

This is an appendix to the paper by McLean *et al.* 1999 Scrapie transmission in Britain: a recipe for a mathematical model. *Proc. R. Soc. Lond. B* **266**, 2531-2538.

Electronic appendices are refereed with the paper. However, no attempt has been made to impose a uniform editorial style on the appendix.

Electronic Appendix A

Cross tabulations of farm distributions across risk groups. Expected numbers are shown in italics. Cells where observed is greater than expected are shown in bold. All distributions are significantly different from expected by χ^2 analysis.

Table A1 Cross tabulation of farm size with other factors

Size quartile	L/U/H			P/C/PC			Region										Proportion home bred						Lamb in groups						
	L	U	H	P	C	PC	EM	ER	NE	NW	SC	SE	Sh	SW	W	WM	YH	1	2	3	4	5	6	1	2	3	4	5	6
1	756 650	241 296	343 394	223 140	964 998	127 175	85 72	37 25	58 93	99 140	258 291	92 70	42 26	254 195	303 348	153 127	118 111	318 310	206 278	286 278	385 267	156 293	152 77	34 17	549 619	100 98	31 24	519 566	204 113
2	798 694	325 316	308 420	121 154	1167 1094	152 192	86 76	34 27	84 99	158 149	286 308	71 74	27 28	231 206	312 368	146 134	151 118	404 329	349 295	279 295	244 283	247 311	72 82	16 18	584 670	104 107	28 26	664 612	159 122
3	672 679	348 310	380 411	101 150	1129 1067	174 187	84 76	18 27	116 99	172 148	270 307	66 74	26 28	202 205	385 367	131 134	112 118	333 328	339 294	317 293	236 282	315 310	49 81	13 18	643 663	105 105	25 25	679 606	73 121
4	422 624	293 285	572 378	146 147	944 1045	286 184	46 76	17 27	132 99	157 149	400 308	62 74	15 28	125 206	450 368	99 134	84 118	241 329	267 295	278 294	251 283	508 311	49 82	9 18	846 670	108 107	16 26	534 612	42 122

Table A2 Cross tabulation of region with other factors

Region	L/U/H			P/C/PC			Proportion homebred						Lamb in groups						Rams bought					Ewes bought		
	L	U	H	P	C	PC	1	2	3	4	5	6	1	2	3	4	5	6	0	1	2	3	4	0	1	2
EM	210 128	39 58	15 77	22 30	241 217	22 38	91 62	78 56	62 56	40 54	19 59	11 15	6 4	60 127	27 20	7 5	165 116	31 23	90 91	75 59	64 62	37 29	37 63	147 176	63 49	93 79
ER	90 45	2 21	1 27	15 11	74 81	18 14	21 22	21 20	27 20	18 19	14 21	5 5	2 1	17 45	9 7	10 2	45 41	22 8	38 32	30 21	16 22	8 10	15 22	61 62	18 17	28 28
NE	164 161	61 73	107 97	31 37	260 266	59 47	119 81	80 72	78 72	42 70	61 76	10 20	4 5	200 165	30 26	5 6	126 150	18 30	104 119	62 76	85 80	41 38	104 82	200 230	69 64	127 103
NW	208 248	125 113	177 150	70 57	372 409	96 72	143 121	128 108	89 108	96 105	116 114	14 30	8 8	337 250	31 40	10 10	170 228	26 46	170 180	119 116	130 121	60 57	119 124	302 347	107 96	189 155
SC	203 495	337 225	478 299	133 113	768 808	162 142	244 250	191 224	201 224	226 216	275 236	74 61	10 16	695 505	104 81	18 19	285 461	62 92	302 367	181 235	235 248	141 116	360 253	788 707	151 196	280 316
SE	258 129	4 59	4 78	39 30	212 214	31 38	78 60	58 54	45 54	51 52	39 57	20 15	3 4	86 122	19 20	9 5	132 111	35 22	124 89	44 57	48 60	26 28	53 61	176 171	35 47	84 77
Sh	1 48	2 22	96 29	15 8	48 60	16 11	6 23	1 20	11 20	32 19	36 21	23 6	0 1	91 46	8 7	0 2	6 42	1 8	46 33	26 21	23 23	9 11	7 23	99 64	8 18	4 29
SW	605 368	87 167	66 222	54 82	642 585	74 103	125 168	167 150	209 150	153 145	122 158	36 41	13 11	179 342	49 55	9 13	452 312	94 62	298 248	183 159	174 167	55 78	112 170	458 477	142 132	222 213
W	314 603	393 274	533 364	144 124	870 887	153 155	185 298	155 267	245 267	323 257	445 281	90 73	17 19	679 600	89 96	16 23	522 548	73 109	383 441	274 282	310 297	143 139	352 303	968 848	201 235	293 380
WM	375 236	82 107	28 142	35 53	410 376	50 66	137 109	162 98	98 98	66 94	43 103	22 27	17 7	100 224	33 36	7 9	297 205	68 41	204 162	110 104	95 109	43 51	87 112	256 313	95 87	188 140
YH	238 204	78 93	104 123	34 45	327 319	59 56	141 96	112 86	88 86	66 83	46 90	11 23	5 6	180 197	22 32	9 8	194 180	48 36	146 141	117 91	104 95	37 45	65 97	210 272	126 75	133 122

Table A3 Cross tabulation of proportion home bred with other factors

Proportion home- bred	L/U/H			P/C/PC			Lamb in groups						Rams bought					Ewes bought		
	L	U	H	P	C	PC	1	2	3	4	5	6	0	1	2	3	4	0	1	2
1	746	283	152	43	1086	33	42	406	105	24	564	99	456	219	277	116	228	464	252	580
	573	261	346	124	883	155	15	534	85	20	489	97	387	252	265	123	269	749	209	338
2	668	257	88	35	908	135	2	346	83	19	585	100	346	241	247	124	203	398	237	526
	492	224	297	115	819	144	13	489	78	19	447	89	347	226	237	111	241	671	187	303
3	540	257	180	51	812	176	7	394	73	20	521	103	328	262	255	102	213	504	281	375
	474	216	287	111	789	138	13	482	76	18	441	88	346	226	237	110	241	671	187	303
4	374	207	355	164	614	202	7	512	61	24	382	97	301	248	226	111	230	773	202	141
	454	207	275	105	745	131	13	467	74	18	427	85	333	217	228	106	232	645	180	291
5	231	164	668	220	629	168	7	778	68	11	276	52	231	214	257	133	391	1180	33	13
	516	235	312	109	773	136	14	514	81	20	470	93	366	239	250	117	254	709	197	320
6	86	37	155	78	148	22	7	181	25	2	66	25	214	38	20	12	38	312	6	4
	135	61	82	27	188	33	4	132	21	5	121	24	96	63	66	31	67	186	52	84

Table A4 Cross tabulation of Lambing groups with other factors

Lamb in groups	L/U/H			P/C/PC			Rams bought					Ewes bought		
	L	U	H	P	C	PC	0	1	2	3	4	0	1	2
1	39	14	18	7	63	4	59	10	9	2	6	54	12	20
	35	16	21	8	56	10	26	17	18	8	18	50	14	23
2	576	496	1173	302	1590	304	720	439	507	266	706	1765	341	532
	1098	493	653	236	1665	295	783	515	538	253	550	1525	422	691
3	177	105	83	28	306	45	127	75	83	48	90	230	71	122
	179	80	106	41	287	51	126	83	86	41	88	245	68	111
4	54	22	10	16	55	21	31	24	24	10	12	51	20	30
	42	19	25	10	70	12	30	20	21	10	21	58	16	26
5	1453	470	224	167	1769	292	677	520	541	237	436	1177	437	797
	1050	472	625	239	1689	299	715	470	492	231	503	1394	386	631
6	305	63	41	63	333	63	208	130	88	25	31	274	101	107
	200	90	119	49	348	62	143	94	98	46	101	279	77	126