

Supplementary Materials

Table S1. Location of local MET Office weather stations for each farm in the study.

Farm	Weather station location	Approximate distance from farm (km)
A	Cardiff Bute Park, Wales	11.7
B	Oxford, South East	26.0
C	Ross-on-Wye, West Midlands	12.7
D	Ross-on-Wye, West Midlands	23.8

Table S2. Univariable analyses of the associations with the presence of WLD for 5672 foot-level observations of 400 sheep.

Variable	<i>n</i>	%	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						
< 4 years	3528	62.2	ref			
≥ 4 years	2144	37.8	1.36	1.14	1.63	0.001
BCS						
3.0	2816	49.6	ref			
< 3.0	828	14.6	0.66	0.54	0.80	<0.001
> 3.0	2028	35.8	1.28	1.10	1.49	<0.001
<i>Foot-level variables</i>						
Foot position						
Front	2836	50.0	ref			
Back	2836	50.0	1.27	1.14	1.42	<0.001
Other feet affected by WLD						
None	1372	24.2	ref			
One other	1844	32.5	2.86	2.45	3.35	<0.001
Two others	1535	27.1	4.07	3.46	4.79	<0.001
Three others	921	16.2	9.24	7.60	11.25	<0.001
Clinical disease						
No FR disease present	5204	91.7	ref			
ID and/or SFR present	468	8.3	2.05	1.65	2.56	<0.001
<i>Farm-level variables</i>						
Flock size						
< 500 ewes	1364	24.0	ref			
≥ 500 ewes	4308	76.0	0.99	0.57	1.74	0.982
Vaccination status						
Flock not vaccinated against footrot (Footvax®)	2816	49.6	ref			
Flock vaccinated against footrot (Footvax®)	2856	50.4	0.76	0.51	1.13	0.174
Soil type						
Loamy	1364	24.0	ref			
Clay	2856	50.4	0.94	0.53	1.66	0.819
Loamy/clay mix	1452	25.6	1.12	0.58	2.16	0.736
Pasture moisture (calendar month of visit) (<i>n</i> = 4512)						
Dry (“hard”)	996	22.1	ref			
Damp (“firm”)	2064	45.7	1.88	1.59	2.23	<0.001

Wet (“squelchy”)	1452	32.2	2.38	1.92	2.94	<0.001
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture moisture (lagged to previous calendar month)						
Dry (“hard”)	1604	28.3	ref			
Damp (“firm”)	2140	37.7	0.86	0.74	1.00	0.054
Wet (“squelchy”)	768	13.5	1.96	1.59	2.42	<0.001
Saturated (“boggy”)	1160	20.5	1.72	1.45	2.03	<0.001
Pasture quality (calendar month of visit) (n = 4512)						
Lush (~ 90% leafy rye grasses)	2812	62.3	ref			
Average (~ 50% rye grasses)	1700	37.7	1.23	1.01	1.49	0.041
Poor (mostly stalk and weeds)	0	0.0	-	-	-	-
Pasture quality (lagged to previous calendar month)						
Lush (~ 90% leafy rye grasses)	2516	44.4	ref			
Average (~ 50% rye grasses)	2760	48.7	0.92	0.73	1.18	0.528
Poor (mostly stalk and weeds)	396	7.0	2.53	1.78	3.60	<0.001
Pasture type (calendar month of visit) (n = 4512)						
Permanent grassland	1008	22.3	ref			
New grass ley	752	16.7	2.01	1.56	2.60	<0.001
Mix permanent and new ley	2752	61.0	2.30	1.87	2.84	<0.001
Pasture type (lagged to previous calendar month)						
Permanent grassland	1768	31.2	ref			
New grass ley	3584	63.2	0.66	0.52	0.83	<0.001
Mix permanent and new ley	320	5.6	0.23	0.17	0.32	<0.001
Sward height (calendar month of visit) (n = 4512)						
Approx. 3 cm	1876	41.6	ref			
Approx. 8 cm	2324	51.5	2.48	2.15	2.86	<0.001
Approx. > 8 cm	312	6.9	5.50	4.04	7.48	<0.001
Sward height (lagged to previous calendar month)						
Approx. 3 cm	2068	36.5	ref			
Approx. 8 cm	3208	56.6	1.19	1.02	1.38	0.027
Approx. > 8 cm	396	7.0	0.41	0.32	0.53	<0.001
Rainfall (calendar month of visit)	4512	100.0	0.99	0.99	0.99	<0.001
Rainfall (lagged to previous calendar month)	5672	100.0	1.03	1.03	1.03	<0.001
Temperature (calendar month of visit)	4512	100.0	0.87	0.85	0.89	<0.001
Temperature (lagged to previous calendar month)	5672	100.0	0.95	0.94	0.96	<0.001

Table S3. Univariable analyses of the associations with the number of feet affected by WLD for 1086 sheep-level observations of 396 ewes affected by WLD.

Variable	<i>n</i>	%	β	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						0.001
< 4 years	672	61.9	ref			
≥ 4 years	414	38.1	0.29	0.11	0.46	
BCS¹						0.005
3.0	523	48.2	ref			
< 3.0	149	13.7	-0.26	-0.49	-0.03	
> 3.0	414	38.1	0.18	0.00	0.37	
Clinical disease						<0.001
No feet with FR disease present	920	84.7	ref			
≥ 1 feet with ID and/or SFR present	166	15.3	0.35	0.16	0.54	
<i>Farm-level variables</i>						
Flock size						0.991
< 500 ewes	250	23.0	ref			
≥ 500 ewes	836	77.0	0.00	-0.75	0.75	
Vaccination status						0.341
Flock not vaccinated against footrot (Footvax®)	558	51.4	ref			
Flock vaccinated against footrot (Footvax®)	528	48.6	-0.26	-0.80	0.28	
Soil type						0.953
Loamy	545	50.2	ref			
Clay	250	23.0	0.06	-1.02	1.14	
Loamy/clay mix	291	26.8	0.11	-1.13	1.35	
Pasture moisture (calendar month of visit) (<i>n</i> = 838)						<0.001
Dry (“hard”)	159	19.0	ref			
Damp (“firm”)	394	47.0	0.52	0.31	0.73	
Wet (“squelchy”)	285	34.0	0.71	0.45	0.98	
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture moisture (lagged to previous calendar month)						<0.001
Dry (“hard”)	293	27.0	ref			
Damp (“firm”)	383	35.3	-0.15	-0.34	0.05	
Wet (“squelchy”)	162	14.9	0.59	0.32	0.86	
Saturated (“boggy”)	248	22.8	0.47	0.25	0.68	
Pasture quality (calendar month of visit) (<i>n</i> = 838)						0.176

Lush (~ 90% leafy rye grasses)	559	66.7	ref			
Average (~ 50% rye grasses)	279	33.3	0.17	-0.08	0.41	
Poor (mostly stalk and weeds)	0	0.0	-	-	-	-
Pasture quality (lagged to previous calendar month)						<0.001
Lush (~ 90% leafy rye grasses)	525	48.3	ref			
Average (~ 50% rye grasses)	473	43.6	-0.11	-0.41	0.19	
Poor (mostly stalk and weeds)	88	8.1	0.77	0.34	1.21	
Pasture type (calendar month of visit) (n = 838)						<0.001
Permanent grassland	149	17.8	ref			
New grass ley	135	16.1	0.59	0.32	0.85	
Mix permanent and new ley	554	66.1	0.74	0.54	0.94	
Pasture type (lagged to previous calendar month)						<0.001
Permanent grassland	335	30.8	ref			
New grass ley	718	66.1	-0.36	-0.64	-0.09	
Mix permanent and new ley	30	3.0	-1.09	-1.43	-0.75	
Sward height (calendar month of visit) (n = 838)						<0.001
Approx. 3 cm	296	35.3	ref			
Approx. 8 cm	474	56.6	0.79	0.62	0.96	
Approx. > 8 cm	68	8.1	1.46	1.11	1.81	
Sward height (lagged to previous calendar month)						<0.001
Approx. 3 cm	400	36.8	ref			
Approx. 8 cm	608	56.0	0.15	-0.05	0.34	
Approx. > 8 cm	78	7.2	-0.80	-1.13	-0.48	
Rainfall (calendar month of visit)	5672	100.0	-0.01	-0.01	-0.01	<0.001
Rainfall (lagged to previous calendar month)	5672	100.0	-0.12	-0.15	-0.09	<0.001
Temperature (calendar month of visit)	5672	100.0	0.03	0.02	0.03	<0.001
Temperature (lagged to previous calendar month)	5672	100.0	-0.05	-0.06	-0.04	<0.001
<i>Time variable</i>						
Visit						<0.001
1 (Sep 2019)	263	24.2	ref			
2 (Jan 2020)	329	30.3	0.99	0.81	1.17	
3 (Jul 2020)	225	20.7	-0.04	-0.22	0.14	
4 (Sep 2020)	269	24.8	1.21	1.02	1.40	

β: estimate; CI: confidence interval for estimate; bold estimates are statistically significant at 0.05 as their CIs do not include 0; ref: baseline category for comparison.

Table S4. Univariable analyses of the associations with the development of WLD at foot-level for 1014 observations of 351 ewes during transition period 1 (Sep 2019 – Jan 2020).

Variable	<i>n</i>	%	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						
< 4 years	661	65.2	ref			
≥ 4 years	353	34.8	1.72	1.04	2.83	0.033
Change in BCS						
Same condition	626	61.7	ref			
Gained condition	164	16.2	1.09	0.60	1.97	0.781
Lost condition	224	22.1	0.85	0.50	1.46	0.559
<i>Foot-level variables</i>						
Foot position						
Front	497	49.0	ref			
Back	517	51.0	1.13	0.84	1.51	0.429
Other feet develop WLD						
None	284	28.0	ref			
One other	308	30.4	2.38	1.70	3.33	<0.001
Two others	278	27.4	4.85	3.38	6.95	<0.001
Three others	144	14.2	6.63	4.14	10.62	<0.001
Clinical disease (First month of T1)						
No FR disease present	954	94.1	ref			
ID and/or SFR present	60	5.9	1.00	0.48	2.09	0.984
Clinical disease (Last month of T1)						
No FR disease present	914	90.1	ref			
ID and/or SFR present	100	9.9	1.99	1.07	3.71	0.031
<i>Farm-level variables</i>						
Flock size						
< 500 ewes	289	28.5	ref			
≥ 500 ewes	725	71.5	0.42	0.41	0.42	<0.001
Vaccination status						
Flock not vaccinated against footrot (Footvax®)	524	51.7	ref			
Flock vaccinated against footrot (Footvax®)	490	48.3	0.46	0.30	0.69	<0.001
Soil type						
Loamy	289	28.5	ref			
Clay	528	52.1	2.21	2.20	2.21	<0.001
Loamy/clay mix	197	19.4	0.74	0.74	0.74	<0.001

Pasture moisture (First month of T1)						
Dry (“hard”)	0	0.0	-	-	-	-
Damp (“firm”)	528	52.1	ref			
Wet (“squelchy”)	486	47.9	1.28	0.60	2.73	0.520
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture quality (First month of T1)						
Lush (~ 90% leafy rye grasses)	721	71.1	ref			
Average (~ 50% rye grasses)	293	28.9	0.66	0.29	1.48	0.311
Poor (mostly stalk and weeds)	0	0.0	-	-	-	-
Pasture type (First month of T1)						
Permanent grassland	293	28.9	ref			
New grass ley	289	28.5	2.63	2.62	2.64	<0.001
Mix permanent and new ley	432	42.6	1.16	1.15	1.16	<0.001
Sward height (First month of T1)						
Approx. 3 cm	293	28.9	ref			
Approx. 8 cm	721	71.1	1.52	0.68	3.39	0.311
Approx. > 8cm	0	0.0	-	-	-	-
Rainfall (calendar month of visit)	1014	100.0	1.00	0.99	1.01	0.053
Temperature (calendar month of visit)	1014	100.0	0.43	0.07	2.67	0.364

CI: confidence interval for odds ratio; bold odds ratios are statistically significant at 0.05 as their CIs do not include 1; ref: baseline category for comparison.

Table S5. Univariable analyses of the associations with the recovery from WLD at foot-level for 514 observations of 256 ewes during transition period 1 (Sep 2019 – Jan 2020).

Variable	<i>n</i>	%	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						
< 4 years	279	54.3	ref			
≥ 4 years	235	45.7	0.81	0.46	1.44	0.477
Change in BCS						
Same condition	290	56.4	ref			
Gained condition	72	14.0	1.16	0.52	2.58	0.709
Lost condition	152	29.6	0.75	0.38	1.48	0.408
<i>Foot-level variables</i>						
Foot position						
Front	267	51.9	ref			
Back	247	48.1	1.17	0.76	1.79	0.483
Other feet recover from WLD						
None	309	60.1	ref			
One other	119	23.2	1.95	1.24	3.07	0.004
Two others	65	12.6	4.38	2.42	7.94	<0.001
Three others	21	4.1	7.25	2.49	21.10	<0.001
Clinical disease (First month of T1)						
No FR disease present	467	90.9	ref			
ID and/or SFR present	47	9.1	1.39	0.59	3.25	0.447
Clinical disease (Last month of T1)						
No FR disease present	432	84.0	ref			
ID and/or SFR present	82	16.0	0.77	0.38	1.57	0.470
<i>Farm-level variables</i>						
Flock size						
< 500 ewes	83	16.1	ref			
≥ 500 ewes	431	83.9	1.83	0.61	5.47	0.283
Vaccination status						
Flock not vaccinated against footrot (Footvax®)	224	43.6	ref			
Flock vaccinated against footrot (Footvax®)	290	56.4	2.77	1.60	4.80	<0.001
Soil type						
Loamy	83	16.1	ref			
Clay	240	46.7	1.22	0.38	3.96	0.453
Loamy/clay mix	191	37.2	2.94	1.63	5.32	<0.001

Pasture moisture (First month of T1)						
Dry (“hard”)	0	0.0	-	-	-	-
Damp (“firm”)	240	46.7	ref			
Wet (“squelchy”)	274	53.3	1.65	0.68	3.97	0.267
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture quality (First month of T1)						
Lush (~ 90% leafy rye grasses)	415	80.7	ref			
Average (~ 50% rye grasses)	99	19.3	1.02	0.31	3.37	0.975
Poor (mostly stalk and weeds)	0	0.0	-	-	-	-
Pasture type (First month of T1)						
Permanent grassland	99	19.3	ref			
New grass ley	83	16.1	0.62	0.16	2.35	0.483
Mix permanent and new ley	332	64.6	1.20	0.40	3.62	0.750
Sward height (First month of T1)						
Approx. 3 cm	99	19.3	ref			
Approx. 8 cm	415	90.7	0.98	0.30	3.24	0.975
Approx. > 8cm	0	0.0	-	-	-	-
Rainfall (calendar month of visit)	514	100.0	1.02	1.01	1.02	<0.001
Temperature (calendar month of visit)	514	100.0	10.02	3.10	32.43	<0.001

CI: confidence interval for odds ratio; bold odds ratios are statistically significant at 0.05 as their CIs do not include 1; ref: baseline category for comparison.

Table S6. Univariable analyses of the associations with the development of WLD at foot-level for 530 observations of 235 ewes during transition period 2 (Jan 2020 – Jul 2020).

Variable	<i>n</i>	%	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						
< 4 years	354	66.8	ref			
≥ 4 years	176	33.2	0.81	0.46	1.43	0.465
Change in BCS						
Same condition	261	49.2	ref			
Gained condition	116	21.9	0.44	0.20	0.96	0.038
Lost condition	153	28.9	0.80	0.40	1.62	0.543
<i>Foot-level variables</i>						
Foot position						
Front	264	49.8	ref			
Back	266	50.2	1.65	1.06	2.54	0.025
Other feet develop WLD						
None	332	62.6	ref			
One other	145	27.4	2.29	1.48	3.56	<0.001
Two others	42	7.9	2.27	1.14	4.51	0.019
Three others	11	2.1	7.58	1.92	30.02	0.004
Clinical disease (First month of T2)						
No FR disease present	481	90.8	ref			
ID and/or SFR present	49	9.2	1.45	0.64	3.27	0.371
Clinical disease (Last month of T2)						
No FR disease present	523	98.7	ref			
ID and/or SFR present	7	1.3	3.58	0.50	25.68	0.204
<i>Farm-level variables</i>						
Flock size						
< 500 ewes	85	16.0	ref			
≥ 500 ewes	445	84.0	0.81	0.15	4.39	0.805
Vaccination status						
Flock not vaccinated against footrot (Footvax®)	206	38.9	ref			
Flock vaccinated against footrot (Footvax®)	324	61.1	0.35	0.12	1.01	0.053
Soil type						
Loamy	85	16.0	ref			
Clay	265	50.0	1.38	0.24	8.11	0.720
Loamy/clay mix	180	34.0	1.38	0.25	7.68	0.713

Pasture moisture (Last month of T2)						
Dry (“hard”)	0	0.0	-	-	-	-
Damp (“firm”)	350	66.0	ref			
Wet (“squelchy”)	180	34.0	1.25	0.24	6.50	0.792
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture quality (Last month of T2)						
Lush (~ 90% leafy rye grasses)	301	56.8	ref			
Average (~ 50% rye grasses)	85	16.0	0.73	0.35	1.49	0.383
Poor (mostly stalk and weeds)	144	27.2	0.17	0.08	0.36	<0.001
Pasture type (Last month of T2)						
Permanent grassland	144	27.2	ref			
New grass ley	0	0.0	-	-	-	-
Mix permanent and new ley	386	72.8	5.41	2.62	11.18	<0.001
Sward height (Last month of T2)						
Approx. 3 cm	206	38.9	ref			
Approx. 8 cm	324	61.1	0.35	0.12	1.01	0.053
Approx. > 8 cm	0	0.0	-	-	-	-
Rainfall (calendar month of visit)	530	100.0	1.00	0.97	1.04	0.880
Temperature (calendar month of visit)	530	100.0	2.16	0.02	200.44	0.739

CI: confidence interval for odds ratio; bold odds ratios are statistically significant at 0.05 as their CIs do not include 1; ref: baseline category for comparison.

Table S7. Univariable analyses of the associations with the recovery from WLD at foot-level for 762 observations of 275 ewes during transition period 2 (Jan 2020 – Jul 2020).

Variable	<i>n</i>	%	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						
< 4 years	458	60.1	ref			
≥ 4 years	304	39.9	1.18	0.71	1.97	0.530
Change in BCS						
Same condition	327	42.9	ref			
Gained condition	212	27.8	1.09	0.54	2.18	0.818
Lost condition	223	29.3	1.09	0.60	1.95	0.785
<i>Foot-level variables</i>						
Foot position						
Front	382	50.1	ref			
Back	380	49.9	0.57	0.40	0.81	0.002
Other feet recover from WLD						
None	168	22.0	ref			
One other	241	31.6	2.04	1.35	3.07	0.004
Two others	214	28.1	2.69	1.74	4.16	<0.001
Three others	139	18.2	5.82	3.36	10.07	<0.001
Clinical disease (First month of T2)						
No FR disease present	649	85.2	ref			
ID and/or SFR present	113	14.8	0.62	0.34	1.11	0.107
Clinical disease (Last month of T2)						
No FR disease present	747	98.0	ref			
ID and/or SFR present	15	2.0	0.32	0.08	1.39	0.129
<i>Farm-level variables</i>						
Flock size						
< 500 ewes	195	25.6	ref			
≥ 500 ewes	567	74.4	0.84	0.25	2.84	0.774
Vaccination status						
Flock not vaccinated against footrot (Footvax®)	418	54.9	ref			
Flock vaccinated against footrot (Footvax®)	344	45.1	1.88	0.78	4.52	0.159
Soil type						
Loamy	195	25.6	ref			
Clay	391	51.3	1.12	0.31	4.05	0.863
Loamy/clay mix	176	23.1	0.82	0.23	2.96	0.761

Pasture moisture (Last month of T2)						
Dry (“hard”)	0	0.0	-	-	-	-
Damp (“firm”)	586	76.9	ref			
Wet (“squelchy”)	176	23.1	0.80	0.23	2.78	0.722
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture quality (Last month of T2)						
Lush (~ 90% leafy rye grasses)	399	52.4	ref			
Average (~ 50% rye grasses)	195	25.6	1.76	1.01	3.07	0.045
Poor (mostly stalk and weeds)	168	22.0	4.08	2.17	7.68	<0.001
Pasture type (Last month of T2)						
Permanent grassland	168	22.0	ref			
New grass ley	0	0.0	-	-	-	-
Mix permanent and new ley	594	78.0	0.30	0.15	0.60	0.001
Sward height (Last month of T2)						
Approx. 3 cm	418	54.9	ref			
Approx. 8 cm	344	45.1	1.99	0.84	4.73	0.120
Approx. > 8 cm	0	0.0	-	-	-	-
Rainfall (calendar month of visit)	762	100.0	1.00	0.97	1.02	0.725
Temperature (calendar month of visit)	762	100.0	1.12	0.05	25.94	0.944

CI: confidence interval for odds ratio; bold odds ratios are statistically significant at 0.05 as their CIs do not include 1; ref: baseline category for comparison.

Table S8. Univariable analyses of the associations with the development of WLD at foot-level for 815 observations of 286 ewes during transition period 3 (Jul 2020 – Sep 2020).

Variable	<i>n</i>	%	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						
< 4 years	505	62.0	ref			
≥ 4 years	310	38.0	1.80	1.09	2.98	0.022
Change in BCS						
Same condition	363	44.5	ref			
Gained condition	210	25.8	1.79	0.97	3.27	0.060
Lost condition	242	29.7	1.22	0.69	2.16	0.499
<i>Foot-level variables</i>						
Foot position						
Front	380	46.6	ref			
Back	435	53.4	2.31	1.60	3.35	<0.001
Other feet develop WLD						
None	204	25.0	ref			
One other	233	28.6	4.06	2.71	6.08	<0.001
Two others	237	29.1	3.53	2.37	5.26	<0.001
Three others	141	17.3	11.07	6.37	19.23	<0.001
Clinical disease (First month of T3)						
No FR disease present	807	99.0	ref			
ID and/or SFR present	8	1.0	6.67	0.44	100.45	0.170
Clinical disease (Last month of T3)						
No FR disease present	727	89.2	ref			
ID and/or SFR present	88	10.8	2.69	1.20	6.01	0.016
<i>Farm-level variables</i>						
Flock size						
< 500 ewes	208	25.5	ref			
≥ 500 ewes	607	74.5	0.85	0.47	1.54	0.597
Vaccination status						
Flock not vaccinated against footrot (Footvax®)	367	45.0	ref			
Flock vaccinated against footrot (Footvax®)	448	55.0	0.80	0.48	1.34	0.392
Soil type						
Loamy	208	25.5	ref			
Clay	402	49.3	0.73	0.39	1.36	0.322
Loamy/clay mix	205	25.2	1.15	0.56	2.35	0.703

Pasture moisture (First month of T3)						
Dry (“hard”)	610	74.8	ref			
Damp (“firm”)	205	25.2	1.37	0.78	2.41	0.267
Wet (“squelchy”)	0	0.0	-	-	-	-
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture moisture (Last month of T3)						
Dry (“hard”)	0	0.0	-	-	-	-
Damp (“firm”)	610	74.8	ref			
Wet (“squelchy”)	205	25.2	1.37	0.78	2.41	0.267
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture quality (First month of T3)						
Lush (~ 90% leafy rye grasses)	364	44.7	ref			
Average (~ 50% rye grasses)	208	25.5	1.05	0.73	1.50	0.791
Poor (mostly stalk and weeds)	243	29.8	0.67	0.48	0.94	0.019
Pasture quality (Last month of T3)						
Lush (~ 90% leafy rye grasses)	607	74.5	ref			
Average (~ 50% rye grasses)	208	25.5	1.29	0.74	2.26	0.372
Poor (mostly stalk and weeds)	0	0.0	-	-	-	-
Pasture type (First month of T3)						
Permanent grassland	243	29.8	ref			
New grass ley	0	0.0	-	-	-	-
Mix permanent and new ley	572	70.2	1.51	1.12	2.06	0.008
Pasture type (Last month of T3)						
Permanent grassland	243	29.8	ref			
New grass ley	0	0.0	-	-	-	-
Mix permanent and new ley	572	70.2	1.90	1.11	3.26	0.020
Sward height (First month of T3)						
Approx. 3 cm	367	45.0	ref			
Approx. 8 cm	448	55.0	0.85	0.59	1.21	0.359
Approx. > 8 cm	0	0.0	-	-	-	-
Sward height (Last month of T3)						
Approx. 3 cm	656	80.5	ref			
Approx. 8 cm	0	0.0	-	-	-	-
Approx. > 8 cm	159	19.5	1.16	0.62	2.16	0.646
Rainfall (calendar month of visit)	815	100.0	1.01	1.01	1.01	0.297
Temperature (calendar month of visit)	815	100.0	1.23	0.72	2.11	0.454

CI: confidence interval for odds ratio; bold odds ratios are statistically significant at 0.05 as their CIs do not include 1; ref: baseline category for comparison.

Table S9. Univariable analyses of the associations with the recovery from WLD at foot-level for 401 observations of 200 ewes during transition period 3 (Jul 2020 – Sep 2020).

Variable	<i>n</i>	%	Odds ratio	Lower 95% CI	Upper 95% CI	<i>p</i>
<i>Sheep-level variables</i>						
Age						
< 4 years	271	67.6	ref			
≥ 4 years	130	32.4	0.34	0.11	1.02	0.055
Change in BCS						
Same condition	177	44.1	ref			
Gained condition	130	32.4	0.46	0.15	1.36	0.161
Lost condition	94	23.4	1.09	0.35	3.41	0.877
<i>Foot-level variables</i>						
Foot position						
Front	228	56.9	ref			
Back	173	43.1	0.51	0.26	1.03	0.060
Other feet recover from WLD						
None	274	68.3	ref			
One other	82	20.4	6.63	3.84	11.46	<0.001
Two others	34	8.5	6.81	3.11	14.88	<0.001
Three others	11	2.7	12.29	3.09	48.85	<0.001
Clinical disease (First month of T3)						
No FR disease present	389	97.0	ref			
ID and/or SFR present	12	3.0	1.21	1.21	1.21	<0.001
Clinical disease (Last month of T3)						
No FR disease present	339	84.5	ref			
ID and/or SFR present	62	15.5	0.16	0.05	0.58	0.005
<i>Farm-level variables</i>						
Flock size						
< 500 ewes	96	23.9	ref			
≥ 500 ewes	305	49.4	0.48	0.16	1.42	0.185
Vaccination status						
Flock not vaccinated against footrot (Footvax®)	245	61.1	ref			
Flock vaccinated against footrot (Footvax®)	156	38.9	1.47	0.41	5.25	0.552
Soil type						
Loamy	96	23.9	ref			
Clay	198	49.4	0.60	0.19	1.91	0.391
Loamy/clay mix	107	26.7	0.32	0.09	1.18	0.088

Pasture moisture (First month of T3)						
Dry (“hard”)	294	73.3	ref			
Damp (“firm”)	107	26.7	0.48	0.17	1.35	0.162
Wet (“squelchy”)	0	0.0	-	-	-	-
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture moisture (Last month of T3)						
Dry (“hard”)	0	0.0	-	-	-	-
Damp (“firm”)	294	73.3	ref			
Wet (“squelchy”)	107	26.7	0.48	0.17	1.35	0.162
Saturated (“boggy”)	0	0.0	-	-	-	-
Pasture quality (First month of T3)						
Lush (~ 90% leafy rye grasses)	256	63.8	ref			
Average (~ 50% rye grasses)	96	23.9	1.80	1.09	2.97	0.021
Poor (mostly stalk and weeds)	49	12.2	3.39	1.81	6.36	<0.001
Pasture quality (Last month of T3)						
Lush (~ 90% leafy rye grasses)	305	76.1	ref			
Average (~ 50% rye grasses)	96	23.9	2.14	0.73	6.30	0.168
Poor (mostly stalk and weeds)	0	0.0	-	-	-	-
Pasture type (First month of T3)						
Permanent grassland	49	12.2	ref			
New grass ley	0	0.0	-	-	-	-
Mix permanent and new ley	352	87.8	0.35	0.18	0.70	0.003
Pasture type (Last month of T3)						
Permanent grassland	49	12.2	ref			
New grass ley	0	0.0	-	-	-	-
Mix permanent and new ley	352	87.8	0.19	0.05	0.72	0.015
Sward height (First month of T3)						
Approx. 3 cm	245	61.1	ref			
Approx. 8 cm	156	38.9	1.40	0.57	3.40	0.465
Approx. > 8 cm	0	0.0	-	-	-	-
Sward height (Last month of T3)						
Approx. 3 cm	252	62.8	ref			
Approx. 8 cm	0	0.0	-	-	-	-
Approx. > 8 cm	149	37.2	0.41	0.16	1.09	0.074
Rainfall (calendar month of visit)	401	100.0	0.97	0.97	0.98	<0.001
Temperature (calendar month of visit)	401	100.0	2.17	0.77	6.15	0.144

CI: confidence interval for odds ratio; bold odds ratios are statistically significant at 0.05 as their CIs do not include 1; ref: baseline category for comparison.