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COMMON AGRICULTURAL POLICY (CAP) AND PREVENTION OF DAMAGES CAUSED BY LARGE CARNIVORES

Joint report prepared by:

**LARGE CARNIVORES, WILD UNGULATES AND SOCIETY WORKING
GROUP (WISO) of the ALPINE CONVENTION and the project LIFE
WOLFALPS EU**

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1 PREFACE

Large carnivores were absent from the Alpine region for many decades. This led to the abandonment of traditional practices and the disappearance of knowledge about the coexistence with predators. The main result of the absence of large carnivores are the free-ranging herds that graze and roam around without any protection and are therefore easy prey for predators.

The presence of large carnivores, regardless of the population size, can affect the agricultural practices of people, especially farmers, present in the area of their territories or home ranges. Throughout the Alps, sheep (and goat) herding is the most affected farming practice, mainly due to its widespread distribution in the Alps and the evolutionary lack of defensive mechanism towards large predators in sheep. However, in the last years, also cattle depredation is increasing representing an important source of conflicts, especially with wolves.

The fast-spreading large carnivores, especially wolves, represent a major challenge not only for farmers and local communities, but also for decision makers. The need for rapid introduction of new, sustainable and, most importantly, effective measures and supports for farmers, is being increasingly showed in the field among livestock herders' communities.

In general, the support from the policy has to be divided in two main parts: first, the support for investments and infrastructure (fences, livestock guarding dogs, shelters for animals and shepherds) and second, support for the extra work-load that farmers bear when engaged with activities that are needed to set up, maintain and carry out to protect their property.

Livestock protection experts from the Alpine region and throughout Europe are convinced that with regular collaboration between expert, different stakeholders, decision makers and especially farmers, it is possible to mitigate conflicts and generate common goals to preserve agriculture and pastoralism in the Alpine region in presence of large carnivores. Close collaboration improves knowledge and experiences on different implemented practices, which is crucial for coping with ever-growing challenges arising in new areas of large carnivore recolonization.

The Large Carnivores, Wild Ungulates and Society Working Group of the Alpine Convention (WISO) is committed to face these challenges through interregional and international collaboration, exchange of experiences and dissemination of knowledge between stakeholders and interested public.

In 2018, a joint report entitled “*Prevention of damages caused by large carnivores in the Alps*” was prepared in collaboration with the LIFE WOLFALPS EU project. It represents an overview of measures aimed at preventing conflicts arisen due to the reappearing of large carnivores in each Alpine country.

With the present report, we focus on the European Union’s Common Agricultural Policy (CAP). The CAP policy for the period 2023-27 has a strong emphasis on results and performance. The policy focuses on ten specific objectives, linked to common EU goals for social, environmental, and economic sustainability in agriculture and rural areas. European countries implement CAP through designed national CAP Strategic Plans, combining funding for income support, rural development, and market measures.

The present document is prepared through the collaboration of members of WISO of the Alpine Convention and the LIFE WOLFALPS EU project personnel in order to involve experts from different countries who are leading the evolution of different damage prevention practices and try to include them within the perspective of agricultural policies.

The main objectives of the present report are to (1) present the preventive measures involved in different Alpine countries, (2) present the measures and practices implemented within CAP 2023-2027 and (3) compare the previous EU supporting scheme RDP 2014-2020 with CAP 2023-2027. Additionally, the report includes the complementary activities that each country (or region) has adopted to mitigate the conflicts between farming practices and large carnivore species.

2 REPORTS BY COUNTRY

2.1 AUSTRIA

Prepared by:

Albin Blaschka

The Common agricultural policy (CAP) 2023-2027	
<p>The Austrian Strategic plan (SP) for the Common agricultural policy (CAP) 2023-2027 was confirmed by the European Commission in September 2022.</p> <p>It contains measures, which can help to prevent damages by large carnivores, via the Austrian program for the promotion of environmentally sound, extensive agriculture protecting natural habitats (Österreichisches Programm zur Förderung einer umweltgerechten, extensiven und den natürlichen Lebensraum schützenden Landwirtschaft- see https://www.lko.at/%C3%B6pul-2023-ein-%C3%BCberblick+2400+3563571, in German).</p> <p>There are two measures supported, one general for alpine pasture management and one under the label Animal Welfare with one supplement:</p>	
<p>Alpine pasture management</p>	<p><i>Description:</i></p> <p>At least 60 calendar days of grazing on one or more alpine pastures located in Austria by cattle, sheep, goats, equidae or New World camels.</p> <ul style="list-style-type: none"> • max. 2 AU/ha per alpine pasture, (AU = Animal Unit ~ 500kg live weight) • only animals with a total grazing period of at least 60 calendar days are taken into account. <p><i>Sums:</i></p> <ul style="list-style-type: none"> • 40 Euro/ha for alpine pasture accessible with tractor • 60 Euro/ha for alpine pasture accessible only by cable car or special mountain farmer machine; • 80 Euro/ha for alpine pasture only accessible via footpath or cattle path <p>See https://www.lko.at/14-almbewirtschaftung-%C3%B6pul-2023+2400+3587363 (in German)</p>
<p>Animal welfare husbandry</p>	<p><i>Description:</i></p> <p>Herding of livestock for at least 60 calendar days on one or more mountain pastures. This measure is only available if the farmer gets the subsidy “Alpine pasture management”:</p> <ul style="list-style-type: none"> • a daily, proper care of the animals, if necessary, also

	<p>at night.</p> <ul style="list-style-type: none"> • A mere inspection is not sufficient; the shepherding has to take place at least during a substantial part of the day. • Proper care includes the provision of sufficient water, animal care, supply of proper treatment of diseases and injuries as well as safety measures on the mountain pasture. • Suitable overnight accommodation must be available on the mountain pasture. <p><i>Sums:</i></p> <ul style="list-style-type: none"> • for the first 20 AU: 75 Euro/AU • starting with 21 AU: 25 Euro/AU • Supplement dairy cattle for the first 20 AU: 140 Euro/AU • Supplement dairy cattle starting with 21 AU: 100 Euro/AU <p>(AU = Animal Unit ~ 500kg live weight)</p> <p>See https://www.lko.at/15-tierwohl-behirtung-%C3%B6pul-2023+2400+3587362 (in German)</p>
<p>Optional supplement: Livestock guarding dogs</p>	<p><i>Description:</i></p> <p>Support of costs for livestock guarding dog on an alpine pasture.</p> <p>This supplement is only available for the measure “Animal welfare husbandry”:</p> <ul style="list-style-type: none"> • The dogs must be used on the alpine pasture during the entire alpine pasture period of the herded animals, but at least 60 calendar days. • The minimum of 60 calendar days must be achieved on a single mountain pasture – Caveat: This 60 days’ requirement, also necessary for subsidy “Alpine Pasture Management” can there be divided to more than one pasture <p><i>Sums:</i></p> <ul style="list-style-type: none"> • 700 €/dog, max. 5 dogs per pasture
<p>Comparison between RDP 2014-2020 and SP 2023-2027</p>	
<p>During the period 2014-2020, there was only one measure “Alpine pasture management and herding”, with no supplement for livestock guarding dogs.</p>	
<p>General comment of the implemented measures</p>	
<ul style="list-style-type: none"> • The subsidy “Animal welfare husbandry” is only available if the farmer gets the subsidy for Alpine pasture management (those subsidies add up) • The optional supplement for livestock guarding dogs is therefore only available for alpine pastures • The subsidies are not high enough to finance a herder full time for the 	

grazing period	
Damage prevention on national level	
National subsidies /cofinancing schemes by the federal states	<p>Most federal states are funding livestock protection measures, mostly as an investment funding for fences and equipment. Budget is in general coming from agriculture, without EU-funding – see https://baer-wolf-luchs.at/hilfe-bei/praevention-foerderung (in German).</p> <p><i>Lower Austria</i></p> <ul style="list-style-type: none"> • Fence material: Subsidy 80% of the net material costs for renewal and upgrading or new construction of fences for sheep, goats, calves <p><i>Upper Austria</i></p> <ul style="list-style-type: none"> • Fence material: 50 % of the net material costs for renewal and upgrading or new construction of fences for sheep, goats and calves (young cattle up to 12 months); • GPS trackers: 50 % of the net material costs for GPS trackers for sheep and goats, • Livestock guarding dogs: Purchase can be supported; the amount is decided on a case-by-case basis (min. 150 sheep). <p><i>Salzburg</i></p> <ul style="list-style-type: none"> • Fence material: Upgrading or acquisition of protective fences incl. accessories, extent depending on herd size, to be determined per individual case according to professional criteria; 80 % of eligible costs, but maximum € 3,000. • GPS Tracker: First-time new acquisition, 80% of first-time acquisition costs for device, max. € 80€ per device: Eligible are sheep/goats from one year of age, at least 60 days on the pasture; A maximum of 3 GPS collar transmitters is subsidised per animal owner - € 240. • Livestock guarding dogs: for up to 200 sheep, 80% of the purchase costs of two dogs, maximum € 1600 per dog; for more than 200 sheep, one additional dog is eligible for every additional 100 sheep; for all other livestock, 80 % of the costs for two or more dogs, maximum € 1600 per dog <p><i>Tirol</i></p> <ul style="list-style-type: none"> • Fence material: 60% the purchase of fences and necessary accessories for sheep and goats within the framework of investments in agricultural production. Minimum investment sum is € 400

	<p>(before tax)</p> <ul style="list-style-type: none"> • GPS tracker: via the Tyrolean Sheep and Goat Breeders' Association, maximum 5 devices: 1 tracker and protective cover for every 10 animals, 5 trackers and cover for 41 animals or more. 50% of costs, maximum 75€ per device <p><i>Vorarlberg</i></p> <ul style="list-style-type: none"> • Basic subsidy: <ul style="list-style-type: none"> ○ 20 - 100 sheep/goats from 1 year 1.000,00 € per alpine season ○ 100 - 200 sheep/goats from 1 year 1.500,00 € per alpine season ○ over 200 sheep/goats from 1 year 2.000,00 € per alpine season • With the Possibility of wolves in the area, the increased care effort can be compensated for a maximum of 5 days <ul style="list-style-type: none"> ○ up to 200 sheep/goats from 1 year 50,00 € per day ○ over 200 sheep/goats from 1 year 100,00 € per day • Purchase of mobile fences for night pens is supported once: <ul style="list-style-type: none"> ○ a maximum of 200m of sheep net fence (pen area 50m x 50m), height of at least 90 cm, a one-off subsidy of a maximum of € 360 is granted. ○ The purchase of a pasture fencing device for the pen fence is supported once with a maximum amount of € 250 ○ The purchase of livestock guarding dogs can be supported. The amount is decided on a case-by-case basis <p><i>Styria</i></p> <p>Pilot-Phase Summer 2023, valid between May 15th and Sept. 30th 2023:</p> <ul style="list-style-type: none"> • Fence material: Subsidy 50% of the net material costs for renewal and upgrading or new construction of fences • Fences must fulfil minimum standards for protective fences as defined by the Austrian Centre Bear, Wolf, Lynx • Max. € 2000, min. € 200
Other damage prevention activities	
Projects	<p><i>Whole of Austria</i></p> <ul style="list-style-type: none"> • LIFEstockProtect The LIFE project LIFEstockProtect, which is besides

	<p>Austria also active in Bavaria and South Tyrol, promotes livestock prevention measures, including the use of livestock guarding dogs also among other actions via building so called “Livestock protection competence centres”, which are farms whose owners are specially trained within the project and should help/train on a peer-to-peer bases other farmers implementing livestock protection measures.</p> <p>Other topics covered:</p> <ul style="list-style-type: none"> ○ Training of livestock protection advisors ○ Improvement of public and professional support structures for livestock protection ○ Training of tourism managers on how to deal with livestock protection ○ Guidelines for the breeding and certification of livestock guarding dogs <ul style="list-style-type: none"> ● LIFE WolfAlpsEU – WPIU Within the work of this project, the so-called “Wolf Damage Prevention Intervention Units” (WPIU) are helping affected farmers after a damage by a large carnivore occurred. Specific measures include help building protective fences, rounding up dispersed animals, or helping with bringing back the animals back to the valley prematurely. The teams bring the necessary material and special equipment, as well as the necessary expertise. <p><i>Tirol</i></p> <ul style="list-style-type: none"> ● Pilot projects Livestock Protection – Targeted pasturing Those projects in the western part of Tirol on three alpine pastures, planned for a period of five years (2021 – 2025), experience in the implementation of livestock protection measures including the needed operational changes from free to managed grazing of sheep should be gained. In addition, the effects coming with this management changes in terms of animal health, weight developments, movement patterns, animal losses, shepherding work, possible vegetation changes and costs are studied. Suitable similar support for a small alpine pasture with a mixed herd was given in 2022.
Testing of new solutions	-
Intervention kits	-

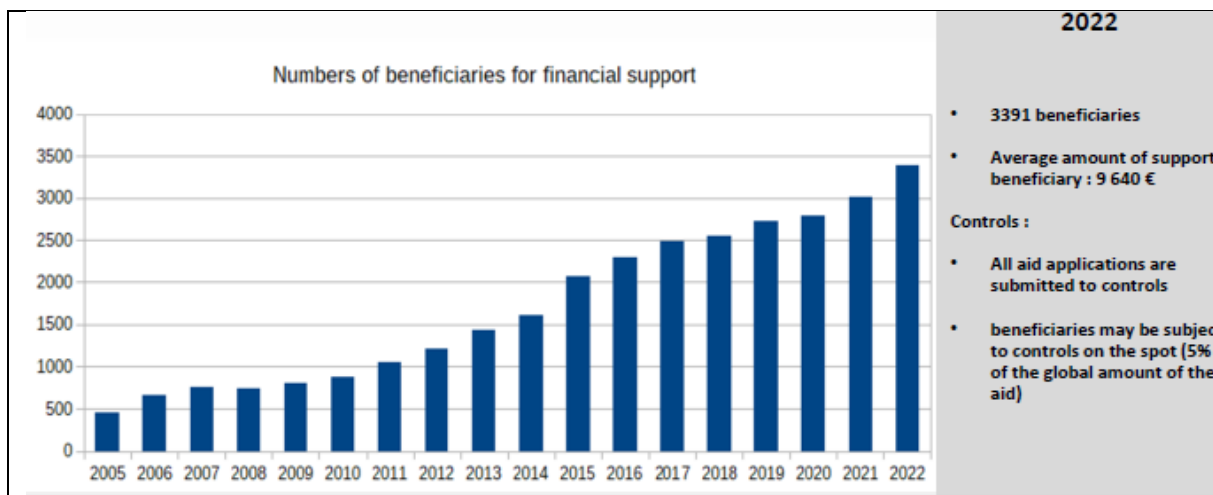
2.2 FRANCE

Prepared by:

Léa Rallu, Ricardo N. Simon, Rachel Berzins

The Common agricultural policy (CAP) 2023-2027	
<p>The France National Strategic plan (PSN) for the Common agricultural policy (CAP) 2023-2027 was confirmed by the European Commission in August 2022. It covers two types of support for farmers in terms of preventing damages by large carnivores (wolves and bears) to grazing animals (sheep and goats) where predation is annually confirmed by national and local authorities (cf. circle areas):</p> <ul style="list-style-type: none"> - Support to protect livestock against wolves and bears predation (shepherding), and -Support for investments to protect farms against wolves and bears predation (guarding dogs, electric fences ...). <p>There are five measures that are supported within PSN 2023-2027. The new scheme is relatively similar to the previous one. The subsidies are always paid to farmers based on the costs of the damage prevention measure or on flat-rate:</p>	
Shepherding	<ul style="list-style-type: none"> • Subsidies cover the work of a shepherd (salary shepherds, breeder guarding their flock, private company) under an upper limit. Payments to the beneficiaries are based on the period dedicated to shepherding with a 80% cofinancing rate (based on the salary costs or on a flat-rate per day), and 100%cofinancing rate in protected areas where wolf lethal control to protect flocks is forbidden (e.g., national parks) • Daily attendance of the shepherd with the herd • Financial support is available in circles 0 (hotspot) and 1 (confirmed predation)
Electric fences	<ul style="list-style-type: none"> • Subsidies cover the costs of setting up electric fences (fixed or mobile pens) and the electrification of existing fences under an upper limit • At least 3000 volts and 80cm high electric fences • The animals have to be gathered and closed in a night pen by night • Financial support is available in circle 0 (hotspot), 1 (confirmed predation) and 2 (possible predation in the coming year)

	<ul style="list-style-type: none"> • 80% cofinancing rate based on the costs, and 100% cofinancing rate in protected areas where wolf lethal control to protect flocks is forbidden
Guarding dogs	<ul style="list-style-type: none"> • Subsidies support the cost of livestock guarding dogs (300€ per dog and up to 2 dogs thus 600€ per year), dogs' sterilization (200€ per dog up to 400€), behavior tests and dog care (650€ per dog per year) • Dogs have to be guarding the herd permanently • Financial support is available in circle 0 (hotspot), 1 (confirmed predation), 2 (possible predation in the coming year) and 3 (possible predation in the mid term)
Technical support (optional)	<ul style="list-style-type: none"> • Farmers who take part in collective training or who get individual advice about the implementation of protection measures can benefit from this payment. • Support covers 100% of the costs up to 2,000€ per year per farmer • Financial support is available in circle 0 (hotspot), 1 (confirmed predation), 2 (possible predation in the coming year) and 3 (possible predation in the mid term)
Vulnerability analysis	<ul style="list-style-type: none"> • aims at establishing an assessment of the farm and its context and define an action plan to reduce the risk of predation • After requesting the assessment, farmers can benefit from the payment to cover the costs of the vulnerability analysis • Support covers up to 5.000€ during the 2023-2027 period • Financial support is available in circle 0 (hotspot), 1 (confirmed predation) and 2 (possible predation in the coming year)
Comparison between RDP 2014-2020 and SP 2023-2027	
<p>In France, there are only few differences between the two CAP schemes except that the previous alone measure has been divided in two measures to separate investment support to other supports. The other small changes have been mainly introduced to simplify the measures (flat-rate support).</p>	



General comment of the implemented measures

- In circle 0 (hotspot) and 1 (confirmed predation), it is mandatory to have at least two types of protecting measures among: shepherding, electric fences, guarding dog
- More than 75% of the subsidies cover shepherding (salaries, shepherding by breeder)
- The level of funding for protection measures is likely to increase in the coming years due to the growing of wolf population and its geographic expansion
- Different types of controls are applied (administrative ones during the aid instruction, on field control for the payment)

Damage prevention on national level

Urgent funds for livestock protection (new area) (Ministry of Agriculture)

In addition to EARFD support, the Ministry of agriculture have national fund to protect livestock from large carnivore attacks. The fund can be used for beneficiaries who are not eligible for the EARFD supports. It includes protecting sheep and goats in area where predation by wolves and/or bears were not detected before.

The national fund can support mainly investments:

- Light or sound protection devices against large carnivore
- Electric fences
- Emergency housing to shepherd livestock

After having notified the Ministry of Agriculture of the urgent need of investments, local national authorities buy the equipment and provide farmers that have suffered attacks on their livestock with needed equipment.

Other damage prevention activities

Developing guarding dogs breed

More and more guarding dogs are used to protect livestock from large carnivore attacks in mountain as

	<p>well as in plain area but some incidents appear every year between dogs and hikers or tourists enjoying outdoor activities (attacks, bite).</p> <p>In order to trigger this issue, different actions are to be set up:</p> <ul style="list-style-type: none"> - Support network to improve training of guarding dogs; - Inventory of guarding dogs to support breeding - Follow-up of incidents with guarding dogs - Communication to outdoor activities users on how to act with guarding dogs (best-practices guide).
<p>Wolf Prevention Intervention Units (WPIU) of the LIFE WolfAlps EU (LWA EU) project</p>	<p>In the scope of the LWA EU project, the French Office for Biodiversity (OFB) and the Mercantour national park have each set up a WPIU to assist breeders in preventing wolf damages to their flocks. Each unit is composed of two agents who regularly perform field visits to flocks suffering from wolf depredation. Each visit usually last for one to fifteen days. The objectives of the WPIU are:</p> <ul style="list-style-type: none"> - to provide psychological support (an attentive ear) to breeders whose flocks are suffering from wolf depredation, - to evaluate the effectiveness of the preventive system, and - to give detailed, concrete advice to the breeder on how to improve the preventive system given wolf behavior and local conditions and constraints. <p>The advice provided by WPIU is based on observations of:</p> <ul style="list-style-type: none"> - the local context (landscape characteristics such as slope, forest cover, presence of shepherd cabins and other human infrastructure, etc.), - the state of night pens, if used (type, height, area and electrification), - the behavior of livestock guarding dogs, if used (number, attachment to the flock, reaction to stimuli, etc.), including through the use of GPS collars, - and, whenever possible, the actual behavior of wolves in the vicinity of the flock through the use of camera traps and thermal infrared cameras. <p>Breeders that could benefit from an intervention of the WPIU are usually identified by local authorities, which centralize wolf depredation damage claims, or WPIU staff. Breeders are free to decline the service and to act or not on the advice provided. Interventions are 100% free of charge: all costs are covered by funds</p>

	from LWA EU, OFB and Mercantour national park.
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2.3 GERMANY

Prepared by:

Axel Drechsler

The Common agricultural policy (CAP) 2023-2027														
<p>In Germany up to now the federal states finance livestock protection measures by own funds and some are also using the joint federal/länder task for "the Improvement of Agricultural Structures and Coastal protection" (GAK). Information about the sources of funding are published on a yearly basis (see https://dbb-wolf.de/mehr/literatur-download/berichte-zu-praevention-und-nutztierschaeden).</p> <p>Payment for prevention measures and for compensation of wolf caused damages by federal states in 2022.</p> <table border="1"> <thead> <tr> <th></th> <th>Payment for prevention (€)</th> <th>Promoted prevention cases</th> <th>Payment for compensation (€)</th> <th>Number of attacks</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td>18.428.830</td> <td>3.444</td> <td>616.413</td> <td>1.136</td> </tr> </tbody> </table>						Payment for prevention (€)	Promoted prevention cases	Payment for compensation (€)	Number of attacks	Total	18.428.830	3.444	616.413	1.136
	Payment for prevention (€)	Promoted prevention cases	Payment for compensation (€)	Number of attacks										
Total	18.428.830	3.444	616.413	1.136										
General comment of the implemented measures														
Damage prevention on national level														
<p>In Bavaria: Federal state funding scheme „Förderrichtlinie Investition Herdenschutz Wolf“ (since May 2020)</p>	<p>The Bavarian state ministry of the environment and consumer protection finances up to 100 % of the purchase of equipment to farmers who graze their animals within a designated area around the territories of stationary wolves and around ‘incidence areas’ (see map on https://www.lfu.bayern.de/natur/wildtiermanagement_grosse_beutegreifer/herdenschutz/herdenschutz_wolf/index.htm).</p> <p>The following elements are eligible for funding:</p> <ul style="list-style-type: none"> • Electric fences (mobile electric fences and electrified fixed fences) • Mobile Field Shelters (for sheep and goats only) • Livestock guarding dogs <p>From May 2020 (start of funding scheme) until the end of 2022, Bavaria invested 10,2 Mio. Euros to fund livestock protection measures. (The payment for the year 2022 – ca. 5 Mio. € - is included in the table above)</p>													
Other damage prevention activities														
<p>Projects and damage prevention center</p>	<p>The Federal Agency for Nature Conservation has four projects regarding livestock protection: One project contains a literature review about livestock protection measures that are not yet implemented in Germany but may be effective, too. Another project focuses on a literature review regarding livestock protection</p>													

(BZWW)	<p>species, e.g. donkeys, lamas etc. and their effectiveness regarding protection of livestock. Two additional projects focus on the implementation of livestock protection measures on dykes and steep slopes. For the last two projects livestock owners which implement protection measures on dykes and steep slopes were portrayed. All four reports will be published and will be available via https://dbb-wolf.de/mehr/relevante-literatur.</p> <p>The Federal Agency of Agriculture and Food has implemented the German Federal Center for Grazing Livestock and Wolf in 2021. The major objective of the new center is to support administrative processes as well as to promote best practice examples of livestock damage preventive measures and its transferability across federal states, grazing livestock associations and other stakeholders. Financial expenses of the federal center for the year 2022 sum up to € 214.850.</p>
In Bavaria: Stockage of intervention kits at local level	<p>Intervention kits are stored at local level (7 places, each: 25 nets, 5 electric fence energizers, 5 batteries and more)</p> <ul style="list-style-type: none"> - Distribution of fence material to livestock farmers after attacks - Fence construction help in urgent cases <p>The intervention kits stay in the field until the farmers establish a permanent reliable protection.</p>

2.4 ITALY

Prepared by:

Arianna Menzano and Vincenzo Gervasi

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Regione Lombardia: **Elisabetta Rossi, Fabrizio Cappa**

Provincia Autonoma di Trento: **Matteo Zeni, Paolo Zanghellini, Natalia Bragalanti, Claudio Groff**

Regione Autonoma Friuli Venezia Giulia: **Giuliana Nadalin, Umberto Fattori**

The Common agricultural policy (CAP) 2023-2027

The Italian Strategic plan (SP) for the Common agricultural policy (CAP) 2023-2027 was confirmed by the European Commission in December 2022. Each Region will be able to define a Regional Complement for Rural Development of the SP 2023-2027 (CSR), which is in fact the local implementation tool of the national strategy. The Regions remain the Managing Authorities and can choose the interventions to be implemented within the national plan, the financial allocation, and the timing of the calls with the definition of the selection criteria.

In Italy, two Alpine Regions have activated/will soon activate the SRA17-ACA17 “Specific commitments to coexistence with large carnivores”, payments for implementing damage prevention (subsidies for extra workload): Liguria and Piemonte; and 3 have activated/will soon activate the SRD04 “Non-productive agricultural investments with an environmental purpose”, supporting farmers in investments to improve coexistence between agriculture, livestock farming and the species of Community interest protected by the Habitats Directive 92/43/EEC (investments in equipment): Lombardia, Liguria and Piemonte.

Peculiarities of each Alpine Region are reported considering:

- the Regional Complement for Rural Development of the SP 2023-2027 (SCR)
- the comparison between SP 2023-2027 and RDP 2014-2022
- the damage prevention measures at regional level
- other damage prevention activities

The data about Veneto Region and Bolzano Autonomous Province are missing.

PIEMONTE REGION

Two measures are supported within the SP 2023-2027:

1. SRA17-ACA17 “Specific commitments to coexistence with large carnivores”

Selection criteria give priority to:

- breeding in areas with previous depredations
- sheep and goat farms
- mountain breeding

Protection with fences for the grazing and/or closing animals at night	<ul style="list-style-type: none"> • Subsidies cover the workload needed to setup, move, and maintain the enclosure. • Electrified or not-electrified, fixed, semi-permanent or movable fences as grazing enclosures / night pens. • Periodic check of the enclosure’s functionality. If mobile fences are used, they must be moved every 10 days. • Grazing/use of fences of at least 60 days/year.
Protection with livestock guarding dogs (LGDs)	<ul style="list-style-type: none"> • Subsidies cover the workload needed to work with LGDs. • A ratio of 1 LGD per 100 animals is required, with a minimum of at least 2 dogs. If more than 800 animals are present, a minimum of 8 dogs is allowed. • LGDs must belong to Pastore Maremmano-Abruzzese and Montagna dei Pirenei breeds. • Insurance for any damage caused by LGDs to people is required.
Protection with a shepherd	<ul style="list-style-type: none"> • Subsidies cover the work of a shepherd. • Regular presence of a shepherd is required. • The animals must be gathered and closed in a night pen or stable during the night.

2. SRD04 – “Non-productive agricultural investments with an environmental purpose” - D “Improving coexistence between agriculture, livestock and wildlife“

The measure has not yet been activated. It will support investments to improve coexistence between agriculture, livestock farming and the species of Community interest protected by Dir. 92/43/EEC (wolf, lynx, brown bear, and golden jackal). Subsidies will cover 100% of the cost of the investments.

The following investments are planned to be implemented:

- fixed or mobile, electrified or not-electrified fences for the protection of animals during the grazing activity and for night shelter;
- structures for beehives protection;
- virtual fencing systems;
- structures for the night protection of livestock and accommodation (micro-

- housing units) for shepherds;
- purchase of livestock guarding dogs;
- acoustic/visual deterrent devices.

Comparison between RDP 2014-2022 and SP 2023-2027

In Piemonte within the RDP 2014-2022 two different Measures had been activated:

- **Measure 4.4.2: Protection of livestock by canids depredations in pastures.** Farmers could access to a capital contribution to offset the prevention cost incurred. Subsidies covered 100% of the cost of the prevention system purchased (livestock guarding dog or electrified fences) with range from 1.000,00 to 30.000,00 € for each application. Totally 4.610,46 € have been funded in 2018 (3 applications).
- **Measure 10.1.6: Protection of livestock by canids depredations on hill and mountain pastures.** The area-based flat rate payment for mobile electric fences, livestock guarding dogs and constant human presence during grazing was 50,00 € / ha, only for mountain and hilly territories. Subsidies covered the workload which was needed to setup, move, and maintain the enclosure and the constant human presence. Eighty farmers have been funded in the period 2016-2023, for about 270.000 €/year.

Similar measures are being implemented within the SP 2023-2027.

The main changes between Measure 10.1.6 and ACA17 regard: 1. the extension of the premium areas from hill/mountain pastures to the entire Piemonte area due to the increased wolf spread; 2. a different in the payment considering breeders with livestock grazing in the mountain pastures vs. livestock grazing in the lowland pastures due to the different work required for protection activities from large carnivores required.

Between Measure 4.4.2 and SRD04 the main differences regard the greater number of investment types that will be implemented with the SP 2023-2027.

Comparison between the two schemes:

	RDP 2014-2022		SP 2023-2027	
	Payments	Farmers included	Payments	Farmers included
RDP 2014-2022 – Measure 10.1.6	270.000 €/year	80		
RDP 2014-2022 – Measure 4.4.2	4.610,46 €	3		
CSR 2023-2027 – SRD17-ACA17 (total foreseen budget ...)			284.000 € (2023)	47 (2023)

CSR 2023-2027 – SRD04			Not yet activated
General comment of the implemented measures			
<ul style="list-style-type: none"> • No field assistance is provided for breeders. • Breeders must implement all 3 protection measures to access to ACA17 funds. • There are no controls of the proper implementation of measures in the field (e.g. for the correct use of electric fences). 			
Damage prevention on regional level			
Regional cofinancing scheme	<p>Regional plan to protect livestock from large carnivore (from 2012 to 2022).</p> <p>From 2012 to 2021: about 290.000 €/year</p> <p>In 2022: about 400.000 €</p> <p>Currently not available.</p>		
Other damage prevention activities			
Projects	<p>Two LIFE Projects were active in Piemonte Region based on improving coexistence between human activities and wolf presence and dealing with damage prevention activities:</p> <ul style="list-style-type: none"> • LIFE WOLFALPS (2013-2018) - LWA • LIFE WOLFALPS EU (2019-2024) – LWA_EU <p>ELECTRIC FENCES</p> <p>Enclosures composed by 3 electrified wires, battery, a solar panel, and an energizer have been distributed to cattle farmers and kits composed by electrified nets (of at least 120 cm), battery, solar panel and energizer have been distributed to sheep farmers.</p> <p>LIVESTOCK GUARDING DOGS</p> <p>Eight LGDs from working lines were purchased, bred, socialized, and distributed to interested farmers within the LWA project.</p> <p>ALPINE SHELTER</p> <p>A prefabricated building made of durable, high-performance materials was provided to a shepherd and localized in an alpine pasture at 1.930 m a.s.l. within the Life WolfAlps project.</p>		
Testing of new	PROTECTION OF CATTLE		

<p>solutions</p>	<p>Since 2015, within the two LIFE projects, a multi-wire electrified enclosure for the protection of cattle has been tested with positive results both from a management and a protection point of view.</p> <p>FLADRY</p> <p>Since 2014, within the two LIFE projects, the efficacy of the system called fladry has been tested in the wolf captive facility “Centro uomini e lupi” and in the field to prevent wolf attacks on livestock (both cattle and sheep). No animals have been attacked while fladry was in place.</p> <p>ACOUSTIC DETERRENTS</p> <p>Since 2015, within the two LIFE projects, the efficacy of acoustic devices which emit pre-recorded sounds, either at programmed intervals or by photocell activation has been tested. The acoustic deterrent has been used in the wolf captive facility “Centro uomini e lupi” where a wolf rapid adaptation to the system has been observed, and in the field where no animals have been attacked during the trials.</p>
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LIGURIA REGION

Two measures are supported within the SP 2023-2027:

1. **SRA17-ACA17 “Specific commitments to coexistence with large carnivores”**
 The measure has not yet been activated.
 Selection criteria will give priority to:
 - breeding in areas with previous depredation
 - sheep and goat farms

<p>Protection with fences for the grazing and/or for closing animals at night</p>	<ul style="list-style-type: none"> • Subsidies cover the workload needed to setup, move, and maintain the enclosure. • Electrified or not-electrified, fixed, semi-permanent or movable fences as grazing enclosures / night pens. • Periodic check of the functionality of the enclosures; if mobile fences are used, they must be moved periodically. • A grazing period and use of fences of at least 60 days/year is required. • Minimum grazing area of 2,5 ha.
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<p>Protection with livestock guarding</p>	<ul style="list-style-type: none"> • Subsidies cover the workload needed to work with LGDs. • LGDs must belong to Pastore Maremmano-Abruzzese
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<p>dogs (LGDs)</p>	<p>and Montagna dei Pirenei breeds.</p> <ul style="list-style-type: none"> • Insurance for any damage caused by LGDs to people is required. • Dogs must come from work lines of at least one generation. • Participation by beneficiaries in training activities is required.
<p>Protection with a shepherd</p>	<ul style="list-style-type: none"> • Subsidies cover the work of a shepherd. • Regular presence of a shepherd is required. • The animals must be gathered and closed in a night pen or stable during the night.
<p>2. SRD04 – “<u>Non-productive agricultural investments with an environmental purpose</u>” - D “<u>Improving coexistence between agriculture, livestock and wildlife</u>“</p> <p>The measure has not yet been activated. It will support investments to improve coexistence between agriculture, livestock farming and the species of Community interest protected by Dir. 92/43/EEC (Wolf, Lynx, Brown Bear and Golden Jackal). A capital grant is provided to reimburse the expenditures. The eligible expenditures start from a minimum of 5.000 €. A maximum value is not defined. 100% of the eligible expenditures will be refunded.</p> <p><u>The following investments are planned:</u></p> <ul style="list-style-type: none"> ○ fixed or mobile, electrified or not-electrified fences for the protection of animals during the grazing activity and for night shelter; ○ structures for beehives protection; ○ virtual fencing systems; ○ structures for the night protection of livestock and accommodation (micro-housing units) for shepherds; ○ purchase of livestock guarding dogs; ○ acoustic/visual deterrent devices. 	
<p>Comparison between RDP 2014-2022 and SP 2023-2027</p>	
<p>In Liguria within the RDP 2014-2022 had been activated only one preventive measure:</p> <ul style="list-style-type: none"> ○ Measure 4.4.2: "Support for non-productive investments related to the fulfilment of the agri-climate-environmental objectives" - Prevention of animal damage". Farmers could access to a capital contribution to offset the prevention cost incurred. Subsidies covered 50% of the cost of the prevention system purchased (livestock guarding dog or electrified fences). The practices are still ongoing for almost 150.000,00 € for 10 applications. <p>Similar measures are being implemented within the SP 2023-2027.</p> <p>Measure as ACA17 was not activated before.</p> 	

Between Measure 4.4.2 and SRD04 there aren't substantial differences.

Comparison between the two schemes:

	RDP 2014-2022		SP 2023-2027	
	Payments ongoing	Farmers included	Payments	Farmers included
RDP 2014-2022 – Measure 4.4.2	approximately 150.000,00 € in 2023	10		
CSR 2023-2027 – SRD17-ACA17 (total foreseen budget 1.863.333 €)			Not yet activated	
CSR 2023-2027 – SRD04			Not yet activated	

Damage prevention on regional level

Regional cofinancing scheme	<p>Regional plan to protect livestock from wolf (from 2012 to 2022).</p> <p>From 2012 to 2022: about 160.000 € in total</p>
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Other damage prevention activities

Projects	<p>Regione Liguria is partner of the LIFE WolfAlps EU Project (2019-2024). The project aims to improve coexistence between human activities and wolf presence and deals with damage prevention activities.</p> <p>ELECTRIC FENCES</p> <p>Five enclosures composed by 5 electrified wires, battery, solar panel and energizer have been bought with project funds and distributed to farmers.</p>
Testing of new solutions	<p>ACOUSTIC DETERRENTS</p> <p>The efficacy of acoustic devices which emit pre-recorded sounds, either at programmed intervals or by photocell activation, have been tested in the past in field conditions but a wolf rapid adaptation to the system was observed.</p>

LOMBARDIA REGION

There is one measure supported within the SP 2023-2027:

1. **SRD04 – “Non-productive agricultural investments with an environmental purpose” - D “Improving coexistence between agriculture, livestock and wildlife“**

The measure has not yet been activated. It will support investments to improve coexistence between agriculture, livestock farming and fauna species, including ungulates and the species of Community interest protected by Dir. 92/43/EEC (Wolf, Lynx, Brown Bear and Golden Jackal). A capital grant is provided to reimburse the expenditures. The eligible expenditures still need to be defined. 100% of eligible expenditures will be refunded.

The following investments are planned:

- fixed or mobile, electrified or not-electrified fences for the protection of animals during the grazing activity and for night recovery;
- structures for beehives protection;
- purchase of livestock guarding dogs.

Comparison between RDP 2014-2022 and SP 2023-2027

In Lombardia, within the RDP 2014-2022, one measure had been activated:

- **Measure 4.4.1: Non-productive agricultural investments with an environmental purpose.** Farmers could access to a capital contribution to offset the prevention costs. Subsidies covered 100% of the cost of the prevention system purchased (livestock guarding dog or electrified fences), between 1.000 and 30.000 € for each application. Totally, 59 applications have been funded within the call 2019 (249.652 € funded) and 46 within the call 2022 (220.019 € funded)

A similar measure will be implemented within the SP 2023-2027.

Between measure 4.4.1 and SRD04 no substantial differences are foreseen.

Comparison between the two schemes:

	RDP 2014-2022		SP 2023-2027	
	Payments	Farmers included	Payments	Farmers included
RDP 2014-2022 – Measure 4.4.1	469.671 €	105		
CSR 2023-2027 – SRD04			Not yet activated	

General comment of the implemented measures

In 2019 for the first time this measure has been financed in Lombardia, as it was not foreseen in the previous RDP. The contents of the measure have been defined

thanks to the support of experts of the LIFE WOLFALPS and LIFE GESTIRE2020 projects and the experience gained in these projects. Region Lombardia has contributed to the active promotion of this measure through the technical assistance provided to farmers by the technical facilitators of the LIFE GESTIRE2020 project, who helped farmers in compiling the proposals and organized a dedicated webinar, and through direct information to farmers that came in contact within LIFE WOLFALPS and LIFE WOLFALPS EU projects, especially through the active role of the WPIUs and ERSAF in the ALCP of LIFE WOLFALPS EU. Furthermore, an active role of local administrations involved in the project such as Provinces and Parks was a key aspect in facilitating the contact with local potential beneficiaries.

Damage prevention on regional level

Regional cofinancing scheme

In august 2023, the regional government adopted a regional financing scheme for prevention of damages by wildlife, including protected species, that finances 100% of the purchase of equipment.

Other damage prevention activities

Projects

In the last decade, 4 LIFE projects based on improving coexistence between human activities and large carnivores have been carried out in Lombardia:

LIFE ARCTOS (2010-2014)

LIFE WOLFALPS (2013-2018)

LIFE GESTIRE2020 (2016-2023)

LIFE WOLFALPS EU (2019-2024)

AFTER LIFE CONSERVATION PLAN (ALCP) of LIFE WOLFALPS financed to ERSAF (2018-2020, extended to 2023) that included support for farmers; also including the purchase of electric fences and prevention materials. The total amount of the project is 208.000 €.

ELECTRIC FENCES

Within the above-mentioned projects, a total of 162 kits of electric fences were distributed to livestock breeders and beekeepers: 36 (LIFE ARCTOS), 52 (LIFE WOLFALPS), 74 (ALCP WOLFALPS).

LIVESTOCK GUARDING DOGS

In Lombardia, there are no mechanism for the support of livestock guarding dogs to farmers. 3 LGDs were distributed to interested farmers within LIFE WOLFALPS project.

Testing of new solutions

Four acoustic devices and 3 fladry have been tested in selected pastures within LIFE WOLFALPS project.

Intervention kits	The kits tested were composed of: energizer, battery, solar panel, 200 linear meters of electrified wire or net, multimeter and all the materials for electrification signalling in accordance with the law.																								
VALLE D'AOSTA REGION																									
There are no measures supported within the RDP 2014-2022 and SP 2023-2027 in Valle d'Aosta Region.																									
Damage prevention on regional level																									
Regional cofinancing scheme	<p>Regional plan to protect livestock from large carnivore attacks supports the cost for electric fences, mechanic fences, livestock guarding dogs, acoustic and optical devices, shepherds' work, and helicopter travels.</p> <p>The funds and the number of farmers assisted, from 2017 to 2023, are reported:</p> <table border="1" data-bbox="531 891 1385 1518"> <thead> <tr> <th>Year</th> <th>Funds (€)</th> <th>N. farmers supported</th> </tr> </thead> <tbody> <tr> <td>2017</td> <td>4615,37</td> <td>5</td> </tr> <tr> <td>2018</td> <td>55587,84</td> <td>23</td> </tr> <tr> <td>2019</td> <td>91721,62</td> <td>39</td> </tr> <tr> <td>2020</td> <td>73533,76</td> <td>25</td> </tr> <tr> <td>2021</td> <td>162562,00</td> <td>56</td> </tr> <tr> <td>2022</td> <td>138754,13</td> <td>64</td> </tr> <tr> <td>2023 (not definitive data)</td> <td>169249,49</td> <td>39</td> </tr> </tbody> </table>	Year	Funds (€)	N. farmers supported	2017	4615,37	5	2018	55587,84	23	2019	91721,62	39	2020	73533,76	25	2021	162562,00	56	2022	138754,13	64	2023 (not definitive data)	169249,49	39
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Other damage prevention activities																									
Projects	<p>LIFE WOLFALPS EU (2019-2024) Project is active in Valle d'Aosta Region based on improving coexistence between human activities and wolf presence and dealing with damage prevention activities.</p> <p>ELECTRIC FENCES</p> <p>Enclosures composed by 4 or 5 electrified wires, battery, solar panel and energizer have been distributed to cattle farmers and kits composed by electrified nets (of at least 145 cm), battery, solar panel and energizer have been distributed to sheep farmers.</p>																								

	<p>LIVESTOCK GUARDING DOGS</p> <p>Eight LGDs from working lines were purchased, bred and socialized within the project and distributed to interested farmers.</p>
TRENTO AUTONOMOUS PROVINCE (APT)	
The Common agricultural policy (CAP) 2023-2027	
At the moment, in the APT there are no initiatives covered by the CAP program 2023-2027 for the implementation of protection measures.	
Comparison between RDP 2014-2020 and SP 2023-2027	
<p>In the APT, during the period 2014-2020, a total amount of € 262.560 were used through the RDP (measure 4.4.2) for the following protection measures:</p> <p>A) Traditional wooden fences (<i>60% of the expense between € 10.000 and € 50.000 for each intervention</i>)</p> <p>B) Stone walls for livestock confinement and protection (<i>60% of the expense between € 10.000 and € 50.000 for each intervention</i>)</p> <p>C) “Bienenhaus” fences for the protection of beehives from bears (<i>100% of the expense</i>)</p> <p>D) Electric fences for livestock protection from bears and wolves (<i>70% of the expense between € 3.000 and € 50.000 for each intervention</i>)</p> <p>E) Temporary living modules for shepherds (<i>100% of the expense</i>)</p>	
Damage prevention on local level	

Funds from the APT

In the APT there are three main types of interventions, financed with direct funds from the provincial administration, to promote protection measures:

- Free loan for use, i.e., the direct transfer of materials for the construction of electrified multi-wire networks and fences. The loan, lasting eight years, is guaranteed by the staff of the Trentino Forestry Corps, through the stipulation of specific contracts between the public administration and the user;
- Short loan (i.e., the temporary transfer of electrified fences or housing modules, for a maximum of a few months);
- Financing. The financing formula provides for reimbursement for the purchase of the materials necessary for the construction of electrified fences, or for the purchase of Maremmano Abruzzese protection dog puppies.

The program covers respectively:

60% of the purchase costs if the prevention measure is directed to protect bovine or equine livestock. In the case of equines and cattle, the funding is aimed, respectively, at the protection of foals and calves younger than 15 months. Adult horses and cattle are therefore excluded, as they are statistically much less at risk of predation than the categories listed above;

90% of the purchase costs if the work will protect sheep, goats, donkeys, small ponies, and camelids (llamas and alpacas) and, exclusively in western Trentino (west of the Adige River), chicken coops and beekeeping heritage.

Other damage prevention activities

Projects

At the moment, in the APT, there are no additional projects or funding sources for the implementation of livestock and beehives protection measures. Still, in the last fifteen years, protection measures and activities were financed also in the context of two LIFE projects, LIFE ARCTOS (2010-2014) and LIFE DINALP BEAR (2014-2019).

LIFE ARCTOS: The project activity was focused on the implementation of livestock and beehives protection measures during the period 2010-2014, in the earlier stages of the brown bear recolonization process after their reintroduction in 1999-2002. During the period 2010-2014, the project covered most of the costs related to financing protection measures in the APT. Each year, an average of about 50 measures were financed (mostly for beehives, but also for livestock), for an annual expense of about € 40.000 – 50.000.

LIFE DINALP BEAR: The project was active during a later stage of the bear recolonization phase (2014-2019), when also wolves returned to the territory of the APT. A total of 19 electric fences for livestock and beehives protection were financed through the LIFE DINALP BEAR funds. Additionally, an expert referent from the project worked to check the health and training of 25 Maremmano Abruzzese puppies provided by the APT to local breeders. Also for these dogs, the veterinary visit was guaranteed.

FRIULI-VENEZIA GIULIA REGION

The Common agricultural policy (CAP) 2023-2027

At the moment, in Friuli-Venezia Giulia there are no initiatives covered by the CAP program 2023-2027 for the implementation of protection measures.

Comparison between RDP 2014-2020 and SP 2023-2027

Also for the period 2014-2020, Friuli-Venezia Giulia did not activate initiatives connected to the RDP funds.

Damage prevention on local level

Regional funds

In Friuli-Venezia Giulia there are two initiatives, covered by regional funds, supporting farmers who implement protection measures:

- 1) Regional act 6/2008 and regional decree. 162/2020: Direct contribution for protection measures**

- a) Contribution for fixed or mobile fences, electrified or otherwise.
- b) Contribution for the purchase of guardian dogs.
- c) Contribution for labour costs for installing protection measures.
- d) Contribution for the labour costs of managing prevention measures in mountain pastures.
- e) Information activities for breeders on LGDs

2) Regional act 183/2023 (still in evaluation): Contribution to offset the increased costs of agricultural companies that adopt and manage prevention measures

- a) Contribution based on the number of Adult Bovine Units (ABU), starting from a minimum of 10 ABU/company;
- b) Contribution for farmers working in mountain pastures and transforming milk products;
- c) Contribution for farmers working in mountain pastures and not transforming milk products;
- d) Contribution for guardian dogs

Other damage prevention activities

At the moment, in Friuli-Venezia Giulia there are no additional projects or funding sources for the implementation of protection measures, nor such measures had been activated during the period 2014-2020.

2.5 LIECHTENSTEIN

Prepared by:

Cathérine Frick

Legislation on national level	
<p>The Principality of Liechtenstein is not part of the European Union and thereby is not affected by the Common agricultural policy (CAP).</p> <p>The responsibility for supporting farmers in terms of preventing damages to grazing animal by large carnivores lies with the government. The Office of Environment is tasked with revising legislation and management plans concerning damage prevention and compensation payments and further enforces this legislation.</p>	
Damage prevention on national level	
<p>National co-financing scheme (national funds, same source as for damage compensation)</p>	<p>The guideline concerning aptitude, training, keeping, breeding and for government-funded livestock guarding dogs was brought into force on July 11th, 2023.</p> <p>The regulation on prevention and compensation for damages by protected animals is currently under revision.</p>
Other damage prevention activities	
<p>Pilot project: Shepherding in 2024</p>	<p>In the year 2022 free grazing sheep on alpine pastures in Liechtenstein were attacked and killed by a transient wolf. This was the first documented incident of damages by large carnivores Liechtenstein.</p> <p>In 2023 a motion was proposed for a pilot project. The plan is to fund a shepherd in 2024. This person is planned to join the three existing flocks together, be present with the sheep and gather them and close them in a night pen.</p>

2.6 SLOVENIA

Prepared by:

Tomaž Berce, Rok Černe

The Common agricultural policy (CAP) 2023-2027	
<p>The Slovenia Strategic plan (SP) for the Common agricultural policy (CAP) 2023-2027 was confirmed by the European Commission in October 2022. It covers two types of support for farmers in terms of preventing damages by large carnivores to grazing animals:</p> <ul style="list-style-type: none"> - payments for implementing damage prevention (subsidies for extra workload) and - support for pasture arrangements (investments in equipment). 	
<p>There are three measures that are supported within SP 2023-2027:</p>	
<p>Protection with high electric nettings or night pens</p>	<ul style="list-style-type: none"> • Subsidies cover the workload needed to setup, move and maintain the enclosure. • High electric nettings (160 cm) or fixed fences as enclosures / night pens.
<p>Protection with livestock guarding dogs</p>	<ul style="list-style-type: none"> • Subsidies cover the workload needed to work with livestock guarding dogs. • At least 3 dogs are required and kept within a fenced pasture.
<p>Protection with a shepherd</p>	<ul style="list-style-type: none"> • Subsidies cover the work of a shepherd. • Regular presence of a shepherd is required. • The animals have to be gathered and closed in a night pen or stable during the night.
Comparison between RDP 204-2020 and SP 2023-2027	
<p>In Slovenia, there are almost no differences between the two CAP schemes. The only changes have been made to the amount of support (payments per hectare) for the three prevention measures, as presented in the chart below.</p> <p>Within the support for pasture arrangements, the Ministry of agriculture, forestry and food foresees the support of improved fencing systems to farmers living in areas of large carnivore presence. The idea is to support the purchase of pure-bred livestock guarding dog, but the system has not been set yet.</p>	

Comparison between the two schemes:

Protection measure	RDP 2014-2020		SP 2023-2027
	Payments	Farmers included	Payments
Protection with high electric nettings or night pens	119,90 € / ha	55-58	118,64 € / ha
Protection with livestock guarding dogs	107,60 € / ha	22-25	85,60 € / ha
Protection with shepherd	112,60 € / ha	5-8	269,20 € / ha

General comment of the implemented measures

- Farmers can apply only for one type of measure, except the combination of shepherds and livestock guarding dogs, where they can receive payments for both measures.
- Subsidies based on grazing area (per hectare) do not always cover actual costs (e.g. employment of a shepherd or the maintenance of three LGDs are fixed costs, not based on grazing surface).
- The surveillance is applied only for the subsidy obligations and it is done by the Agency for Agricultural Markets and Rural Development. The controls are random and cover only 5% of the farmers involved. There are no controls of the proper implementation of measures in the field (e.g. for the correct use of electric fences).

Damage prevention on national level

<p>National cofinancing schemes (national funds, same source as for damage compensation)</p>	<p>Ministry of Natural Resources and Spatial Planning cofinances 80% of the purchase of equipment to farmers who have already experienced damage on their property.</p> <p>The cofinancing covers the costs (up to 4000 €) for the implementation of high electric fences (160 cm) for the protection of grazing animals, beehives, orchards, etc. Applications are possible all-year-long and the payments after performed after the purchase and the installation of the equipment in the field.</p> <p>Regular field controls are made by Slovenia Forest Service damage officials – in general two controls per year for livestock breeders (more in case of detected improper use). The controls are announced and unannounced. The purpose of such controls is to check, whether the equipment is correctly installed in the field and to stay in touch with farmers. This is a kind of collaboration between farmers and officials, as they share useful feedback information and improve the general knowledge about the use of these</p>
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	<p>preventive measures. Regular field controls are crucial for ensuring the correct use the equipment. The control is also useful to monitor the effectiveness of the implemented measures.</p> <p>The main weakness of the current system is the eligibility towards the co-financing, as is allows the support only for farmers who have already experienced damages on their animals. Therefore, the support does not cover the prevention of damages and proactive farmers who would like to protect their herds from attacks.</p>
<p>Other damage prevention activities</p>	
<p>Projects</p>	<p>In the last decade, many projects were focused on finding solutions for preventing damages caused by large carnivores on human property, especially for protecting grazing animals. Within projects, SFS and other institutions have been collaborating with livestock breeders, beekeepers and other farmers to spread the network of good practice examples.</p> <p>The aim of damage prevention activities within project is to test new methods and approaches, to test the effectiveness, to try to implement new measures in national schemes, to educate, advise and closely collaborate with farmers, damage officials and other stakeholders, to improve controls of the implemented measures. The negative side of the project-based activities is that the actions and initiatives are limited to the project duration.</p> <p>From 2010 there were several projects working on this topic:</p> <ul style="list-style-type: none"> • LIFE SloWolf • LIFE DINALP BEAR • Carnivora Dinarica (Interreg Slovenia-Croatia) • LIFE Lynx • LIFE WOLFALPS EU • LIFE WILD WOLF <p>ELECTRIC FENCES</p> <p>Within the above-mentioned project, 106 kits of electric fences were distributed to livestock breeders and beekeepers.</p> <p>LIVESTOCK GUARDING DOGS</p> <p>In Slovenia, there are no mechanism for the support of livestock guarding dogs to farmers. For this reason, LGDs were distributed to interested farmers from projects. Altogether, 44 dogs joined new owners from LGD working lines.</p>

<p>Testing of new solutions</p>	<p>PROTECTION OF CATTLE</p> <p>In 2021, Slovenia Forest Service started with the collaboration with four cattle breeders to test different solution for the protection of cattle, especially calves up to the age of 3 months and suckler cows. High electric nettings and multiwire electric fences have been tested with positive results.</p> <p>ADULT LIVESTOCK GUARDING DOGS</p> <p>In 2020, based on the interest of farmers, two LGDs were raised and educated by an experienced LGD breeder until adult phase and transferred to a new farm to protect a herd of sheep. This practice has shown great results, as less experienced farmers can receive an educated and more stable dog that can immediately work in the new environment.</p> <p>FLADRY</p> <p>In 2022, Slovenia Forest Service started with testing a system called fladry to prevent wolf attacks on livestock. As the system is still being tested, we cannot make any conclusions on the effectiveness.</p>
<p>Intervention kits</p>	<p>Within the LIFE DINALP BEAR project, Slovenia Forest Service established the so-called intervention kits. These kits consist of all the equipment needed to implement a quick temporary protection for livestock or other types of human property and prevent large carnivore attacks from reoccurring. Intervention kits are stored in SFS regional offices and are available all the time. Damage officials are ready to help farmers in need and the intervention kit usually stays in the field for 2 months before the owners establish a permanent reliable protection.</p> <p>On average, 12 kits are requested and set in the field every year. We observe a moderate increase in the need for quick reaction in the field after attacks in the last years, due to the occurrence of wolves and bears in areas where they have been absent or very rare in the last decades.</p>

2.7 SWITZERLAND

Prepared by:

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The agricultural policy (AP) 2022-+	
<p>Switzerland is not member of the EUROPEAN AGRICULTURAL FUND FOR RURAL DEVELOPMENT (EAFRD)</p> <p>The Swiss Strategic plan for the agricultural policy (AP) 22+ focuses on strengthening the efficiency of farms and reducing environmental pollution and the consumption of non-renewable resources. Protection of livestock plays a subordinate role. Nevertheless, the Confederation has earmarked additional financial resources to support alpine farming: the use of shepherds on alps will be supported with higher contributions depending on pasture management.</p> <p>For its part, the Federal Office for the Environment (FOEN) supports production agriculture with financial resources for specific herd protection measures. This includes material for the raising/reinforcement and electrification of existing pasture fences or for the construction of new night pastures/repens on alps, and the provision of protection dogs according to the specifications of the official system.</p> <p>Measures that are supported within the general strategy of Switzerland:</p>	
<p>Protection with high electric nettings or electrified night pens</p>	<ul style="list-style-type: none"> • Supported by the Federal Office for Agriculture (FOFA) through direct payments workload needed to setup, move and maintain the enclosure (only on alps). • Supported by the FOEN through financial aid High electric nettings (105 cm) or mobile electrified fences as enclosures / night pens.
<p>Protection with livestock guarding dogs</p>	<ul style="list-style-type: none"> • Supported by the FOEN through financial aid • Financial aid for breeding, training, field testing, keeping and use in summer pastures • At least 2 dogs are required for protecting one herd
<p>Protection with a shepherd</p>	<ul style="list-style-type: none"> • Supported by the Federal Office for Agriculture (FOFA) through direct payments. • Subsidies cover part of the work of a shepherd. • Regular presence of a shepherd is required. • The animals have to be guided.
Comparison between RDP 204-2020 and SP 2023-2027	

Measures and financial aid from the FOEN have not changed. On the FOAG side, subsidies for shepherds on the Alps will be added in 2024.

In addition, last year and this year additional financial resources were added for so-called emergency measures in summering. This is a mixture of support for manpower and material. The FOEN was tasked with distributing the funds, which is not in line with its actual policy (support for material).

Protection measure	FOEN	FOEN	FOAG
	Payment 2022	Payments 2023	Payments 2022/2023
Protection with higher electric nettings or night pens	CHF 330'000.00/year	CHF 250'000.00/year	--
Protection with livestock guarding dogs	CHF 1'700'000.00/year	CHF 1'850'000.00/year	--
Subsidies for shepherd	--	CHF n--	n.n.
Emergency measures	CHF 4,7 mio/year	CHF 4 mio/year	--

General comment of the implemented measures

- Due to the joint task of the FOEN and FOAG, the involvement of the cantonal agricultural offices and other agricultural organisations, it is difficult for the FOEN to assess the efficiency of the measures. In addition, the wolf population has only increased significantly since 2021.

Damage prevention on national level

<p>National cofinancing scheme (National funds, other source as for damage compensation)</p>	<p>The FOEN co-finances 80%</p> <p>In order to prevent damage to farm animals by large carnivores, the FOEN shall contribute 80 per cent of the flat-rate costs of the following measures:</p> <ol style="list-style-type: none"> Breeding, training, keeping and use of livestock guardian dogs that meet the federal requirements; Electrical reinforcement of pasture fences to protect against large predators; Electric fences to protect beehives from bears; Further measures by the cantons in consultation with the FOEN if the measures under letters a-c are not sufficient or not appropriate <p>The cofinancing covers the costs (for the implementation of</p>
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	<p>electrical reinforced and raised fences (105 cm) for the protection of grazing animals and beehives (fence even higher).</p> <p>Currently field controls are only carried out in connection with attacks by large carnivores. It is planned that regular inspections will be carried out by the agricultural authorities in future. The purpose of such controls is to check, whether the equipment is correctly installed in the field. Regular field controls are crucial for ensuring the correct use of the equipment. Controls are also useful to monitor the effectiveness of the implemented measures.</p> <p>Further measures to prevent damage are the compensation of killed livestock and, as a last possibility, the shooting of large carnivores. However, this is only possible if the milder measures such as herd protection and compensation have "failed".</p>
<p>Other damage prevention activities</p>	
<p>Projects</p>	<p>Since the return of the wolf to Switzerland, various approaches for better herd protection have been tested. The currently established system could prove its worth if all parties involved would support it. Unfortunately, the wolf is still not accepted by large parts of the agricultural population.</p>
<p>Testing of new solutions</p>	<p>Wolves and cattle is a project financed by third parties and carried out by a foundation (https://www.kora.ch/en/projects/wolf/wolves-and-cattle).</p> <p>A trial with pheromone collars is currently underway, but also without the participation of the federal government (www.studioalpino.ch).</p>

3 CONCLUSIONS

Members of the WISO working group and LIFE WOLFALPS EU project members who contributed to this report recognize the importance of the EU's Common agricultural policy and the effects that its support has on farming practices, especially when dealing with such an urgent topic of large carnivore depredations.

When retrieving information from different countries, we had difficulties in comparing the implemented systems as each country has its own way to collect data, present the results and most importantly, each country (in some cases region) has the liberty to decide whether or not to apply for CAP.

In this context, we are convinced that there is room for improvement both within the implementation of focused measures applied and within their effectiveness and results in the field.

Hereafter we discuss the topics we define the most crucial in terms of implementation of CAP.

CONTROLLING OF THE IMPLEMENTED MEASURES

Financing damage prevention measures represent a crucial recourse to prevent conflicts with large carnivores in agriculture. However, financial support alone does not bring results if there are no mechanisms for giving advice to farmers how to properly use the subsidized prevention measures and control the proper use. Damage prevention supports should not be a general allowance for farmers that live in areas where large carnivores are present. In order for farmers to effectively implement damage prevention measures, it is necessary that financial supports are focused for the use of specific tools to protect their herds.

Technical support, control and monitoring of the correct implementation of damage protection measures need to be done on a regular basis in order to assure their effectiveness.

Regular visits to breeders do not act only as a systematic control, but also represent a way of exchanging experiences between users, competent expert personnel and other stakeholders.

The main risks of having implemented measures without performing field controls and a monitor system is their ineffectiveness and consequently common belief that nothing

can be done for protection of the herds. If large amount of finances is used with no concrete results in the field, a general mistrust in any damage prevention measure will take over and the pressure to implement lethal control of the populations will increase.

GENERAL, NOT FOCUSED MEASURES

The implemented subsidies not always aim at the prevention of depredations on livestock caused by large carnivores. We are convinced that large carnivores represent an important factor affecting farming practices and ultimately the persistence of alpine pastoralism. Having such an important influence, supporting practices to prevent damages on livestock have to be considered, as crucial and focused approaches have to be applied. Defined proven practices (such as electric nettings, livestock guarding dogs, etc.) have to be supported. Wide and general measures to support the existence of alpine farming practices cannot be seen as an effective tool to prevent damage cases. In this context, it is necessary to consider more focused implementations based on problems in the field. One example arising in the last years throughout the Alps are the attacks on cattle caused by wolves. Some of the potential measures to be applied and supported include planned calvings, the adapted protection of young animals and the protection of suckler cows. In cases of regular attacks on adult cattle, removal of problematic animals can be an effective tool for reduction of damage cases. Cattle protection remains a challenge for alpine pastoralism.

SUPPORTING INVESTMENTS AND EXTRA WORK-LOAD

Within CAP, there are basically two types of support: support for investments (purchase of different types of materials needed to fence grazing areas, shelters for animals, shelters for shepherds, basic fences, livestock guarding dogs, etc.) and support for the extra work that farmers experience when dealing with protective measures (setting up fences, taking care of livestock guarding dogs and related expenses, salaries for shepherds).

In general, supports for employing shepherds do not allow the coverage of the entire shepherd's salary for the entire pasturing season, especially if the support is area-based (the amount of support per hectare). The salary represents a fixed expenditure for the farmer who employs a shepherd, however it would be rational to provide support to farmers with larger flocks, with the cap being adapted to the size of the herds in each country.

The same applies for the support for livestock guarding dogs. As each dog represents a fixed cost, the support cannot be area-based.

NON-UTILISATION OF EU FUNDS

As documented in the national reports, some countries (especially regions) do not use the CAP funds to mitigate conflict with large carnivores. It is not clear what are the reasons for not applying; however, we encourage each country to opt for CAP in order to have an extra financial source and a broader range of options in dealing with damage prevention.

COMPLEMENTARITY WITH NATIONAL MEASURES

Within most countries, national or regional damage prevention measures and schemes represent a welcome conflict mitigation strategy. In contrast to the CAP, where applied measures are long-term and fixed more or less for the entire period of the scheme, national supports tend to be more plastic and adaptable to specific needs, and usually involve less administration. Here we see more chances for testing of new approaches and quickly implementing them into the system.