

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

Month	Manual	Model	dil
Jan	47.59	47.59	0
Feb	47.59	47.59	0
Mar	47.59	47.59	0
Apr	47.59	47.59	0
May	47.59	47.59	0
Jun	47.59	47.59	0
Jul	47.59	47.59	0
Aug	47.59	47.59	0
Sep	47.59	47.59	0
Oct	47.59	47.59	0
Nov	47.59	47.59	0
Dec	47.59	47.59	0

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

Month	Manual	Model	dil
Jan	54.7285	54.7285	0
Feb	64.2465	64.2465	0
Mar	66.1501	66.1501	0
Apr	68.0537	68.0537	0
May	69.9573	69.9573	0
Jun	71.8609	71.8609	0
Jul	73.7645	73.7645	0
Aug	75.6681	75.6681	0
Sep	77.5717	77.5717	0
Oct	47.5900	47.5900	0
Nov	49.9695	49.9695	0
Dec	52.3490	52.3490	0

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

Month	Manual	Model	dil
Jan	10.261594	10.261594	0
Feb	12.046219	12.046219	0
Mar	37.209431	37.209431	0
Apr	38.280206	38.280206	0
May	39.350981	39.350981	0
Jun	53.895675	53.895675	0
Jul	41.492531	41.492531	0
Aug	42.563306	42.563306	0
Sep	43.634081	43.634081	0
Oct	8.923125	8.923125	0
Nov	9.369281	9.369281	0
Dec	9.815437	9.815437	0

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

Month	Manual	Model	dil
Jan	2.992965	2.992965	0
Feb	3.513480	3.513480	0
Mar	10.852751	10.852751	0
Apr	11.165060	11.165060	0
May	11.477370	11.477370	0
Jun	15.719572	15.719572	0
Jul	12.101988	12.101988	0
Aug	12.414298	12.414298	0
Sep	12.726607	12.726607	0
Oct	2.602578	2.602578	0
Nov	2.732707	2.732707	0
Dec	2.862836	2.862836	0

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

Month	Manual	Model	dil
Jan	0.4275664	0.4275664	0
Feb	0.5019258	0.5019258	0
Mar	1.5503930	1.5503930	0
Apr	1.5950086	1.5950086	0
May	1.6396242	1.6396242	0
Jun	2.2456531	2.2456531	0
Jul	1.7288555	1.7288555	0
Aug	1.7734711	1.7734711	0
Sep	1.8180867	1.8180867	0
Oct	0.3717969	0.3717969	0
Nov	0.3903867	0.3903867	0
Dec	0.4089766	0.4089766	0

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

Month	Manual	Model	dil
Jan	41.04637	41.04637	0
Feb	48.18487	48.18487	0
Mar	16.53752	16.53752	0
Apr	17.01342	17.01342	0
May	17.48932	17.48932	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	35.69250	35.69250	0
Nov	37.47713	37.47713	0
Dec	39.26175	39.26175	0

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

Month	Manual	Model	dil
Jan	0.00000	0.00000	NA
Feb	0.00000	0.00000	NA
Mar	0.00000	0.00000	NA
Apr	0.00000	0.00000	NA
May	0.00000	0.00000	NA
Jun	0.00000	0.00000	NA
Jul	18.40627	18.40627	0
Aug	18.88127	18.88127	0
Sep	19.35627	19.35627	0
Oct	0.00000	0.00000	NA
Nov	0.00000	0.00000	NA
Dec	0.00000	0.00000	NA

Cow–calf pairs on land for forest with 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	0.02187833	0.02187833	0
Aug	0.02244293	0.02244293	0
Sep	0.02300753	0.02300753	0
Oct	0.00000000	0.00000000	NA
Nov	0.00000000	0.00000000	NA
Dec	0.00000000	0.00000000	NA

Cow-calf pairs in stream for forest (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	0.01297969	0.01297969	0
Aug	0.01331465	0.01331465	0
Sep	0.01364961	0.01364961	0
Oct	0.00000000	0.00000000	NA
Nov	0.00000000	0.00000000	NA
Dec	0.00000000	0.00000000	NA

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

Month	Manual	Model	dil
Jan	26320987969	26320987969	0
Feb	30898551094	30898551094	0
Mar	95442191156	95442191156	0
Apr	98188729031	98188729031	0
May	100935266906	100935266906	0
Jun	138242406375	138242406375	0
Jul	106428342656	106428342656	0
Aug	109174880531	109174880531	0
Sep	111921418406	111921418406	0
Oct	22887815625	22887815625	0
Nov	24032206406	24032206406	0
Dec	25176597188	25176597188	0

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

Month	Manual	Model	dil
Jan	7676954824	7676954824	0
Feb	9012077402	9012077402	0
Mar	27837305754	27837305754	0
Apr	28638379301	28638379301	0
May	29439452848	29439452848	0
Jun	40320701859	40320701859	0
Jul	31041599941	31041599941	0
Aug	31842673488	31842673488	0
Sep	32643747035	32643747035	0
Oct	6675612891	6675612891	0
Nov	7009393535	7009393535	0
Dec	7343174180	7343174180	0

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

Month	Manual	Model	dil
Jan	1096707832	1096707832	0
Feb	1287439629	1287439629	0
Mar	3976757965	3976757965	0
Apr	4091197043	4091197043	0
May	4205636121	4205636121	0
Jun	5760100266	5760100266	0
Jul	4434514277	4434514277	0
Aug	4548953355	4548953355	0
Sep	4663392434	4663392434	0
Oct	953658984	953658984	0
Nov	1001341934	1001341934	0
Dec	1049024883	1049024883	0

Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	41.04637	41.04637	0
Feb	48.18487	48.18487	0
Mar	16.53752	16.53752	0
Apr	17.01342	17.01342	0
May	17.48932	17.48932	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	35.69250	35.69250	0
Nov	37.47713	37.47713	0
Dec	39.26175	39.26175	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	47268192712	47268192712	0
Aug	48488017040	48488017040	0
Sep	49707841369	49707841369	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	33292913	33292913	0
Aug	34152085	34152085	0
Sep	35011256	35011256	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	1096707832	1096707832	0
Feb	1287439629	1287439629	0
Mar	3976757965	3976757965	0
Apr	4091197043	4091197043	0
May	4205636121	4205636121	0
Jun	5760100266	5760100266	0
Jul	4467807190	4467807190	0
Aug	4583105440	4583105440	0
Sep	4698403690	4698403690	0
Oct	953658984	953658984	0
Nov	1001341934	1001341934	0
Dec	1049024883	1049024883	0

Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	71439258	71439258	0
Feb	83863477	83863477	0
Mar	259044961	259044961	0
Apr	266499492	266499492	0
May	273954023	273954023	0
Jun	375211406	375211406	0
Jul	288863086	288863086	0
Aug	296317617	296317617	0
Sep	303772148	303772148	0
Oct	62121094	62121094	0
Nov	65227148	65227148	0
Dec	68333203	68333203	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	9681145	9681145	0
Aug	9930981	9930981	0
Sep	10180817	10180817	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	642953320	642953320	0
Feb	754771289	754771289	0
Mar	2331404648	2331404648	0
Apr	2398495430	2398495430	0
May	2465586211	2465586211	0
Jun	3376902656	3376902656	0
Jul	2599767773	2599767773	0
Aug	2666858555	2666858555	0
Sep	2733949336	2733949336	0
Oct	559089844	559089844	0
Nov	587044336	587044336	0
Dec	614998828	614998828	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	87130309	87130309	0
Aug	89378833	89378833	0
Sep	91627357	91627357	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA