LIFE Project Number

LIFE18 PRE/NL/002

Final Report

Covering the project activities from 01/01/2019 to 31/12/2021

Reporting Date

31/03/2022

LIFE PROJECT

GrazeLIFE

Data Project

Project location:	Nijmegen, the Netherlands
Project start date:	01/01/2019
Project end date:	31/12/2021 **Extension date:** -
Total budget:	€ 833.325,00
EU contribution:	€ 499.995,00
(%) of eligible costs:	60

Data Beneficiary

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Package completeness and correctness check	
Obligatory elements	**✓ or N/A**
Technical report	
The correct latest template for the type of project (e.g. traditional) has been followed and all sections have been filled in, in English *In electronic version only*	✓
Index of deliverables with short description annexed, in English *In electronic version only*	✓
Final report: Deliverables not already submitted with the MTR annexed including the Layman's report and after-LIFE plan Deliverables in language(s) other than English include a summary in English *In electronic version only*	✓
Financial report	
The reporting period in the financial report (consolidated financial statement **and** financial statement of each Individual Beneficiary) is the same as in the technical report with the exception of any terminated beneficiary for which the end period should be the date of the termination.	✓
Consolidated Financial Statement with all 5 forms duly filled in and signed and dated *On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets + full Excel file)*	✓
Financial Statement(s) of the Coordinating Beneficiary, of each Associated Beneficiary and of each affiliate (if involved), with all forms duly filled in (signed and dated). The Financial Statement(s) of Beneficiaries with affiliate(s) include the total cost of each affiliate in 1 line per cost category. *In electronic version (pdfs of signed sheets + full Excel files) + in the case of the Final report the overall summary forms of each beneficiary on paper (signed and dated originals*)*	✓
Amounts, names and other data (e.g. bank account) are correct and consistent with the Grant Agreement / across the different forms (e.g. figures from the individual statements are the same as those reported in the consolidated statement)	✓
Beneficiary's certificate for Durable Goods included (if required, i.e. beneficiaries claiming 100% cost for durable goods) *On paper (signed and dated originals*) and in electronic version (pdfs of signed sheets)*	**N/A**
Certificate on financial statements (if required, i.e. for beneficiaries with EU contribution ≥750,000 € in the budget) *On paper (signed original) and in electronic version (pdf)*	**N/A**
Other checks	
Additional information / clarifications and supporting documents requested in previous letters from the Agency (unless already submitted or not yet due) *In electronic version only*	✓
This table, page 2 of the Final report, is completed - each tick box is filled in *In electronic version only*	✓

**original signature by a legal or statutory representative of the beneficiary / affiliate concerned*

1. Table of Contents

2. List of keywords and abbreviations

AB	: Associated Beneficiary
ARK	: ARK Nature, The Netherlands
BEF-LT	: Baltic Environmental Forum Lithuania, Lithuania
CAP	: Common Agricultural Policy
CB	: Coordinating Beneficiary
DG ENVI	: Directorate General of the Environment of the European Commission
EC	: European Commission
EU	: European Union
EWB	: European Wildlife Bank
GA	: Grant Agreement
GO	: Governmental Organisation
MS	: Member State (of the EU)
MTR	: Mid Term Report
NGO	: Non-Governmental Organisation
NIOO	: Netherlands Institute of Ecology
RE	: Rewilding Europe
REC	: Rewilding Europe Capital
RRF	: Rewilding Rhodope Foundation, Bulgaria
RU	: Rewilding Ukraine, Ukraine
SAC	: Scientific Advisory Committee
UDC	: University of A Coruña, Spain
UFZ	: Umwelt Forschung Zentrum – Helmholtz Centre for Environmental Research
ULEI	: University of Leipzig, Germany

3. Executive Summary

On request of the EC, the GrazeLIFE-consortium explored the potential for extensive grazing systems to support EU-targets on climate adaptation, biodiversity and other ecosystems services.

3.1 Project objectives

1) Description of different grazing models and their (cost) effectiveness for biodiversity, wildfire prevention, improving human-wildlife coexistence, climate adaptation and ecosystem services, compared to other land management-systems (including mowing, land abandonment and reforestation), specified for different European regions, and substantiated with case studies.
2) Building a robust knowledgebase with respect to effectiveness and cost-efficiency of different grazing models.
3) Analysing and mapping factors that facilitate, impede or restrict the implementation of the most effective grazing models (financial, social-cultural, political, physical, ecological, administrative, technical, etc.).
4) Formulating recommendations for the EU to adapt relevant policies, legislation and subsidies in a way that will promote the most effective models for land management and enhance coherence with EU-targets on biodiversity, the restoration agenda, reduction of human-wildlife conflicts and climate adaptation.

3.2 Key results

1) Ready-to-use information on practically tested grazing models, differentiated to the regions of Europe, including a practitioners' guide how to adopt such new models.
2) Clear and practical recommendations to the European Commission and Member States to facilitate (or at least not hamper/disable) these models via their policies, legal systems and subsidies.
3) As soon as these grazing models are adopted and/or incorporated in European and Member State policies and subsidy systems, a substantial and positive impact can be expected on improved biodiversity, carbon sequestration, and reduction of fire risks in those places (EU-wide) where the models will be applied.

3.3 Outputs

General progress

1) **Action A1**: Successful Kick-Off Meeting in the Netherlands on March 11-13, 2019.
2) **Action A2**: Literature review on 'Grazing models and their effects on biodiversity and ecosystem services: overview of scientific evidence', combined with the insights from eight case studies and the conclusions and recommendations resulting from both sub-studies. Online available.
3) **Action A3**: In coordination with the regional teams and advised by the Scientific Advisory Committee 8 Area Reports – including the results from 17 case studies, 95 interviews and 19 stakeholder meetings (with > 200 participants) – have been delivered and are online available.
4) **Action A4:** In March 2021 the Policy Report, reviewing EU and MS policies and legislation, has been published and is online available.
5) **Action A5:** The report with the final 45 recommendations towards EU and MS is online available, together with a 2-pager that summarizes the main outcomes of GrazeLIFE.
6) **Action B1:** The GrazeLIFE-website went online on July 1st 2019, with all the general information (background, objectives, partners, area-descriptions) of the project. News-items have been posted, and a series of blogs with GrazeLIFE-related topics.

7) **Action B2**: Presentations of the GrazeLIFE-project at LIFE- and other international meetings were done at 11 relevant meetings between June 2019 and October 2021. Attendance of 4 other relevant events took place in the same period. For the EU Forestry Conference (Febr.2020) a hand-out was distributed, containing recommendations for Europe's policy on the regeneration of natural (grazed) forests that best serve the goals for biodiversity and climate adaptation
8) **Action B3:** The Practitioners Guide is online available in 11 languages.
9) **Action B4:** The final GrazeLIFE recommendations (A5) are summarized in a Layman's Report, printed in an edition of 200 and online available. A short version of the Layman's Report is online available as a 2-pager.
10) **Action C1/C2:** Quarterly, technical reports have been made with input from all the partners in the project, and provided to the NEEMO Monitor. Internal financial reporting has been conducted semi-annually, in line with the Partnerships Agreements. In March 2020 and March 2021 two meetings were held with the GrazeLIFE Steering Group, together with the Scientific Advisory Board. Online, because of the Covid19-emergency.
11) **Action C3:** The After-LIFE plan is online available.

Identified deviations, problems and corrective actions taken in the reporting period

- **In General:** Since February 2020 all physical meetings had to be cancelled because of the Covid-pandemics. These included two planned physical meetings of the Steering Group, as well as the concluding field visit with the NEEMO Monitor and the EC representatives and the presentation of the GrazeLIFE-reports and outcomes to the EC and media at a physical closing event in October 2021 in Brussels. This problem has largely been overcome by strengthening online presence and outreach. In order to obtain sufficient publicity for the final results of GrazeLIFE, an online webinar was organized, with a specially created video about the main results of the project.
- **General/A3:** As mentioned above, the cancelling of physical meetings, field visits and practical exchanges with other (LIFE) projects could - in terms of content - largely be solved through online meetings. At the same time, this meant significant savings on travel and some other expenses. During the Steering Group meeting in March 2021, the consortium partners decided to use part of these savings for additional research on the effects of deworming medicines in the various GrazeLIFE regions. On the one hand, it appeared from the literature review that deworming medicines have a negative effect on the dung fauna and therefore on the quality of the soil/carbon storage. On the other hand, the interviews showed that more than 80% of the surveyed herd managers use deworming medicines. With the agreement of all partners and the consent of the Technical Desk Officer (see **FeedbackLetter of 07-06-2021**), it was therefore decided to have additional research done on this by a German laboratory, supervised by ARK and using manure samples from 6 GrazeLIFE areas. This study was delivered as a separate appendix to this final report.
- **A2**: The PhD-student, main author of the Literature Review (A2) has conducted additional work with processing relevant information on policies and legislation coming from the area-interviews. Because of the promising results, she used substantial parts of her GrazeLIFE-work for 3 scientific publications, of which 2 are already published.
- **B1:** During the project, it was concluded that the original goal of 85.000 visitors was too ambitious. Not for the total public outreach of GrazeLIFE (which is even higher) but via the means of the website. In the FeedbackLetter of 20-07-2020 the Technical Desk Officer approved to maintain the total outreach of GrazeLIFE at a minimum of

85,000, but lower the target for the website to the still ambitious target of 25,000 unique visitors.

Overall we can conclude that objectives of the project are still viable - even more than during the time of drafting the GrazeLIFE-proposal as climate adaptation and counteracting biodiversity losses have become even more evident and urgent. the project consortium has been able to anticipate the constraints caused by the Covid pandemics well and deliver even more than originally planned, by reusing resources for additional research, communication and dissemination activities. Finally, could the project has gathered large quantity of information, which was deployed for a targeted set of recommendations towards EU and MSs.

4. Introduction

4.1 Background and problems addressed by GrazeLIFE

1) Vast areas of Europe have been abandoned in recent decades or will be abandoned in coming decades: current levels of abandonment of land in rural areas in the EU are 0,5-1 million ha/year. This has severe, and often negative, consequences, not only for the local economy, but also for the biodiversity and ecosystem service provisioning in the abandoned land.
2) Land abandonment causes large scale bush-encroachment and spontaneous massive forest regrowth, which can not only lead to the disappearance of small scale cultural and mosaic landscapes, but also to a loss of biodiversity (ca. 50% of the biodiversity on land is directly or indirectly related to herbivory). In addition, this process also has consequences for ecosystem services and disservices. Through the higher availability of fire fuel, bush-encroachment could lead to increased risks of wildfires (especially in the Mediterranean region), a risk which becomes increasingly relevant with climate change.
3) Technical measures to stop this process, like mowing or other forms of mechanical cleaning, are relatively expensive compared to the natural processes that keep landscapes open, like natural grazing. On top of that, promotion of grazing with sheep or goats – while associated with valuable traditions and cultures - may also often lead to increasing human-wildlife conflicts, for example with large predators. Natural grazers are able to (learn to) defend themselves, and predation of wild herbivores does not conflict with human interests.
4) First experiments with natural and semi-natural grazing show that such practices can facilitate wildlife-based tourism, sales of carbon credits or regional products (e.g. wild meat), and thus create viable business opportunities for landowners and –users. However, this model is financially, legally and politically poorly supported compared to other land management options like mowing or ploughing grasslands, although the latter may have less positive (and in many cases even a negative) impact on EU-targets for biodiversity and climate adaptation/mitigation.

4.2 Objectives of GrazeLIFE

1) Description of different grazing models and their (cost) effectiveness for biodiversity, wildfire prevention, improving human-wildlife coexistence, climate adaptation and ecosystem services, compared to other land management-systems (including mowing, land abandonment and reforestation), specified for different European regions, and substantiated with case studies.
2) Building a robust knowledgebase with respect to effectiveness and cost-efficiency of different grazing models.
3) Analysing and mapping factors that facilitate, impede or restrict the implementation of the most effective grazing models (financial, social-cultural, political, physical, ecological, administrative, technical, etc.).
4) Formulating recommendations for the EU to adapt relevant policies, legislation and subsidies in a way that will promote the most effective models for land management and enhance coherence with EU-targets on biodiversity, the restoration agenda, improving human-wildlife coexistence and climate adaptation.

4.3 Expected longer term results (as anticipated at the start of the project)

1) The project will result in region-specific recommendations on grazing models that are most effective and (cost) efficient when it comes to wildfire prevention, carbon storage/sequestration, improving human-wildlife coexistence and provision of

additional ecosystem services. This means that – if the EC follows up these recommendations – there will be an optimal politic, legal and financial basis for these grazing models which will give them a competitive advantage above less effective models that are artificially favoured at the moment.

2) This in turn creates a basis for the restoration - on a landscape scale - of natural grasslands (one of the most endangered biomes in the world), naturally regenerating forests and all biodiverse transition zones between these landscape types. Just looking at the abandoned marginal agricultural lands in Europe, on a scale of many millions of hectares, this can lead to a new rural economy in which climate adaptation, biodiversity and income from nature tourism and natural products are permanently intertwined.

3) Forestry: when seed sources from trees and shrubs are present, extensive grazing generally leads – often via shrub mosaics - to spontaneous reforestation, thus providing an alternative for expensive forest plantations. These 'herbiforests' are less vulnerable for wildfires and therefore – in the long run - store more carbon and provide more quality wood than forests that heavily suffer from wildfires.

4) Agriculture: extensive grazing systems – especially when applied without use of medicines, fertilizers and additional food – can improve soil conditions (carbon, minerals) for other agricultural land use as well. In itself it could be a source of sustainable food production (meat, other products from nature), which may also be of particular interest for use in marginal agricultural areas, which are now subject to land abandonment.

5) Due to the lack of sharp boundaries, these grazed, mosaic landscapes of natural forests and grasslands intrinsically offer the best guarantee for most land-dwelling species to move along with shifting climate zones.

6) In each case study region, we will also seek to promote long(er) term monitoring of relevant indicators beyond the project's end. Structural monitoring of these land management models will help improve the political, legal and financial systems, identify best implementation of relevant policies given existing flexibilities, and continue refining the models in terms of policy and administration.

7) The project will support capacity-building in developing strategies that make optimal use of the grazing models to generate benefits e.g. in terms of eco-tourism, selling and distributing sustainable (meat and dairy) products, and other business models as identified in each case study.

5. Administrative part

5.1 The project management process

The Coordinating Beneficiary of the project was Rewilding Europe (RE). Associated Beneficiaries were the University of Leipzig, Germany (ULEI, agreement signed on 29/3/2019), Baltic Environmental Forum Lithuania (BEF-LT, agreement signed on 19/2/2019), ARK Nature in the Netherlands (ARK, agreement signed on 11/3/2019), University of A Coruña, Spain (UDC, agreement signed on 26/2/2019), Rewilding Ukraine (RU, agreement signed on 15/1/2019) and Rewilding Rhodopes Foundation (RRF, agreement signed on 11/1/2019).

Representatives of these 7 beneficiaries (CB and 6 AB's) formed a Steering Group that gathered once a year in Spring.

The University of Leipzig was responsible for the implementation of a scientific program including literature reviews, integration of these reviews with the field results in the 8 regions and a policy assessment that made use of these results.
The other five ABs were responsible for the implementation of the project in 5 European regions. For 3 other regions Rewilding Europe had subcontracted the most suitable regional partners. These partners were: Rewilding Oder Delta (ROD) for the Oder Delta in Germany/Poland), Associacao Transhumanca e Natureza (ATN) and Terraprima for the Coa Valley in Portugal and Udruga Divljina Velebita (UDV), Faculty of Forestry of the University of Zagreb (FAZ) and EKONERG d.o.o. for the Velebit-Lika area in Croatia.

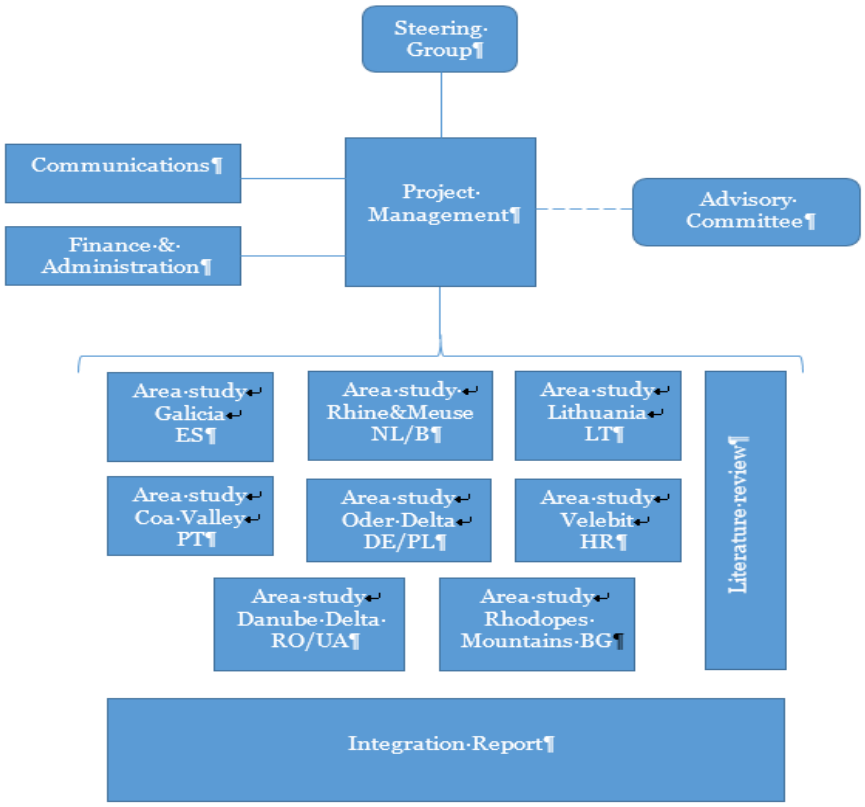
On top of that a Scientific Advisory Committee, consisting of 4 leading scientists in CAP-related issues, wildfires, herbivory and ecosystem services, advised the consortium-partners in their methodologies and alignment of their fieldwork.

The daily project management was in hands of Rewilding Europe and executed by:

- A Project Manager (Wouter Helmer) who was responsible for the coordination between the GrazeLIFE-partners, subcontracting and communications. The project manager was also responsible for liaison with the Scientific Advisory Committee, incl. 2 formal meetings per year.
- A Financial Manager (Dana Bezdickova), who was in charge of coordinating and supervising the administrative management of the project and all reporting activities to the EC. She has also ensured that that the project activities were carried out in line with the LIFE regulations.

Both the Project Manager and the Financial Manager constantly provided assistance and guidelines to the project partners for technical and administrative issues, and they regularly controlled that all the activities were carried out according to the requirements of the LIFE program.

An organigram of the GrazeLIFE-project is presented below:



The Steering Group and additional staff of the project have met in one kick-off meeting (A1, March 2019) and two general online project meetings (C2, March 2020 and March 2021) where all the project progress was discussed, problems analyzed and future activities planned. The management team has also held regular online meetings with the project partners to discuss potential technical and/or administrative problems. Also, the Project Manager and the Financial Manager were constantly in contact by email and regular meetings.
All these meetings were necessary to assess the development of the project, to exchange information between beneficiaries about procedures, methods and obtained results, to discuss potential problems and to plan upcoming activities until the next steering group meeting and finally the closing event in December 2021.

The main communication with the EC's liaison (Mr. Daniel Nuijten of DG ENVI) was assured by the Project Manager. Regarding the content and general progress of the project, the Project Manager, supported by the Financial Manager for financial and administrative issues, have kept the representative of the External Monitoring Team, Mr. Kristijan Civic, up to date. With him it was agreed that the project delivered quarterly technical reports produced in cooperation with ULEI and all representatives of the study areas and were used for the constant monitoring of the project development by the Project Manager.

The Financial Manager of the project kept track of the project expenses with the use of a specially-designed "financial monitoring tool". This is a set of Excel sheets that provided a periodic update of the expenses for each beneficiary, broken down to separate actions, in comparison with the foreseen budget.
Apart from the adjustments mentioned under 3.3 there were no big changes in the partnership structure during the project.

5.2 Communication with the EC and Monitoring team

The representative of the Monitoring Team (NEEMO) has attended both the Kick-Off Meeting in March 2019 as the Meetings of the GrazeLIFE Steering Group in March 2020 and March 2021 (online, because of Covid19). During these two last meetings technical and financial progress and planning of the GrazeLIFE-project were discussed in detail.
Following the simplification process for all LIFE projects the EC decided to skip the Progress Report in Summer 2019 and suffice with a two months advanced Mid Term Report in June 2020. In line with this latter change, the Final Report deadline was first anticipated to 31 December 2021 but later confirmed at the original date of 31 March 2022 (FeedbackLetter 07/06/2021)

5.3 The changes due to amendments to the Grant Agreement

All the technical and financial changes have been made within the limits set out by the General Conditions.

With the **MTR-FeedbackLetter (dated 20-7-2020),** we discovered that the project was expected to deliver a certificate on the financial statement and underlying accounts with the Final Report. During the project development, we have based ourselves on the Model Grant Agreement provided in the documents package for the applicants. According to that document (art. II.23.2d) such a certificate on financial statements would be required only for beneficiaries for which the EU-contribution is at least € 325.000,-. In case of GRAZELIFE, for none of the beneficiaries this was the case (the highest requested EU-contribution is estimated to be € 227.921,- (RE)), hence we had not budgeted for a final project audit. At the moment of GA signing, we had checked on the original Grant Agreement for the project-specific aspects, not expecting that, without further notice, there would be any derogation from the Model GA. Hence, RE had signed the Grant Agreement, without noticing that the conditions in the article II.23.2d were changed.
As a consequence the signed Grant Agreement required a final audit, whereas no budgets are available to arrange for it. Generating such budgets would impose savings on project activities, which was likely to influence the project's results and impact negatively. Hence, we proposed that in this case EC grants the project a derogation from the art. II.23.2d. This proposal was considered and approved by the EC through an Amendment to Grant Agreement no 1 dated 4 January 2021.

No other amendments to the Grant Agreement have been requested by the project beneficiaries.

6. Technical part

6.1 Technical progress, per Action

Action A1. Kick-off meeting with all project partners and external experts

Foreseen start date: 11/03/2019 *Actual start date: 11/03/2019*
Foreseen end date: 13/03/2019 *Actual end date: 13/03/2019*

This action was aimed at organizing a meeting with all project partners and external experts to get to know each other, share experiences and align the activities of all partners in more detail.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Gantt Chart – *Additional product*	13/03/2019	Ready. Updated at the Steering Group Meetings in March 2020/21
Overview Case Studies - *Additional product*	13/03/2019	First version of a 'living document' used in action A3
Milestones		
Successful KO-Meeting	13/03/2019	According to plan

Progress

- Organization by Rewilding Europe of a 3-days event in the Dutch-German cross-border area Gelderse Poort, on 11-13 March 2019, attended by 18 people, representing all consortium-partners and subcontractors contracted for area studies, the Scientific Advisory Committee, the LIFE Monitor and the DG ENVI-contact person for the GrazeLIFE-project;
- Including a field trip with explanation on 3 different grazing systems by stakeholders: the Dutch State Forestry Department, the German NGO NABU, and a leading Dutch farmer in the area;
- Including contributions from the 4 scientific experts within the consortium and from the EC-contact person within DG Environment, Daniel Nuijten;
- The meeting was further used to prepare a more detailed methodology for the 8 case studies, together with the team from University of Leipzig (ULEI).

Both in terms of planning and results, the Kick-Off meeting met our expectations, so that this activity was closed in March 2019. Combined with the first Monitoring Visit, this meeting also formed a good start for the collaboration with the NEEMO Monitor, Kristijan Civic.
As planned, the practical implementation of GrazeLIFE in the 8 regional studies was further detailed, including the coordination of the stakeholder-meetings, interviews and field work. Based on the specific ecological and socio-economic contexts of the 8 study areas, an overview (not so much a database as originally planned) was made of the potential case studies in the areas and the different land use-models to be examined in plots. We discussed the topics (for ex. vegetation structure, carbon storage) to be investigated and possible research partners to cooperate with. At the end of the meeting a more specific time-schedule was made in the form of a Gantt Chart.

Deviations

There was a budget saving of about 2,500 euro which was redirected to presentations to/additional meetings with representatives of the EC (part of C1) as - within the context of the new Green Deal and revision of the CAP - more interaction with the EC were expected (however, from spring 2020, those last meetings have only taken place online, without extra travel and accommodation costs).

Fig. 1. Participants of the GrazeLIFE Kick-Off Meeting. March 2019

Action A2. Review of scientific literature on grazing models, and assessing them in terms of effectiveness, (cost-) efficiency and scalability

Foreseen start date: 01/01/2019 Actual start date: 01/04/2019
Foreseen end date: 31/12/2021 Actual end date: 31/12/2021

This action was aimed at putting together a database of available scientific knowledge on different grazing systems and a report summarizing the analyses of effectiveness and (cost-) efficiency of different grazing models, explicitly addressing questions relating to facilitators, barriers, costs and benefits.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Preliminary overview of scientific literature	31/12/2019	Delivered with 3 months delay, because of later start PhD.
Final overview of scientific literature	30/04/2021	According to plan
Article in Frontiers in Sustainable Food Systems – *Additional product*	31/03/2021	Delivered
+Article in Journal of Applied Ecology – *Additional product*	31/08/2021	Delivered
Draft article on 'Grazing for Ecosystem Services - *Additional product*	31/12/2021	Ready to be published

Report combining the literature review with the insights from eight case studies	31/11/2021	According to plan
Milestones		
Presentation review of wildfire literature at EU Forest Conference	05/02/2020	See Fig.2.

Progress

- In January 2019 an advert was published for a PhD-position at the University of Leipzig, resulting in over 35 applicants.
- The selection procedure was coordinated by ULEI (with input from RE), like the communication with the candidates.
- This procedure resulted in the appointment of Julia Rouet-Leduc on the PhD-position per April 1, 2019, and with common effort she could already participate in the KO-meeting on 11-13 March 2019.
- The literature review started in April 2019, with also some input from the regional teams.
- Analysis of the literature database resulted in addressing factors determining impacts/success/failure of grazing models, incl. gap analysis of knowledge and data.
- A presentation of the initial results was held on 17 September 2019 at the DG Environment in Brussels, leading to an invitation to present the findings on wildfire prevention at the EU Forestry Conference of 4-5 February 2020 in Brussels.
- Having a background in social sciences, the PhD also helped very much in drafting the Interview Guide and Consent Form for the interviewees.

Fig. 2. Presenting preliminary outcomes on grazing and wildfire at EU Forest Conference in Brussel, by GrazeLIFE-PhD Julia Rouet Leduc

- The literature review has been integrated with data from field work and stakeholder-interviews.

- The PhD-study summarized the analyses of effectiveness and (cost)efficiency of different grazing models, explicitly addressing questions related to facilitators, barriers, costs and benefits.
- The PhD student contributed to an article in Frontiers in Sustainable Food Systems (Gordon et al, 2021. Domestic livestock and rewilding: are they mutually exclusive?);
- Extra attention was given to a scientific paper about the impact of grazing on wildfire prevention, also because of the request from the EU to present these results at the Forestry Conference. Finally this paper about the impact of grazing on wildfire prevention was published in the Journal of Applied Ecology (Rouet-Leduc et al, 2021. Effects of large herbivores on fire regimes and wildfire mitigation). This article received the necessary attention in both newspapers and scientific fora. Follow-up interviews with several journalists.
- The 2nd chapter of the PhD-thesis (on land-users' perspective) will be used by the PhD-student to write a third scientific article (Rouet-Leduc et al., 2022. Grazing for ecosystem services: land-users' motivations, incentives and challenges) to be published in 'People and Nature'' or 'Ambio'.

Especially on natural grazing with wild and semi-wild herbivores there is not so much European literature available. For some topics this meant that we had to look at information from other continents as well.
On the biodiversity topic there is so much literature available that regarding this subject we decided to study only reviews.

Deviations
Due to the official approval of the project only in the second half of December 2018, the recruitment-procedure for the PhD position couldn't start earlier than January 2019. With more than 35 applicants the selection process took more than two months, with the final appointment of the preferred candidate on the 1st of April; 3 months later than originally planned.
This didn't cause any problems in the further implementation of Action A2, as the PhD-student in her first year already did some advanced work for the next phase of her study: writing summaries for several relevant topics and a more in-depth analyses of one of the most relevant issues: grazing systems in relation to wildfire risks. These advanced activities saved time in the rest of this project.

Complementary actions outside LIFE
In parallel with the GrazeLIFE-presentation at the EU Forestry Conference in February 2020 a hand-out was produced that summarizes the first findings in the literature review that were considered to be relevant for the European Green Deal.
Because of the promising results of her research-activities, the PhD-student used substantial parts of her GrazeLIFE-work for 3 scientific publications, of which 2 are already published.

Perspectives for continuing the action after the end of the project
The database produced in the context of this literature review will be public available and accessible (as far as the copyright allows) for further research after the PhD and the GrazeLIFE-project finish in 2021.
The third scientific article – on Grazing for ecosystem services – will be submitted for publication in scientific journals and – if accepted – be public available like the two previous articles, which have already been published.

Action A3. Area studies in 8 European regions

Foreseen start date: 01/01/2019 *Actual start date: 01/01/2019*
Foreseen end date: 30/06/2021 *Actual end date: 30/11/2021*

This action was aimed at organizing two rounds of stakeholder meetings (2x8)**,** interviews (approx.100) and fieldwork to collect data regarding land-use models and their relevance/potential for biodiversity, wildfire prevention, carbon stocks/sequestration and other ecosystem services in 8 European regions.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Interview guide- *Additional product*	01/09/2019	Ready in 2 versions: one for land users/owners, one for GO's, NGO's and experts
Reports from 8 project areas	30/06/2021	According to plan
Two rounds of stakeholder-meetings in the 8 areas, at the beginning and the end of the project	30/11/2021	19 SH-meetings, with more than 200 participants (photos and lists of participants available)
Extra study on accumulation of pesticides in herbivore-dung – *Additional product*	30/11/2021	Study available, incl. results from 5 areas

Progress

- All the 8 regional partners prepared a short area presentation for the KO-meeting in March 2019, including first information on the different land use models in their areas.

Figure 3. Study areas of the GrazeLIFE-project

- Via bilateral calls in Spring 2019 with all 8 teams and in coordination with the Scientific Advisory Committee, the case studies in the 8 areas were agreed. Same for the different land use models in each case study, that would be compared with each other on relevant topics for GrazeLIFE. Detailed maps of case studies and study plots with different land use-models were produced for all 8 regions.
- With input from all teams, the PhD-student and with help from social scientists at the Universities of Leipzig and A Coruña the interview guide was prepared, with a separate survey-chapter to get more quantitative data from the interviewees. A Consent Form for the

interviewees has been developed and translated in the languages of the study areas. 14 test-interviews with a preliminary interview guide were done in summer 2019 in four areas. Using the comments in these test interviews, we concluded on final guides for two separate target groups: landowners/users and GOs/NGOs. In the second half of 2019 and early 2020 a total of 95 interviews were conducted.

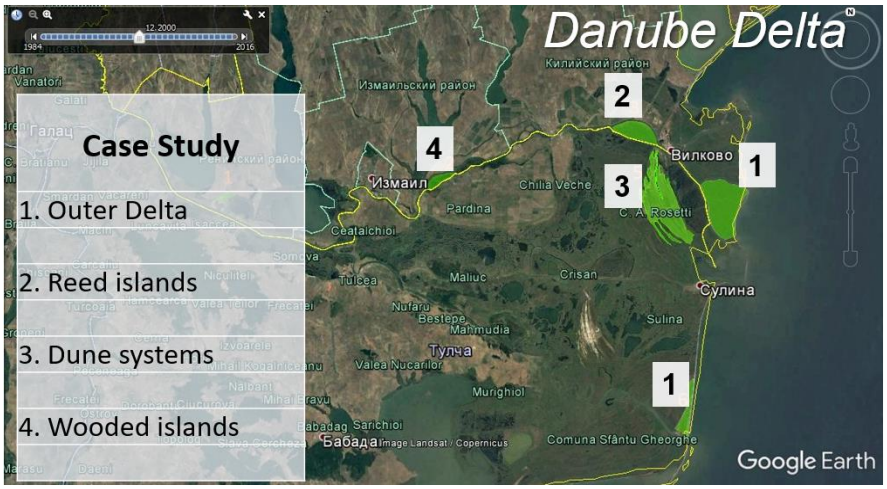


Figure 4. Example of case studies (Danube Delta)

- Field work in the case studies started for most areas already in summer-autumn 2019, but for three areas (Velebit, Oder Delta and Danube Delta) it was decided to concentrate the field work in one year (2020). In most cases the fieldwork consisted of comparing different land use models via remote sensing in combination with a field validation of vegetation structures and -diversity. In Lika Plains and the Coa Valley this was combined with analysing soil samples on carbon storage, whereas in other areas available data on biodiversity were used to compare the different land use models. From the Border-Meuse (NL/B) the study on cross-border grazing management along the Border-Meuse - including proposals for solutions - has been published, together with a news item on the RE-website in October 2020.

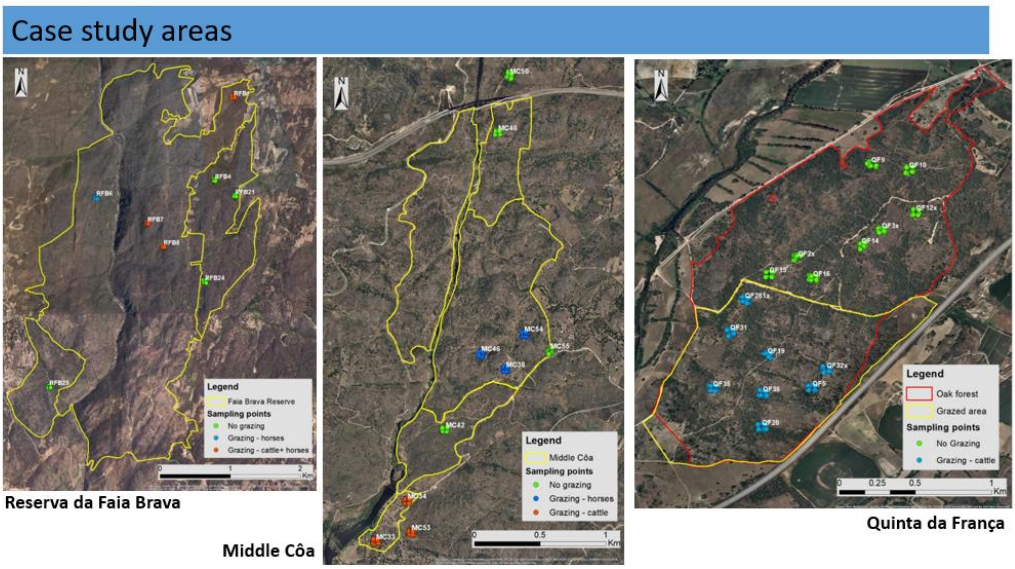


Figure 5. Example of case studies and research plots in the Coa Valley, Portugal.

- Final Area Reports were all ready in Spring 2021. The Galician team even made a Galician, Spanish and English version of their area report

- Stakeholder-meetings were prepared and held in the 8 GrazeLIFE regions at the beginning and at the end of the project, with altogether more than 200 participants (see table 1 and 2 below). In some areas (Danube Delta and Galicia) more than two stakeholder meetings were organized because of the complexity of the area or the transboundary character of it. In 3 other areas the meeting were planned for Spring 2020, but had to be postponed due to the Covid19 restrictions (see paragraph "deviations"). The purpose of the first round of meetings was to inform regional stakeholders about the GrazeLIFE-project, obtain their opinions and involvement and harvest names of persons/organisations for the interviews.

Table 1. First round of Stakeholder Meetings in 8 GrazeLIFE regions

Region	**Meeting place(s)**	**Date(s)**	**Nr. of participants**
Galicia	Baiona/Abadín	11/10/2019 & 8/11/2019	10/11
Coa Valley		Cancelled (Org.problems)	-
Velebit/Lika	Krasno	13/12/2019	19
Rhodopes	Madzharovo	23/7/2020	18
Danube Delta	Vilkovo/Tulcea	14/2/2020	13/14
Oder Delta	Ueckermünde/online	29/10/2020 & 21/12/2020	8/7
Lithuania	Vilnius	09/12/2019	7
Border-Meuse	Maastricht	03/07/2019	13

The second round of meetings was meant to inform the stakeholders about the results of GrazeLIFE and to provide them with a list of potential follow-up actions to improve policies, legislation and practices of (cost)effective grazing models.

Table 2. Second round of Stakeholder Meetings in 8 GrazeLIFE regions

Region	**Meeting place(s)**	**Date(s)**	**Nr. of participants**
Galicia	Baiona/Abadín	8/10/2021 & 15/10/2021	13/11
Coa Valley	Figueira del CR	27/10/2021	21
Velebit/Lika	Senj	29/10/2021	5
Rhodopes	Madzharovo	21/10/2021	21
Danube Delta	Vilkovo	26/10/2021	10
Oder Delta	Miroslawiec	18/09/2021	17
Lithuania	Online meeting	8/12/2021	8
Border-Meuse	Maastricht	2/11/2021	11

Figure 6. Stakeholder meeting in Baiona, Galicia, October 2021.

Deviations

Due to the replacement of the scientific partner (see also Action C1) the start of the fieldwork in the Croatian Lika Plains had to be postponed to Spring 2020 (instead of Autumn 2019), but it didn't have any consequences for the delivery of the results, as the amount of field work planned for this region could be done in one field season (2020). Subsequently, the Covid19-crisis caused the execution of this field work to be done by the staff of the University of Zagreb (instead of students).

Due to the Covid19-pandemic (with also infected GrazeLIFE-colleagues in Croatia and Romania) some stakeholder-meetings in the first round had to be delayed or had to be organized online. One meeting (in Portugal) couldn't take place at all due to reorganization issues at our partner in the area. Some stakeholders stayed away from the meetings (for ex. in Germany) because of infection risks. Altogether this also had a delaying effect on some interviews, although 80-90% of the interviews could be done within the original planning. As the results of the interviews were also used for Action A.4, this influenced the input for that action as well. However, the set-up of A.4 was flexible enough to include the outcomes of the remaining interviews at a later stage in this action. It even improved the outcomes of A.4 as the already processed data helped us to select even better interviewees later in the project to fill gaps in our knowledge, population of interviewees etc.
In the Danube Delta one of the four couples of plots (wooded islands) couldn't be investigated due to capacity problems as a result of Covid. In Galicia, Spain, the land-abandonment-plots were too difficult to access - due to dense *Ulex.sp*. overgrowth. Therefore, the team was forced to adapt their sampling protocol, but the main results were not affected by this.

The limited budget for field research made some regional partners decide to fully concentrate this research in 2020 (and not 2019 *and* 2020), which then brought extra challenge because of the Covid19 crisis. This meant that in some areas the gathering of field data was replaced by remote sensing techniques.

Despite the delays in some stakeholder meetings, remaining interviews and fieldwork mentioned above, the case study reports could be delivered in time. Although, due to the Covid19 limitations some teams had to switch to more online meetings and remote sensing of field data, which created a slightly different, but still relevant set of outcomes.

During the Steering Group meeting in March 2021, the consortium partners decided to use part of the savings on travel and accommodation (due to Covid-19) for additional research on the effects of deworming medicines in the various GrazeLIFE regions. On the one hand, it appeared from the literature review that deworming medicines have a negative effect on the dung fauna and therefore on the quality of the soil/carbon storage. On the other hand, the interviews showed that more than 80% of the surveyed herd managers use deworming medicines. With the agreement of all partners and Technical Desk Officer (**FeedbackLetter of 07/06/2021**), it was therefore decided to have additional research done on this topic. Dung samples were collected from 6 GrazeLIFE areas and 5 of them* were analysed by a laboratory in Jena (Germany), to determine the content of harmful substances, in particular anthelmintics. This study was supervised by ARK and delivered as a separate appendix to the final report.

* DHL declined the shipment of dung samples from Ukraine, which left us with the analyses of only 5 areas.

Complementary actions outside LIFE
None

Perspectives for continuing the action after the end of the project

Using best practices from the case studies for recommendations to the EU and its Member States will hopefully lead to improved policies, legislation and finance models that support these best practices in the future. Resulting in further upscaling and replication of these practices.

First examples of practices and regulations, that can be improved based on the results of the case studies, are related to topics like ear-tagging of semi-wild herbivores, derogation of microchip identification for free-living equids, cross-border grazing with livestock, co-existence with large carnivores and the use of (deworming) medicines in nature areas.

Action A4. Synthesis of A.2-A.3. Evaluation of current policies, practices and subsidy systems based on the case studies and literature, to develop recommendations for improvements of the latter with respect to effectiveness, (cost)efficiency and scalability of grazing models

Foreseen start date: 01/07/2019 Actual start date: 01/07/2019
Foreseen end date: 28/12/2021 Actual end date: 30/04/2021

This action was aimed at compiling a report on the effectiveness, efficiency and coherence of key instruments (policies, regulations and subsidies) in supporting effective and (cost) efficient grazing models.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Assessment current policies, legislation and subsidies	31.12.2020	Presentation of initial assessment on 17/09/2019 in Brussels.
Interim Policy Report	31.08.2020	Ready in December 2020. Delay caused by Covid-related issues.
Final Policy-report	31.08.2021	Published in March 2021. Due to the ongoing negotiations on the new CAP, it was decided to publish this report earlier
Milestones		
Publication of the report	30/04/2021	Generating attention for it via news items

Progress

- Using data from literature (A1), case studies and interviews (A3), in summer 2019 ULEI started with the evaluation of the most relevant EU policies (primarily Birds and Habitats' Directives and Common Agricultural Policy) with respect to their support of those grazing models that are most effective and (cost) efficient.

The first phase of this study consisted of re-considering already existing policy analyses of the CAP and other relevant European policies and re-arranging the conclusions and recommendations using the questions from GrazeLIFE.

Preliminary findings were that current policies indeed (sometimes unintentionally) stimulate land users and owners to intensify their production, often at the cost of biodiversity, climate adaptation, soil quality and other ecosystem services.
- An initial assessment of CAP impacts on grazing has been summarized and presented to the DG Environment in Brussels on September 17th 2019. Based on these preliminary results, the EC-representatives offered their support in raising awareness for the mismatch between what European citizens and farmers expect from the CAP, and the reality of where the majority of the CAP-money is actually spent. Several relevant podia to present the story were chosen as well as possible tools (Horizon programme) to further test the outcomes of GrazeLIFE.
- The interim policy report has been written and shared with members of the Scientific Advisory Committee and some team leaders of the regional GrazeLIFE-partners, with specific experience and expertise on policies.
- After collecting comments from those consulted: writing and design of the final Policy Report in Winter 2020/21.
- Publication in March 2021. The outcomes of this policy report served as input for the recommendations towards EU and Member States (A5). The report has also been shared with members of the European Habitat Forum, to use this information in the discussions about the new CAP-policy.

Deviations
Due to Covid19, bringing their children back to home, the authors of the Policy Report were only able to work on their assignment at half speed. Therefore the interim report was ready in December 2020, a few months later than originally planned.
Due to the ongoing negotiations on the new CAP, it was decided to publish the final Policy report earlier, in March 2021.

Complementary actions outside LIFE
Parallel to the GrazeLIFE-project ULEI published a summary and independent evaluation of the current and proposed Common Agricultural Policy (Pe'er et al. 2019, Science)*.

Perspectives for continuing the action after the end of the project
The Policy Report indicates that the major obstacles for (cost) effective land use-models are not at the EU-level but at the level of the Member States. A substantial part of the MSs (deliberately?) don't make use of the facilities and budgets for (cost) effective land use-models, as offered by the EU. This means that – depending on the extent to which the EU makes supportive measures mandatory – targeted follow-up actions at MS level are needed to fulfil those obligations and/or improve implementation.

*Pe'er G., Y.Zinngrebe, F.Moreira, C.Sirami, S.Schindler, R.Müller, V.Bontzorlos, D.Clough, P.Bezák, A.Bonn, B.Hansjürgens, A.Lomba, S.Möckel, G.Passoni, C.Schleyer, J.Schmidt & S.Lakner, 2019. A greener path for the EU Common Agricultural Policy, *Science*, 365, 449-451

Action A5. Report and policy notes with recommendations to EC, Member States and regional administrations to promote and support effective and (cost-) efficient grazing models

Foreseen start date: 01/01/2020 Actual start date: 01/09/2019
Foreseen end date: 31/08/2019 Actual end date: 31/08/2021

This action was aimed at compiling a report with recommendations at different policy levels to improve the implementation of (cost)effective grazing models that support European targets on biodiversity, climate adaptation, wildfire prevention and other ecosystem services.

Deliverables and Milestones

Description	**Deadline**	**Comments**
Deliverables		
Report with 45 recommendations, online available	31/08/2021	According to plan
A 2-pager summarizes the main outcomes of GrazeLIFE Recommendations to the EC – *Additional product*	09/12/2021	
Milestones		
Presentation recommendations to the EC at a closing event	15/10/2021	Due to Covid-19 the physical event has been replaced by an online symposium on 09/12/2021

Progress

- Already during the KO-meeting in March 2019, the optimization of the potential interaction between new policies/legislation and the GrazeLIFE outcomes/recommendations was discussed between the consortium-partners and EC-representatives.
- This first made clear the different levels on which recommendations had to be developed: a) for updates and improvements of policies, regulations and subsidies at the EU level, b) for optimizing policy implementation at the national and regional level, and c) for identifying possible lanes of applicable improvements at the eight project areas to scale up and replicate successful grazing models (also economically). Another set of recommendations will address indicators and monitoring relating to each of the targets, i.e., biodiversity, carbon storage/sequestration, fire hazard and its prevention, and support of other ecosystem services.
- To be able to respond adequately to current policy issues, during the project a living internal document was created with preliminary recommendations, based on the latest insights from the literature review and the case studies. This document was constantly updated during GrazeLIFE and resulted in the final recommendations at the end of the project.
- Final editing and design of the Recommendations Report took place in Summer 2021.
- In order to make the extensive list of recommendations somewhat manageable for the wider public, not only a Laymen Report has been prepared (Action B4) but also an even more compressed handout.
- In the meantime, one of the consortium-partners (ARK) already contacted the Dutch and Belgium authorities to solve legal issues around cross-border grazing. In 5 other areas strategic contacts have already been established with regional authorities, agricultural agencies, agricultural (subsidy) advisors and environmental NGO's.
- In the Oder Delta input from GrazeLIFE is already used by the Agricultural Ministry to prepare an Agro-Environmental scheme for grazing on rewetted lands which can also be used for the restoration of already drained areas in the Oder Delta.
- Preliminary recommendations of GrazeLIFE were sent to Ladislav Miko, who holds the position of permanent EC-representative to Slovakia and was actively involved in recently initiated discussions on Strategic Action Plans which needed to be prepared by the MSs in order to implement the new CAP.

Deviations
Because of the new Animal Health Regulation in the EU (est. in April) some additional remarks were made on this regulation, based on a short report by ARK Nature.

Complementary actions outside LIFE
None.

Perspectives for continuing the action after the end of the project
See C.3.

Action B1. GrazeLIFE website; establishment and maintenance

Foreseen start date: 01/07/2019 *Actual start date: 01/07/2019*
Foreseen end date: 31/12/2021 *Actual end date: 31/12/2021*

This action was aimed at developing an attractive and informative website which gives the wider public access to background stories, implementation and results of the GrazeLIFE-project.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Operational website	01/07/2019	On track, publication: 1 July 2019
Series of blogs - *Additional product*	31/12/2021	12 blogs published

Progress
- In Spring 2019 the Communications-team of Rewilding Europe prepared the website, its design, the content for the home page, general objectives of GrazeLIFE, the first news items, area description and description of the consortium partners;
- On the 1st of July 2019, the website went online and has since that moment – together with the RE-website on which GrazeLIFE items were published - reached a public of >28,000 unique visitors.
- During Autumn 2019 new pages were created to introduce the Scientific Advisory Committee-members and as of November 2019 partners and external experts were approached to write blogs on interesting topics related to GrazeLIFE. A total of 10 blogs and 7 news items have been published.
- In October a news item was published about the study on cross-border grazing along the Border-Meuse. Resulting in large interest from regional and national newspapers.
- Since December 2021, all publications of GrazeLIFE are public available online via the website. Since then, more than 1750 of these publications have been downloaded.

Deviations
With an expected total of 85,000 visitors in 3 years, the real number (ca. 20,000 until December 2020) was lagging behind. This did not influence the progress in other actions, but as we wanted to have a wider outreach, we tried to find new ways to attract visitors.
An example was the idea to publish a series of blogs, which was not in the original project-proposal, but was added to the project in autumn 2019 to make the website more attractive. To

increase the outreach of these blogs we enhanced the use of networks and social media of all GrazeLIFE-partners, as was referred to in **EC's Feedback Letter of 14/04/2020**. Within RE we have – in April 2020 - appointed a colleague in the communications-team to coordinate this action.
While we were making these improvements, we have also realized that the original goal of 85,000 visitors is too ambitious. Not for the total public reach of GrazeLIFE (which was much higher) but via the means of a website. The theme is too policy-oriented for that. Therefore, we proposed to maintain the total reach of GrazeLIFE at a minimum of 85,000, but for the website to be brought back to the still ambitious target of 25,000 unique visitors. This has been agreed by the EC in its **Feedback letter of 20/07/2020**, on the condition that the total media outreach of the GrazeLIFE project would reach at least 85,000 people. As indicated above, that number of 25,000 unique website visitors has been amply achieved. At the same time, the overall media outreach has exceeded all expectations. Media articles about GrazeLIFE have reached more than 2.6 million people worldwide.
Via social media (we only have the data from RE, not from the other partners) GrazeLIFE-posts resulted in a total of 232,651 impressions (Facebook (63,447), Instagram (31,407), Twitter (92,482) and LinkedIn 45,315)).

Complementary actions outside LIFE
To increase the audience for GrazeLIFE-related information, the blogs and news-items were also shared on the general website of Rewilding Europe, having more than 40,000 visitors/month.

Perspectives for continuing the action after the end of the project
The GrazeLIFE website will be continued in a follow-up project or (partly) integrated in the website of Rewilding Europe.

Action B2. Networking with other LIFE and non-LIFE projects

Foreseen start date: 01/09/2019 *Actual start date: 05/06/2019*
Foreseen end date: 30/06/2021 *Actual end date: 31/12/2021*

The purpose of this action was the exchange of knowledge and experiences with relevant related projects to inform these projects with insights acquired by GrazeLIFE and - the other way round – inform ourselves with relevant information from outside the GrazeLIFE-consortium.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Two open webinars about outcomes of GrazeLIFE - *Additional product*	15/10/2021	GrazeLIFE-outcomes were presented at the webinar of the European Rewilding Network on 29/04/2021. The open webinar of 09/12/2021 replaced the physical closing event
Milestones		

Participation in 8 relevant events outside GrazeLIFE - *Additional product*	15/10/2021	According to plan, with GrazeLIFE-presentations on at least 13 relevant events and attendance of 4 other relevant events

Progress

- In June 2019 the Project Manager was invited to do a presentation on rewilding principles, including more natural grazing systems, at the International Workshop 'Cooperation for Private Land Conservation' of the European Private Land Conservation Network in Sighisoara, Romania (LIFE-ELCN);
- The Project Manager also presented this topic at a session on 'Nature Based Solutions' at the IUCN Conservation Forum in Rotterdam on July 1, 2019;
- A third presentation was done in Berlin, on July 5, at the kick-off meeting of the Interreg V-project on Wildlife Economies, where RE is involved as expert organisation in rewilding models, several of them related to more natural grazing;
- In October 2019 the Project Manager presented the GrazeLIFE-project at the European Rewilding Gathering in Spain, with participants from 15 European countries;

Discussions with the participants of these meetings made clear that there is a growing interest in more sustainable land-use models, especially when these models help to diversify income of landowners/users and at the same time provide public goods as carbon sequestration, wildfire prevention and an increasing biodiversity.

- On Sep 17th, 2019 an informative meeting in Brussels with DG Environment was co-organised with our EC-contact person Daniel Nuijten (see also Action A.4);
- We were invited to the EU Forest Conference in February 2020. GrazeLIFE's PhD research fellow, Julia Rouet-Leduc gave a presentation on grazing and wildfire prevention on behalf of the GrazeLIFE -team.

To inform the visitors of this last event about new insights on the benefits of more natural grazing systems for sustainable forestry, a leaflet was produced on 'Herbiforests'. 200 printed copies were distributed among the visitors of the conference. A multiple of this number was downloaded from the Rewilding Europe website.

As was referred to in EC's Feedback Letter of 01/04/2019 - we consulted both the LIFE and Horizon project databases for identifying potentially interesting projects to approach for cooperation. This resulted in a series of additional exchanges.

- In September 2020 there was an exploratory online meeting of the Project Manager with a French team of researchers working for the government on the topic of ecosystem (dis)services by (semi)wild grazing.
- In October 2020 the Project Manager attended an online meeting on 'Climate neutral food and wood – Agriculture', organized by the EU LIFE Programme.
- In November 2020 we informed speakers at a Czech webinar (with several MEP's) on 'how to change EU-subsidies in a way that they don't damage our landscapes'.
- In December 2020 the Project Manager participated in an online US-Conference on 'Rewilding for healthy landscapes' and the role of wild horses in ecosystems and their impact on biodiversity.
- In April 2021 the Project Manager presented the GrazeLIFE-project and its preliminary outcomes at a webinar on natural grazing of the European Rewilding Network.

- In June 2021 the Project Manager provided unsolicited advice for the European Forest Strategy, based on the preliminary results of GrazeLIFE.
- In May 2021 the Project Manager attended an online meeting about the future of the CAP and recommendations of 300 scientists to improve CAP's performance for biodiversity.
- Relevant information and experiences from the GrazeLIFE-project were shared with the CANA Foundation in the US to support extensive grazing by horses on state owned land.
- In July 2021 the Galician team presented the GrazeLIFE project at the 1st International congress on equinology and equestrian tourism in Viana do Castelo, Portugal.
- In August 2021 the Project Manager presented some outcomes of GrazeLIFE at an online meeting organized by the British Wildlife Trusts on rewilding and landscape recovery.
- In September 2021 the Project Manager presented the GrazeLIFE-project and its preliminary outcomes at an online meeting of the Large Herbivore Working Group in the UK.
- In October 2021 GrazeLIFE-outcomes were shared with the organisation of an online symposium Peisaj Deschis (Open Landscapes) that took place in Romania, on November 12th, where also the Romanian representative of GrazeLIFE did a presentation about intensive vs extensive grazing.
- In October 2021 the Galician team presented the outcomes of the GrazeLIFE-project at the IAPS International symposium on sustainability in the post-Covid era: challenges and opportunities in the face of climate change and the energy transition in A Coruña – Spain.
- In December 2021 our Portuguese partner Terra Prima presented GrazeLIFE-results at the National Conference of Ecology in Portugal

As requested by the EC in its **Feedback letter of 20/07/2020** provides an overview of links to the relevant presentations and/or event programs, where applicable.

Many of the exchanges mentioned above were a follow-up to previous presentations. There is apparently a growing interest in the theme, which is also apparent from the large number of online visitors (>800) to the closing symposium, many of whom came from the network built up with this B2 action. Outside the EU countries, this is especially the case in the UK and the US, where completely new movements around grazing with (semi) wild herbivores are taking off.

Deviations
During our meeting with DG ENVI in September 2019 our EC contact person suggested that GrazeLIFE-outcomes could be interesting for the European Green Deal and for the discussions on a related CAP-reform with the MS's, which so far resulted in the presentation at the Forestry Conference and an invitation for the Green Week in June 2020 (which has been cancelled due to the Covid19-crisis).
This all contributed to the impression that there was more demand for networking than originally planned within the GrazeLIFE-project, but that this could be solved within the possibilities RE had for communications and networking.
In order to meet the extra demand for presentations and knowledge sharing, we decided to use part of the budget surplus from the KO-meeting for this purpose (see also Action A.1). Also, non-significant budget shifts in the Personnel costs budget within Rewilding Europe were made to facilitate this.

Complementary actions outside LIFE
See above.

Perspectives for continuing the action after the end of the project
As sharing knowledge and experience on (cost) effective land use models for biodiversity, climate adaptation and other ecosystem services, belongs to the core business of all GrazeLIFE-partners, they will continue this work also after GrazeLIFE, building upon the new insights gained with this project.

Action B3. Practitioners guide

Foreseen start date: 01/06/2021 Actual start date: 15/03/2021
Foreseen end date: 31/10/2021 Actual end date: 09/12/2021

This action was aimed at the production of a technical document for landowners and –users, which guides them in the implementation of most efficient and (cost) effective grazing models, adapted to the specific context of their region.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Practitioners guide – English version	15/10/2021	To have a format available for the 10 translations, the English version was already finished on 30/06/2021
Practitioners guide – in 10 more languages	31/11/2021	According to plan, translations are online available in NL, D, PL, LT, UA, RO, BG, HR, ES and PT
Milestones		
Presentation practitioners guide	15/10/2021	Due to Covid-19 delayed until 09/12/2021

Progress
- Rewilding Europe produced a first draft in March 2021 to discuss at the 2nd Steering Group Meeting. The guide compares different land use models with regard to their impact on public services, then describes extensive grazing as the preferred option and elaborates this in more detail for the practice of more natural grazing.
- With comments from this meeting and additional remarks from the GrazeLIFE-partners the final English version was written in Spring 2021.
- Instead of external translators, the GrazeLIFE-teams themselves were asked to translate the English version in their own language, adding – if possible – additional area/country-specific information.
- Final editing and design of all 11 Practitioners' Guides took place in Autumn 2021.
- Online versions of these 11 guides were published on the GrazeLIFE-website on December 9th, 2021, and are public available. Since then, more than 330 Practitioners Guides have been downloaded.

Deviations
Without a view on physical meetings and presentations of the guides, we have decided not to publish the 11 documents in printed form, but only to make them available online.

Complementary actions outside LIFE

Already during the last months of the project, it became clear that there is a growing demand for practical grazing advice and tips to improve policy and regulations at national levels. Under embargo, parts of the practitioners' guide have already been shared with groups dealing with extensive grazing in Romania and the UK.
The release of the Practitioners Guide has already led to the offer of a third party - Rewilding France - to also translate this guide into French at its own expense. Rewilding Europe will support these and similar initiatives with the design of the guides.

Perspectives for continuing the action after the end of the project
It is expected that such requests for practical tips will only increase further and that also after the GrazeLIFE project, considerable use will be made of the online practitioners guides.

Action B4. Closing event incl. presentation Layman's report

Foreseen start date: 01/11/2021 Actual start date: 01/09/2021
Foreseen end date: 31/12/2021 Actual end date: 09/12/2021

This action was aimed at organizing a public event in Brussels where a report with recommendations would have been handed over to a EU-representative, while at the same time a popular version should be available for the wider audience, media and relevant stakeholders at the EU-level.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Layman's Report	15/10/2021	According to plan
Hand-out – *Additional product*	09/12/2021	According to plan
Video 'Grazing for Life' – *Additional product*	09/12/2021	According to plan
Milestones		
Closing event	30/11/2021	Replaced by an online symposium on 09/12/2021

Progress
- In cooperation with representatives from the EC first preparations were made for a closing event in Brussels on 17/11/2021.
- But in course of October it already became clear that a physical meeting would be problematic, due to the corona-pandemic.
- Therefore, we decided to shift towards an online symposium, which was finally held on December 9th, with even more participants. In the end we received 560 registrations, of which 342 people took part via Zoom and 148 via the YouTube channel, together from 38 different countries. In the months after the meeting the YouTube-version was seen by another 1210 unique viewers. During the first months after the symposium, the video 'Grazing for Life' has been seen by more than 2250 viewers via YouTube and another 6989 viewers via Facebook, Instagram and LinkedIn.
- The reports were handed over to Mr. Humberto Delgado Rosa, Director for Natural Capital of the DG Environment, European Commission.
- In the meantime, the main GrazeLIFE-recommendations were translated into a Layman's Report that was first – in a draft version – presented at the 2nd Steering Group Meeting in March 2021.

- With the comments of all partners, the Layman's Report was edited, designed and printed (200 copies) to have available at the closing event.

Deviations
Due to Covid-19 we shifted from a physical closing event to an online symposium. In consultation with the EC representative and the LIFE Monitor, the associated cost savings have been used to further increase the outreach of the online symposium with additional means of communication in the form of a handout and a short video, with the main outcomes of GrazeLIFE.

Complementary actions outside LIFE
None

Perspectives for continuing the action after the end of the project
With the additional means of communication mentioned above, we can continue to bring the GrazeLIFE recommendations to the attention of a wider audience after the project has ended.
Already in the first weeks after the online closing event, there were several requests for translation of the GrazeLIFE-video in the following languages: Bulgarian, Ukrainian, Danish, German and Polish. Rewilding Europe will continue to facilitate this after the GrazeLIFE project ends.

Action C1. Project management

Foreseen start date: 01/01/2019 *Actual start date: 01/01/2019*
Foreseen end date: 01/03/2022 *Actual end date: 31/12/2021*

This action was aimed at the coordination of the 12 actions and the work of the 14 GrazeLIFE consortium partners (beneficiaries and subcontractors for the area studies) in order to deliver the products and milestones of the project in time and with sufficient quality.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Progress Report nr. 1	30/09/2019	Cancelled in consultation with the EC
Mid Term Report	31/08/2020	Advanced to 30/06/2020
Final Report	28/02/2022	Advanced to 31/12/2021

Progress
Project management was executed by two employees of Rewilding Europe, coordinating beneficiary of the GrazeLIFE-project. Management tasks were split in the overall management of the project, focusing on the content and the technical cooperation within the consortium (Project Manager) and the coordination of the financial/administrative issues (LIFE Project Officer, assisted by the Project Assistant). In order to manage the process smoothly, both employees performed the following tasks in close mutual cooperation:

Project Manager:
- Selection in winter 2019 of subcontractors for RE in 3 regions: Coa Valley, Velebit and Oder Delta.

- Coordination of the project planning (summarized in a GANTT-chart), and facilitating the consortium partners on a daily basis to deliver their tasks in line with that planning.
- Gathering input from the partners on a quarterly basis and share this input with all of them (and the LIFE Monitor) in Quarterly reports, the Mid Term Report and this Final Report.
- Writing 3 news items on RE's website in winter/spring 2019 to announce the GrazeLIFE-project, the PhD-position and the relevance of the KO-meeting.
- Organizing the consortium-meetings (Kick Off in March 2019, Steering Group Meetings in 2020 and 2021) and compiling the programme for these meetings. Preparation of 4 presentations for the KO-meeting, 3 for the SG-meeting in March 2020 and 5 for the SG-Meeting in March 2021. Coordinating the answers to all questions that came up in the chatbox of these SG-meetings and sharing these answers with all participants.
- Developing guidelines in spring/summer 2019 for interviews (both for landowners/users and GO's/NGO's) and stakeholder meetings, with help of a social scientist and conclude on these guidelines together with the Scientific Advisory Committee (SAC).
- Having bi-annual Skype-meetings with the SAC to develop research methods, define the 9 land use models to be examined/compared in GrazeLIFE, set criteria for the comparison of different land use models and guidelines for selecting case studies and research areas (plots).
- Bilateral meetings with all partners in spring/summer 2019 to prepare the area studies, interviews and stakeholder meeting(s) in the 8 GrazeLIFE regions.
- Generate more detailed overview of case studies, plots, investigated topics/area, research institutes involved and research methods.
- Being the daily contact for all the partners to discuss the progress of the project and help solving practical issues.
- Having regular calls with ULEI and the PhD-student to monitor the progress of the literature review, adapt the interview guide and discuss progress on Action A4.
- Organizing the content for the GrazeLIFE website and approach partners, external experts to provide input, that could be useful for the project and interested audience.
- Representing the project to the outer world (EC, other LIFE and non-LIFE-projects), giving presentations himself or facilitating presentations of project partners on external events.
- Preparation of the meeting with EC DG ENVI on 17 September 2019 to provide them with an update of the project and to join forces in improving European policies, legislation and financing on (cost) effective grazing systems. This meeting was followed by intensive communications with DG ENVI about recent developments and opportunities for effective grazing systems within EU.
- Providing all regional teams with a format for the final Area Reports that had to be ready in Spring 2021.
- Providing input to a study at Wageningen University (NL) on carbon storage under different grazing regimes.
- Writing article about GrazeLIFE for Rewilding Europe's Annual Review.
- Writing the Final recommendations (A5), English version of the Practitioners' Guide (B3), Laymen Report (B4) and After LIFE-plan (C3).
- Coordination of editing (by native speaker) and design of GrazeLIFE-reports.
- Contribution as co-author to the scientific GrazeLIFE-publications (A2).
- Preparation of a wrap-up trip along the Border Meuse, with the GrazeLIFE-contact at the EC and the LIFE Monitor.
- Preparation of communication action plan for different target groups (EU parliament, National authorities and Practitioners), incl. dissemination of GrazeLIFE-reports and additional tools like GrazeLIFE-video and leaflet with main results.
- Preparation and coordination of open webinar/online symposium on December 9th 2021 in which GrazeLIFE-outcomes were presented to the wider public.

- Compilation of list of follow-up actions in the GrazeLIFE-regions, as part of the After LIFE-plan. List disseminated among consortium-partners.

LIFE Project Officer resp. Project Assistant

- Administrative and financial part of the reporting to the EC.
- Organisation– in Spring 2019 – of a webinar with all the partners on financial/administrative issues (done in cooperation with the LIFE WolFlux project (LIFE18 NAT/PT/554) which had the same starting date and where RE is also beneficiary. The webinar was followed-up by provision of tools for financial management of LIFE and intensive guidance in reporting, ensuring that the LIFE rules are met.
- Logistics of the consortium-meetings (Kick-Off in March 2019, Steering Group Meetings in March 2020 and March 2021).
- Preparation of contracts with (6) Associated Beneficiaries and (5) subcontractors of Rewilding Europe and prepare the signing of these contracts with the Managing Director of RE.
- Preparation of amendments in contracts between Rewilding Europe and partners because of additional work by partners (translation of Practitioners' Guide by all teams, dung sampling by 6 teams, dung study by ARK).
- Support subcontractor Rewilding Oder Delta with hiring consultant for implementation of activities on the Polish side of the study area.
- Coordination of the bi-annual internal financial reporting (July 2019, January 2020, May 2020, January 2021, July 2021 and November 2021), assuring for division of EC-contribution to the project among the beneficiaries, and monitoring of the overall budget expenditures.
- internal project administration and financial management of RE as GrazeLIFE (Coordinating) Beneficiary.

Deviations

The Project Manager had to anticipate on some deviations in the project planning, as mentioned under actions A.2 and A.3 (3 months delayed start of PhD, more time consuming preparations of the stakeholder-meetings and fieldwork concentrated in shorter period), but together with consortium-partners this could all be solved without major delays in the overall project.
Both the 'wrap-up trip' with the LIFE Monitor/EC Contact as the physical closing event in Brussels had to be cancelled, due to the Covid-pandemic. This could be solved through online contacts and the organization of an extra online closing symposium in December 2021.
With regard to the composition of the GrazeLIFE-consortium, some changes had to be made with regard to the subcontractors of Rewilding Europe in Velebit. In Velebit the Faculty of Forestry from the University of Zagreb withdrew as they considered other institutes better equipped for the type of investigation we had in mind (carbon storage in soil and vegetation). Another institute – EKONERG – was indeed better positioned to do this research and the modelling of the carbon storage in different grazing systems.

Complementary actions outside LIFE

Preliminary results of the GrazeLIFE-project were used by the coordinating beneficiary in other landscape projects in which RE is involved like the EU-programmes H2020 (project TERRANOVA), Interreg Europe (project Wildlife Economies) and the Endangered Landscapes Programmes (funded by Arcadia) in the Danube Delta and Western Iberia. The Project Manager also supported ULEI to publish about GrazeLIFE-results in scientific papers. This will contribute to the project's dissemination and also strengthen the follow-up and replicability of the project's results.

Perspectives for continuing the action after the end of the project

Herbivory is one of the ecological key processes in Europe's natural landscapes, which could contribute to nature-based solutions for climate change, biodiversity loss and several socio-economic issues (wildfire prevention, lowering flood risks etc.). Even if the EC takes over all the recommendations coming from GrazeLIFE, this will not mean that the work is done. Implementation of improved policies, legislation and finance for (cost) effective grazing systems requires tailor-made applications in the different MSs and regions as well. This will remain a priority for RE, also after the GrazeLIFE-project.

Action C2. Monitoring project progress, incl. performance indicators

Foreseen start date: 13/03/2019 *Actual start date: 13/03/2019*
Foreseen end date: 01/03/2022 *Actual end date: 31/12/2021*

This action was aimed at an accurate monitoring of the project progress and the delivery of products and milestones according to provisions set in the original proposal

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
Quarterly technical reports	Every quarter	On track
Half-yearly financial reports	Every half year	On track
Milestones		
1st Meeting Steering Group + Scientific Advisory Committee	March 2020	Done. Online because of Covid19
2nd Meeting Steering Group + Scientific Advisory Committee	April 2021	Done in March 2021. Online because of Covid19

Progress

All consortium partners contributed to the Quarterly reports (11 in total of which 3 are a summary of resp. the outcomes of the Kick-off Meeting (Q1) and the two meetings of the Steering Group (Q5 and Q9)) that were made by the Project Manager and have been sent to the LIFE Monitor. A more comprehensive overview was made in the Mid Term Report, including a discussion of the project's progress towards achieving the KPI-targets (see Chapter 6).
To monitor the progress of the literature review and the 8 case studies, bi-annual meetings were organized with the Scientific Advisory Committee that consists of 4 scientific members.
During the 1st SAC-meeting in April 2019 we decided that each SAC-members should adopt 2 area studies (so each member adopting 2 areas). In practice this meant that regular bilateral calls between Project Manager and the regional teams, about the progress in the area studies, were often attended by the responsible SCA-member to advise on methods and data-gathering.

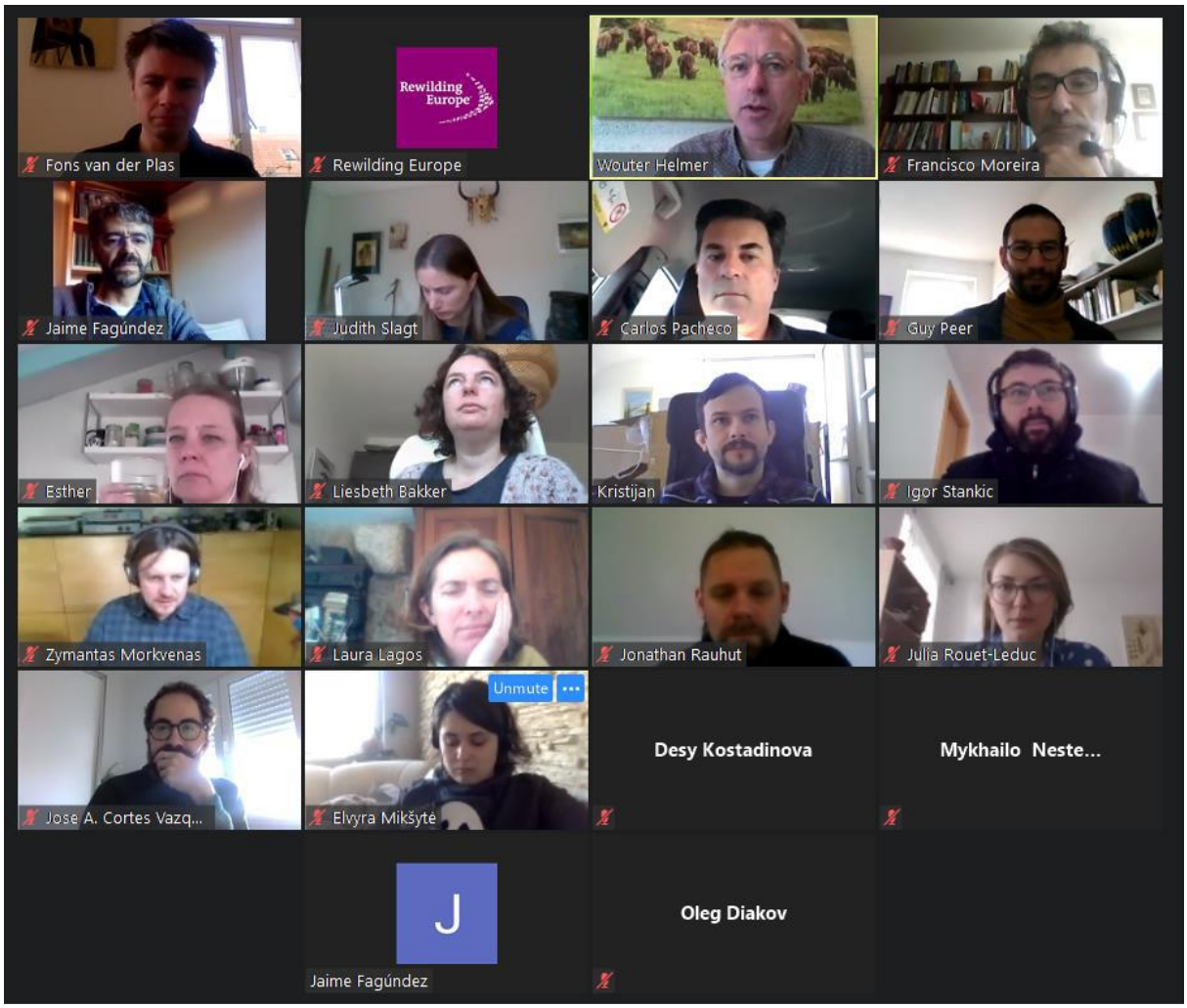


Fig. 7. Steering Group Meeting in times of Covid19 pandemics…

Deviations
None

Complementary actions outside LIFE
None.

Perspectives for continuing the action after the end of the project
Having established a monitoring-system of pioneering grazing practices in 8 European regions, we hope to use the outcomes of GrazeLIFE to improve and scale up these practices and monitor them in a follow-up project (Horizon Programme?) or continue the cooperation between the GrazeLIFE-regions and the scientific institutes represented in the SAC in another context.

Action C3. After-LIFE plan

Foreseen start date: 01/09/2021 Actual start date: 15/03/2021
Foreseen end date: 31/10/2021 Actual end date: 09/12/2021

This action was aimed at compiling an action plan for all consortium-partners and relevant stakeholders how to proceed after GrazeLIFE to ensure long-term sustainability of the project outcomes.

Deliverables and Milestones

Description	Deadline	Comments
Deliverables		
After LIFE-plan	15/10/2021	According to plan
List of possible follow-up actions in the GrazeLIFE-regions	15/10/2021	Published as Annex of the After LIFE-plan
Milestones		
Presentation of the After LIFE-plan at the closing event	15/10/2021	Due to Covid-19 the presentation was online at the symposium of 09/12/2021

Progress

- A first draft of the After LIFE-plan was made in March 2021, to be discussed at the Steering Group Meeting. Comments of the SGM were used to improve and update the proposal;
- Relevant parts of the updated proposal were presented to the stakeholders at the 2nd round of stakeholder meetings in 2021;
- Feedback of all project participants was collected to summarize this in an action plan, to be published in paper format and online at the end of 2021
- Anticipating the after LIFE period, the Program Manager already integrated GrazeLIFE-outcomes in RE's brochure on Natural Grazing and compiled a list of follow-up actions for the GrazeLIFE-regions.

Deviations

Two months delay of the presentation, because of corona.

Complementary actions outside LIFE

None.

Perspectives for continuing the action after the end of the project

The After LIFE-plan will function as a guide for all GrazeLIFE-partners to continue their efforts for (cost)effective grazing systems after the project.

6.2 Main deviations, problems and corrective actions implemented

As mentioned above the main deviations from the original planning are:

1) 3 Months delayed start of the PhD and the opportunity to anticipated publishing on the topic of wildfire preventions (*see Action A.2*) which caused a few months delay in the reporting on other topics in the literature review of the PhD.
2) More time needed to prepare the stakeholder-meetings in most of the 8 GrazeLIFE-areas, which - as a consequence - also caused a few months delay in the last interviews to be made with those stakeholders (*see Action A.3*).
3) In some case studies, and because of limited budgets: concentration of fieldwork in one season (2020) instead of two (2019-2020) (*see Action A.3*).
4) Change of subcontractor of RE in the Velebit case study area, which lead to a delay in the implementation of field work (*see above under action C.1)*.

These deviations did not require major changes to the overall implementation of the project.

The delay under 1) was partly due to advanced work on the wildfire issue that saved time in the course of 2020/2021. On top of this, extra support from the team at ULEI and the Project Manager, regarding the integration of the literature review and results from the interviews in

the course of 2020, helped to get this action back on track. Overall, the delay was resolved in the winter of 2020-21.

The delay of some stakeholder-meetings – three of them were again postponed because of the Covid19-crisis – was definitely not ideal, as in these cases we missed an opportunity at an early stage of the project to present the GrazeLIFE-project to the regional target-groups, gather general feedback from them and harvest suggestions for stakeholders to be interviewed. However, all three teams involved stated that they had a relatively good overview of relevant parties in their regions and that all the original goals could be achieved during the (delayed) meetings.

The delays under 2) and 4) also had consequences for the timing of the interviews and thus indirectly for the planning of the processing of these interviews within the PhD study. But as most of the interviews were finished before their (3 months delayed) processing could start, this was logistically solved in the same way as the delay under 1). For the remaining 15 interviews it was not a problem to have them later in 2020. On the contrary, having the preliminary results of the first 80 interviews helped us to select the most relevant stakeholders and experts for the last round of interviews to fill possible gaps in our knowledge and stakeholder-networks.

The project offered sufficient scope to anticipate on more concentrated field work (deviations 3) and 4)). All the planned fieldwork could be finished in 2020. Even when the Covid19-crisis caused a few months delay in the fieldwork for most areas, we could deliver according to the planning, due to extra effort in the field. Only in a few cases (Lika Plains, Coa Valley), we had to adapt the methodologies (more remote sensing). This resulted in slightly different outcomes, though relevant and useful in reaching the project's objectives still as was referred to in **EC's Feedback Letter of 14/04/2020**.

However, the deviations mentioned above influenced the pace of spending of the project budget which was pushed back a few months compared to the original planning in 2020, but later overtaken by extra spending in 2021.

6.3 Evaluation of Project Implementation

Methodology applied

1) An important source of information were the ***interviews*** with stakeholders in the 8 study areas. In compiling the interview guide we made - as much as possible - use of social scientists in the consortium, combined with the practical experience of the local teams. Additionally, the interview scripts were tested in four areas. With this we tried to anticipate as much as possible on the fact that many of the local partners are not professional interviewers. On the other hand, they have often good knowledge of the local situations and issues and extensive relevant networks. Despite the abovementioned preparations, this part of the project encountered also insurmountable limitations: not all interviewees accepted the interview being recorded or they showed reluctance in providing private (financial) information, despite the guaranteed anonymity.
2) From the beginning of the project we were aware that the 8 ***study areas*** have a very diverse socio-economic background, geography, culture, history, practice of different land use models and experience of the teams involved. We realized that this would add difficulties to harmonisation of the methodology. However, the same diversity was also considered as an extra quality. In this way, the project was able to cover as much of Europe's regional variation in grazing systems as possible. The eight areas offered complementary pieces of the puzzle that helped us creating a coherent set of recommendations with regard to the most effective grazing methods and their application in the different regions of Europe. At the same time, this variation made it

very difficult to use one unifying methodology for the field studies in the 8 areas and we decided already from the start to let every area (in consultation with the SAC) decide on the most effective method to investigate the most relevant GrazeLIFE-topic for *that* area. At the end of the project it turned out to be possible to translate this heterogeneity of data into a coherent set of recommendations, also because of adding a specific region oriented category of recommendations.

Results

Action	Foreseen in the revised proposal	Achieved	Evaluation
A1	**Objectives:** Kick-off meeting with all project partners and external experts **Expected results**: 1) A database providing an overview of the spatial, ecological socio-political/economic context, existing grazing models, activities and knowledge-needs in all case studies. 2) Fine tuning of practical implementation of GrazeLIFE and exact activities in case-studies, translated into a clear list of tasks and a more specific time-schedule (Gantt Chart).	Successful meeting with all partners, resulting in: 1) An overview of case studies in the 8 GrazeLIFE-regions and the plots with different grazing models to be examined within these case studies. 2) A Gantt Chart with the planning of all activities and deliverables during the duration of the GrazeLIFE-project.	Action closed according to plan. After an extensive internal discussion, the project consortium rejected the idea of an additional political / economic overview of the GrazeLIFE - regions that goes beyond what was already described in the project proposal. It was considered as having too little added value.
A2	**Objectives:** Review of scientific literature on grazing models, and assessing them in terms of effectiveness, (cost) efficiency and scalability **Expected results**: 1) A database summarizing available scientific knowledge on different grazing systems, organized according to grazing-types and EU bioclimatic regions. 2) A report summarizing the analyses of effectiveness and (cost-) efficiency of different grazing models, explicitly addressing questions relating to facilitators, barriers, costs and benefits.	A report has been published, which not only summarizes the scientific literature review, but also relevant insights from the 95 interviews, and comparing both sources of information. The literature database, was already available in Spring 2020, as part of the study above. As an immediate result of this action 3 scientific papers have been prepared of which 2 are already published	Some delay, due to late start of the PhD and the chance of earlier publication of findings in the field of wildfire prevention. We succeeded to overcome this delay in the rest of the project. With the extra publication of 2 (with a 3rd one in the near future) scientific articles, this action has exceeded our expectations.

Action	Foreseen in the revised proposal	Achieved	Evaluation
A3	**Objectives**: Area studies in 8 European regions **Expected results**: 1) Reports from all study areas based on the interviews, including qualitative and quantitative data regarding land-use models and their relevance/potential for biodiversity, wildfire prevention, carbon stocks/sequestration, reducing human-wildlife conflicts and performance of ecosystem services. 2) Case study-reports for each area on current grazing management models, facilitators and barriers for implementation. 3) Final area reports with recommendations combining the results of the case studies and interviews.	Stakeholder-meetings were held in all 8 areas (in some areas on both sides of the border), with all together >150 participants. Among these stakeholders 95 interviews were conducted, giving a comprehensive overview of qualitative and quantitative data on land use models from the 8 areas. Summarizing reports from the areas and case studies are available since summer 2021.	An initial delay in the organization of the stakeholder-meetings – and therefore in conducting the interviews as well - was corrected in 2020. Therefore the initial assessment of the interviews on Month 20 – as planned in the original proposal – was still possible.
A4	**Objectives**: Synthesis of A.2-A.3. Evaluation of current policies, practices and subsidy systems based on the case studies and literature, to develop recommendations for improvements of the latter with respect to effectiveness, (cost)efficiency and scalability of grazing models **Expected results**: Report on the effectiveness, efficiency and coherence of key instruments (policies, regulations and subsidies) in supporting effective and (cost) efficient grazing models.	An initial assessment of CAP impacts on grazing has been summarized and presented to the DG Environment in Brussels in September 2019. The final Policy Report was published in Spring 2021 and served as input for the Practitioners' Guides (B3), Laymen Report (B4)and the final set of EU-recommendations (A5).	On the one hand, the compilation of this report had to wait for the (delayed) results from the area studies, while, on the other hand, it was imperative to influence the ongoing CAP negotiations. As a result, the production took place in a short time, but without the quality having suffered.

Action	Foreseen in the revised proposal	Achieved	Evaluation
A5	**Objectives**: Report and policy notes with recommendations to EC, Member States and regional administrations to promote and support effective and (cost-) efficient grazing models **Expected results**: 1) Report and policy notes with recommendations to EC, Member States and regional administrations to promote and support effective grazing models. 2) Policy notes for Member States and regional administrations will be written in the language of the regions that are involved in this Preparatory Project.	Final report with 45 recommendations, published online. Relevant outcomes and follow-up actions for the GrazeLIFE-regions are integrated in the 11 different Practitioners' Guides (see Action B3).	Circulating the draft recommendations from the outset of the GrazeLIFE-project, proved to be an effective method to further perfect this crucial document over the time span of the project.
B1	**Objectives**: GrazeLIFE website; establishment and maintenance **Expected results**: Until the end of the project a total of 85 000 unique web visitors are expected.	Website established, with news-items and (additional to original plan): a series of blogs. December 2020: >34,000 page views by >28,000 unique visitors of GrazeLIFE-website and RE-website regarding GrazeLIFE-items.	Nr. of visitors lagging behind expectations. Partly solved by publishing on websites with more visitors (RE, Nature Today, etc.). At the same time, publishing of GrazeLIFE-outcomes in scientific magazines and newspapers, resulted in an outreach of >2,6 million people.
B2	**Objectives**: Networking with other LIFE and non-LIFE projects **Expected results**: Better insights in the topics GrazeLIFE is dealing with from outside the consortium and – the other way round - adequate informing of relevant projects outside	Members of the GrazeLIFE-consortium has presented the (preliminary) results of this project at 11 relevant international events.	There was more demand for international presentations than foreseen at the beginning of the project. However, the idea at the time of the MTR to use savings on other project's components for this

	GRAZELIFE with insights acquired by this Preparatory Project.		purpose, became outdated as a result of the coronavirus outbreak.
Action	**Foreseen in the revised proposal**	**Achieved**	**Evaluation**
B3	**Objectives**: Practitioners guide **Expected results**: The final product will be a paper and on-line, full colour, easy to read guide. Available in their own language for the stakeholders in the areas that participate in GrazeLIFE (500 copies) and online available also for the broader audience (5,000 downloads expected). Targeted dissemination via direct communication (Action A.3) and online channels (Action B.1) will ensure that guidance material reaches the most relevant people and stakeholders in the entire EU.	Practitioners' Guides published in 11 different languages.	Because of the knowledge - also gained during the project - among the GrazeLIFE partners, we decided to have the translation carried out by them as well. This made it possible to add relevant region-specific information to most of the Practitioners' Guides.
B4	**Objectives**: Closing event incl. presentation Laymen report **Expected results**: 1) Media attention in international media and media within the countries where the area studies have been done. 2) Laymen report of max. 10 pages – online and in 500 prints - presenting the main outcomes of this project to a wider audience.	Online symposium on December 9th 2021 as closing event. Laymen report available in a lower edition (200 prints). Additional a 2-pager and a short video are produced.	The need to replace the physical closing event with an online symposium also made it easier to reach more people. For the same reason we decided to replace printed documents by communication tools with a wider reach.

C1	**Objectives**: Project management **Expected results**: The expected main result is the development of the project according to provisions set in the proposal.	Timely submission of quarterly reports, financial reports, MTR and FR.	Project generally on track, with the exceptions mentioned under 5.2. These deviations did not require major changes to the overall project.
Action	**Foreseen in the revised proposal**	**Achieved**	**Evaluation**
C2	**Objectives**: Monitoring project progress, incl. performance indicators. **Expected results**: 1) The expected main result is the development of the project according to provisions set in the proposal. 2) If relevant, a technical report will be delivered including the main outcomes of the project and the advances in understanding constraints of each system.	Thanks to regular contacts between the project management, regional teams and scientific partners there was continuous insight into the progress of the project. Leading to accurate updates and reporting. Plenary meetings of Steering Group and SAC have taken place in March 2020 and March 2021.	Properly functioning network of consortium partners avoided unpleasant surprises regarding project planning and deliverables.
C3	**Objectives**: After-LIFE plan **Expected results**: The main expected result is that all project participants and relevant stakeholders will have detailed knowledge on how to proceed to ensure long-term sustainability of the project actions.	After LIFE-plan ready.	Consultation of all consortium-partners (already at an early stage of the writing process), regarding their future role, resulted in a realistic set of follow-up actions.

Policy impact

The results of the literature review and case studies, show that implementation of specific grazing systems can indeed make a substantial contribution to increasing biodiversity and mitigating climate change. In particular, different forms of extensive grazing (with livestock or (semi)wild herbivores, pastoral or not) - often characteristic for different European regions - can be very effective in creating diverse structured landscapes, rich of flora and fauna. At the same time, these landscapes are inherently fire resistant (grazed parts functioning as natural fire breaks) and store large amounts of carbon in soil and vegetation. Therefore, supporting these grazing systems suggests to be a very important policy option. The 45 recommendations provided by the GrazeLIFE-consortium point out a very concrete, practical way for the EU and Member States to support these effective grazing systems through changes in policy, regulations and subsidies.

As a result of a meeting with DG Environment in September 2019, the GrazeLIFE-consortium was invited to present its (preliminary) results at some strategic events, organized by the EU. The first one being the EU Forestry Conference on 4/5 February 2020 in Brussels. Apart from a presentation on wildfire prevention (given by the PhD-student), hand-outs were spread on the topic of 'Herbiforests" to draw attention to the added value of large grazed forest landscapes, compared with planted closed canopy-monocultures. This was considered as useful input to the European Green Deal and EU's Biodiversity Strategy. As a follow-up to this input, the Project Manager provided unsolicited advice for the European Forest Strategy in June 2021, based on the results of GrazeLIFE.

On MS-level the GrazeLIFE consortium was active in incentivising national authorities to improve use of European facilities to support (cost) effective grazing systems. One of the consortium-partners (ARK) is already negotiating with the Dutch and Belgium authorities to solve legal issues around cross-border grazing. In Germany already an important step was taken by the agricultural authorities in relaxing the eligibility of rewetted and rewilded grasslands if this contributes to N2000 or EU WFD-targets.

For the rest it's too early to visualize concrete achievements which influenced legislation or its implementation on regional, national or EU-level. The main barriers in this process are probably not at the EU-level, but at the level of the Member States, where established industries of intensive farming systems seem to frustrate the – in their eyes – 'leakage' of community money to other (often more sustainable) land use forms than intensive agriculture. Awareness raising about the available facilities at EU-level (hardly known by anyone…) could help. With the Practitioners Guides and the list of follow-up actions (part of the After LIFE – plan) we try to create that awareness and provide bottom-up the tools for practitioners to push their authorities for change. Apart from that a more mandatory European policy with regard to national implementation of (cost) effective grazing systems would be a big step forward compared to the current almost voluntary implementation by MS's.

Outside LIFE

As its broader goal, RE is among others exploring business models around sustainable land uses, among which there are several models that are in line with the goals of GrazeLIFE, especially when referring to carbon storage in soils, biodiversity offsets and the prevention of wildfires. Apart from a contract that RE signed with the European Investment Bank in 2017 (LIFE Natural Capital Financing Facility), RE is also exploring the cooperation with a green bank to scale up these models.

In order to help landowners and land users with setting up their own sustainable grazing systems, RE has established the European Wildlife Bank, as a revolving fund from which animals can be offered for free. So far, in 2019-2021 herds of horses, kulan and water buffalos were provided to grazing areas in the Danube Delta and adjacent steppe areas. Areas in the Romanian Carpathians and the Croatian Lika Plains were populated with resp. European bison and Tauros.

6.4 Analysis of benefits

Environmental benefits

Direct / quantitative environmental benefits:

On Biodiversity: more natural grazing systems can be beneficial for Europe's biodiversity, as a large part of this biodiversity is direct or indirect related to grasslands and their gradients to scrubland and forests, maintained by herbivores. Also, the (healthy) dung of herbivores, their carcasses, trampling sites, sand baths and their role as seed transporters contribute to higher biodiversity in European landscapes.
From the field studies in the GrazeLIFE-regions evidence has been gathered (a/o by ARK) on the added value of social herds on biodiversity; for example, rival bulls creating sand pits that host hundreds of insect species. Healthy manure (without medicines) appears to be another biodiversity driver, leading to an extreme rich dung fauna that also helps increasing carbon storage in soil (see below).

On Environment & Resource Efficiency: no quantitative results. For qualitative benefits, see below.

On Climate Action: the literature review shows that extensive grazing systems store more carbon in soil and vegetation than ploughing, mowing or intensive grazing of the land. In extensively grazed landscapes, with spontaneous growth of shrubs and trees, carbon storage can increase to amounts almost similar to forests.
Compared to abandoned scrublands or monocultures of trees, grazed landscapes are less vulnerable for wildfires, as the herbivores create natural firebreaks. Therefore, grazing systems also indirectly contribute to a reduction of greenhouse gas emissions.

On Environmental Governance & Information: no quantitative results. For qualitative benefits, see below.

Qualitative environmental benefits

On Biodiversity:
Natural grasslands and heathlands belong to the most endangered biomes in the world and more natural grazing systems can contribute to their salvation.
Species related to grasslands, shrubs, forest edges and all the gradients in between, species of sand baths, trampled soil, dung, big carcasses etc. have all their dependency on large grazers. Seeds and insects are dispersed by their fur and/or their manure. The more natural the conditions in which large herbivores live, the more evident these relations are.
Having – on both EU and MS-level - supportive policies, legislation and financial instruments for these grazing systems in place (as is recommended by GrazeLIFE) will therefore benefit a wide range of natural grazed habitats with their specific flora and fauna.
As these landscapes at the same time serve several goals in climate adaptation (see below) there is a political momentum for scaling up extensive grazing systems. Despite

the current discouraging policies - especially at level of Member States - the selected GrazeLIFE areas are developing against the oppression. This demonstrates the potential for these grazing systems. When better supported by policies, legislation and subsidies, this land use that is so important for biodiversity can take off.

GrazeLIFE concluded with targeted recommendations - on EU and MS-level - for grazing systems that maximise biodiversity benefits. And the efforts to get these recommendations implemented will continue after the end of the project. Each of the 8 regional partners will continue to scale up effective grazing systems in their regions and influence national and regional authorities to support this. Rewilding Europe will support these regional initiatives with continued financial and/or technical assistance, by offering herds via its European Wildlife Bank and by influencing European policies and legislation in the right direction, at the same time raising international awareness for natural grazing as a key process in preserving Europe's biodiversity.

On Environment & Resource Efficiency:
Compared to intensive farming, extensive grazing-systems with (semi)wild herbivores, not treated with medicines/insecticides, reduce the risks for water pollution and create better conditions for a healthy insect fauna. Dung beetles will survive and bury the manure, which leads to a carbon rich soil.
Especially in areas with a thin soil layer and/or steep slopes, more extensive forms of grazing reduce the risks of soil erosion, compared to ploughing or more intensive grazing.
Compared with mowing and ploughing methods, extensive grazing systems are more environmentally friendly due to less fuel consumption and carbon emissions. On the other hand, animals (esp. cattle) produce more methane, but with a higher proportion of horses (3-4x lower methane emissions than cattle) in the grazer population, this can be greatly reduced.

On Climate Action:
The literature review shows that - compared to arable fields - grazing systems store more carbon in vegetation and soil, even if the grazing is rather intensive. With more extensive grazing systems, including shrub encroachment and spontaneous reforestation of areas, even higher levels of carbon sequestration could be expected, but scientific evidence for this is still very limited.
Herbivory seems to be a (cost) efficient alternative for artificial firebreaks in forest (or can at least reduce costs of mechanical cleaning), thus reducing the impact of large wildfires and contributing to less emissions and more carbon storage in the overall landscape (soil and vegetation).
Extensive grazing systems are often at the basis of mosaic landscapes of grassy vegetations, scrublands and forest-patches. These mosaics seem to have a high permeability for migrating species of all these sub-habitats, making them less vulnerable for climate change.
Via stakeholder-meetings and –interviews we investigated obstacles and opportunities for climate adaption and mitigation by landowners and users in order to formulate recommendations for improved policies, legislation and subsidy systems to make climate measures more attractive.

On Environmental Governance & Information

Ranging from complete wild, via semi-wild herbivory towards pastoralism and extensive livestock-grazing, GrazeLIFE offers a variety of models that can inspire tailor made grazing systems for specific regions and circumstances in Europe.
With the dissemination of the results of the area studies and literature review, we want to create an enabling environment (policies, legislation and subsidies) for landowners and users to implement these grazing models for the benefit of all. Especially on national levels the legal and financial support of (cost-) effective grazing systems could be significantly improved.
Having two stakeholder meetings in each study area – both at the beginning and the end of the project – with intermediate interviews to collect their insights, demands and the obstacles/opportunities these stakeholder see, we started to broaden the stakeholder group committed to better land uses for biodiversity and climate adaptation, at least in the 11 countries of the GrazeLIFE study areas.

Economic benefits
From the areas where more or less free roaming herds of cattle and horses have to deal with large predators, like in Velebit (Croatia) and Rhodope Mountains (Bulgaria), it seems that these herds learn to defend themselves, thus substantially reducing the human-wildlife conflict related to predators.
Grazing fire brigades of (semi) wild animals increase the production rates of forest areas by reducing the risks of wildfires. The animals themselves can become a sustainable source of healthy meat. Carbon storage in soil and vegetation - as a result of extensive grazing - could be an extra source of income for landowners and users when they are supported in selling carbon credits on the (voluntary) carbon market.
Grazed mosaic landscapes, with more or less free roaming herds of (semi)wild herbivores are considered as attractive landscapes for ecotourism, contributing to a healthier rural economy.
The stakeholder meetings, organized in all 8 GrazeLIFE areas, had a/o as goal to make local authorities, land owners/users and NGOs aware of these benefits of grazing systems. On top of that Rewilding Europe is exploring business models around carbon-offsetting and fire prevention that could be adopted by the stakeholders mentioned above.

Social benefits
The economic opportunities mentioned above, also create conditions for new employment in a nature-based economy. Extensive grazed floodplains in the Netherlands showed a sharp increase in jobs (B&B's, wildlife watching, ferries, cafes, restaurants, tea gardens, regional products etc.) compared to the intensive farming economy before.
In combination with free accessibility of the areas (compared to the fenced farmland in the past) these new landscapes also provide the visitors with a sense of freedom, which benefits the appreciation of the landscape and the well-being of the people in the region.

Replicability, transferability, cooperation:
Within the current CAP-regulations – selectively implemented on national levels – more sustainable forms of land use are simply outcompeted by intensive farming systems that receive more CAP-subsidies and/or face less restrictions. If farmers and other landowners/users will get the same amount of subsidies for extensive grazing systems as they can receive now for other land use models that are far less efficient (or even contra-productive) in achieving public goals, that would cause a revolution in the European landscape. It would incentivise farmers to have more biodiversity on their land, store more carbon and create a more attractive landscape. This can lead to an overdraft of the available subsidy volume, which means that the subsidies per hectare must be reduced. This is not a problem as long as there is a level playing field. In

such a level playing field intensive systems have extra income from higher food-production, where extensive grazing systems have competitive advantages in generating extra income from carbon storage, higher prices for sustainable meat and ecotourism.
Especially in regions with high levels of land abandonment this could bring back extensive grazing systems on a large scale, laying a foundation under a new rural economy. In Mediterranean landscapes (Portuguese examples in the Coa Valley) this could suppress the risks of large-scale wildfires. In floodplains (Dutch examples along the Rhine and Meuse) natural grazing can support a good flow of high waters, increasing flood water safety.
With a level playing field regarding subsidies, extensive grazing models also become more attractive as an investment opportunity. Therefore, these land use models could attract additional money from the financial sector. With its loan facility Rewilding Europe Capital, supported by the EIB and the Triodos Bank, RE is exploring these finance mechanisms which could – in combination with the GrazeLIFE-recommendations, improve the scalability of efficient land use models regarding biodiversity and climate adaptation.

Best Practice lessons:
Mixed grazing of free roaming herds of cattle and horses in the Rhodope Mountains show that these animals are better equipped to protect themselves against wolves than herds of sheep and goats.
Extensive grazed areas with (semi)wild animals in Portugal and Galicia indeed show that these areas seem to be less vulnerable for large scale wildfires, than surrounding areas without grazing large herbivores.
The first results in the Border Meuse area show that the omission of deworming medicines is key for a healthy dung fauna and therefore high biodiversity in other parts of the ecosystem (insectivores, soil-life). In the same area Dutch and Belgium owners of free roaming semi-wild herds are developing a cross-border system of natural grazing that could become a showcase for other transboundary grazing projects in Europe.

Innovation and demonstration value:
GrazeLIFE offered new insights in the capacity of different grazing systems when it comes to carbon storage, wildfire prevention, self-defence against predators and the contribution of herbivory to biodiversity under different geographical, ecological and socio-cultural conditions. This made it possible to formulate targeted recommendations for implementation of these models in different parts of Europe.
As the 8 study areas of GrazeLIFE represent regions in North, West, East and Southern Europe, this adds to their demonstration value.
With the knowledge we gathered on their capacity to store carbon, produce high quality meat, reduce fire risks and other ecosystem services the project is likely to also create the foundation for new investment opportunities in sustainable land use models (assuming our recommendations will lead to a level playing field regarding subsidies).

Policy implications:
The main bottleneck for implementation of the GrazeLIFE-recommendations is not at the EU-level, but at national levels. From the variety of options that CAP offers to implement (cost-) effective land use models for biodiversity and climate adaptation, only few are taken up by the MSs. This means that – in order to reach the environmental EU-targets – CAP-subsidies must be more strictly tied to public goods. Agreements made on the EU-level should be mandatory for implementation at MS-level.

For semi-wild herbivores a current bottleneck is the ear-tagging of young animals, which legally have to be done within 7 days after birth – which is almost impossible in larger grazed landscapes. There is an exception in some countries where the owner is allowed to tag the young animals only once or twice a year (much better for animal welfare and working conditions of farmer), but these areas are ineligible for CAP-subsidies. This mismatch between practice and CAP-regulations has to be solved on EU-level in order to support efficient extensive grazing systems on a landscape scale. Simultaneously a DNA sample can be taken to determine with 100% certainty the genetic origin of the calves. A similar approach should apply as an alternative to microchipping of free-living horses.

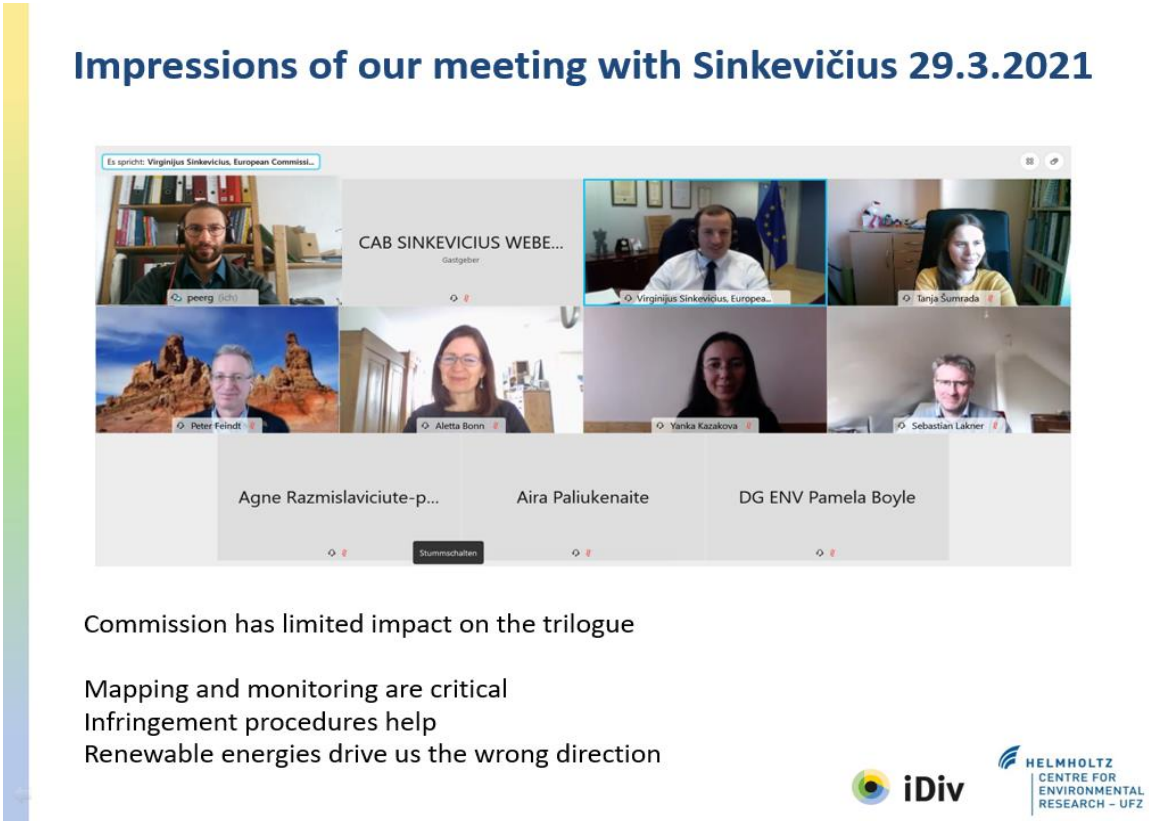


Fig. 8. Online meeting with the European Commissioner, at the time of the publication of the Policy report

At Member State-level, the range of eligible vegetation types for CAP subsidies should be broadened, within the policies already provided by the European Union. By including periodically flooded grazing areas, reed and rush vegetations, grassland under bracken, and scattered shrubs and trees, herd managers will be incentivized to protect valuable habitats and biodiversity; as well as improving soil quality, water balance and carbon storage.

MSs should use derogations of the European Animal Health Regulation to withdraw free-roaming herds of water buffalo, cattle and horses – that don't have contact with domestic livestock – from the identification and registration system. And they should register large extensively grazed nature areas for the relaxation of microchipping horses or ear-tagging calves.

MSs should support 'grazing fire brigades' of (semi)wild animals with compensatory payments for herd managers that create natural fire breaks in dense vegetation or contiguous young forest stands. With financial support for creating new natural water sources, authorities can further

facilitate dispersal of these large herbivores and amplify their role in reducing risks of large-scale wildfires.

Finally, MSs should establish teams of national experts that can issue binding advice on the eligibility of the land/farm for a specific subsidy.

7. Key Project-level Indicators

Already at the time of the Mid Term Report we found that the applicability of the webtool: https://webgate.ec.europa.eu/eproposalWeb/kpi/module is limited when it comes to filling the KPI database of a LIFE Preparatory Project like GrazeLIFE.
GrazeLIFE made use of the results of case studies, literature reviews and interviews with stakeholders, but the relevance of these results (and therefore the indicators) were not so much related to the size of these study areas, or the number of interviews, but to their relevance for landscape management on a much larger scale.
The main results of GrazeLIFE are evidence-based recommendations to the EU and its Member States to improve policies, legislation and finance on efficient and (cost) effective grazing systems for a whole range of public goods. Indicators were related to these public goods, but their performance was highly dependent on:

1) The strength of the recommendations that finally were made, based on the results from literature, interviews and case studies (the formal assignment of GrazeLIFE);

but even more:

2) The actual inclusion of these recommendations in policies, legislation and subsidy systems on EU and MS level (the aim of GrazeLIFE);

and of course, most importantly:

3) The implementation of these improved policies, legislation and subsidies in national and regional practices (the final goal of GrazeLIFE).

Therefore, we distinguished two types of KPIs for GrazeLIFE:

a) Those KPIs that were related to concrete recommendations towards the EU and its MS's. In such cases the begin value was "0 recommendation", the end value is a "strong recommendation" (so, it doesn't make much sense to mention that in the current format). However, the real value will be in the 3 years beyond, depending on whether the recommendation will be adopted and implemented. To cover the potential impact of these recommendations, we decided not to use the KPI-webtool, but describe them in the impact sections under chapter 5.4 – Analyses of benefits.

b) Those KPIs that were related to specific activities during the GrazeLIFE-project. These are mainly the indicators related to reports, outreach, networking and influencing people, which could be valued within the framework of the current format.

Deviations from the targets set initially
Comparing the KPIs with the originally set targets, there were no significant deviations, apart from the number of visitors of the website, which were lagging behind and for which additional activities were developed as described under paragraph 6.1 / Action B.1 and under paragraph 6.3.

8. Comments on the financial report

8.1 Summary of Costs Incurred

Together with this technical report, detailed Financial Reports of all project beneficiaries are provided, as is the Consolidated Financial Statement presenting an overview of costs and income on the level of the entire project.
Following paragraphs discuss the costs incurred and report on accounting and administrative aspects and on the cooperation between the implementing partners.

The financial reports cover the entire period of the project, being 1 January 2019 up until and including 31 December 2021 with exception of partners who finalized their activities incl. financial reporting a few months earlier.

The project has not only developed according to plan but has also managed to deliver additional results. The project approach and some of its activities needed to be adjusted to the inevitable effects of the Covid19 pandemics, however the final project result lies completely in line with the original objectives, against costs which remained within the budget boundaries set (overall budget consumption of 99%). Table below shows the original budget together with the final expenditures, broken down to all cost categories; the budget consumption is mentioned in the rightest column.

PROJECT COSTS INCURRED				
	Cost category	(Abbr.)	Budget according to the Grant Agreement in €	Costs incurred within the reporting period in €	% GA-budget consumption
1.	Personnel	**PE**	441.634,-	485.151,87	110%
2.	Travel and subsistence	**TR**	73.859,-	20.624,48	28%
3.	External assistance	**EA**	212.444,-	220.558,50	104%
4.	Durables goods: total non-depreciated cost	-			
	- *Infrastructure sub-tot.*	-	0,-		
	- *Equipment sub-tot.*	-	0,-		
	- *Prototype sub-tot.*	-	0,-		
5.	Consumables	**CM**	2.000,-	0,00	0%
6.	Other costs	**OC**	48.871,-	44.562,05	91%
7.	*Overheads*	***OH***	*54.517.-*	*53.954,32*	*99%*
	TOTAL		**833.325,-**	**824.851,23**	99%

Up until the final reporting date, a number of changes have been made corresponding with budget shifts, which accumulated to 3,9% of the total budget, as presented in the Consolidated Financial Statement. Although there have been several changes, none of them have changed the objectives of the project or of a single action. All changes are well within the thresholds set in the General Conditions. In any case, all changes have contributed to establishing

effective solutions for the challenges encountered and to achieving the set objectives of the project.

8.2 Accounting system

1. All beneficiaries used a professional accounting system or hired an external accountant office assuring for fulfilment of the specific legislative requirements of their respective countries. The systems allowed for accurate bookkeeping of project costs by separate coding or similar. Where possible and fitting the national legislative framework, the costs were analysed by type of costs, cost centres etc. All expenditures made for the purposes of the project appeared in the organisations' financial records. MTR presented the accounting systems per beneficiary in detail, per bullet point requested. There, also the specific codes identifying the project costs were mentioned and procedures of costs approvals and time recording described.

2. The administrative documentation was produced and archived according to the guidelines set out in the General Conditions for LIFE projects. It was assured that the project code (LIFE18 PRE/NL/002) was inserted in the invoices at the moment of their issuing or added through a stamp at time of booking. Wherever possible, the code was also included in the preparatory and accompanying documents such as cost offers etc. The project's Financial Manager conducted random checks on the documents of the beneficiaries, with the semi-annually submitted financial reports. In cases of non-compliance with the LIFE rules, the beneficiary was asked to make the relevant corrections.

3. A general remark: obviously, despite the professional character of administrative procedures of the project beneficiaries, the acute and far-reaching Covid19 lockdowns during 2020-2021 have had noticeable effects, like delays or gaps in invoice approvals and coding or validation of time registration. The beneficiaries have put extra effort into corrections and have adapted their procedures to the new situation of distant/hybrid working.
   During compilation of the Final Report, the Ukrainian partner of the project's consortium (RU) has been also affected by the sudden outbreak of the war. It's staff managed to deliver input required, despite its evacuation to Romania, but the accessibility of its documentation has been seriously hampered.

4. Reporting of Personnel costs: for reporting the personnel costs the beneficiaries sent to RE the following documents for each reported person:
   a. Time Sheets of all months of the year in which the person has worked;
   b. The corresponding pay slips and salary documentation.

   For the Time Sheets we used the model that was provided by the LIFE website. The Time Sheets were produced on a monthly basis and reported the hours worked on the current project, on other EU funded projects, the hours worked on other activities and the total.

8.3 Partnership arrangements

According to the Grant Agreement, RE as Coordinating Beneficiary has functioned as the designated receiver of the instalments by the European Commission. RE has signed partnership agreements with the Associated Beneficiaries, which among other specify how the EU-contribution will be distributed. For this purpose arrangements were agreed,

depending on the beneficiaries' expenditures, activities in the upcoming period and instalments by EC received so far.
All beneficiaries reported to RE after the end of each semester, using the EC format for financial reporting. In case of questions a clarification and/or report improvement was requested. At time of the MidTerm and Final Reports, RE prepared a consolidated financial statement, using information provided by the beneficiaries.
As part of the financial management of the project, RE maintained also a financial monitoring tool, through which all budget shifts were recorded and processed, so that the project had always an updated budget overview at its disposal. This tool enabled us to monitor if the budget shift percentage remained within the 20% limit as set out in Art. II.22 of the General Conditions. The budget shift requests of each beneficiary were treated in accordance with internally agreed approval procedure.
In case of significant budget shifts between partners or change of agreements on shares in EU contribution, Amendments to Partnership Agreement have been signed, so that clear agreements contributed to smooth cooperation between partners.

8.4 Certificate on the financial statement

The annual financial statements of Rewilding Europe as Coordinating Beneficiary have been audited by De Jong & Laan Accountants b.v. (registered with the Dutch Authority Financial Markets (AFM) under licence no. 13000420; address: Twentepoort Oost 1a 1, 7609 RG Almelo, the Netherlands; tel. +31-(0)546 836000, Fax +31-(0)546 818960, e-mail: almelo@jonglaan.nl, website: www.jonglaan.nl; contact person Mr. Harry Wanningen RA). The same accountancy office is, if required, designated to establish the certificate for the payment of the balance at the time of the Final Report.

For the sake of completeness, please note that based on the remark made in the FeedbackLetter of 20-07-2020 an extensive email correspondence with the Financial Desk Officer (Ms Paivi Rauma) followed addressing the assumed requirement of the Certificate on the Financial Statements as part of the Final Report. The issue was resolved by the Amendment to the Grant Agreement no. 1, signed on 4 January 2021, resulting in suspension of the obligation.