/

The screenshot displays the 'Encyclopedia pratisensis' website. The main content area is titled 'Grazing management with suckler cows and regional marketing of beef products' by Schornhof/Markus Lintner. It includes an 'Innovation Analysis' section with a list of bullet points, a 'Description' section titled 'The innovation at a glance', and a 'Strengths' section. The 'Prerequisites/weaknesses' section is also present. On the right side, there is a 'Presentation' video, a 'Schornhof – Pasture management' section with images, a 'Schornhof – Farm infrastructure' section with images, and a 'Schornhof – Direct marketing' section with an image. At the bottom, there is a 'You may also like...' section with three related articles. The page is annotated with numbers 1 through 4 and arrows pointing to specific sections:

- 1: Points to the 'Innovation Analysis' section.
- 2: Points to the 'Presentation' video.
- 3: Points to the 'Schornhof – Pasture management' section.
- 4: Points to the 'You may also like...' section.

What the innovation is about

Would you do it?

The farmer answers because he is convinced that a closed nutrient cycle is the only way to ensure a sustainable future for his farm.

The operation mode is well combined with the existing farm structure.

What would you like to see?

The farmer would like to invest more money in the farm.

Would there be enough market available in your village for three other farmers implementing your innovation?

Yes, principally the potential exists, as the market for organically produced meat is growing.

Prerequisites are the organic farming as well as the guaranteed purchase of the production by the customer. Suckler cow husbandry represents a good alternative to the traditional dairy farming.

You may also like...

- Grazing management (rotational stocking) combined with mowing
- Grazing management with suckler cows and regional marketing of beef products
- Grazing management with suckler cows and regional marketing of beef products

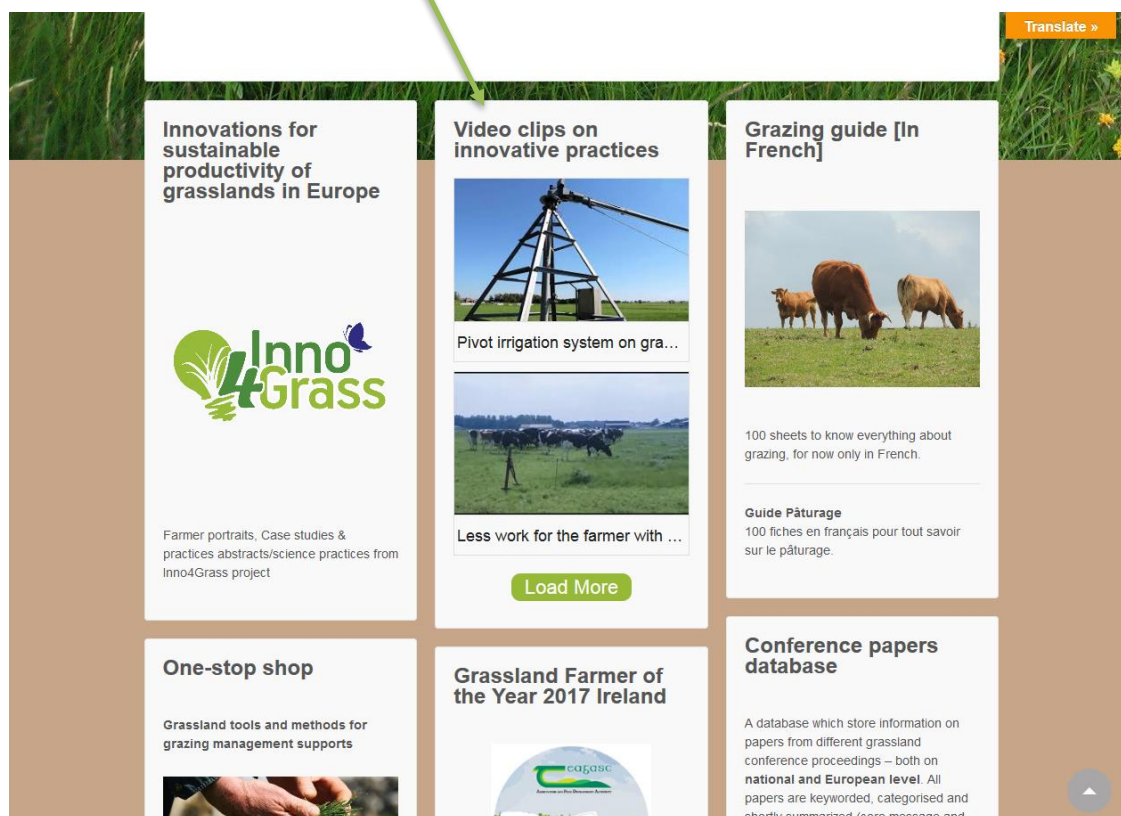
© 2019 Inno4Grass

Videos

48 technical leaflets and 104 videos D2.3

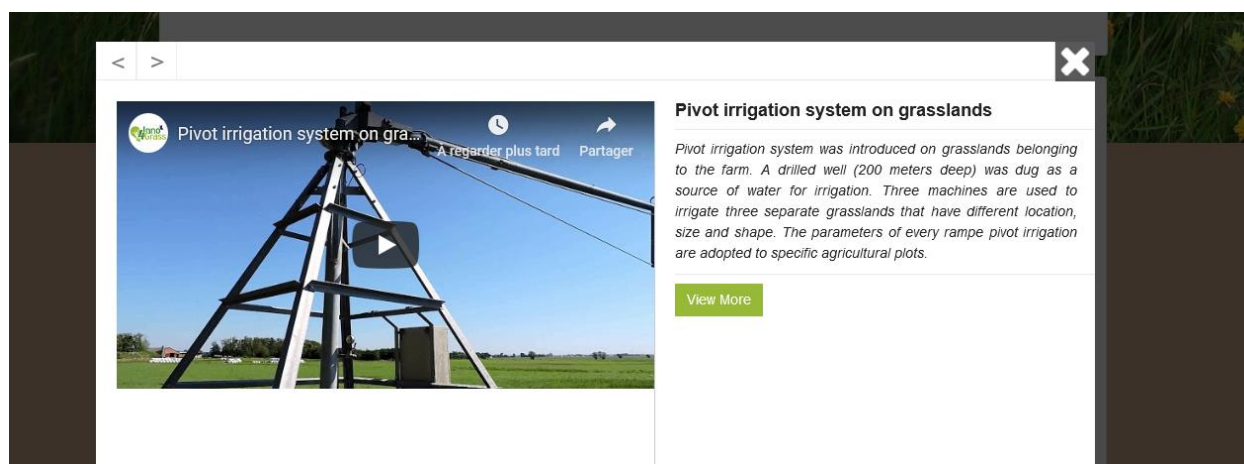
Presently, 12 videos are available.

- *Direct access to the first videos from the Encyclopedia pratensis home page*



By clicking on the image of the video, it is possible:

- to see the video;
- to read the abstract when appropriate;
- to open the farmer portrait by clicking on the 'View more' button.

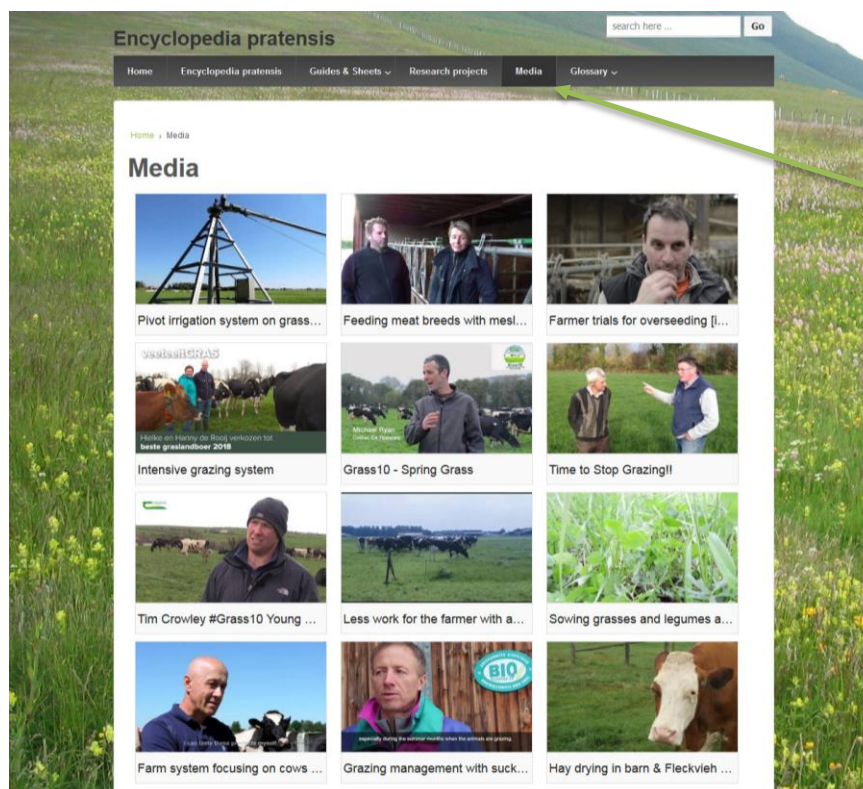


- *Access to the video directly in the product*

Each video is added to the sidebar of the corresponding product.



- *Access in the Media page*



News

In the home page of the *Encyclopedia pratensis*, focus is given to news.

ABOUT

Encyclopedia pratensis is the first encyclopedia dedicated to grasslands and forage crops. It's the result of several national and international research projects...

[Read more](#)

NEWS

Brokering systems
15/09/2018
The innovation brokering systems within the 8 countries involved in the Inno4Grass project are [described here](#).

Farmer portraits
20/09/2018
171 portraits of innovative farmers are available in the [Inno4Grass catalog!](#)

Case studies
03/04/2019
85 case studies of the different farm innovations are available in the [Inno4Grass catalog!](#)

[Innovations for sustainable](#) [Video clips on innovative practices](#) [Grazing guide \[In French\]](#)