

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

| Month | Manual | Model | dil |
|-------|--------|-------|-----|
| Jan | 0.87 | 0.87 | 0 |
| Feb | 0.87 | 0.87 | 0 |
| Mar | 0.87 | 0.87 | 0 |
| Apr | 0.87 | 0.87 | 0 |
| May | 0.87 | 0.87 | 0 |
| Jun | 0.87 | 0.87 | 0 |
| Jul | 0.87 | 0.87 | 0 |
| Aug | 0.87 | 0.87 | 0 |
| Sep | 0.87 | 0.87 | 0 |
| Oct | 0.87 | 0.87 | 0 |
| Nov | 0.87 | 0.87 | 0 |
| Dec | 0.87 | 0.87 | 0 |

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

| Month | Manual | Model | dil |
|-------|--------|--------|-----|
| Jan | 1.0005 | 1.0005 | 0 |
| Feb | 1.1745 | 1.1745 | 0 |
| Mar | 1.2093 | 1.2093 | 0 |
| Apr | 1.2441 | 1.2441 | 0 |
| May | 1.2789 | 1.2789 | 0 |
| Jun | 1.3137 | 1.3137 | 0 |
| Jul | 1.3485 | 1.3485 | 0 |
| Aug | 1.3833 | 1.3833 | 0 |
| Sep | 1.4181 | 1.4181 | 0 |
| Oct | 0.8700 | 0.8700 | 0 |
| Nov | 0.9135 | 0.9135 | 0 |
| Dec | 0.9570 | 0.9570 | 0 |

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

| Month | Manual | Model | dil |
|-------|-----------|-----------|-----|
| Jan | 0.1182693 | 0.1182693 | 0 |
| Feb | 0.1388379 | 0.1388379 | 0 |
| Mar | 0.4288548 | 0.4288548 | 0 |
| Apr | 0.4411960 | 0.4411960 | 0 |
| May | 0.4535371 | 0.4535371 | 0 |
| Jun | 0.6211710 | 0.6211710 | 0 |
| Jul | 0.4782194 | 0.4782194 | 0 |
| Aug | 0.4905606 | 0.4905606 | 0 |
| Sep | 0.5029017 | 0.5029017 | 0 |
| Oct | 0.1028429 | 0.1028429 | 0 |
| Nov | 0.1079850 | 0.1079850 | 0 |
| Dec | 0.1131272 | 0.1131272 | 0 |

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

| Month | Manual | Model | dil |
|-------|-----------|-----------|-----|
| Jan | 0.1153737 | 0.1153737 | 0 |
| Feb | 0.1354387 | 0.1354387 | 0 |
| Mar | 0.4183551 | 0.4183551 | 0 |
| Apr | 0.4303941 | 0.4303941 | 0 |
| May | 0.4424331 | 0.4424331 | 0 |
| Jun | 0.6059629 | 0.6059629 | 0 |
| Jul | 0.4665111 | 0.4665111 | 0 |
| Aug | 0.4785501 | 0.4785501 | 0 |
| Sep | 0.4905891 | 0.4905891 | 0 |
| Oct | 0.1003250 | 0.1003250 | 0 |
| Nov | 0.1053412 | 0.1053412 | 0 |
| Dec | 0.1103575 | 0.1103575 | 0 |

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

| Month | Manual | Model | dil |
|-------|------------|------------|-----|
| Jan | 0.01648196 | 0.01648196 | 0 |
| Feb | 0.01934839 | 0.01934839 | 0 |
| Mar | 0.05976502 | 0.05976502 | 0 |
| Apr | 0.06148488 | 0.06148488 | 0 |
| May | 0.06320473 | 0.06320473 | 0 |
| Jun | 0.08656612 | 0.08656612 | 0 |
| Jul | 0.06664445 | 0.06664445 | 0 |
| Aug | 0.06836430 | 0.06836430 | 0 |
| Sep | 0.07008416 | 0.07008416 | 0 |
| Oct | 0.01433214 | 0.01433214 | 0 |
| Nov | 0.01504875 | 0.01504875 | 0 |
| Dec | 0.01576535 | 0.01576535 | 0 |

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

| Month | Manual | Model | dil |
|-------|----------|----------|-----|
| Jan | 0.750375 | 0.750375 | 0 |
| Feb | 0.880875 | 0.880875 | 0 |
| Mar | 0.302325 | 0.302325 | 0 |
| Apr | 0.311025 | 0.311025 | 0 |
| May | 0.319725 | 0.319725 | 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 | 0.652500 | 0.652500 | 0 |
| Nov | 0.685125 | 0.685125 | 0 |
| Dec | 0.717750 | 0.717750 | 0 |

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

| Month | Manual | Model | dil |
|-------|-----------|-----------|-----|
| Jan | 0.0000000 | 0.0000000 | NA |
| Feb | 0.0000000 | 0.0000000 | NA |
| Mar | 0.0000000 | 0.0000000 | NA |
| Apr | 0.0000000 | 0.0000000 | NA |
| May | 0.0000000 | 0.0000000 | NA |
| Jun | 0.0000000 | 0.0000000 | NA |
| Jul | 0.3337129 | 0.3337129 | 0 |
| Aug | 0.3423249 | 0.3423249 | 0 |
| Sep | 0.3509368 | 0.3509368 | 0 |
| Oct | 0.0000000 | 0.0000000 | NA |
| Nov | 0.0000000 | 0.0000000 | NA |
| Dec | 0.0000000 | 0.0000000 | NA |

Cow–calf pairs in forest on land without 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 | 0.002141561 | 0.002141561 | 0 |
| Aug | 0.002196827 | 0.002196827 | 0 |
| Sep | 0.002252094 | 0.002252094 | 0 |
| Oct | 0.000000000 | 0.000000000 | NA |
| Nov | 0.000000000 | 0.000000000 | NA |
| Dec | 0.000000000 | 0.000000000 | 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 | 0.001270518 | 0.001270518 | 0 |
| Aug | 0.001303305 | 0.001303305 | 0 |
| Sep | 0.001336093 | 0.001336093 | 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 | 303360800 | 303360800 | 0 |
| Feb | 356119200 | 356119200 | 0 |
| Mar | 1100012639 | 1100012639 | 0 |
| Apr | 1131667679 | 1131667679 | 0 |
| May | 1163322719 | 1163322719 | 0 |
| Jun | 1593303678 | 1593303678 | 0 |
| Jul | 1226632799 | 1226632799 | 0 |
| Aug | 1258287839 | 1258287839 | 0 |
| Sep | 1289942879 | 1289942879 | 0 |
| Oct | 263792000 | 263792000 | 0 |
| Nov | 276981600 | 276981600 | 0 |
| Dec | 290171200 | 290171200 | 0 |

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

| Month | Manual | Model | dil |
|-------|------------|------------|-----|
| Jan | 295933597 | 295933597 | 0 |
| Feb | 347400310 | 347400310 | 0 |
| Mar | 1073080957 | 1073080957 | 0 |
| Apr | 1103960984 | 1103960984 | 0 |
| May | 1134841012 | 1134841012 | 0 |
| Jun | 1554294719 | 1554294719 | 0 |
| Jul | 1196601067 | 1196601067 | 0 |
| Aug | 1227481094 | 1227481094 | 0 |
| Sep | 1258361122 | 1258361122 | 0 |
| Oct | 257333563 | 257333563 | 0 |
| Nov | 270200241 | 270200241 | 0 |
| Dec | 283066919 | 283066919 | 0 |

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

| Month | Manual | Model | dil |
|-------|-----------|-----------|-----|
| Jan | 42276228 | 42276228 | 0 |
| Feb | 49628616 | 49628616 | 0 |
| Mar | 153297280 | 153297280 | 0 |
| Apr | 157708712 | 157708712 | 0 |
| May | 162120145 | 162120145 | 0 |
| Jun | 222042103 | 222042103 | 0 |
| Jul | 170943010 | 170943010 | 0 |
| Aug | 175354442 | 175354442 | 0 |
| Sep | 179765875 | 179765875 | 0 |
| Oct | 36761938 | 36761938 | 0 |
| Nov | 38600034 | 38600034 | 0 |
| Dec | 40438131 | 40438131 | 0 |

Bacteria in confinement (dil = 1E+06)

| Month | Manual | Model | dil |
|-------|----------|----------|-----|
| Jan | 0.750375 | 0.750375 | 0 |
| Feb | 0.880875 | 0.880875 | 0 |
| Mar | 0.302325 | 0.302325 | 0 |
| Apr | 0.311025 | 0.311025 | 0 |
| May | 0.319725 | 0.319725 | 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 | 0.652500 | 0.652500 | 0 |
| Nov | 0.685125 | 0.685125 | 0 |
| Dec | 0.717750 | 0.717750 | 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 | 861466747 | 861466747 | 0 |
| Aug | 883698147 | 883698147 | 0 |
| Sep | 905929547 | 905929547 | 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 | 3258878 | 3258878 | 0 |
| Aug | 3342978 | 3342978 | 0 |
| Sep | 3427078 | 3427078 | 0 |
| Oct | 0 | 0 | NA |
| Nov | 0 | 0 | NA |
| Dec | 0 | 0 | NA |

Bacteria in stream (dil = 1E+06)

| Month | Manual | Model | dil |
|-------|-----------|-----------|-----|
| Jan | 42276228 | 42276228 | 0 |
| Feb | 49628616 | 49628616 | 0 |
| Mar | 153297280 | 153297280 | 0 |
| Apr | 157708712 | 157708712 | 0 |
| May | 162120145 | 162120145 | 0 |
| Jun | 222042103 | 222042103 | 0 |
| Jul | 174201888 | 174201888 | 0 |
| Aug | 178697420 | 178697420 | 0 |
| Sep | 183192953 | 183192953 | 0 |
| Oct | 36761938 | 36761938 | 0 |
| Nov | 38600034 | 38600034 | 0 |
| Dec | 40438131 | 40438131 | 0 |

Accum for pasture (dil = 1E+06)

| Month | Manual | Model | dil |
|-------|-----------|-----------|-----|
| Jan | 68884413 | 68884413 | 0 |
| Feb | 80864311 | 80864311 | 0 |
| Mar | 249780873 | 249780873 | 0 |
| Apr | 256968812 | 256968812 | 0 |
| May | 264156751 | 264156751 | 0 |
| Jun | 361792919 | 361792919 | 0 |
| Jul | 278532628 | 278532628 | 0 |
| Aug | 285720567 | 285720567 | 0 |
| Sep | 292908506 | 292908506 | 0 |
| Oct | 59899490 | 59899490 | 0 |
| Nov | 62894464 | 62894464 | 0 |
| Dec | 65889439 | 65889439 | 0 |

Accum for Forest (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 | 770611.6 | 770611.6 | 0 |
| Aug | 790498.4 | 790498.4 | 0 |
| Sep | 810385.1 | 810385.1 | 0 |
| Oct | 0.0 | 0.0 | NA |
| Nov | 0.0 | 0.0 | NA |
| Dec | 0.0 | 0.0 | NA |

SQOLIM for pasture (dil = 1E+06)

| Month | Manual | Model | dil |
|-------|------------|------------|-----|
| Jan | 619959721 | 619959721 | 0 |
| Feb | 727778803 | 727778803 | 0 |
| Mar | 2248027857 | 2248027857 | 0 |
| Apr | 2312719307 | 2312719307 | 0 |
| May | 2377410756 | 2377410756 | 0 |
| Jun | 3256136273 | 3256136273 | 0 |
| Jul | 2506793654 | 2506793654 | 0 |
| Aug | 2571485103 | 2571485103 | 0 |
| Sep | 2636176552 | 2636176552 | 0 |
| Oct | 539095409 | 539095409 | 0 |
| Nov | 566050180 | 566050180 | 0 |
| Dec | 593004950 | 593004950 | 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 | 6935505 | 6935505 | 0 |
| Aug | 7114485 | 7114485 | 0 |
| Sep | 7293466 | 7293466 | 0 |
| Oct | 0 | 0 | NA |
| Nov | 0 | 0 | NA |
| Dec | 0 | 0 | NA |