

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

Month	Manual	Model	dil
Jan	18.55	18.55	0
Feb	18.55	18.55	0
Mar	18.55	18.55	0
Apr	18.55	18.55	0
May	18.55	18.55	0
Jun	18.55	18.55	0
Jul	18.55	18.55	0
Aug	18.55	18.55	0
Sep	18.55	18.55	0
Oct	18.55	18.55	0
Nov	18.55	18.55	0
Dec	18.55	18.55	0

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

Month	Manual	Model	dil
Jan	21.3325	21.3325	0
Feb	25.0425	25.0425	0
Mar	25.7845	25.7845	0
Apr	26.5265	26.5265	0
May	27.2685	27.2685	0
Jun	28.0105	28.0105	0
Jul	28.7525	28.7525	0
Aug	29.4945	29.4945	0
Sep	30.2365	30.2365	0
Oct	18.5500	18.5500	0
Nov	19.4775	19.4775	0
Dec	20.4050	20.4050	0

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

Month	Manual	Model	dil
Jan	1.546606	1.546606	0
Feb	1.815581	1.815581	0
Mar	5.608129	5.608129	0
Apr	5.769514	5.769514	0
May	5.930899	5.930899	0
Jun	8.123045	8.123045	0
Jul	6.253669	6.253669	0
Aug	6.415054	6.415054	0
Sep	6.576439	6.576439	0
Oct	1.344875	1.344875	0
Nov	1.412119	1.412119	0
Dec	1.479363	1.479363	0

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

Month	Manual	Model	dil
Jan	3.313204	3.313204	0
Feb	3.889413	3.889413	0
Mar	12.013965	12.013965	0
Apr	12.359691	12.359691	0
May	12.705417	12.705417	0
Jun	17.401523	17.401523	0
Jul	13.396868	13.396868	0
Aug	13.742594	13.742594	0
Sep	14.088319	14.088319	0
Oct	2.881047	2.881047	0
Nov	3.025099	3.025099	0
Dec	3.169152	3.169152	0

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

Month	Manual	Model	dil
Jan	0.4733148	0.4733148	0
Feb	0.5556305	0.5556305	0
Mar	1.7162808	1.7162808	0
Apr	1.7656702	1.7656702	0
May	1.8150595	1.8150595	0
Jun	2.4859319	2.4859319	0
Jul	1.9138383	1.9138383	0
Aug	1.9632277	1.9632277	0
Sep	2.0126170	2.0126170	0
Oct	0.4115781	0.4115781	0
Nov	0.4321570	0.4321570	0
Dec	0.4527359	0.4527359	0

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

Month	Manual	Model	dil
Jan	15.999375	15.999375	0
Feb	18.781875	18.781875	0
Mar	6.446125	6.446125	0
Apr	6.631625	6.631625	0
May	6.817125	6.817125	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	13.912500	13.912500	0
Nov	14.608125	14.608125	0
Dec	15.303750	15.303750	0

Cow–calf pairs on land for 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	7.185778	7.185778	0
Aug	7.371218	7.371218	0
Sep	7.556657	7.556657	0
Oct	0.000000	0.000000	NA
Nov	0.000000	0.000000	NA
Dec	0.000000	0.000000	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	0.001472981	0.001472981	0
Aug	0.001510993	0.001510993	0
Sep	0.001549006	0.001549006	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	0.0000000000	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	0.0008738710	0.0008738710	0
Aug	0.0008964225	0.0008964225	0
Sep	0.0009189740	0.0009189740	0
Oct	0.0000000000	0.0000000000	NA
Nov	0.0000000000	0.0000000000	NA
Dec	0.0000000000	0.0000000000	NA

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

Month	Manual	Model	dil
Jan	3967045031	3967045031	0
Feb	4656965906	4656965906	0
Mar	14384850244	14384850244	0
Apr	14798802769	14798802769	0
May	15212755294	15212755294	0
Jun	20835610425	20835610425	0
Jul	16040660344	16040660344	0
Aug	16454612869	16454612869	0
Sep	16868565394	16868565394	0
Oct	3449604375	3449604375	0
Nov	3622084594	3622084594	0
Dec	3794564813	3794564813	0

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

Month	Manual	Model	dil
Jan	8498368020	8498368020	0
Feb	9976345066	9976345066	0
Mar	30815821427	30815821427	0
Apr	31702607655	31702607655	0
May	32589393884	32589393884	0
Jun	44634906816	44634906816	0
Jul	34362966340	34362966340	0
Aug	35249752568	35249752568	0
Sep	36136538796	36136538796	0
Oct	7389885234	7389885234	0
Nov	7759379496	7759379496	0
Dec	8128873758	8128873758	0

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

Month	Manual	Model	dil
Jan	1214052574	1214052574	0
Feb	1425192152	1425192152	0
Mar	4402260204	4402260204	0
Apr	4528943951	4528943951	0
May	4655627698	4655627698	0
Jun	6376415259	6376415259	0
Jul	4908995191	4908995191	0
Aug	5035678938	5035678938	0
Sep	5162362685	5162362685	0
Oct	1055697891	1055697891	0
Nov	1108482785	1108482785	0
Dec	1161267680	1161267680	0

Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	15.999375	15.999375	0
Feb	18.781875	18.781875	0
Mar	6.446125	6.446125	0
Apr	6.631625	6.631625	0
May	6.817125	6.817125	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	13.912500	13.912500	0
Nov	14.608125	14.608125	0
Dec	15.303750	15.303750	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	18435299146	18435299146	0
Aug	18911048801	18911048801	0
Sep	19386798457	19386798457	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	2241479	2241479	0
Aug	2299324	2299324	0
Sep	2357168	2357168	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	1214052574	1214052574	0
Feb	1425192152	1425192152	0
Mar	4402260204	4402260204	0
Apr	4528943951	4528943951	0
May	4655627698	4655627698	0
Jun	6376415259	6376415259	0
Jul	4911236670	4911236670	0
Aug	5037978262	5037978262	0
Sep	5164719853	5164719853	0
Oct	1055697891	1055697891	0
Nov	1108482785	1108482785	0
Dec	1161267680	1161267680	0

Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	67198992	67198992	0
Feb	78885773	78885773	0
Mar	243669389	243669389	0
Apr	250681458	250681458	0
May	257693527	257693527	0
Jun	352940794	352940794	0
Jul	271717664	271717664	0
Aug	278729733	278729733	0
Sep	285741802	285741802	0
Oct	58433906	58433906	0
Nov	61355602	61355602	0
Dec	64277297	64277297	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	29393015	29393015	0
Aug	30151545	30151545	0
Sep	30910074	30910074	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	604790930	604790930	0
Feb	709971961	709971961	0
Mar	2193024502	2193024502	0
Apr	2256133120	2256133120	0
May	2319241739	2319241739	0
Jun	3176467144	3176467144	0
Jul	2445458977	2445458977	0
Aug	2508567595	2508567595	0
Sep	2571676214	2571676214	0
Oct	525905156	525905156	0
Nov	552200414	552200414	0
Dec	578495672	578495672	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	264537137	264537137	0
Aug	271363902	271363902	0
Sep	278190667	278190667	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA