

Integrating coupled surface–subsurface modeling and field measurements: insights for rewetting a degraded fen peatland

Nariman Mahmoodi¹, Ottfried Dietrich¹, Jürgen Pickert², Christoph Merz¹

¹ Lowland Hydrology and Water Management Group, Leibniz Centre for Agricultural Landscape Research (ZALF), Eberswalder Straße 84, 15374 Muencheberg, Germany

² Sustainable Grassland Systems Group, Leibniz Centre for Agricultural Landscape Research (ZALF), Eberswalder Straße 84, 15374 Muencheberg, Germany

Corresponding author: Nariman Mahmoodi (nariman.mahmoodi@zalf.de)

Supplementary material

Table S1. Management units and their vegetation growth stages and associated LAI and biomass measurements in the year 2015

Management Units	Date	Status						Sward height m	LAI --	FM-Biomass ¹ t FM ha-1	DM-Biomass ² t DM ha-1
		start growth	start mowing	end mowing	start grazing	end grazing	end re-mowing				
1	4/10/2015	*						0	0.0	0	0
	7/31/2015		*					60	7.6	21.3	4.5
	7/31/2015			*				0	0.0	0	0
	11/9/2015		*					40	5.0	15	4
	11/9/2015			*				0	0.0	0	0
2	4/10/2015	*						0	0.0	0	0
	6/8/2015		*					60	7.0	20.0	6.0
	6/8/2015			*				0	0.0	0	0
	7/31/2015				*			60	7.6	14.9	3.6
	9/4/2015					*		0	0.0	0	0
	10/8/2015				*			35	5.9	8.5	2.1
	10/15/2015					*		0	0.0	0	0
	11/3/2015				*			20	2.0	1.0	0.25
	11/6/2015					*		0	0.0	0	0
3	4/10/2015	*						0	0.0	0	0
	6/10/2015		*					60	7.0	20.0	6.0
	6/10/2015			*				0	0.0	0	0
	7/31/2015		*					60	7.6	21.3	4.5

	7/31/2015		*		20	2.0	1.0	0.25
	11/9/2015	*			35	6.0	8.5	2.10
	11/9/2015		*		0	0.0	0	0
4	4/10/2015	*			0	0	0	0
	6/30/2015			*	60	7.0	20.6	6.2
	7/31/2015			*	20	2.0	1.0	0.25
	8/3/2015				0	0.0	0	0
	9/25/2015			*	30	6.3	12.8	2.6
	10/15/2015			*	0	0.0	0	0
	11/3/2015			*	20	2.0	1.0	0.25
	11/6/2015			*	0	0.0	0	0
5	4/10/2015	*			0	0.0	0	0
	6/10/2015	*			60	7.6	21.3	4.5
	6/10/2015		*		0	0.0	0	0
	7/31/2015	*			60	7.6	21.3	4.5
	7/31/2015		*		0	0.0	0	0
	10/15/2015			*	45	7.1	20	4
	11/3/2015			*	20	2.0	1.0	0.25
	11/11/2015			*	0	0.0	0	0
6	4/10/2015	*			0	0.0	0	0
	6/10/2015	*			60	7.6	21.3	4.5
	6/10/2015		*		0	0.0	0	0
	7/31/2015	*			60	7.6	21.3	4.5
	7/31/2015		*		0	0.0	0	0
	11/10/2015	*			30	6.0	12	3
	11/10/2015		*		0	0.0	0	0
7	4/10/2015	*			0	0.0	0	0
	6/10/2015	*			60	7.6	21.3	4.5
	6/10/2015		*		0	0.0	0	0
	7/31/2015	*			60	7.6	21.3	4.5
	7/31/2015		*		0	0.0	0	0
	10/15/2015			*	45	7.1	15	4
	11/3/2015			*	20	2.0	1.0	0.25
	11/11/2015			*	0	0.0	0	0
8	4/10/2015	*			0	0.0	0	0
	5/21/2015			*	50	5.5	10.5	2.5
	6/17/2015			*	0	0.0	0	0
	9/4/2015			*	35	7.5	15.1	3.4
	9/24/2015			*	0	0.0	0	0
	11/10/2015	*			30	6.0	12	3
	11/10/2015		*		0	0.0	0	0

¹ Fresh Matter Biomass

² Dry Matter Biomass

