**Supplementary Table 1.** Number of animals and grazings (12-hour period) for each rotation at each site.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Rotation | No. of  animals | No. of  Grazings |  | Rotation | No. of  animals | No. of  Grazings |  | Rotation | No. of  animals | No. of  Grazings |
| Moorepark | 1 | 35 | 3 | Moorepark | 1 | 27 | 3 | Moorepark | 1 | 40 | 3 |
| 2019 | 2 | 60 | 1 | 2020 | 2 | 40 | 2 | 2021 | 2 | 50 | 2 |
|  | 3 | 70 | 1 |  | 3 | 40 | 2 |  | 3 | 70 | 1 |
|  | 4 | 70 | 1 |  | 4 | 40 | 2 |  | 4 | 35 | 2 |
|  | 5 | 70 | 1 |  | 5 | 38 | 2 |  | 5 | 35 | 2 |
|  | 6 | 70 | 1 |  | 6 | 70 | 1 |  | 6 | 35 | 2 |
|  | 7 | 70 | 1 |  | 7 | 38 | 2 |  | 7 | 35 | 2 |
|  | 8 | 70 | 1 |  | 8 | 38 | 2 |  | 8 | 35 | 2 |
|  | 9 | 70 | 1 |  | 9 | 70 | 1 |  | 9 | 35 | 2 |
| Clonakilty | 1 | 60 | 2 | Clonakilty | 1 | 67 | 2 | Clonakilty | 1 | 83 | 2 |
| 2019 | 2 | 60 | 2 | 2020 | 2 | 80 | 2 | 2021 | 2 | 97 | 2 |
|  | 3 | 60 | 2 |  | 3 | 80 | 2 |  | 3 | 80 | 2 |
|  | 4 | 60 | 2 |  | 4 | 80 | 2 |  | 4 | 80 | 2 |
|  | 5 | 60 | 2 |  | 5 | 80 | 2 |  | 5 | 80 | 2 |
|  | 6 | 60 | 2 |  | 6 | 80 | 2 |  | 6 | 80 | 2 |
|  | 7 | 60 | 2 |  | 7 | 80 | 2 |  | 7 | 80 | 2 |
|  | 8 | 60 | 2 |  | 8 | 80 | 2 |  | 8 | 80 | 2 |
|  | 9 | 60 | 2 |  | 9 | 80 | 2 |  | 9 | 80 | 2 |
| - | - | - | - | Athenry | 1 | 82 | 2 | Athenry | 1 | 88 | 2 |
| - | - | - | - | 2020 | 2 | 82 | 2 | 2021 | 2 | 88 | 2 |
|  | - | - | - |  | 3 | 82 | 2 |  | 3 | 88 | 2 |
|  | - | - | - |  | 4 | 82 | 2 |  | 4 | 88 | 2 |
|  | - | - | - |  | 5 | 82 | 2 |  | 5 | 88 | 2 |
|  | - | - | - |  | 6 | 82 | 2 |  | 6 | 88 | 2 |
|  | - | - | - |  | 7 | 60 | 2 |  | 7 | 88 | 2 |
|  | - | - | - |  | 8 | 60 | 2 |  | 8 | 60 | 2 |
| - | - | - | - | Ballyhaise | 1 | 60 | 2 | Ballyhaise | 1 | 60 | 2 |
| - | - | - | - | 2020 | 2 | 32 | 2 | 2021 | 2 | 32 | 2 |
|  | - | - | - |  | 3 | 32 | 2 |  | 3 | 32 | 2 |
|  | - | - | - |  | 4 | 32 | 2 |  | 4 | 32 | 2 |
|  | - | - | - |  | 5 | 32 | 2 |  | 5 | 32 | 2 |
|  | - | - | - |  | 6 | 32 | 2 |  | 6 | 32 | 2 |
|  | - | - | - |  | 7 | 32 | 2 |  | 7 | 32 | 2 |
|  | - | - | - |  | 8 | 32 | 2 |  | 8 | 32 | 2 |
|  | - | - | - |  | 9 | 32 | 2 |  | 9 | 32 | 2 |
|  | - | - | - |  | 10 | 32 | 2 |  | - | - | - |