

generative or vegetative, bitten by the steers or not, and the distance to the nearest flowering *J. eff.* or *J. con.* was measured.

Results and Discussion

The number of flowering forbs was not related to sward height in general but in the sward with a high botanical diversity more flowering forbs were observed at low compared to high grazing intensity (Table 2). While heavy grazing led to increased species density at low initial density (area E), heavy grazing at high initial density led to decreased species density (Hald, 2000). Green sward height seemed more sensitive to grazing intensity than CSH at swards with low diversity, but was a more laborious method. In plots with bitten *D. cae.* in E-Low CSH was signif. lower (11cm) than in plots with unbitten plants (20 cm). A similar difference was not found for *J. eff./J. con.* Grazing intensity significantly changed the distance to nearest flowering *J. eff.* or *J. con.* (Table 3).

Perspectives

A support system for grassland management in nature conservation areas should be developed to include different types of swards and target situations. An optimal system will include botanical and zoological interest combined with specific plant trait measurements in the sward as well as animal performances.

Table 2. Number of flowering forbs, CSH and Green height (cm), and frequency of bitten *J. effusus* / *J. conglomeratus* and *D. caespitosa* (and frequency of the species) measured in the 30x30 cm squares at the fourth year of grazing.

Area	Grazing intensity	Flowering forbs	---Sward height---		-----Freq. bitten (freq. of species)-----			
			CSH	Green	<i>J. eff./J. con.</i>	<i>D. caespitosa</i>		
E	High	0.13	9.2	15.0	100	(9.6)	100	(17.3)
	Low	0.08	10.9	25.2	100	(1.9)	83	(78.9)
LSD		ns	ns	6.1	-	ns	ns	(29.5)
W	High	0.51	7.3	14.4	50	(7.7)	-	(0)
	Low	1.22	12.8	25.9	63	(31.3)	-	(0)
LSD		0.29	2.3	4.7	ns	ns	-	-

Table 3. Distance to nearest flowering *J. effusus* or *J. conglomeratus* in area W.

Grazing intensity	0-25 cm	25-50 cm	50-100 cm	100-200 cm	>200 cm	Number of observations
High	2	3	10	9	27	51
Low	17	11	5	12	6	51

Acknowledgements

The Danish research programmes ARL97-1 and FØJ0II supported the work.

References

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