SDH October growth rate and pasture quality summary (to 29 January 2024)

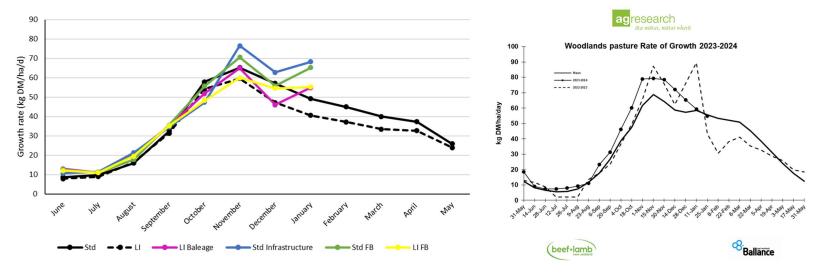
Growth has continued to exceed predictions through January with good rainfall and soil temperature creating ideal growing conditions. Both the Standard and LI farmlets have grown approximately 1 T DM/ha more compared with the four-year average. Relative to last season all farmlets are also ahead in growth. Weather conditions have enabled us to continue with N fertiliser applications to both farmlets with the LI farmlets having received 75% (37.5 kg N) of their annual 50 kg N allowance while the standard farmlets are finishing their 6th applications (130 kg N/ha season to date).

On the pasture quality front, the 7th round pastures in the Standard farmlets have increased in DM while the LI have decreased. ME has increased in the LI farmlets and remained stable in the Standard farmlet. Crude protein in the Standard farmlets has dropped while the LI farmlets have increased, most likely due to the strong clover in these paddocks. There has been an increase in non-structural carbohydrates and soluble sugars across both systems.

Differences between paddocks with and without plantain are small for most nutrients, although those with plantain are higher in DM and non-structural carbohydrates in round 7 but lower in crude protein.

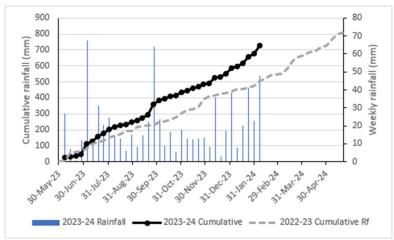
Table 1: Cumulative pasture growth compared with previous years.

| | | 180-190 kg N | | | | | | 50 kg N | | | | | |
|----------------------|------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | Days | Mean | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Mean | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| June | 30 | 9 | 6 | 12 | 10 | 7 | 12 | 9 | 7 | 9 | 11 | 5 | 13 |
| July | 31 | 10 | 12 | 7 | 12 | 10 | 11 | 9 | 10 | 8 | 9 | 9 | 11 |
| August | 31 | 17 | 13 | 19 | 19 | 13 | 20 | 17 | 14 | 19 | 18 | 15 | 20 |
| September | 30 | 30 | 29 | 31 | 31 | 39 | 35 | 29 | 26 | 32 | 30 | 37 | 35 |
| October | 31 | 57 | 56 | 50 | 65 | 61 | 51 | 53 | 50 | 50 | 58 | 59 | 50 |
| November | 30 | 65 | 69 | 67 | 59 | 66 | 74 | 59 | 62 | 61 | 53 | 63 | 63 |
| December | 31 | 53 | 53 | 57 | 50 | 69 | 59 | 43 | 48 | 44 | 37 | 60 | 50 |
| January | 31 | 55 | 50 | 73 | 43 | 31 | 67 | 44 | 44 | 52 | 37 | 30 | 55 |
| February | 28 | 49 | 51 | 57 | 41 | 31 | | 40 | 42 | 41 | 36 | 29 | |
| March | 31 | 39 | 42 | 51 | 23 | 43 | | 32 | 32 | 42 | 22 | 39 | |
| April | 30 | 33 | 42 | 33 | 24 | 51 | | 28 | 33 | 32 | 20 | 46 | |
| May | 31 | 24 | 23 | 24 | 25 | 31 | | 22 | 20 | 21 | 24 | 30 | |
| | | | | | | | | | | | | | |
| STD (kg DM/ha) | | 9085 | 8790 | 9637 | 8827 | 9030 | 10055 | 8031 | 7996 | 8369 | 7729 | 8463 | 9082 |
| Total (kg DM/ha) | | 13408 | 13479 | 14535 | 12264 | 13744 | | 11655 | 11776 | 12419 | 10816 | 12793 | |
| Diff to 4 yr Average | | | | | | | 970 | | | | | | 1051 |
| Diff to 2022-23 | | | | | | | 1025 | | | | | | 619 |



Average monthly pasture growth for the four SDH farmlets and the Woodlands long-term growth rate trial





Pasture quality results

Table 2: Pasture quality from standard and lower impact monitor paddocks for each grazing

| | | | | • | | | | 0 | |
|--------------|-----------|-----------|------------------|----------------------|------------|------------|----------|------------|-----------------------|
| | | DM (%) | ME (MJ/kg DM) | Crude protein (% DM) | NDF (% DM) | ADF (% DM) | Ash (%) | NSC (% DM) | Soluble Sugars (% DM) |
| Standard | 1st round | 17.6 | 12.2 | 20.0 | 39.8 | 20.6 | 9.9 | 26.9 | 11.4 |
| 180 kg N/ha | 2nd round | 18.3 | 12.3 | 23.0 | 39.2 | 20.9 | 10.7 | 23.7 | 10.7 |
| | 3rd round | 15.8 | 12.0 | 23.4 | 43.3 | 21.7 | 10.6 | 18.7 | 8.1 |
| | 4th round | 18.0 | 11.5 | 22.3 | 47.6 | 24.3 | 10.6 | 15.7 | 4.0 |
| | 5th round | 19.8 | 11.3 | 22.8 | 48.3 | 24.8 | 10.9 | 14.2 | 4.0 |
| | 6th round | 18.7 | 11.7 | 21.9 | 45.1 | 22.7 | 9.7 | 19.6 | 7.1 |
| | 7th round | 19.8 | 11.7 | 20.6 | 45.7 | 22.4 | 9.4 | 20.6 | 7.1 |
| Range | | 8.7-23.3 | 10.6-12.9 | 13.2-29.5 | 34.6-55.9 | 18.8-29.0 | 8.6-13.5 | 4.7-34.5 | 0.8-16.2 |
| Lower Impact | 1st round | 17.1 | 12.2 | 20.8 | 39.3 | 20.0 | 10.4 | 25.8 | 11.0 |
| 50 kg N/ha | 2nd round | 16.4 | 12.1 | 22.8 | 39.3 | 20.8 | 11.3 | 23.5 | 12.4 |
| | 3rd round | 16.1 | 12.1 | 20.6 | 40.2 | 21.1 | 10.5 | 25.5 | 11.4 |
| | 4th round | 17.9 | 11.4 | 22.5 | 47.0 | 24.3 | 11.3 | 15.5 | 4.7 |
| | 5th round | 19.4 | 11.3 | 20.7 | 46.9 | 24.7 | 11.2 | 17.5 | 5.0 |
| | 6th round | 19.2 | 11.2 | 18.2 | 44.5 | 23.4 | 9.4 | 24.7 | 7.5 |
| | 7th round | 17.7 | 11.5 | 21.8 | 42.8 | 22.8 | 10.4 | 21.6 | 8.4 |
| Range | | 11.8-23.7 | 10.4-12.9 | 16.7-25.7 | 32.8-52.9 | 17.8-28.8 | 8.8-14.9 | 5.9-34.8 | 1.3-22.1 |

Table 3: Pasture quality from monitor paddocks with and without plantain for each grazing

| | | Da4 (o/) | ME | Constant and the (of Dag) | NDF (0/ DA4) | ADE (0/ DA4) | a - b /0/) | NCC (o/ DAM) | Soluble Sugars (% |
|---------------|-----------|-----------|------------|---------------------------|--------------|--------------|------------|--------------|-------------------|
| | | DM (%) | (MJ/kg DM) | Crude protein (% DM) | NDF (% DM) | ADF (% DM) | Ash (%) | NSC (% DM) | DM) |
| With Plantain | 1st round | 17.8 | 12.3 | 19.3 | 38.1 | 19.5 | 9.8 | 29.4 | 12.4 |
| | 2nd round | 16.3 | 12.0 | 21.7 | 39.7 | 21.0 | 11.1 | 24.2 | 12.2 |
| | 3rd round | 12.0 | 12.2 | 21.9 | 39.0 | 20.4 | 10.7 | 25.0 | 11.3 |
| | 4th round | 18.9 | 11.2 | 17.0 | 45.1 | 24.7 | 11.1 | 23.8 | 8.0 |
| | 5th round | 19.4 | 11.2 | 22.3 | 48.3 | 26.1 | 12.1 | 13.4 | 2.7 |
| | 6th round | 17.7 | 11.6 | 21.0 | 43.9 | 22.7 | 9.7 | 22.0 | 7.0 |
| | 7th round | 20.1 | 11.5 | 19.9 | 42.0 | 22.4 | 9.7 | 24.8 | 7.5 |
| Range | | 8.7-23.0 | 10.6-12.7 | 13.2-25.6 | 32.8-51.6 | 17.8-29.0 | 8.6-14.9 | 9.5-34.5 | 2.3-22.1 |
| No Plantain | 1st round | 17.0 | 12.1 | 21.2 | 40.6 | 20.8 | 10.3 | 24.2 | 10.4 |
| | 2nd round | 18.2 | 12.4 | 23.8 | 38.9 | 20.7 | 10.9 | 23.1 | 11.0 |
| | 3rd round | 17.6 | 12.0 | 21.8 | 42.5 | 21.7 | 10.5 | 21.7 | 9.5 |
| | 4th round | 17.6 | 11.5 | 24.5 | 48.3 | 24.1 | 10.8 | 12.4 | 2.8 |
| | 5th round | 19.7 | 11.4 | 21.3 | 47.1 | 24.0 | 10.5 | 17.4 | 5.7 |
| | 6th round | 19.7 | 11.4 | 19.3 | 45.2 | 23.3 | 9.4 | 22.7 | 7.4 |
| | 7th round | 18.9 | 11.7 | 21.7 | 47.0 | 22.6 | 9.7 | 17.9 | 7.5 |
| Range | | 13.2-24.2 | 10.4-12.9 | 13.9-29.5 | 34.6-55.9 | 18.8-28.8 | 8.0-13.5 | 4.7-34.8 | 0.8-18.0 |