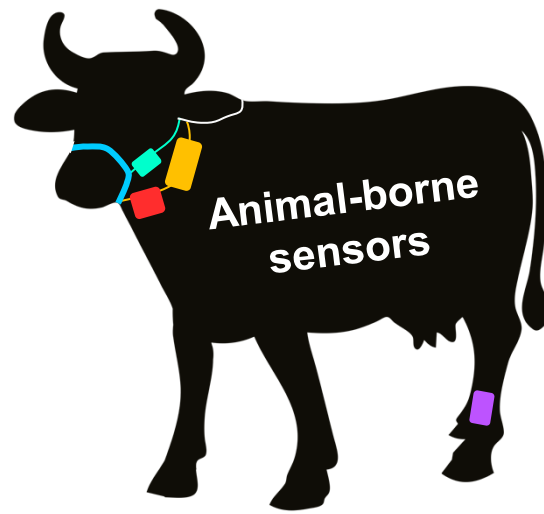




# Lifting the secrets of pastures: Animal-borne sensors uncover processes unobserved by classical grassland research



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## ABSTRACT

On pastures, **plant-herbivore-interactions** are a major driver of vegetation characteristics. Classical grassland research do not account for these ecological **processes**, but measure its **endpoints** on the vegetation site only. Animal-borne sensors allow to gain **insight into underlying processes** and to **understand the reciprocal relationship**.

## EXAMPLE

**Process:** foraging behaviour of hardy Highland cattle and productive breeds

**Endpoint:** long-term impact on pasture vegetation

- Highland cattle **use the space more evenly**  
→ less overused, nutrient-rich areas in their pastures.
- Highland cattle **select plant species less strictly** and **brows more shrubs**  
→ less grazing adapted or woody species in their pastures
- Highland cattle **take less steps** (i.e., less trampling pressure)  
→ less trampling adapted species, less vegetation free soil, less soil compaction

