

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

Month	Manual	Model	dil
Jan	15.08	15.08	0
Feb	15.08	15.08	0
Mar	15.08	15.08	0
Apr	15.08	15.08	0
May	15.08	15.08	0
Jun	15.08	15.08	0
Jul	15.08	15.08	0
Aug	15.08	15.08	0
Sep	15.08	15.08	0
Oct	15.08	15.08	0
Nov	15.08	15.08	0
Dec	15.08	15.08	0

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

Month	Manual	Model	dil
Jan	17.3420	17.3420	0
Feb	20.3580	20.3580	0
Mar	20.9612	20.9612	0
Apr	21.5644	21.5644	0
May	22.1676	22.1676	0
Jun	22.7708	22.7708	0
Jul	23.3740	23.3740	0
Aug	23.9772	23.9772	0
Sep	24.5804	24.5804	0
Oct	15.0800	15.0800	0
Nov	15.8340	15.8340	0
Dec	16.5880	16.5880	0

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

Month	Manual	Model	dil
Jan	2.94814	2.94814	0
Feb	3.46086	3.46086	0
Mar	10.69021	10.69021	0
Apr	10.99784	10.99784	0
May	11.30548	11.30548	0
Jun	15.48414	15.48414	0
Jul	11.92074	11.92074	0
Aug	12.22837	12.22837	0
Sep	12.53600	12.53600	0
Oct	2.56360	2.56360	0
Nov	2.69178	2.69178	0
Dec	2.81996	2.81996	0

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

Month	Manual	Model	dil
Jan	1.213940	1.213940	0
Feb	1.425060	1.425060	0
Mar	4.401852	4.401852	0
Apr	4.528524	4.528524	0
May	4.655196	4.655196	0
Jun	6.375824	6.375824	0
Jul	4.908540	4.908540	0
Aug	5.035212	5.035212	0
Sep	5.161884	5.161884	0
Oct	1.055600	1.055600	0
Nov	1.108380	1.108380	0
Dec	1.161160	1.161160	0

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

Month	Manual	Model	dil
Jan	0.173420	0.173420	0
Feb	0.203580	0.203580	0
Mar	0.628836	0.628836	0
Apr	0.646932	0.646932	0
May	0.665028	0.665028	0
Jun	0.910832	0.910832	0
Jul	0.701220	0.701220	0
Aug	0.719316	0.719316	0
Sep	0.737412	0.737412	0
Oct	0.150800	0.150800	0
Nov	0.158340	0.158340	0
Dec	0.165880	0.165880	0

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

Month	Manual	Model	dil
Jan	13.0065	13.0065	0
Feb	15.2685	15.2685	0
Mar	5.2403	5.2403	0
Apr	5.3911	5.3911	0
May	5.5419	5.5419	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	11.3100	11.3100	0
Nov	11.8755	11.8755	0
Dec	12.4410	12.4410	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	5.813357	5.813357	0
Aug	5.963379	5.963379	0
Sep	6.113401	6.113401	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	0.01891890	0.01891890	0
Aug	0.01940713	0.01940713	0
Sep	0.01989536	0.01989536	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	0.00000000	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	0.01122396	0.01122396	0
Aug	0.01151361	0.01151361	0
Sep	0.01180326	0.01180326	0
Oct	0.00000000	0.00000000	NA
Nov	0.00000000	0.00000000	NA
Dec	0.00000000	0.00000000	NA

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

Month	Manual	Model	dil
Jan	7561979100	7561979100	0
Feb	8877105900	8877105900	0
Mar	27420393780	27420393780	0
Apr	28209469860	28209469860	0
May	28998545940	28998545940	0
Jun	39716829360	39716829360	0
Jul	30576698100	30576698100	0
Aug	31365774180	31365774180	0
Sep	32154850260	32154850260	0
Oct	6575634000	6575634000	0
Nov	6904415700	6904415700	0
Dec	7233197400	7233197400	0

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

Month	Manual	Model	dil
Jan	3113756100	3113756100	0
Feb	3655278900	3655278900	0
Mar	11290750380	11290750380	0
Apr	11615664060	11615664060	0
May	11940577740	11940577740	0
Jun	16353988560	16353988560	0
Jul	12590405100	12590405100	0
Aug	12915318780	12915318780	0
Sep	13240232460	13240232460	0
Oct	2707614000	2707614000	0
Nov	2842994700	2842994700	0
Dec	2978375400	2978375400	0

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

Month	Manual	Model	dil
Jan	444822300	444822300	0
Feb	522182700	522182700	0
Mar	1612964340	1612964340	0
Apr	1659380580	1659380580	0
May	1705796820	1705796820	0
Jun	2336284080	2336284080	0
Jul	1798629300	1798629300	0
Aug	1845045540	1845045540	0
Sep	1891461780	1891461780	0
Oct	386802000	386802000	0
Nov	406142100	406142100	0
Dec	425482200	425482200	0

## Bacteria in confinement (dil = 1E+06)

Month	Manual	Model	dil
Jan	13.0065	13.0065	0
Feb	15.2685	15.2685	0
Mar	5.2403	5.2403	0
Apr	5.3911	5.3911	0
May	5.5419	5.5419	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	11.3100	11.3100	0
Nov	11.8755	11.8755	0
Dec	12.4410	12.4410	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	14959788035	14959788035	0
Aug	15345847081	15345847081	0
Sep	15731906127	15731906127	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	28789465	28789465	0
Aug	29532419	29532419	0
Sep	30275373	30275373	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

## Bacteria in stream (dil = 1E+06)

Month	Manual	Model	dil
Jan	444822300	444822300	0
Feb	522182700	522182700	0
Mar	1612964340	1612964340	0
Apr	1659380580	1659380580	0
May	1705796820	1705796820	0
Jun	2336284080	2336284080	0
Jul	1827418765	1827418765	0
Aug	1874577959	1874577959	0
Sep	1921737153	1921737153	0
Oct	386802000	386802000	0
Nov	406142100	406142100	0
Dec	425482200	425482200	0



## Accum for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	70794000	70794000	0
Feb	83106000	83106000	0
Mar	256705200	256705200	0
Apr	264092400	264092400	0
May	271479600	271479600	0
Jun	371822400	371822400	0
Jul	286254000	286254000	0
Aug	293641200	293641200	0
Sep	301028400	301028400	0
Oct	61560000	61560000	0
Nov	64638000	64638000	0
Dec	67716000	67716000	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	5406306	5406306	0
Aug	5545823	5545823	0
Sep	5685341	5685341	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA

## SQOLIM for pasture (dil = 1E+06)

Month	Manual	Model	dil
Jan	637146000	637146000	0
Feb	747954000	747954000	0
Mar	2310346800	2310346800	0
Apr	2376831600	2376831600	0
May	2443316400	2443316400	0
Jun	3346401600	3346401600	0
Jul	2576286000	2576286000	0
Aug	2642770800	2642770800	0
Sep	2709255600	2709255600	0
Oct	554040000	554040000	0
Nov	581742000	581742000	0
Dec	609444000	609444000	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	48656750	48656750	0
Aug	49912408	49912408	0
Sep	51168066	51168066	0
Oct	0	0	NA
Nov	0	0	NA
Dec	0	0	NA