Grass Allocation - Effect on Performance

If 75 cows are turned into a one Hectare (2.47 acres) paddock with a cover of 1400 kgs of grass dry matter for one day, they will eat around 16 kgs of grass dry matter, when the paddock is grazed down to 4 cm. When grazed down to 4 cm, roughly 200 kgs of DM per Hectare will remain on the paddock, at this point the paddock is grazed out. (The sum is 1400 kgs minus 200 kgs equals 1200 kgs divided by 75 cows equals 16 kgs of DM)

A cow yielding 6 gallons requires at least 18kgs of Dry Matter to feed her properly. If she is getting 16 kgs of Dry Matter from grass, she needs the remaining 2 kgs of Dry Matter to come from concentrate.

If the 2kgs of dry matter is not filled performance drops and animal welfare declines.

- Grazing Low Covers - Less than 1000 kgs DM or Less than 8 centimetres in height
  - When grass is scarce and not enough concentrate or fodder is fed milk proteins drop.
  - Milk yield also reduces, cow body condition and fertility both suffer.
  - Milk butterfat percentage also decreases because the diet is too low in fibre.
  - Feed long fibre, for example either clean straw, hay or high dry matter baled silage.
  - Feed a concentrate high in digestible fibre.

- Grazing Ideal Covers - Around 1400 kgs DM or Around 12 centimetres in height
  - Ideal covers are not easy to achieve due to fluctuations in growth rates.
  - Milk yield and milk protein levels are improved.
  - It is also very hard to get a 6 gallon cow to eat 18 kgs of dry matter from grass alone.
  - Some concentrate will be required to reach the 18 kgs of dry matter intake.
  - Offering some long fibre will prevent low milk butterfat percentage.

- Grazing High Covers - Greater than 1800 kgs DM or Greater than 16 centimetres
  - Grazing high cover, low leaf and high fibre grass will restrict intake and performance.
  - Milk yield and milk protein levels will decrease, while milk butterfat levels increase.
  - As intake is reduced due to high stem levels, body condition will come under stress.
  - Ideally high covers should be skipped and taken out as high dry matter baled silage.
  - If forced to graze high covers due to poor growth, concentrate will be required.

Balanced supplementation is a key element of good grassland management.