

Fattening of lambs of different breeds on
extensively grazed grassland – first
results of possibilities and limitations

Ecosystems-Products-Conservation

Joint Conference on Plant and Animal Genetic Resources
Role of animal and plant genetic resources in ecosystems

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Kozard, Hungary

Bi  **Institut**

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Background

- Intensive fattening:
 - Usually in stable, high amounts of grain
 - Lambs should be not older than 5 month
 - Slaughter weight 42-45 kg
- Differences organically and konventionally produced meat????
- Grazing of (alpine) grassland as landscape management
 - Unfavorable locations?, less productive grassland?
- Alternatives?
 - Switzerland: pasture on the Alps
 - Engadiner lambs, Walliser Schwarznasen lambs
 - Lamb fattening with reduced amounts of grain
 - Motherbound fattening with endangered breeds
 - Short grass pasture

Fattening lambs – short grass pasture

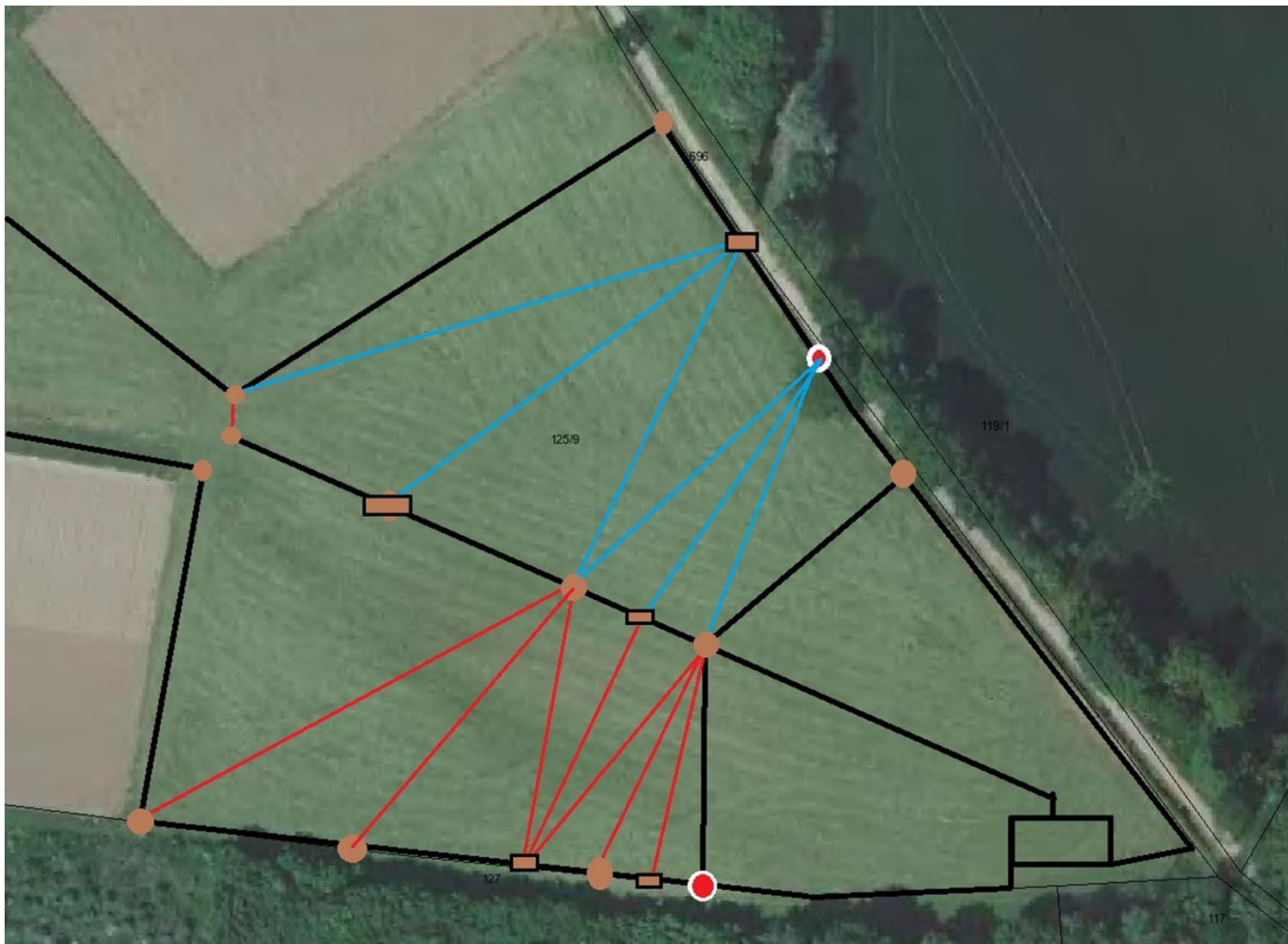
- 20 Merino Lambs (je 2017 und 2018)
- 20 Waldschaf Lambs (je 2017 und 2018)

- Merino lambs: weaned lambs:
 - 10 Tage adaption to pasture
 - Then pasture in Stadl Paura
- Waldschaf: weaned lambs:
 - Pasture in Stadl Paura after slaughter of the Merino lambs.

Fattening lambs – short grass pasture

- 2 Groups (stocking rate, growing height)
 - Normal
 - Long
- Normal: growing height: 6-7 cm (Rising Plate Meter)
- Long: adjustment of the pasture area of Normal resulted in adjustment of Long by a factor of 1,2
- Measuring of growing height: weakly
- weighting: weakly
- slaughter: Merino lambs: Juli
- Waldschaf lambs: Oktober

Weideplan



24.04.2017



29.4.2017



24.5.2017



19. Juni 2017



23. Juni 2017



28.6.2017



16.8.2017



16.08.2017 meadow sage (*salvia pratensis*)



16.08.2017 yarrow (*aquillea millefolium*)



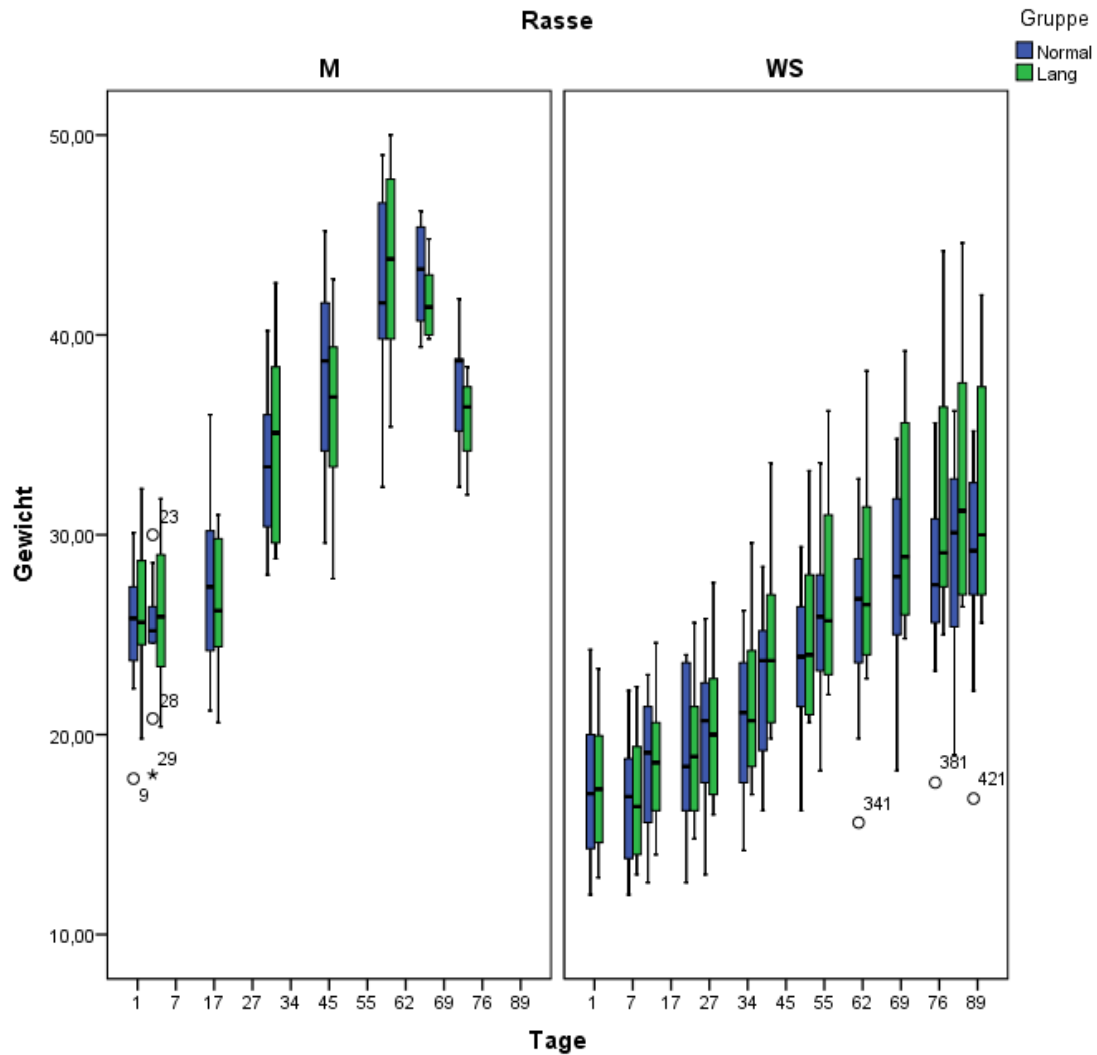
Grassland

		29.05.17	21.06.17	10.08.17	29.09.17	31.10.17
Growing height cm	Normal	6,2	2,1	5,9	3,9	2,9
	Long	7,6	5,4	10,3	5,3	5,2
Yield kg/ha	Normal	1997	220	1017	1771	311
	Long	2153	560	1849	2062	484
	20.04.17	29.05.17	21.06.17	10.08.17	29.09.17	31.10.17
TM	944	945		940	940	942
xP	197	194		178	181	252
xF	142	190		225	224	157
NDF	320	300		399	383	316
ADF	218	239		304	301	244
ADL	30	32		40	41	48
NEL	7,5	6,47		6,17	6,33	6,83
ME	12,0	10,66		10,21	10,49	11,20

Plant inventory (area percent)

	4.5.17	29.5.17	21.6.17	10.8.17	20.9.17	31.10.17
Gaps	0	3	70	0	15	8
Grass	18	17	20	40	15	42
Legumes	70	60	5	25	30	20
Herbs	12	20	5	35	40	30
Total	100	100	100	100	100	100

weights



Life age (days)

		days		months	
		N	L	N	L
Merino	Start of pasture	74	78	2,5	2,6
	Slouughter	144	145	4,81	4,83
Waldschaf	Start of pasture	123	120	4,1	4,0
	Slouughter	204	201	6,8	6,7

Performance and output

Merino

	Ha (ø)	Weight gain (ø kg)	Pasture days	Carcasse (ø kg)	Carcasses kg/ha
Normal	0,274	14,8	67	17,53	639,8
Long	0,327	14,0	67	17,73	542,2

Waldschaf

	Ha (ø)	Weight gain (ø kg)	Pasture days	Carcasse (ø kg)	Carcasses kg/ha
Normal	0,392	11,2	89	11,21	286,0
Long	0,435	14,9	89	14,46	332,4

Comparison of „extensive“ fattening trials

	Pasture on the alps				Reduced grain			Mother bound		Pasture fattening			
	Engardiner		Walliser Sch.		Ad lib	50% KGS	50% GS	IdF	WS	M	N	L	N
	Good	Poor	Good	Poor									
Duration (d)	63	63	63	63	74,4	89,1	81,7	128	128	67	67	89	89
Dwg	132	68	143	73	315	277	296	180	151	220,3	215,1	113,5	167
Weight Past.	36	36	36	36	17,3	17,3	17,3	15,3	13,5	24,9	26,1	17	16,9
Weight Sl.					40,6	41,8	40,9	38,3	32,9	39,8	40,1	28,3	31,8
carcasse	20,5	17	19	15,5	18,7	18,1	17,1	18,4	15,3	17,8	18,1	12,8	14,7
Weight gain					23,3	24,5	23,6	23	19,4	14,8	14	11,2	14,9
Dressing perc.	45	42	42,3	38	47,6	45,7	44,6	47,1	45,6	44,5	44,9	45	46,3

Willems, H. et al., 2013, Agrarforschung Schweiz 4 (1): 4-9.

Jilg, Dr. Thomas (2008): Lämmermast mit reduziertem Kraftfuttereinsatz auf der Basis von Grassilage, Versuchsbericht Nr. 2 2008, LVVG Aulendorf

Problems und Questions

- Which breed to which fattening system?
 - Motherbound pasture fattening
 - advantage: no stress of weaning
 - Disadvantage: fattening finished before jung rams are able to mate
 - Enough pasture area
 - Weaned lambs
 - Time for weaning and changes of feeding stuff
- Weather conditions
- Selective eating behaviour (different to cows), grass growth heights
- Quality of pasture, maintenance of pasture, etc.
- Parasites

