



# Use of electric fences as a carnivore prevention method for small ruminant husbandry in Slovenia

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## The background

- Use of electric fences (permanent and temporary) for grazing animals and partially to prevent large carnivore (LC) damage is already very well known also in Slovenia;
- Start of the recultivation process of abandoned grassland in the area of permanent or occasional presence of large carnivores (bear, wolf) with small and large ruminants;
- Sudden rise of damage (case and value) on livestock due to LC attacks in the last 5 to 10 years.





The beginning goes back into 2003 when ...



**... the usage of (safe) night time enclosure on pasture for CDP purpose in Cerknica near Postojna was applied**



An ariel photo of pasture (blue line) and night time enclosure, Cerknica, 2009



Then came SLOWOLF project with action C6 „Best practice demonstration of damage prevention measures at selected wolf damage hot spots“



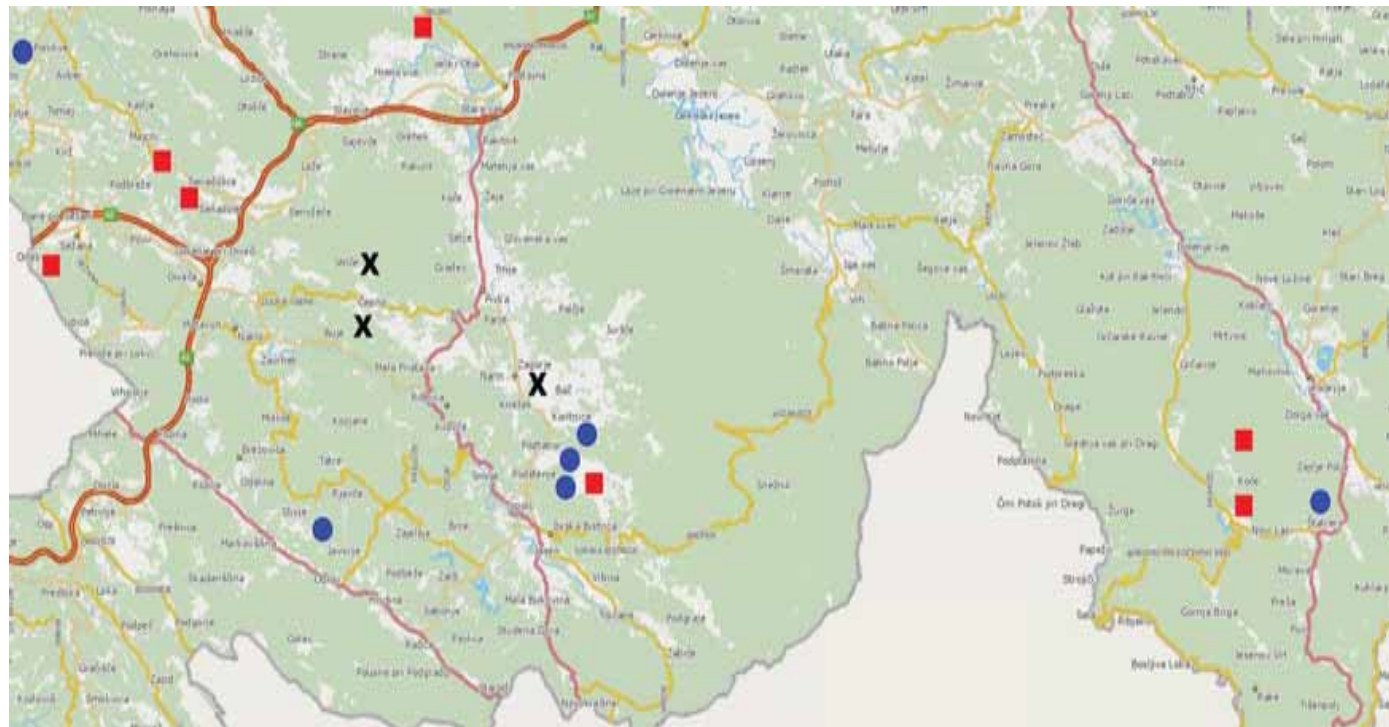
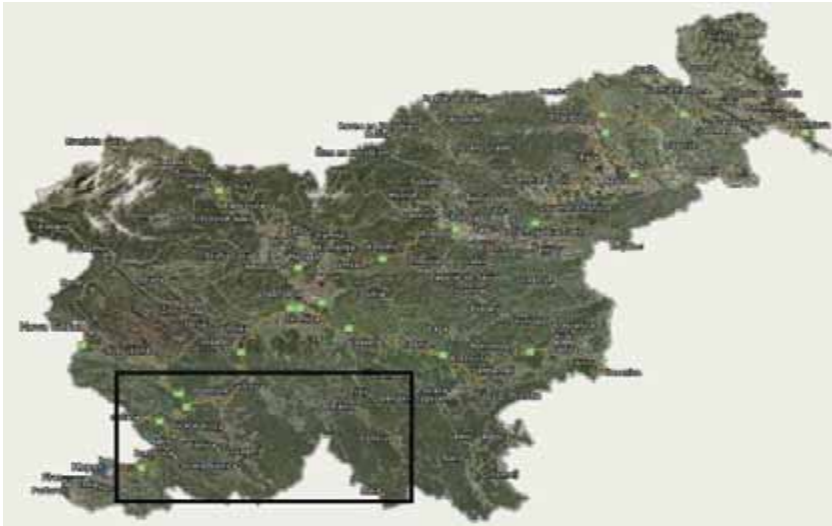
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- Chosen locations with frequent wolf attacks were equipped with wolf damage prevention measures:
  - 170 cm high electric nets and/or
  - Livestock guarding dog pups







	Area	Electric netting	LGD
1	Volovja reber	X	
2	Volče pri Košani	X	X
3	Gornja Košana	X	X
4	Zagorje pri Pivki	X*	
5	Mlaka pri Kočevski Reki	X	X*
6	Štorje	X	
7	Komen		X
8	Štalcerji		X
9	Novi Lazi	X*	X*
10	Zagorje pri Pivki I	X	X
11	Orlek	X	
12	Belsko pri Postojni	X	
13	Senadole	X	
14	Kočevska Reka	X	

# Electric fence donations

- Fences donated by SloWolf and Slovenian Forest Service.
- Donation set:
  - electric nets, 170 cm high, 50 each set)
  - battery 12V energizer
  - digital volt/amper meter





High electric nettings were used by breeders as:

1. all day and night grazing paddock



For a flock of 40 to 90 small ruminants which grazes on small separated parcels.

2. as a night enclosure inside the pasture



For a flock of 100 or more small ruminants which grazes on larger pasture and are only kept behind the high el. fencing during the night.

- March – May 2011: five pastures equipped with electric nettings  
May 2012: four more pastures equipped
- Monitoring:
  - Regular phone calls with breeders obtained
  - Personal visits to check adequate equipment use
  - Infrared video cameras used to detect potential wolf presence







- Problems encountered:
  - Hard to find interested breeders (reasons: additional work, well paid compensations, etc.)
  - Farmers very reluctant to idea of gathering and confining sheep at night or moving the portable **electric nettings** (reasons: heavy fence, difficult terraine, troubles gathering the sheep, etc.)
  - **For now not enough information and experiences on using high electric nettings**





- Results:
  - For the evaluation of the effectiveness we have analyzed the number of large carnivore damages before and after using electric net installation (data provided by SFS).
  - Where fences were correctly used, there were **no more damages** in year 2011 and also 2012 due to LC attacks.





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