

Innovative grazing system with sheep for sustainable management of the alpine cultural landscape

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Background

- Number of grazing animals on alpine pasture decrease
- Multifunctionality of alpine pasture
- Preserve the cultural landscape
- Produce lambs in high quality
- Seek best grasses and herbs
- Traditionally sheep move freely on alpine pasture
- Conflicts



Aim of project - partner

- Project partners
 - Freeholder
 - Sheepfarmer
 - Sheep breeding association
 - Tourism
 - Community
 - Operator of the cableway
 - Hunting society
 - Local agricultural authority
 - AREC Raumberg-Gumpenstein
 - LEADER

Aim of project – scientific support

- Effect on plant population
- Effect on forage yield
- Animal performance
- Animal health



The innovative management system

- A large flock
- Shepherd with dogs
- Fenced during night
- Herding during day
 - on the ski slopes
 - alpine meadows
- No selection of plants



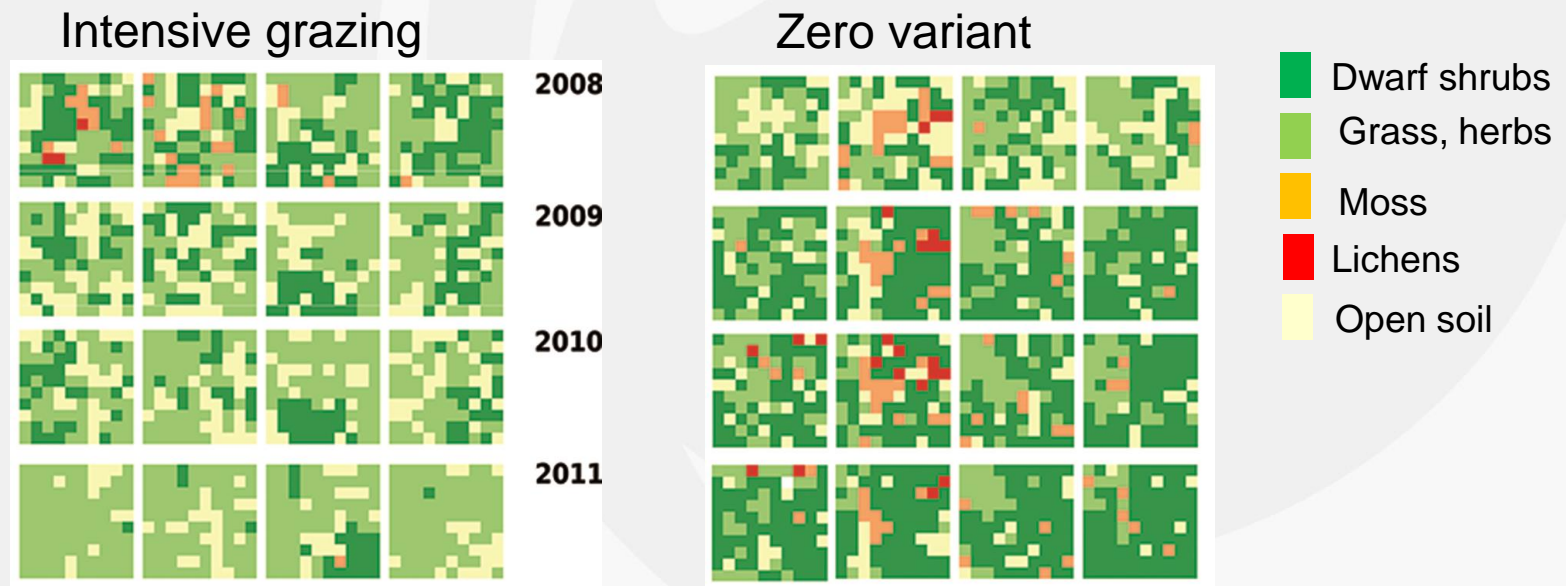
Some results - management

- Sheep – dog, new situation
- Large flock – lambs missed their mother
- Sheep was insider
- Difficult herding in the alpine area
- Difficult weather situations
- Lambing sheep



Some results - plants

- Dwarf shrubs were pushed back
30% **→** 5 % (zero variant surface 30% **→** 70 %)
- Grasses and herbs increased
40 % **→** 65 %
- Forage yield increased 880 **→** 1500 kgDM






Some results – animal performance

- Grazing period 104 d
- 4914 sheep in six years
- Total consumption approx. 4 million kg biomass
- Average daily gains of lambs 90 – 210 g



Some results – meat quality

- Carcass not so fleshy - E U R O P   alpine lamb
- Low proportion of fat  fattening lamb
- Higher proportion of valuable fatty acids
- No difference in tenderness



Some results – animal health

- Problems with hoof
- Problems with parasites
- Poisonous plants
- 4 – 8.4 % lambs and 1 – 2.6 % ewes died



Summay

- Sheep are very usefull for sustainable use of alpine cultural landscape
- Sheep herding in alpine areas is difficult
- Don't herd them too close
- Animal performance is low
- Meat quality is high - PUFA
- More stakeholder benefit from a large flock of sheep

