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

Month	Manual	Model	dil
Jan	21.81	21.81	0
Feb	21.81	21.81	0
Mar	21.81	21.81	0
Apr	21.81	21.81	0
May	21.81	21.81	0
Jun	21.81	21.81	0
Jul	21.81	21.81	0
Aug	21.81	21.81	0
Sep	21.81	21.81	0
Oct	21.81	21.81	0
Nov	21.81	21.81	0
Dec	21.81	21.81	0

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

Month	Manual	Model	dil
Jan	25.0815	25.0815	0
Feb	29.4435	29.4435	0
Mar	30.3159	30.3159	0
Apr	31.1883	31.1883	0
May	32.0607	32.0607	0
Jun	32.9331	32.9331	0
Jul	33.8055	33.8055	0
Aug	34.6779	34.6779	0
Sep	35.5503	35.5503	0
Oct	21.8100	21.8100	0
Nov	22.9005	22.9005	0
Dec	23.9910	23.9910	0

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

Month	Manual	Model	dil
Jan	5.956856	5.956856	0
Feb	6.992831	6.992831	0
Mar	21.600079	21.600079	0
Apr	22.221664	22.221664	0
May	22.843249	22.843249	0
Jun	31.286445	31.286445	0
Jul	24.086419	24.086419	0
Aug	24.708004	24.708004	0
Sep	25.329589	25.329589	0
Oct	5.179875	5.179875	0
Nov	5.438869	5.438869	0
Dec	5.697862	5.697862	0

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

Month	Manual	Model	dil
Jan	0.2743289	0.2743289	0
Feb	0.3220383	0.3220383	0
Mar	0.9947405	0.9947405	0
Apr	1.0233661	1.0233661	0
May	1.0519917	1.0519917	0
Jun	1.4408231	1.4408231	0
Jul	1.1092430	1.1092430	0
Aug	1.1378686	1.1378686	0
Sep	1.1664942	1.1664942	0
Oct	0.2385469	0.2385469	0
Nov	0.2504742	0.2504742	0
Dec	0.2624016	0.2624016	0

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

Month	Manual	Model	dil
Jan	0.03918984	0.03918984	0
Feb	0.04600547	0.04600547	0
Mar	0.14210578	0.14210578	0
Apr	0.14619516	0.14619516	0
May	0.15028453	0.15028453	0
Jun	0.20583187	0.20583187	0
Jul	0.15846328	0.15846328	0
Aug	0.16255266	0.16255266	0
Sep	0.16664203	0.16664203	0
Oct	0.03407813	0.03407813	0
Nov	0.03578203	0.03578203	0
Dec	0.03748594	0.03748594	0

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

Month	Manual	Model	dil
Jan	18.811125	18.811125	0
Feb	22.082625	22.082625	0
Mar	7.578975	7.578975	0
Apr	7.797075	7.797075	0
May	8.015175	8.015175	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	16.357500	16.357500	0
Nov	17.175375	17.175375	0
Dec	17.993250	17.993250	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	8.438883	8.438883	0
Aug	8.656660	8.656660	0
Sep	8.874438	8.874438	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	0.000000000	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	0.007840660	0.007840660	0
Aug	0.008042999	0.008042999	0
Sep	0.008245339	0.008245339	0
Oct	0.000000000	0.000000000	NA
Nov	0.000000000	0.000000000	NA
Dec	0.000000000	0.000000000	NA

Cow–calf pairs in forest in 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	0.004651605	0.004651605	0
Aug	0.004771647	0.004771647	0
Sep	0.004891688	0.004891688	0
Oct	0.000000000	0.000000000	NA
Nov	0.000000000	0.000000000	NA
Dec	0.000000000	0.000000000	NA

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

Month	Manual	Model	dil
Jan	15279336281	15279336281	0
Feb	17936612156	17936612156	0
Mar	55404201994	55404201994	0
Apr	56998567519	56998567519	0
May	58592933044	58592933044	0
Jun	80249731425	80249731425	0
Jul	61781664094	61781664094	0
Aug	63376029619	63376029619	0
Sep	64970395144	64970395144	0
Oct	13286379375	13286379375	0
Nov	13950698344	13950698344	0
Dec	14615017313	14615017312	0

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

Month	Manual	Model	dil
Jan	703653645	703653645	0
Feb	826028191	826028191	0
Mar	2551509302	2551509302	0
Apr	2624934030	2624934030	0
May	2698358759	2698358759	0
Jun	3695711316	3695711316	0
Jul	2845208215	2845208215	0
Aug	2918632943	2918632943	0
Sep	2992057671	2992057671	0
Oct	611872734	611872734	0
Nov	642466371	642466371	0
Dec	673060008	673060008	0

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

Month	Manual	Model	dil
Jan	100521949	100521949	0
Feb	118004027	118004027	0
Mar	364501329	364501329	0
Apr	374990576	374990576	0
May	385479823	385479823	0
Jun	527958759	527958759	0
Jul	406458316	406458316	0
Aug	416947563	416947563	0
Sep	427436810	427436810	0
Oct	87410391	87410391	0
Nov	91780910	91780910	0
Dec	96151430	96151430	0

Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	18.811125	18.811125	0
Feb	22.082625	22.082625	0
Mar	7.578975	7.578975	0
Apr	7.797075	7.797075	0
May	8.015175	8.015175	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	16.357500	16.357500	0
Nov	17.175375	17.175375	0
Dec	17.993250	17.993250	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	21665845508	21665845508	0
Aug	22224964101	22224964101	0
Sep	22784082695	22784082695	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	11931367	11931367	0
Aug	12239274	12239274	0
Sep	12547180	12547180	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	100521949	100521949	0
Feb	118004027	118004027	0
Mar	364501329	364501329	0
Apr	374990576	374990576	0
May	385479823	385479823	0
Jun	527958759	527958759	0
Jul	418389684	418389684	0
Aug	429186837	429186837	0
Sep	439983990	439983990	0
Oct	87410391	87410391	0
Nov	91780910	91780910	0
Dec	96151430	96151430	0

Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	73282852	73282852	0
Feb	86027695	86027695	0
Mar	265729992	265729992	0
Apr	273376898	273376898	0
May	281023805	281023805	0
Jun	384894281	384894281	0
Jul	296317617	296317617	0
Aug	303964523	303964523	0
Sep	311611430	311611430	0
Oct	63724219	63724219	0
Nov	66910430	66910430	0
Dec	70096641	70096641	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	9649421	9649421	0
Aug	9898439	9898439	0
Sep	10147456	10147456	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	659545664	659545664	0
Feb	774249258	774249258	0
Mar	2391569930	2391569930	0
Apr	2460392086	2460392086	0
May	2529214242	2529214242	0
Jun	3464048531	3464048531	0
Jul	2666858555	2666858555	0
Aug	2735680711	2735680711	0
Sep	2804502867	2804502867	0
Oct	573517969	573517969	0
Nov	602193867	602193867	0
Dec	630869766	630869766	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	86844791	86844791	0
Aug	89085947	89085947	0
Sep	91327103	91327103	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA