Total number of Cow–calf pairs (dil = 1E+06)

Month	Manual	Model	dil
Jan	9.01	9.01	0
Feb	9.01	9.01	0
Mar	9.01	9.01	0
Apr	9.01	9.01	0
May	9.01	9.01	0
Jun	9.01	9.01	0
Jul	9.01	9.01	0
Aug	9.01	9.01	0
Sep	9.01	9.01	0
Oct	9.01	9.01	0
Nov	9.01	9.01	0
Dec	9.01	9.01	0

Animal Units by month of Cow−calf pairs (dil = 1E+06)

Month	Manual	Model	dil
Jan	10.3615	10.3615	0
Feb	12.1635	12.1635	0
Mar	12.5239	12.5239	0
Apr	12.8843	12.8843	0
May	13.2447	13.2447	0
Jun	13.6051	13.6051	0
Jul	13.9655	13.9655	0
Aug	14.3259	14.3259	0
Sep	14.6863	14.6863	0
Oct	9.0100	9.0100	0
Nov	9.4605	9.4605	0
Dec	9.9110	9.9110	0

Cow−calf pairs on pasture without stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	2.201382	2.201382	0
Feb	2.584231	2.584231	0
Mar	7.982404	7.982404	0
Apr	8.212113	8.212113	0
May	8.441822	8.441822	0
Jun	11.562043	11.562043	0
Jul	8.901241	8.901241	0
Aug	9.130951	9.130951	0
Sep	9.360660	9.360660	0
Oct	1.914245	1.914245	0
Nov	2.009958	2.009958	0
Dec	2.105670	2.105670	0

Cow−calf pairs on pasture with stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.3403686	0.3403686	0
Feb	0.3995632	0.3995632	0
Mar	1.2342063	1.2342063	0
Apr	1.2697230	1.2697230	0
May	1.3052397	1.3052397	0
Jun	1.7876753	1.7876753	0
Jul	1.3762732	1.3762732	0
Aug	1.4117899	1.4117899	0
Sep	1.4473066	1.4473066	0
Oct	0.2959727	0.2959727	0
Nov	0.3107714	0.3107714	0
Dec	0.3255700	0.3255700	0

Cow–calf pairs on pasture in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.04862409	0.04862409	0
Feb	0.05708045	0.05708045	0
Mar	0.17631518	0.17631518	0
Apr	0.18138900	0.18138900	0
May	0.18646282	0.18646282	0
Jun	0.25538218	0.25538218	0
Jul	0.19661046	0.19661046	0
Aug	0.20168427	0.20168427	0
Sep	0.20675809	0.20675809	0
Oct	0.04228182	0.04228182	0
Nov	0.04439591	0.04439591	0
Dec	0.04651000	0.04651000	0

Cow–calf pairs in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	7.771125	7.771125	0
Feb	9.122625	9.122625	0
Mar	3.130975	3.130975	0
Apr	3.221075	3.221075	0
May	3.311175	3.311175	0
Jun	0.000000	0.000000	NA
Jul	0.000000	0.000000	NA
Aug	0.000000	0.000000	NA
Sep	0.000000	0.000000	NA
Oct	6.757500	6.757500	0
Nov	7.095375	7.095375	0
Dec	7.433250	7.433250	0

Cow–calf pairs in forest without stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.000000	0.000000	NA
Feb	0.000000	0.000000	NA
Mar	0.000000	0.000000	NA
Apr	0.000000	0.000000	NA
May	0.000000	0.000000	NA
Jun	0.000000	0.000000	NA
Jul	3.141784	3.141784	0
Aug	3.222862	3.222862	0
Sep	3.303940	3.303940	0
Oct	0.000000	0.000000	NA
Nov	0.000000	0.000000	NA
Dec	0.000000	0.000000	NA

Cow−calf pairs in forest on land without stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.0000000	0.0000000	NA
Feb	0.0000000	0.0000000	NA
Mar	0.0000000	0.0000000	NA
Apr	0.0000000	0.0000000	NA
May	0.0000000	0.0000000	NA
Jun	0.0000000	0.0000000	NA
Jul	0.2194179	0.2194179	0
Aug	0.2250803	0.2250803	0
Sep	0.2307427	0.2307427	0
Oct	0.0000000	0.0000000	NA
Nov	0.0000000	0.0000000	NA
Dec	0.0000000	0.0000000	NA

Cow–calf pairs in forest in stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.0000000	0.0000000	NA
Feb	0.0000000	0.0000000	NA
Mar	0.0000000	0.0000000	NA
Apr	0.0000000	0.0000000	NA
May	0.0000000	0.0000000	NA
Jun	0.0000000	0.0000000	NA
Jul	0.1301734	0.1301734	0
Aug	0.1335328	0.1335328	0
Sep	0.1368921	0.1368921	0
Oct	0.0000000	0.0000000	NA
Nov	0.0000000	0.0000000	NA
Dec	0.0000000	0.0000000	NA

Bacteria on pasture without stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	5646545527	5646545527	0
Feb	6628553445	6628553445	0
Mar	20474865086	20474865086	0
Apr	21064069836	21064069836	0
May	21653274587	21653274587	0
Jun	29656639117	29656639117	0
Jul	22831684088	22831684088	0
Aug	23420888839	23420888839	0
Sep	24010093590	24010093590	0
Oct	4910039589	4910039589	0
Nov	5155541568	5155541568	0
Dec	5401043548	5401043548	0

Bacteria on pasture with stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	873045554	873045554	0
Feb	1024879564	1024879564	0
Mar	3165739097	3165739097	0
Apr	3256839503	3256839503	0
May	3347939908	3347939908	0
Jun	4585387085	4585387085	0
Jul	3530140720	3530140720	0
Aug	3621241125	3621241125	0
Sep	3712341531	3712341531	0
Oct	759170047	759170047	0
Nov	797128550	797128550	0
Dec	835087052	835087052	0

Bacteria on pasture in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	124720793	124720793	0
Feb	146411366	146411366	0
Mar	452248442	452248442	0
Apr	465262786	465262786	0
May	478277130	478277130	0
Jun	655055298	655055298	0
Jul	504305817	504305817	0
Aug	517320161	517320161	0
Sep	530334504	530334504	0
Oct	108452864	108452864	0
Nov	113875507	113875507	0
Dec	119298150	119298150	0

Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	7.771125	7.771125	0
Feb	9.122625	9.122625	0
Mar	3.130975	3.130975	0
Apr	3.221075	3.221075	0
May	3.311175	3.311175	0
Jun	0.000000	0.000000	NA
Jul	0.000000	0.000000	NA
Aug	0.000000	0.000000	NA
Sep	0.000000	0.000000	NA
Oct	6.757500	6.757500	0
Nov	7.095375	7.095375	0
Dec	7.433250	7.433250	0

Bacteria in forest on land with and without stream access (dil = 1E+06)

Month	Manual	Model	dil
Jan	0	0	NA
Feb	0	0	NA
Mar	0	0	NA
Apr	0	0	NA
May	0	0	NA
Jun	0	0	NA
Jul	8621482001	8621482001	0
Aug	8843971859	8843971859	0
Sep	9066461717	9066461717	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in forest in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	0	0	NA
Feb	0	0	NA
Mar	0	0	NA
Apr	0	0	NA
May	0	0	NA
Jun	0	0	NA
Jul	333894874	333894874	0
Aug	342511516	342511516	0
Sep	351128158	351128158	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	124720793	124720793	0
Feb	146411366	146411366	0
Mar	452248442	452248442	0
Apr	465262786	465262786	0
May	478277130	478277130	0
Jun	655055298	655055298	0
Jul	838200691	838200691	0
Aug	859831677	859831677	0
Sep	881462663	881462663	0
Oct	108452864	108452864	0
Nov	113875507	113875507	0
Dec	119298150	119298150	0

Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	72359501	72359501	0
Feb	84943763	84943763	0
Mar	262381844	262381844	0
Apr	269932401	269932401	0
May	277482958	277482958	0
Jun	380044686	380044686	0
Jul	292584071	292584071	0
Aug	300134628	300134628	0
Sep	307685184	307685184	0
Oct	62921306	62921306	0
Nov	66067371	66067371	0
Dec	69213436	69213436	0

Accum for Forest (dil = 1E+06)

Month	Manual	Model	dil
Jan	0	0	NA
Feb	0	0	NA
Mar	0	0	NA
Apr	0	0	NA
May	0	0	NA
Jun	0	0	NA
Jul	4063861	4063861	0
Aug	4168735	4168735	0
Sep	4273609	4273609	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	651235513	651235513	0
Feb	764493863	764493863	0
Mar	2361436600	2361436600	0
Apr	2429391610	2429391610	0
May	2497346620	2497346620	0
Jun	3420402173	3420402173	0
Jul	2633256640	2633256640	0
Aug	2701211650	2701211650	0
Sep	2769166660	2769166660	0
Oct	566291751	566291751	0
Nov	594606338	594606338	0
Dec	622920926	622920926	0

SQOLIM for Forest (dil = 1E+06)

Month	Manual	Model	dil
Jan	0	0	NA
Feb	0	0	NA
Mar	0	0	NA
Apr	0	0	NA
May	0	0	NA
Jun	0	0	NA
Jul	36574753	36574753	0
Aug	37518617	37518617	0
Sep	38462482	38462482	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA