

Management of grassland by Jersey male calves nursed by ex-milking cows

A.L. Nielsen and A.B. Hald, Natlan, Agro Business Park, Niels Pedersens Allé 2, DK-8830 Tjele
T. B. Nissen, Organic Advisory Center, Silkeborgvej 260, DK-8230 Åbyhøj

To manage some of the semi-natural grassland Jersey male calves with ex-milking cows as aunts is an alternative to suckler cows or groups of heifers from dairy cattle.

Comparing the effect of different management systems on *Cirsium arvense* (L.) Scop. grazing with Jersey alone was unsuccessful. Summer grazing combined with trimmings was a better alternative.

Introduktion

Jersey male calves are usually killed just after birth, but if two calves are coupled in the right way to an ex-milking cow the Jerseys can manage on some of the semi-natural grasslands.

Aim

- To examine grazing with Jersey at semi-natural grassland
- To compare the ability of six different management regimes to reduce *C. arvense* to make room for a higher biodiversity (2008-2010)

Site

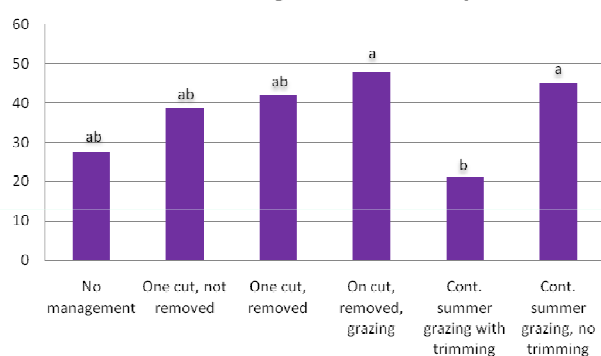
Soil: Mainly mineral soil – from wet to dry.

Management plots

- T1: No management
- T2: One cut, not removed
- T3: One cut, removed
- T4: One cut, removed, grazing
- T5: Continuous summer grazing with trimming
- T6: Continuous summer grazing, no trimming



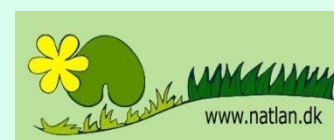
Shoots of *Cirsium arvense* per square meter at different managements, late May 2010



In the figure one cut is about 7. June. Trimmings were about 10. June, 16. July and 5. September in the two previous years, where no significant difference was found.

Yield	Kg	Pieces	Price	DKR
Small calf, 70 kg live weight		-1,035	1042	-1078
Ex-milking cow, 452 kg lw-> slw	190	-0,5	19	-1803
Jersey grass calf, 205 kg lw-> slw	98	1	28	2755
Cow at slaughter, 420 kg lw-> slw	176	0,5	17	1400
Yield in total				1273
Costs:				
Feed and litter				204
Transportation				188
Vet. and miscellaneous				150
Costs in total				542
Gross margin per produced calf				731

In the table: The margin for Jersey grass calves with 750 grams daily gain in a 180 days grazing system.



Results and conclusion

- The cattle group of Jersey calves with aunts (ex-milking cows) seems to be a useful resource in the management of the easier semi-natural grassland. Here they can substitute some of the extensive types of suckler cattle, which can then move on to more difficult swards, e.g. with more low digestible forage.
- Difficult species like *C. arvense* can not be removed by the cattle alone, but it seems that a combination of trimming and continuous summer grazing is a possible strategy when this species occur in substantial amounts.
- A reasonable economy could be obtained for the farmer if the meat is getting a good price and the grassland is available for no cost, e.g. areas belonging to the municipality.