

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

Month	Manual	Model	dil
Jan	5.3	5.3	0
Feb	5.3	5.3	0
Mar	5.3	5.3	0
Apr	5.3	5.3	0
May	5.3	5.3	0
Jun	5.3	5.3	0
Jul	5.3	5.3	0
Aug	5.3	5.3	0
Sep	5.3	5.3	0
Oct	5.3	5.3	0
Nov	5.3	5.3	0
Dec	5.3	5.3	0

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

Month	Manual	Model	dil
Jan	6.095	6.095	0
Feb	7.155	7.155	0
Mar	7.367	7.367	0
Apr	7.579	7.579	0
May	7.791	7.791	0
Jun	8.003	8.003	0
Jul	8.215	8.215	0
Aug	8.427	8.427	0
Sep	8.639	8.639	0
Oct	5.300	5.300	0
Nov	5.565	5.565	0
Dec	5.830	5.830	0

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

Month	Manual	Model	dil
Jan	1.417087	1.417087	0
Feb	1.663537	1.663537	0
Mar	5.138482	5.138482	0
Apr	5.286352	5.286352	0
May	5.434222	5.434222	0
Jun	7.442790	7.442790	0
Jul	5.729962	5.729962	0
Aug	5.877832	5.877832	0
Sep	6.025702	6.025702	0
Oct	1.232250	1.232250	0
Nov	1.293862	1.293862	0
Dec	1.355475	1.355475	0

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

Month	Manual	Model	dil
Jan	0.09332969	0.09332969	0
Feb	0.10956094	0.10956094	0
Mar	0.33842156	0.33842156	0
Apr	0.34816031	0.34816031	0
May	0.35789906	0.35789906	0
Jun	0.49018375	0.49018375	0
Jul	0.37737656	0.37737656	0
Aug	0.38711531	0.38711531	0
Sep	0.39685406	0.39685406	0
Oct	0.08115625	0.08115625	0
Nov	0.08521406	0.08521406	0
Dec	0.08927188	0.08927188	0

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

Month	Manual	Model	dil
Jan	0.01333281	0.01333281	0
Feb	0.01565156	0.01565156	0
Mar	0.04834594	0.04834594	0
Apr	0.04973719	0.04973719	0
May	0.05112844	0.05112844	0
Jun	0.07002625	0.07002625	0
Jul	0.05391094	0.05391094	0
Aug	0.05530219	0.05530219	0
Sep	0.05669344	0.05669344	0
Oct	0.01159375	0.01159375	0
Nov	0.01217344	0.01217344	0
Dec	0.01275313	0.01275313	0

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

Month	Manual	Model	dil
Jan	4.57125	4.57125	0
Feb	5.36625	5.36625	0
Mar	1.84175	1.84175	0
Apr	1.89475	1.89475	0
May	1.94775	1.94775	0
Jun	0.00000	0.00000	NA
Jul	0.00000	0.00000	NA
Aug	0.00000	0.00000	NA
Sep	0.00000	0.00000	NA
Oct	3.97500	3.97500	0
Nov	4.17375	4.17375	0
Dec	4.37250	4.37250	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	2.020697	2.020697	0
Aug	2.072844	2.072844	0
Sep	2.124991	2.124991	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	0.00000000	0.00000000	NA
Feb	0.00000000	0.00000000	NA
Mar	0.00000000	0.00000000	NA
Apr	0.00000000	0.00000000	NA
May	0.00000000	0.00000000	NA
Jun	0.00000000	0.00000000	NA
Jul	0.02074562	0.02074562	0
Aug	0.02128099	0.02128099	0
Sep	0.02181636	0.02181636	0
Oct	0.00000000	0.00000000	NA
Nov	0.00000000	0.00000000	NA
Dec	0.00000000	0.00000000	NA



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

Month	Manual	Model	dil
Jan	0.00000000	0.00000000	NA
Feb	0.00000000	0.00000000	NA
Mar	0.00000000	0.00000000	NA
Apr	0.00000000	0.00000000	NA
May	0.00000000	0.00000000	NA
Jun	0.00000000	0.00000000	NA
Jul	0.01230769	0.01230769	0
Aug	0.01262531	0.01262531	0
Sep	0.01294293	0.01294293	0
Oct	0.00000000	0.00000000	NA
Nov	0.00000000	0.00000000	NA
Dec	0.00000000	0.00000000	NA

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

Month	Manual	Model	dil
Jan	3634829438	3634829437	0
Feb	4266973688	4266973687	0
Mar	13180207613	13180207612	0
Apr	13559494162	13559494162	0
May	13938780712	13938780712	0
Jun	19090756350	19090756350	0
Jul	14697353813	14697353812	0
Aug	15076640363	15076640362	0
Sep	15455926912	15455926912	0
Oct	3160721250	3160721250	0
Nov	3318757313	3318757313	0
Dec	3476793375	3476793375	0

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

Month	Manual	Model	dil
Jan	239390648	239390648	0
Feb	281023805	281023805	0
Mar	868051308	868051308	0
Apr	893031202	893031202	0
May	918011095	918011095	0
Jun	1257321319	1257321319	0
Jul	967970883	967970883	0
Aug	992950777	992950777	0
Sep	1017930670	1017930670	0
Oct	208165781	208165781	0
Nov	218574070	218574070	0
Dec	228982359	228982359	0

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

Month	Manual	Model	dil
Jan	34198664	34198664	0
Feb	40146258	40146258	0
Mar	124007330	124007330	0
Apr	127575886	127575886	0
May	131144442	131144442	0
Jun	179617331	179617331	0
Jul	138281555	138281555	0
Aug	141850111	141850111	0
Sep	145418667	145418667	0
Oct	29737969	29737969	0
Nov	31224867	31224867	0
Dec	32711766	32711766	0

## Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	4.57125	4.57125	0
Feb	5.36625	5.36625	0
Mar	1.84175	1.84175	0
Apr	1.89475	1.89475	0
May	1.94775	1.94775	0
Jun	0.00000	0.00000	NA
Jul	0.00000	0.00000	NA
Aug	0.00000	0.00000	NA
Sep	0.00000	0.00000	NA
Oct	3.97500	3.97500	0
Nov	4.17375	4.17375	0
Dec	4.37250	4.37250	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	5236299512	5236299512	0
Aug	5371429822	5371429822	0
Sep	5506560132	5506560132	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	31569238	31569238	0
Aug	32383928	32383928	0
Sep	33198618	33198618	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

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

Month	Manual	Model	dil
Jan	34198664	34198664	0
Feb	40146258	40146258	0
Mar	124007330	124007330	0
Apr	127575886	127575886	0
May	131144442	131144442	0
Jun	179617331	179617331	0
Jul	169850792	169850792	0
Aug	174234038	174234038	0
Sep	178617285	178617285	0
Oct	29737969	29737969	0
Nov	31224867	31224867	0
Dec	32711766	32711766	0



Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	73098492	73098492	0
Feb	85811273	85811273	0
Mar	265061489	265061489	0
Apr	272689158	272689158	0
May	280316827	280316827	0
Jun	383925994	383925994	0
Jul	295572164	295572164	0
Aug	303199833	303199833	0
Sep	310827502	310827502	0
Oct	63563906	63563906	0
Nov	66742102	66742102	0
Dec	69920297	69920297	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	1760989	1760989	0
Aug	1806433	1806433	0
Sep	1851878	1851878	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

## SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	657886430	657886430	0
Feb	772301461	772301461	0
Mar	2385553402	2385553402	0
Apr	2454202420	2454202420	0
May	2522851439	2522851439	0
Jun	3455333944	3455333944	0
Jul	2660149477	2660149477	0
Aug	2728798495	2728798495	0
Sep	2797447514	2797447514	0
Oct	572075156	572075156	0
Nov	600678914	600678914	0
Dec	629282672	629282672	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	15848897	15848897	0
Aug	16257901	16257901	0
Sep	16666905	16666905	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA