SustAInimal Grazing Living Lab –
a quantitative analysis of grazing management among dairy farms in Northern Sweden

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Dairy farms in the survey

• Northern Sweden – latitude 62°– 67°
• 308* farms (53 with organic production)
• Approx. 21 000 milking cows
• 71 cows/farm on average (8–350 cows)
• 58% of the farms have loose housing system
• 201 millions of kg raw milk in total (15.5% organic milk)

*All dairy farms in the region
Questionnaire

- One page questionnaire
- Answers between December 2021 and February 2022
- 98% response rate
Use of agricultural land at dairy farms in northern Sweden, %

- Temporary grasslands, ley 1–4 years: 61% (61)
- Temporary grasslands, ley >4 years: 15% (15)
- Cereals, mainly barley and oat: 12% (12)
- Other, e.g. fodder rape: 3% (3)
- Fallow: 2% (2)
- Semi-natural grasslands: 2% (2)
- Forest grazing: 1% (1)

Questionnaire, Dec 2020–Feb 2021
Swedish grazing policy framework*

Northern Sweden, May 1–October 1
• 60 days, of which 30 days between June 1 and August 31

Central Sweden, April 1–October 31
• 90 days, of which 60 days between May 1 and September 15

Southern Sweden, April 1–October 31
• 120 days, of which 60 days between May 1 and September 15

*Cattle used for conventional milk production
Distance and grazing time

Average distance from barn to paddock
- Dairy cows 0.5 km (0–1.5)
- Heifers and drying-off cows 3.5 km (0–25)

Average amount of grazing hours per day
- 13.5 hours (7–24 hours)

Number of grazing months per year
- 2–2.5 months – 30%
- 3–3.5 months – 39%
- 4–5 months – 31%
Grazing strategies in temporary grasslands

**Continuous grazing**
The grazing area is available for all cows the whole grazing season.

**Rotational grazing**
The grazing area is divided into several paddocks. The cows are grazing one paddock at a time and moved between paddocks.

**Compartmented continuous grazing**
The total grazing area is large, but the actual grazing area is controlled by moving the fence at certain intervals.

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405 answers in total, some dairy farms use a combination of grazing strategies
Rotational grazing and compartmented continuous grazing

45% of dairy farms mainly use rotational grazing

30% of dairy farms mainly use compartmented continuous grazing
Seed mixtures

Forage mixtures (62% of the farms)
- Red clover, timothy (34%)
- Red clover, timothy, meadow fescue (32%)
- Red clover, white clover, timothy (6%)
- Red clover, white clover, timothy, meadow fescue (6%)
- Forage mixtures, but not specified (22%)

Grazing mixtures (33% of the farms)
- White clover, timothy, meadow fescue, smooth-stalked meadow grass (33%)
- White clover, timothy, meadow fescue, perennial ryegrass, smooth-stalked meadow grass, red fescue (15%)
- Grazing mixtures, but not specified (52%)

Open answers from 77% of the dairy farms

Red clover (Trifolium pratense L.)
White clover (Trifolium repens L.)
Timothy (Phleum pratense L.)
Meadow fescue (Festuca pratensis Huds.)
Smooth-stalked meadow grass (Poa pratensis L.)
Red fescue (Festuca rubra L.)
Temporary grasslands for grazing

- Average age of temporary grasslands before ploughing: 4.6 years (variation 2–11 years)
- Share of farms that apply re-sowing: 24.2%
- Share of farms that apply mowing: 82.4%
- Average number of mowings per season: 1.8
Temporary grasslands for grazing – challenges, %

- Too wet – trampling damages: 30%
- Lack of land: 17%
- Drought and lack of shadow: 12%
- Weeds, e.g. docks: 10%
- Fencing – time and labour consuming: 10%
- Seasonal grass growth variation: 8%
- Winter damages: 6%
- Keeping milk production at high level: 5%
- Cows prefer to stay inside: 2%
- Internal parasites: 1%

Open answers from 75% of the dairy farms