Short Communication

# EU PLATFORM ON COEXISTENCE BETWEEN PEOPLE AND LARGE CARNIVORES: EXAMINING THE POTENTIAL TO SUPPORT

## COEXISTENCE THROUGH THE RURAL DEVELOPMENT PROGRAMMES

Katrina Marsden<sup>1</sup>, Tasos Hovardas<sup>2</sup>, Spyros Psaroudas<sup>2</sup>, Yorgos Mertzanis<sup>2</sup>

1 adelphi consult GmbH, Alt-Moabit 91, 10559 Berlin

2 Callisto 123 Mitropoleos st., 54621 Thessaloniki, Greece

Platform Website:

ec.europa.eu/environment/nature/conservation/species/carnivores/coexistence\_platform.htm

#### 1. Introduction

Europe's large carnivores are challenging species in conservation terms. The brown bear (*Ursus arctos*), wolf (*Canis lupus*), Eurasian lynx (*Lynx lynx*), and wolverine (*Gulo gulo*) have large ranges which cross borders and their needs can potentially conflict with human activities such as farming and hunting. While favourable legislation, in particular the Habitats Directive (ECC, 1992) of the European Union (EU), has protected these species and supported their recovery, different populations are in very different states of health. At the same time, political, socioeconomic and societal changes challenge existing management approaches.

This has been recognised both by the European Commission and stakeholder representative groups who, following several Commission-organised workshops, agreed to come together to form the EU Platform on Coexistence between People and Large Carnivores. In June 2014, eight organisations signed an agreement stating that they would work together "to promote ways and means to minimise, and wherever possible find solutions to, conflicts between human interests and the presence of large carnivores". The organisations involved are: the European Landowners' Organization (ELO); joint representatives of

<sup>&</sup>lt;sup>1</sup> The EU Platform agreement includes these four species. The Iberian lynx (*Lynx pardinus*) and the golden jackal (*Canis aureus*) are also present in Europe but are not included in the Platform's work at present.

<sup>&</sup>lt;sup>2</sup> Platform Agreement: http://ec.europa.eu/environment/nature/conservation/species/carnivores/pdf/EN\_Agreement.pdf

Finnish and Swedish reindeer herders; the European Federation of Associations for Hunting & Conservation (FACE); the International Council for Game and Wildlife Conservation (CIC); the International Union for Conservation of Nature (IUCN); the Worldwide Fund for Nature (WWF), European Policy Office; and EUROPARC Federation (COPA-COGECA was also initially involved but left the Platform in 2015). The European Commission helped to establish the Platform and acts as a co-chair although it is not a member. It supports the Platform members in their work by funding a Platform Secretariat (currently managed by adelphi consult GmbH and Callisto).

In their first meetings, the Platform agreed a work plan. This focused on transfer of good practice for coexistence across the EU, through organising regionally and topically focused workshops and by collecting and sharing good practice examples. Many coexistence actions have been well tested by EU LIFE projects (Salvatori, 2013; Silva et al., 2013) and nationally or regionally funded schemes (Fig. 1). They are therefore ripe for broader roll-out.

For this reason, in the second year of their work, the Platform members decided that they wished to focus particularly on the potential to support good practice through the Rural Development Programmes, the second Pillar of the Common Agricultural Policy which is financed on an EU level through the European Agricultural Fund for Rural Development (EAFRD), and co-financed by Member States (EU, 2013). The EAFRD aims to promote sustainable development in rural areas by supporting a range of measures which can be targeted on the national or regional level. The particular advantages of this funding stream is that it is available across the EU, is significantly larger than LIFE+ Nature and Biodiversity and it is possible for individuals or groups to access it.

The Platform Secretariat therefore carried out a study (Marsden et al., 2016) which examined the good practice identified in the case studies (step 1); overviewed the measures currently included in the Rural Development programmes targeted at large carnivores (step 2) and; evaluated the future potential to fund good practice identified in step 1 through the Rural Development programmes (step 3).





**Fig. 1.** Fencing measures and livestock guarding dogs introduced through the LIFE MEDWOLF Project. Photos: Luisa Vielmi/MEDWOLF.

# 2. Identifying good practice suitable for EAFRD funding

Case studies were initially collected by means of an online questionnaire sent to Platform members and large carnivore experts. In the second and third year of the Platform's work, members simply sent web links and short descriptions to the Secretariat. Case studies that focused on concrete, transferable good practice examples were selected. This meant that some submitted examples were excluded from the final sample either because they did not focus on good practice (they highlighted problems rather than solutions) or they described a wide range of activities implemented over the course of a project or a scientific study. If the project or study included several specific good practice elements, these were included as individual cases.

This process resulted in the collection of 35 case studies from 14 European countries targeting all four carnivore species. The cases identified were grouped into five categories according to the type of intervention (Table 1).

**Table 1.** Examples of best practices for coexistence between people and large carnivores listed by categories (for a list of the case studies see Annex 1 of Marsden et al., 2016).

Category	Descriptions	Species	Member States	Number of cases
Advice/ Awareness raising	Sourcing of information from individual contact points (websites, experts, volunteers) for the general public, responsible authorities or stakeholders	Bear, wolf, lynx	Austria, Germany, Lithuania, Finland	8
	Awareness raising for tourists to avoid conflict with bears	Bear	Bulgaria, Poland	2
	Avoiding infrastructure development in areas important for wolf breeding	Wolf	Portugal	1
	Volunteer programmes supporting livestock keepers in protecting their flocks from wolves	Wolf	France, Italy	3
Innovative financing	Eco-labelling schemes to increase value of farm produce coming from areas where livestock coexist with large carnivores	produce coming from areas where Bear, wolf I		3
	Eco-tourism development based on the presence of large carnivores	Wolf	Italy	1
	Payment for results scheme (number of successful young wolverine)	Wolverine	Sweden	1
Practical support	Practical measures to improve coexistence such as provision of fencing or livestock guarding dogs	Bear, wolf, lynx	Bulgaria, Greece, Italy, Slovenia	5
	Establishment of emergency teams to respond to call-outs	Bear	Greece	1
Monitoring	Good practice in involving stakeholders in monitoring of large carnivores and sharing the results with stakeholders	Bear, wolf, lynx, wolverine	Slovenia, Croatia, Italy, Finland, Sweden, Norway	4
	Good practice in cross border monitoring	Bear, wolf	Finland, Norway, Russia	1
Understanding viewpoints	Studies understanding stakeholder attitudes to different large carnivore species	Bear, wolf	Greece, Italy, Slovenia	2
	Intensive efforts to encourage stakeholders to work together	Bear, wolf, lynx	Germany, Switzerland, Spain	3

#### 3. Assessment of the potential of EAFRD funding to support good practice

An initial situation analysis was carried out at the start of 2016, which involved reviewing relevant literature, meeting officials from the Directorate General Environment and Agriculture and asking the Platform members to question their own members. Based on this, a questionnaire was produced and sent either directly to managing authorities or to experts in the Member States who then approached the managing authorities to gather the relevant information. All Member States with populations of large carnivores were initially contacted (Belgium, Luxemburg and island states were not included). The questionnaire covered the 2000-2006, the 2007-2013 and the 2014-2020 EAFRD programming periods. Respondents were asked for information on sub-measures targeted at coexistence and their financing but also for background information on the programme, the involvement of stakeholders in the process and their views on the success of the measures (for past programmes). Following initial information gathering, the results of the questionnaire were analysed statistically.

#### 4. Results

Altogether 15 respondents from 12 Member States provided information on 13 regional or national Rural Development Programmes in the 2007-2013 programming period and another 29 Rural Development Programmes in the 2014-2020 programming period. Only Slovenia included a large carnivore coexistence measure in the 2000-2006 period (as part of their agri-environment scheme) so this funding period was not analysed further. The countries included in the analysis were Bulgaria, Croatia, Finland, France, Greece, Germany, Italy, Portugal, Slovenia, Spain, Sweden, and Lithuania. It is believed that all relevant Rural Development programmes were covered with the exception of Spain where only Rioja was covered in the full analysis. Information on Asturias and Aragon was added late. Castilla y Leon also intended to include measures on damage prevention but concrete information could not be gathered in time. It should be noted that Member States can make changes and updates to their programmes on an annual basis and that certain Member States had not yet fully agreed on all activities to be included under a particular measure.

#### 4.1. Measures chosen

There are 20 measures and 60 sub-measures in the EAFRD regulation (EU, 2013). Measures give a broad description of an action which can be funded. Sub-measures provide more detail including which costs can be covered. A variety of sub-measures were used in the different Member States and regions to support coexistence. A summary is shown in Table 2.

The main actions funded were damage prevention methods: establishment of electric fences (five instances of specific mention in the former programming period and another 12 instances in the current programming period in Finland, Croatia, Greece, all the Italian programmes, Lithuania, Spain-Aragon, Spain - Asturias, Sweden) and distribution of livestock guarding dogs (three and seven instances, respectively in Croatia, Italia - Emilia Romagna, Italy - Marche, Italy - Piemonte, Portugal, Spain-Asturias, Spain -Rioja). Other approaches involved alert systems and video surveillance (Croatia, Toscana-Italy), adaptation of grazing patterns, when livestock had been exposed to the risk of wolf depredation (Alsace and Auvergne in France) and additional agri-environment area payments in areas where the presence of wolf or bear might prevent delivery of environmentally beneficial grazing practice, normally with a top-up for keeping livestock guarding dogs (Bulgaria, Finland, Spain-Rioja) (Fig. 2). In 2014-2020 the LEADER programme was used for awareness raising and advice provision in Finland (for a full description of all actions see Annex 2 of Marsden et al., 2016).

Different measures were used to fund very similar actions for example, measures 4.1, 4.4 and 7.6 (support for investment in agricultural holdings, support for non-productive investment, village renewal) were all used to deliver damage prevention measures such as fencing and livestock guarding dogs. Regional programmes in a Member State tended to use the same sub-measure (e.g. in France measure 7.6) but this is not always the case (e.g. in Germany different sub-measures are used in the regional programmes). Usually where Member States had included a sub-measure in their 2007-13 programme, they continued using the equivalent sub-measure in the 2014-20 programme.

The reasons for the choices of the different Member States in selecting certain sub-measures to support particular actions clearly needs to be explored further. From the requirements included in the EU Regulation, however it is possible to identify administrative reasons why particular sub-measures have been used. For example measure 4.1 (support for in**Table 2.** Description of measures implemented within the EAFRD in each country, according to programming period. Measure and sub-measure codes are those used in the EU regulation and the Member States' programmes. They are listed and described in Annex 1, Part 5 of the implementing regulation (EU, 2014).

	2007-2013		2014-2020		
Sub-measure description	Sub-measure code	Country/Region where the sub-measure was used	Sub-measure code	Country/Region where the sub-measure is used	
Support for investment in agricultural holdings	121	Italy (Marche, Toscana)	4.1	Croatia, Finland, Italy (Marche), Spain (Aragon), Sweden	
Support for non-productive investments linked to the achievement of agri-environment- -climate objectives	216	Germany (Saxony), Greece, Italy (Abruzzo), Sweden	4.4	Germany (Saxony, Mecklenburg-Vorpommern), Greece, Italy (Abruzzo, Emilia Romagna, Friuli Venezia Giulia, Lazzio, Marche, Piemonte, Toscana), Spain (Asturias)	
Support for non-productive investments linked to the achievement of forest environment objectives	227	Spain (Rioja)	8.5	Not included	
Agri-environment- -climate	214	Bulgaria, Greece, Slovenia	10.1	Bulgaria, Portugal, Slovenia, Spain (Rioja)	
Village renewal	323	Germany – Brandenburg	7.6	Germany – Brandenburg, France (Alsace, Auvergne, Champagne-Ardennes, Franche–Comte, Languedoc Rousillon, Midi – Pyrenees, Alpes Côte D'Azur, Rhones Alpes)	
LEADER	412	Germany – Saarland (highlighted as having potential)	19	Germany – Saarland (highlighted as having potential), Finland (used in a project)	



**Fig. 2.** Example of measures supported through the Bulgarian Regional Development Programme – flocks attended by livestock guarding dogs and a shepherd. Photos: Elena Tsingarska and Sider Sedefchev.

vestment in agricultural holdings) has the advantage of being flexible. Fencing paid through for this measure may also bring a farmer other benefits such as reducing the time needed to gather stock together. Support under measure 4.4 (support for non-productive investment) must demonstrate that it delivers environmental aims and does not provide farmers with economic benefits. The advantage of 4.4 for farmers, is that (contrary to 4.1) it is fully funded and they do not need to invest anything themselves. Table 3 describes the strengths and potential barriers for each of the main measures used.

**Table 3.** Strengths and potential barriers of the main measures within the European Agricultural Fund for Rural Development usedfor coexistence.

Code	Measure	Strengths	Potential barriers
121 / 4.1	Support for investment in agricultural holdings	Farmers do not need to prove that the measures are linked to agri-environment-climate objectives under the regulation. Measures may therefore also provide additional economic benefits.	Not fully financed (the beneficiary must also contribute). Open only to farmers/groups of farmers. Only covers costs of infrastructure.
216 / 4.4	Support for non-productive investments linked to the achievement of agri-environment (-climate) objectives	100% financed. Open to all land managers.	Need to prove the link to agri-environment-climate objectives and that the measure is "non-productive". Land manager cannot benefit financially from the measure. Only covers costs of infrastructure.
214 / 10.1	Agri-environment (-climate)	Potentially available to all land managers. Longer-term payment (normally 5-7 years) which can cover additional costs and income foregone on an annual level, not just initial costs.	Annual payment which does not cover the initial investment in infrastructure. The link with providing area-based environmental benefits should be clear – therefore needs to include land management requirements.
323 / 7.6	Village renewal	Open to wide range of rural actors. Can cover a wider range of measures related to coexistence including information and awareness raising, waste management, local infrastructure management.	Actions must be in accordance with plans for the development of municipalities and villages in rural areas.

### 4.2. Targeting measures and stakeholder involvement in design

All four large carnivore species covered by the Platform's work are targeted in the Rural Development programmes<sup>3</sup>. The wolf was the most commonly targeted species but the fairly generic measures can often be used to prevent damage by more than one species.

The main beneficiaries are stockbreeders/herders and farmers followed by bee keepers, rural residents and environmental non-governmental organisations (NGOs). This reflects the focus of the chosen measures which are largely on protecting livestock. Implementation of measures is targeted mainly at individuals (i.e. individual stockbreeders, not their associations). The number of NGO beneficiaries appears to have increased in the second programming period.

National authorities/ministries and regional/local authorities were (unsurprisingly) most frequently involved in the design of measures, followed by environmental NGOs. Participation in the Programme Monitoring Committee (PMC)<sup>4</sup> is more evenly distributed among stakeholders with greater

<sup>&</sup>lt;sup>3</sup>Brown bear, wolf, Eurasian lynx and wolverine.

<sup>&</sup>lt;sup>4</sup>The PMC is made up of managing authorities and stakeholder representatives. Its aim is to monitor the implementation of the programme. Members of the PMC agree the measures and sub-measures to be included in the programme initially, monitor their uptake and make suggestions for amendments.



direct involvement of farming unions and farming cooperatives. Overall, stakeholder involvement appears to have increased in the new programming period in comparison to the 2007-2013 programme.



#### 5. Discussion and future potential

To identify how good practice could be better supported through the EAFRD, a comparison between the categories of good practice identified through the case studies and the support available through the EAFRD was carried out.

Coexistence with large carnivores is a complex topic, including a wide range of activities from awareness raising to fence building (as demonstrated by the case studies). Theoretically, therefore, most of the measures could be put to some use related to coexistence. An effort has been made here to concentrate on those measures most relevant to the good practices identified.

Following the example of Allen et al. (2012), measures were identified as: being key to delivering coexistence (K); with potential to deliver coexistence (P); or as having cross-cutting potential (C) to deliver for coexistence amongst other objectives (Table 4). For a fuller description see Annex 3 of Marsden et al. (2016).

### 6. Recommendations and role of the Platform

The analysis of EARFD measures shows that they are already used in various ways in many Member States to support coexistence. However, some Member States with significant large carnivore populations do not make use of the EAFRD (notably Slovakia, Romania and Poland). While in some countries, national support may be available, in others, no funds are dedicated to this purpose and there may be the

**Table 4.** Potential use of EAFRD measures to support best practice actions for coexistence (compare with Table 1 for a description of the best practice categories): K=Key measure; P=Measure with potential; C=Cross-cutting measure.

		Categories of best practices for coexistence				
Code	Measure	Advice/ Awareness	Innovative financing	Practical support	Monitoring	Understan- ding viewpoints
1	Knowledge transfer/Information	С	С	С	С	С
2	Advisory Services	С	С	С	С	С
4.1	Investment in physical assets			K		
4.4	Non-productive investment			K		
6.2	Business start-up aid		Р			
6.4	Non-agricultural activity development		Р			
7.1	Basic services/village renewal		Р			
7.5	Tourism infrastructure		Р			
7.6	Studies/investments natural heritage	K	K	K	K	K
8.5	Forest ecosystem investment			K		
10.1	Agri-environment-climate		K	K		
12.1	Compensation Natura 2000 areas			K		
14	Animal welfare payments			Р		
15.1	Forest-environment-climate			K		
16	Cooperation	Р	Р			Р
19	LEADER	С	С	С	С	С
20	Technical support	С	С	С	С	С

potential to exploit the EAFRD further. There is clear potential to use the EAFRD more innovatively, for example to support awareness raising and advice, target different stakeholders, establish pilot projects or new business opportunities.

This overview does not provide information on uptake of measures (evidence gathering occurred shortly after the start of the new programmes). However, from the information gathered from the 2007-2014 period, it appears that in many cases uptake is poor. The respondents to the questionnaire su-

ggest that this may be due to lack of awareness and poor promotion of the measures. In certain areas there may be resistance to using measures (acceptance of support being seen as de facto acceptance of the presence of large carnivores). Finally in some locations, Rural Development funds are still seen as largely an agricultural support measure and little support is distributed to other rural actors.

The Platform members clearly have a role in promoting the potential of the Rural Development Programmes to fund coexistence with their members and encouraging them to use the measures that are available. To assist them in awareness raising, the Platform Secretariat produced a leaflet translated into several languages. This is freely available to print from the Platform website to take to events attended by appropriate stakeholders<sup>5</sup>.

In 2017, the Platform members have commissioned the Secretariat to look in more detail at the good practice examples identified. The most promising examples of joint-working on coexistence have been selected and are being analysed to identify the key success factors for stakeholders working together. The findings are presented in a report available on the Platform website (Hovadas et al., 2017). In 2018, the Platform Secretariat will examine in more detail the gaps in the financing of prevention measures through the EAFRD or national funding.

To keep track of this and other initiatives carried out by the Platform, visit the Platform website.



<sup>5</sup> http://ec.europa.eu/environment/nature/conservation/species/carnivores/communication.htm



#### References

- Allen B, Keenleyside C, Menadue H (2012) Fit for the environment: principles and environmental priorities for the 2014 – 2020 Rural Development Programmes. Report produced for the RSPB. Institute for European Environmental Policy, London, 71 p.
- ECC (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Available: http://eur-lex.europa.eu/legalcontent/en/TXT/?uri=CELEX%3A31992L0043
- EU (2013) Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005. Available: http:// eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2013:347:0487:0548:en:PDF
- EU (2014) Commission Implementing Regulation (EU) No 808/2014 of 17 July 2014 laying down rules for the application of Regulation (EU) No 1305/2013 of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development (EAFRD). Available: www.eur-lex.europa.eu/legal-content/en/ TXT/?uri=CELEX:32014R0808
- Hovardas T, Marsden K, Psaroudas S, Mertzanis Y, Brandt K (2017) Case studies for coexistence: examples of good practice in supporting coexistence between people and large carnivores. Available: http://

ec.europa.eu/environment/nature/conservation/ species/carnivores/pdf/144\_case%20studies%20 analysis%20report.pdf

- Marsden K, Hovardas T, Psaroudas S, Mertzanis Y, Baatz U (adelphi consult GmbH and Callisto for the EU Platform on Coexistence between People and Large Carnivores) (2016) EU Platform on large carnivores: Supporting good practice for coexistence – presentation of examples and analysis of support through the EAFRD. adelphi consult GmbH and Callisto to DG Environment, 30 p. Available: www. ec.europa.eu/environment/nature/conservation/ species/carnivores/pdf/160906\_LC%20Platformcase%20studies%20and%20RD.pdf
- Salvatori V (2013) Large carnivore conservation and management in Europe: The contribution of EC cofunded LIFE projects. Istituto di Ecologia Applicata for DG Environment, 53 p. Available: http://ec.europa. eu/environment/nature/conservation/species/ carnivores/pdf/task\_2\_life\_and\_lc.pdf
- Silva JP, Toland J (editors), Hudson T, Jones W, Eldridge J, Thorpe E, Bacchereti S, Nottingham S, Thévignot C, Demeter A (2013) LIFE and human coexistence with large carnivores. Publications Office of the European Union, 73 p. Available : http://ec.europa.eu/ environment/nature/conservation/species/carnivores/ pdf/life\_and\_human\_coexistence\_with\_large\_ carnivores.pdf