

# Optimum stocking rate & calving date

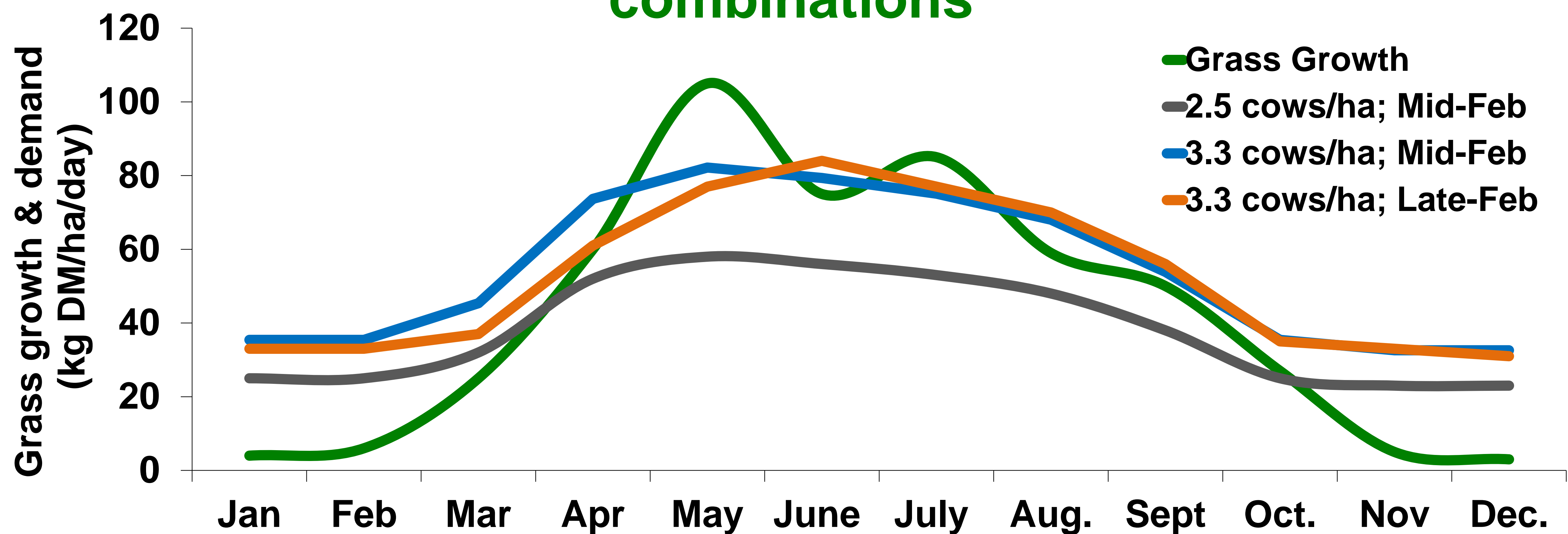
## Stocking rate (SR; cows/ha)

- Main driver of productivity in grazing systems
- Align feed supply with herd demand
- Influenced by soil type, grass growth, supplement fed

## Calving date (CD)

- Compact spring calving fed on grazed grass diet
- Affects supplement requirement & milk production
- Delaying calving affects spring grazing targets

## Grass growth and demand profiles for SR and calving date combinations



| Mean calving date           | 15 <sup>th</sup> February | 2 <sup>nd</sup> March |
|-----------------------------|---------------------------|-----------------------|
| Concentrate (kg DM/cow)     | 425                       | 376                   |
| Silage fed (kg DM/cow)      | 200                       | 137                   |
| Milk yield (kg/cow per day) | 18.7                      | 19.9                  |
| Milk yield (kg/cow)         | 5,452                     | 5,514                 |
| Milk solids (kg/cow)        | 430                       | 431                   |
| Lactation length            | 291                       | 277                   |

## Take home messages

- Match SR to growth capability and supplement brought onto farm
- Target mean calving date; range 15<sup>th</sup> February – 2<sup>nd</sup> March (50-60 days before magic day)
- Decision rules key to managing systems

|   |     |     |     |     |
|---|-----|-----|-----|-----|
| Grass grown (t DM/ha)                         | 10  | 12  | 14  | 16  |
| Optimum SR if feeding 0.5 t DM supplement/cow | 1.8 | 2.2 | 2.5 | 3.0 |
| Optimum SR if feeding 1.0 t DM supplement/cow | 2.0 | 2.4 | 2.9 | 3.2 |