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

Month	Manual	Model	dil
Jan	11.28	11.28	0
Feb	11.28	11.28	0
Mar	11.28	11.28	0
Apr	11.28	11.28	0
May	11.28	11.28	0
Jun	11.28	11.28	0
Jul	11.28	11.28	0
Aug	11.28	11.28	0
Sep	11.28	11.28	0
Oct	11.28	11.28	0
Nov	11.28	11.28	0
Dec	11.28	11.28	0

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

Month	Manual	Model	dil
Jan	12.9720	12.9720	0
Feb	15.2280	15.2280	0
Mar	15.6792	15.6792	0
Apr	16.1304	16.1304	0
May	16.5816	16.5816	0
Jun	17.0328	17.0328	0
Jul	17.4840	17.4840	0
Aug	17.9352	17.9352	0
Sep	18.3864	18.3864	0
Oct	11.2800	11.2800	0
Nov	11.8440	11.8440	0
Dec	12.4080	12.4080	0

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

Month	Manual	Model	dil
Jan	1.264770	1.264770	0
Feb	1.484730	1.484730	0
Mar	4.586166	4.586166	0
Apr	4.718142	4.718142	0
May	4.850118	4.850118	0
Jun	6.642792	6.642792	0
Jul	5.114070	5.114070	0
Aug	5.246046	5.246046	0
Sep	5.378022	5.378022	0
Oct	1.099800	1.099800	0
Nov	1.154790	1.154790	0
Dec	1.209780	1.209780	0

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

Month	Manual	Model	dil
Jan	1.730951	1.730951	0
Feb	2.031986	2.031986	0
Mar	6.276580	6.276580	0
Apr	6.457201	6.457201	0
May	6.637822	6.637822	0
Jun	9.091257	9.091257	0
Jul	6.999064	6.999064	0
Aug	7.179685	7.179685	0
Sep	7.360306	7.360306	0
Oct	1.505175	1.505175	0
Nov	1.580434	1.580434	0
Dec	1.655692	1.655692	0

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

Month	Manual	Model	dil
Jan	0.2472787	0.2472787	0
Feb	0.2902838	0.2902838	0
Mar	0.8966542	0.8966542	0
Apr	0.9224572	0.9224572	0
May	0.9482602	0.9482602	0
Jun	1.2987510	1.2987510	0
Jul	0.9998662	0.9998662	0
Aug	1.0256692	1.0256692	0
Sep	1.0514722	1.0514722	0
Oct	0.2150250	0.2150250	0
Nov	0.2257762	0.2257762	0
Dec	0.2365275	0.2365275	0

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

Month	Manual	Model	dil
Jan	9.7290	9.7290	0
Feb	11.4210	11.4210	0
Mar	3.9198	3.9198	0
Apr	4.0326	4.0326	0
May	4.1454	4.1454	0
Jun	0.0000	0.0000	NA
Jul	0.0000	0.0000	NA
Aug	0.0000	0.0000	NA
Sep	0.0000	0.0000	NA
Oct	8.4600	8.4600	0
Nov	8.8830	8.8830	0
Dec	9.3060	9.3060	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	4.370278	4.370278	0
Aug	4.483059	4.483059	0
Sep	4.595841	4.595841	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	0.0000000000	0.0000000000	NA
Feb	0.0000000000	0.0000000000	NA
Mar	0.0000000000	0.0000000000	NA
Apr	0.0000000000	0.0000000000	NA
May	0.0000000000	0.0000000000	NA
Jun	0.0000000000	0.0000000000	NA
Jul	0.0004531384	0.0004531384	0
Aug	0.0004648323	0.0004648323	0
Sep	0.0004765262	0.0004765262	0
Oct	0.0000000000	0.0000000000	NA
Nov	0.0000000000	0.0000000000	NA
Dec	0.0000000000	0.0000000000	NA

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

Month	Manual	Model	dil
Jan	0.0000000000	0.0000000000	NA
Feb	0.0000000000	0.0000000000	NA
Mar	0.0000000000	0.0000000000	NA
Apr	0.0000000000	0.0000000000	NA
May	0.0000000000	0.0000000000	NA
Jun	0.0000000000	0.0000000000	NA
Jul	0.0002688321	0.0002688321	0
Aug	0.0002757697	0.0002757697	0
Sep	0.0002827073	0.0002827073	0
Oct	0.0000000000	0.0000000000	NA
Nov	0.0000000000	0.0000000000	NA
Dec	0.0000000000	0.0000000000	NA

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

Month	Manual	Model	dil
Jan	3244135050	3244135050	0
Feb	3808332450	3808332450	0
Mar	11763515790	11763515790	0
Apr	12102034230	12102034230	0
May	12440552670	12440552670	0
Jun	17038761480	17038761480	0
Jul	13117589550	13117589550	0
Aug	13456107990	13456107990	0
Sep	13794626430	13794626430	0
Oct	2820987000	2820987000	0
Nov	2962036350	2962036350	0
Dec	3103085700	3103085700	0

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

Month	Manual	Model	dil
Jan	4439889956	4439889956	0
Feb	5212044731	5212044731	0
Mar	16099427059	16099427059	0
Apr	16562719924	16562719924	0
May	17026012789	17026012789	0
Jun	23319074205	23319074205	0
Jul	17952598519	17952598519	0
Aug	18415891384	18415891384	0
Sep	18879184249	18879184249	0
Oct	3860773875	3860773875	0
Nov	4053812569	4053812569	0
Dec	4246851262	4246851262	0

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

Month	Manual	Model	dil
Jan	634269994	634269994	0
Feb	744577819	744577819	0
Mar	2299918151	2299918151	0
Apr	2366102846	2366102846	0
May	2432287541	2432287541	0
Jun	3331296315	3331296315	0
Jul	2564656931	2564656931	0
Aug	2630841626	2630841626	0
Sep	2697026321	2697026321	0
Oct	551539125	551539125	0
Nov	579116081	579116081	0
Dec	606693037	606693037	0

Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	9.7290	9.7290	0
Feb	11.4210	11.4210	0
Mar	3.9198	3.9198	0
Apr	4.0326	4.0326	0
May	4.1454	4.1454	0
Jun	0.0000	0.0000	NA
Jul	0.0000	0.0000	NA
Aug	0.0000	0.0000	NA
Sep	0.0000	0.0000	NA
Oct	8.4600	8.4600	0
Nov	8.8830	8.8830	0
Dec	9.3060	9.3060	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	11210925446	11210925446	0
Aug	11500239651	11500239651	0
Sep	11789553856	11789553856	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	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	689554.4	689554.4	0
Aug	707349.4	707349.4	0
Sep	725144.3	725144.3	0
Oct	0.0	0.0	NA
Nov	0.0	0.0	NA
Dec	0.0	0.0	NA

Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	634269994	634269994	0
Feb	744577819	744577819	0
Mar	2299918151	2299918151	0
Apr	2366102846	2366102846	0
May	2432287541	2432287541	0
Jun	3331296315	3331296315	0
Jul	2565346486	2565346486	0
Aug	2631548976	2631548976	0
Sep	2697751466	2697751466	0
Oct	551539125	551539125	0
Nov	579116081	579116081	0
Dec	606693037	606693037	0

Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	68120789	68120789	0
Feb	79967883	79967883	0
Mar	247011905	247011905	0
Apr	254120161	254120161	0
May	261228417	261228417	0
Jun	357782231	357782231	0
Jul	275444930	275444930	0
Aug	282553186	282553186	0
Sep	289661442	289661442	0
Oct	59235469	59235469	0
Nov	62197242	62197242	0
Dec	65159016	65159016	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	49127631	49127631	0
Aug	50395441	50395441	0
Sep	51663251	51663251	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	613087102	613087102	0
Feb	719710945	719710945	0
Mar	2223107142	2223107142	0
Apr	2287081448	2287081448	0
May	2351055755	2351055755	0
Jun	3220040081	3220040081	0
Jul	2479004367	2479004367	0
Aug	2542978673	2542978673	0
Sep	2606952980	2606952980	0
Oct	533119219	533119219	0
Nov	559775180	559775180	0
Dec	586431141	586431141	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	442148681	442148681	0
Aug	453558970	453558970	0
Sep	464969258	464969258	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA