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

Month	Manual	Model	dil
Jan	19.75	19.75	0
Feb	19.75	19.75	0
Mar	19.75	19.75	0
Apr	19.75	19.75	0
May	19.75	19.75	0
Jun	19.75	19.75	0
Jul	19.75	19.75	0
Aug	19.75	19.75	0
Sep	19.75	19.75	0
Oct	19.75	19.75	0
Nov	19.75	19.75	0
Dec	19.75	19.75	0

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

Month	Manual	Model	dil
Jan	22.7125	22.7125	0
Feb	26.6625	26.6625	0
Mar	27.4525	27.4525	0
Apr	28.2425	28.2425	0
May	29.0325	29.0325	0
Jun	29.8225	29.8225	0
Jul	30.6125	30.6125	0
Aug	31.4025	31.4025	0
Sep	32.1925	32.1925	0
Oct	19.7500	19.7500	0
Nov	20.7375	20.7375	0
Dec	21.7250	21.7250	0

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

Month	Manual	Model	dil
Jan	2.895844	2.895844	0
Feb	3.399469	3.399469	0
Mar	10.500581	10.500581	0
Apr	10.802756	10.802756	0
May	11.104931	11.104931	0
Jun	15.209475	15.209475	0
Jul	11.709281	11.709281	0
Aug	12.011456	12.011456	0
Sep	12.313631	12.313631	0
Oct	2.518125	2.518125	0
Nov	2.644031	2.644031	0
Dec	2.769938	2.769938	0

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

Month	Manual	Model	dil
Jan	2.434496	2.434496	0
Feb	2.857887	2.857887	0
Mar	8.827695	8.827695	0
Apr	9.081729	9.081729	0
May	9.335763	9.335763	0
Jun	12.786397	12.786397	0
Jul	9.843832	9.843832	0
Aug	10.097866	10.097866	0
Sep	10.351901	10.351901	0
Oct	2.116953	2.116953	0
Nov	2.222801	2.222801	0
Dec	2.328648	2.328648	0

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

Month	Manual	Model	dil
Jan	0.3477852	0.3477852	0
Feb	0.4082695	0.4082695	0
Mar	1.2610992	1.2610992	0
Apr	1.2973898	1.2973898	0
May	1.3336805	1.3336805	0
Jun	1.8266281	1.8266281	0
Jul	1.4062617	1.4062617	0
Aug	1.4425523	1.4425523	0
Sep	1.4788430	1.4788430	0
Oct	0.3024219	0.3024219	0
Nov	0.3175430	0.3175430	0
Dec	0.3326641	0.3326641	0

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

Month	Manual	Model	dil
Jan	17.034375	17.034375	0
Feb	19.996875	19.996875	0
Mar	6.863125	6.863125	0
Apr	7.060625	7.060625	0
May	7.258125	7.258125	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	14.812500	14.812500	0
Nov	15.553125	15.553125	0
Dec	16.293750	16.293750	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	7.636416	7.636416	0
Aug	7.833485	7.833485	0
Sep	8.030554	8.030554	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	0.01048729	0.01048729	0
Aug	0.01075793	0.01075793	0
Sep	0.01102857	0.01102857	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	0.000000000	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	0.006221762	0.006221762	0
Aug	0.006382324	0.006382324	0
Sep	0.006542885	0.006542885	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	7427839219	7427839219	0
Feb	8719637344	8719637344	0
Mar	26933990906	26933990906	0
Apr	27709069781	27709069781	0
May	28484148656	28484148656	0
Jun	39012303375	39012303375	0
Jul	30034306406	30034306406	0
Aug	30809385281	30809385281	0
Sep	31584464156	31584464156	0
Oct	6458990625	6458990625	0
Nov	6781940156	6781940156	0
Dec	7104889688	7104889688	0

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

Month	Manual	Model	dil
Jan	6244482480	6244482480	0
Feb	7330479434	7330479434	0
Mar	22643036473	22643036473	0
Apr	23294634645	23294634645	0
May	23946232816	23946232816	0
Jun	32797107984	32797107984	0
Jul	25249429160	25249429160	0
Aug	25901027332	25901027332	0
Sep	26552625504	26552625504	0
Oct	5429984766	5429984766	0
Nov	5701484004	5701484004	0
Dec	5972983242	5972983242	0

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

Month	Manual	Model	dil
Jan	892068926	892068926	0
Feb	1047211348	1047211348	0
Mar	3234719496	3234719496	0
Apr	3327804949	3327804949	0
May	3420890402	3420890402	0
Jun	4685301141	4685301141	0
Jul	3607061309	3607061309	0
Aug	3700146762	3700146762	0
Sep	3793232215	3793232215	0
Oct	775712109	775712109	0
Nov	814497715	814497715	0
Dec	853283320	853283320	0

Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	17.034375	17.034375	0
Feb	19.996875	19.996875	0
Mar	6.863125	6.863125	0
Apr	7.060625	7.060625	0
May	7.258125	7.258125	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	14.812500	14.812500	0
Nov	15.553125	15.553125	0
Dec	16.293750	16.293750	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	19614306806	19614306806	0
Aug	20120482465	20120482465	0
Sep	20626658125	20626658125	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	15958819	15958819	0
Aug	16370660	16370660	0
Sep	16782500	16782500	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	892068926	892068926	0
Feb	1047211348	1047211348	0
Mar	3234719496	3234719496	0
Apr	3327804949	3327804949	0
May	3420890402	3420890402	0
Jun	4685301141	4685301141	0
Jul	3623020128	3623020128	0
Aug	3716517422	3716517422	0
Sep	3810014715	3810014715	0
Oct	775712109	775712109	0
Nov	814497715	814497715	0
Dec	853283320	853283320	0

Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	69226945	69226945	0
Feb	81266414	81266414	0
Mar	251022923	251022923	0
Apr	258246605	258246605	0
May	265470286	265470286	0
Jun	363591956	363591956	0
Jul	279917648	279917648	0
Aug	287141330	287141330	0
Sep	294365011	294365011	0
Oct	60197344	60197344	0
Nov	63207211	63207211	0
Dec	66217078	66217078	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	23688776	23688776	0
Aug	24300100	24300100	0
Sep	24911423	24911423	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	623042508	623042508	0
Feb	731397727	731397727	0
Mar	2259206311	2259206311	0
Apr	2324219442	2324219442	0
May	2389232573	2389232573	0
Jun	3272327606	3272327606	0
Jul	2519258836	2519258836	0
Aug	2584271967	2584271967	0
Sep	2649285098	2649285098	0
Oct	541776094	541776094	0
Nov	568864898	568864898	0
Dec	595953703	595953703	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	213198987	213198987	0
Aug	218700896	218700896	0
Sep	224202806	224202806	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA