How to adapt land-use regimes with ongoing climate change?

SUSALPS
Sustainable use of alpine and pre-alpine grassland soils in a changing climate

UNIVERSITÄT BAYREUTH
DISTURBANCE ECOLOGY

Introduction & Background:

- **Pastures are dominant** agriculture in mountain regions
- **Climate change is more severe** in mountain regions
- Trend towards **more sustainable land-use** regimes

Method:

1. Simulation of climate change by downslope translocation
2. Two contrasting land-use regimes
3. **Forage quantity & quality** assesed

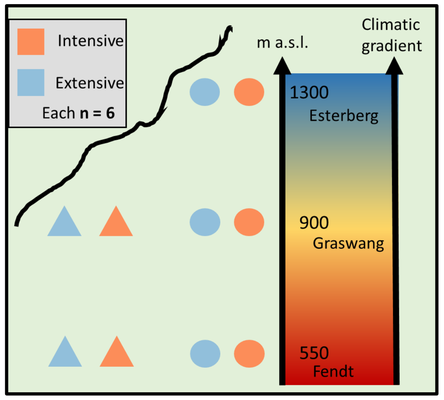

Fig. 1: Experimental set-up scheme

Results:

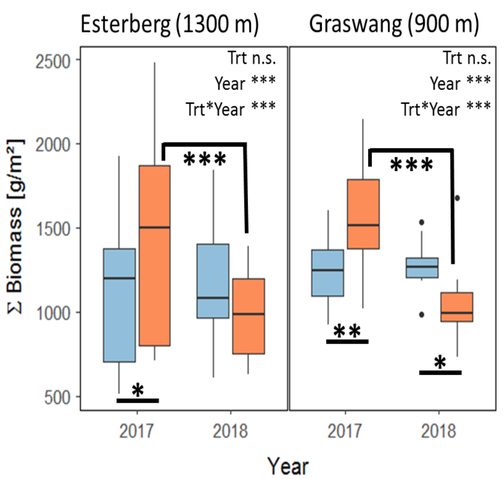

Fig. 2: Drop of production in 2018 of intensive managed communites

Production under **intensive** management **suffers** from **drought** spells, whereas **extensive** is more **resistant.**

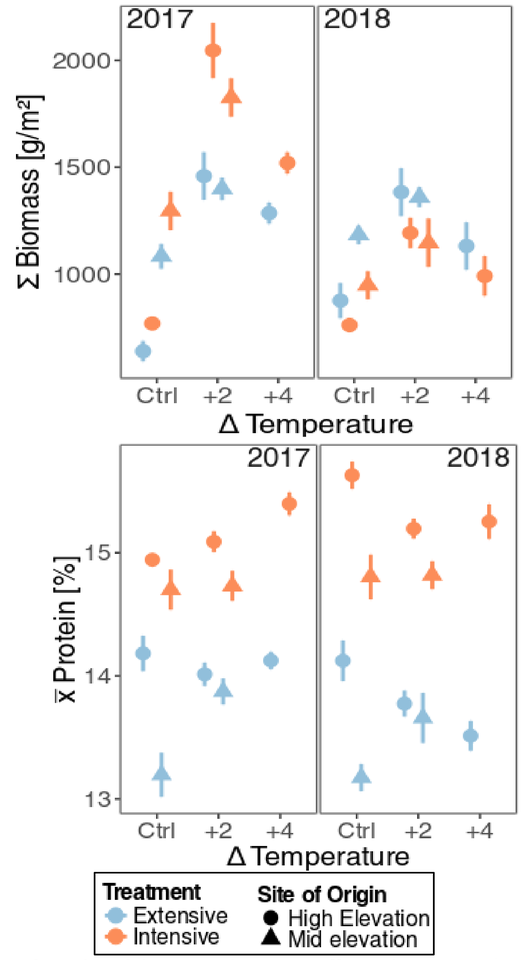

Fig. 3: Climate change effect is strongly influenced by community.

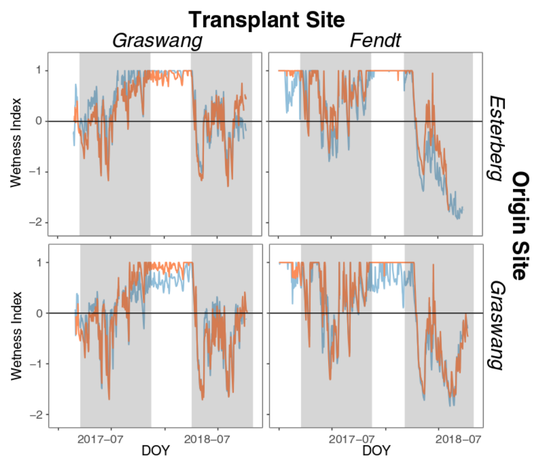

Fig. 4: In 2018 more time with insufficient water supply (Wet-Index<0)

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