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

Month	Manual	Model	dil
Jan	0.87	0.87	0
Feb	0.87	0.87	0
Mar	0.87	0.87	0
Apr	0.87	0.87	0
May	0.87	0.87	0
Jun	0.87	0.87	0
Jul	0.87	0.87	0
Aug	0.87	0.87	0
Sep	0.87	0.87	0
Oct	0.87	0.87	0
Nov	0.87	0.87	0
Dec	0.87	0.87	0

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

Month	Manual	Model	dil
Jan	1.0005	1.0005	0
Feb	1.1745	1.1745	0
Mar	1.2093	1.2093	0
Apr	1.2441	1.2441	0
May	1.2789	1.2789	0
Jun	1.3137	1.3137	0
Jul	1.3485	1.3485	0
Aug	1.3833	1.3833	0
Sep	1.4181	1.4181	0
Oct	0.8700	0.8700	0
Nov	0.9135	0.9135	0
Dec	0.9570	0.9570	0

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

Month	Manual	Model	dil
Jan	0.1182693	0.1182693	0
Feb	0.1388379	0.1388379	0
Mar	0.4288548	0.4288548	0
Apr	0.4411960	0.4411960	0
May	0.4535371	0.4535371	0
Jun	0.6211710	0.6211710	0
Jul	0.4782194	0.4782194	0
Aug	0.4905606	0.4905606	0
Sep	0.5029017	0.5029017	0
Oct	0.1028429	0.1028429	0
Nov	0.1079850	0.1079850	0
Dec	0.1131272	0.1131272	0

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

Month	Manual	Model	dil
Jan	0.1153737	0.1153737	0
Feb	0.1354387	0.1354387	0
Mar	0.4183551	0.4183551	0
Apr	0.4303941	0.4303941	0
May	0.4424331	0.4424331	0
Jun	0.6059629	0.6059629	0
Jul	0.4665111	0.4665111	0
Aug	0.4785501	0.4785501	0
Sep	0.4905891	0.4905891	0
Oct	0.1003250	0.1003250	0
Nov	0.1053412	0.1053412	0
Dec	0.1103575	0.1103575	0

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

Month	Manual	Model	dil
Jan	0.01648196	0.01648196	0
Feb	0.01934839	0.01934839	0
Mar	0.05976502	0.05976502	0
Apr	0.06148488	0.06148488	0
May	0.06320473	0.06320473	0
Jun	0.08656612	0.08656612	0
Jul	0.06664445	0.06664445	0
Aug	0.06836430	0.06836430	0
Sep	0.07008416	0.07008416	0
Oct	0.01433214	0.01433214	0
Nov	0.01504875	0.01504875	0
Dec	0.01576535	0.01576535	0

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

Month	Manual	Model	dil
Jan	0.750375	0.750375	0
Feb	0.880875	0.880875	0
Mar	0.302325	0.302325	0
Apr	0.311025	0.311025	0
May	0.319725	0.319725	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	0.652500	0.652500	0
Nov	0.685125	0.685125	0
Dec	0.717750	0.717750	0

Cow–calf pairs on land for forest 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	0.3337129	0.3337129	0
Aug	0.3423249	0.3423249	0
Sep	0.3509368	0.3509368	0
Oct	0.0000000	0.0000000	NA
Nov	0.0000000	0.0000000	NA
Dec	0.0000000	0.0000000	NA

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

Month	Manual	Model	dil
Jan	0.000000000	0.000000000	NA
Feb	0.000000000	0.000000000	NA
Mar	0.000000000	0.000000000	NA
Apr	0.000000000	0.000000000	NA
May	0.000000000	0.000000000	NA
Jun	0.000000000	0.000000000	NA
Jul	0.002141561	0.002141561	0
Aug	0.002196827	0.002196827	0
Sep	0.002252094	0.002252094	0
Oct	0.000000000	0.000000000	NA
Nov	0.000000000	0.000000000	NA
Dec	0.000000000	0.000000000	NA

Cow−calf pairs in stream for forest (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.000000000	0.000000000	NA
Feb	0.000000000	0.000000000	NA
Mar	0.000000000	0.000000000	NA
Apr	0.000000000	0.000000000	NA
May	0.000000000	0.000000000	NA
Jun	0.000000000	0.000000000	NA
Jul	0.001270518	0.001270518	0
Aug	0.001303305	0.001303305	0
Sep	0.001336093	0.001336093	0
Oct	0.000000000	0.000000000	NA
Nov	0.000000000	0.000000000	NA
Dec	0.000000000	0.000000000	NA

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

Month	Manual	Model	dil
Jan	303360800	303360800	0
Feb	356119200	356119200	0
Mar	1100012639	1100012639	0
Apr	1131667679	1131667679	0
May	1163322719	1163322719	0
Jun	1593303678	1593303678	0
Jul	1226632799	1226632799	0
Aug	1258287839	1258287839	0
Sep	1289942879	1289942879	0
Oct	263792000	263792000	0
Nov	276981600	276981600	0
Dec	290171200	290171200	0

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

Month	Manual	Model	dil
Jan	295933597	295933597	0
Feb	347400310	347400310	0
Mar	1073080957	1073080957	0
Apr	1103960984	1103960984	0
May	1134841012	1134841012	0
Jun	1554294719	1554294719	0
Jul	1196601067	1196601067	0
Aug	1227481094	1227481094	0
Sep	1258361122	1258361122	0
Oct	257333563	257333563	0
Nov	270200241	270200241	0
Dec	283066919	283066919	0

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

Month	Manual	Model	dil
Jan	42276228	42276228	0
Feb	49628616	49628616	0
Mar	153297280	153297280	0
Apr	157708712	157708712	0
May	162120145	162120145	0
Jun	222042103	222042103	0
Jul	170943010	170943010	0
Aug	175354442	175354442	0
Sep	179765875	179765875	0
Oct	36761938	36761938	0
Nov	38600034	38600034	0
Dec	40438131	40438131	0

Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.750375	0.750375	0
Feb	0.880875	0.880875	0
Mar	0.302325	0.302325	0
Apr	0.311025	0.311025	0
May	0.319725	0.319725	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	0.652500	0.652500	0
Nov	0.685125	0.685125	0
Dec	0.717750	0.717750	0

Bacteria on land for forest 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	861466747	861466747	0
Aug	883698147	883698147	0
Sep	905929547	905929547	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in stream 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	3258878	3258878	0
Aug	3342978	3342978	0
Sep	3427078	3427078	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	42276228	42276228	0
Feb	49628616	49628616	0
Mar	153297280	153297280	0
Apr	157708712	157708712	0
May	162120145	162120145	0
Jun	222042103	222042103	0
Jul	174201888	174201888	0
Aug	178697420	178697420	0
Sep	183192953	183192953	0
Oct	36761938	36761938	0
Nov	38600034	38600034	0
Dec	40438131	40438131	0

Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	68884413	68884413	0
Feb	80864311	80864311	0
Mar	249780873	249780873	0
Apr	256968812	256968812	0
May	264156751	264156751	0
Jun	361792919	361792919	0
Jul	278532628	278532628	0
Aug	285720567	285720567	0
Sep	292908506	292908506	0
Oct	59899490	59899490	0
Nov	62894464	62894464	0
Dec	65889439	65889439	0

Accum for Forest (dil = 1E+06)

Month	Manual	Model	dil
Jan	0.0	0.0	NA
Feb	0.0	0.0	NA
Mar	0.0	0.0	NA
Apr	0.0	0.0	NA
May	0.0	0.0	NA
Jun	0.0	0.0	NA
Jul	770611.6	770611.6	0
Aug	790498.4	790498.4	0
Sep	810385.1	810385.1	0
Oct	0.0	0.0	NA
Nov	0.0	0.0	NA
Dec	0.0	0.0	NA

SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	619959721	619959721	0
Feb	727778803	727778803	0
Mar	2248027857	2248027857	0
Apr	2312719307	2312719307	0
May	2377410756	2377410756	0
Jun	3256136273	3256136273	0
Jul	2506793654	2506793654	0
Aug	2571485103	2571485103	0
Sep	2636176552	2636176552	0
Oct	539095409	539095409	0
Nov	566050180	566050180	0
Dec	593004950	593004950	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	6935505	6935505	0
Aug	7114485	7114485	0
Sep	7293466	7293466	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA