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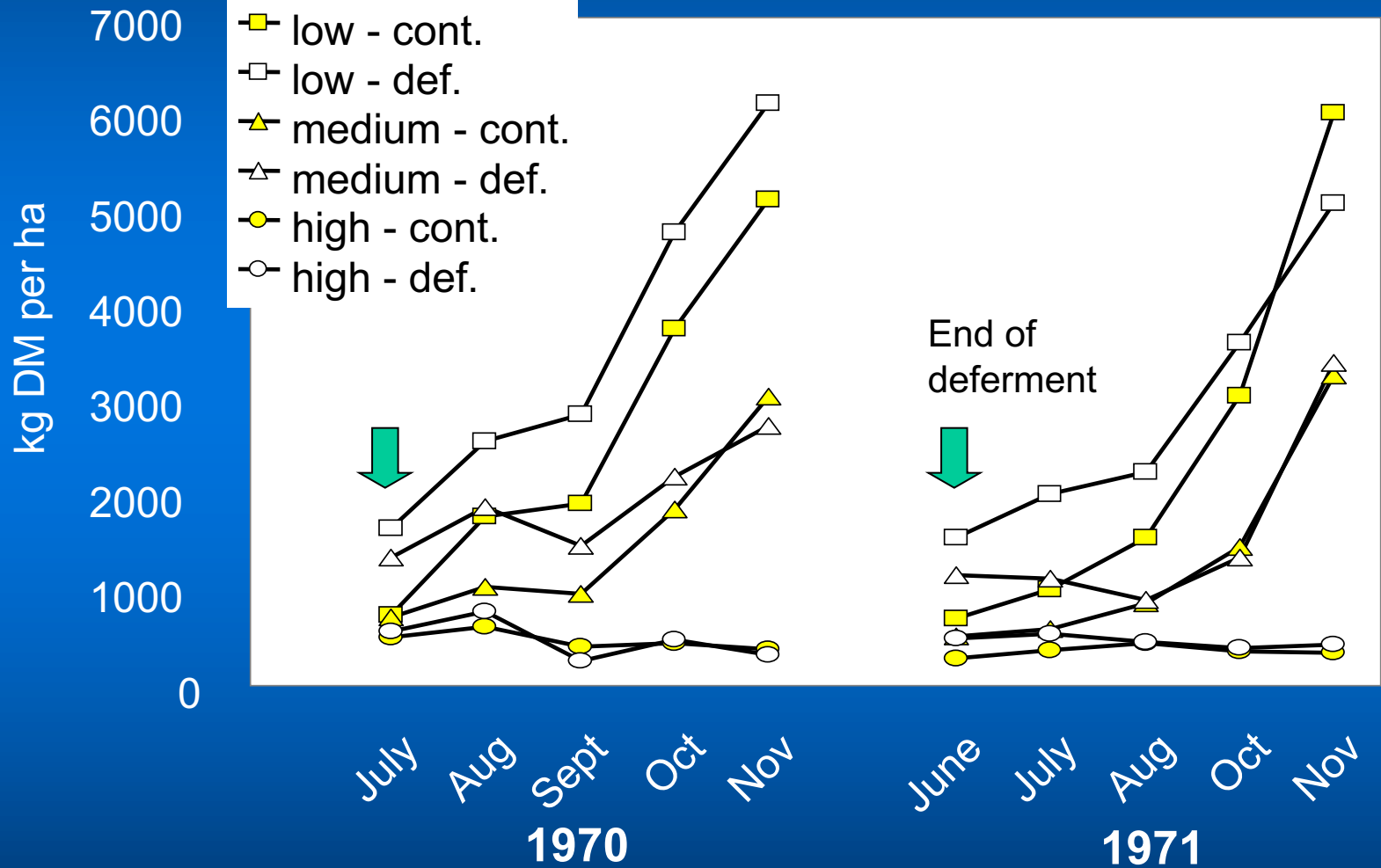
Wool

Management of Annual Pastures for Wool Production: Autumn Deferment

Produced for the CRC for Premium Quality Wool undergraduate program by;
Dr. Brad Crook, The University of New England.



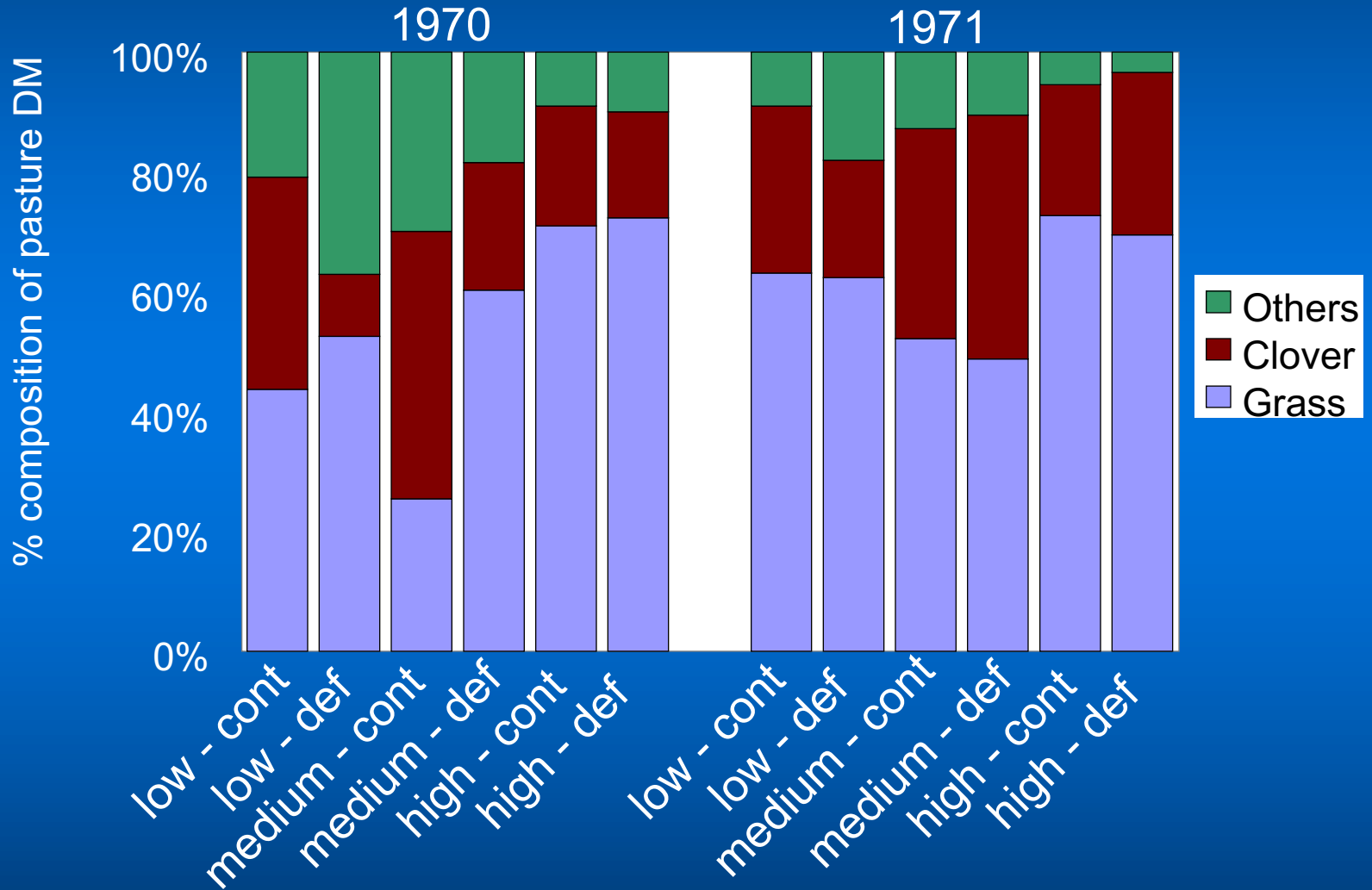
Autumn deferment vs continuous grazing: pasture availability



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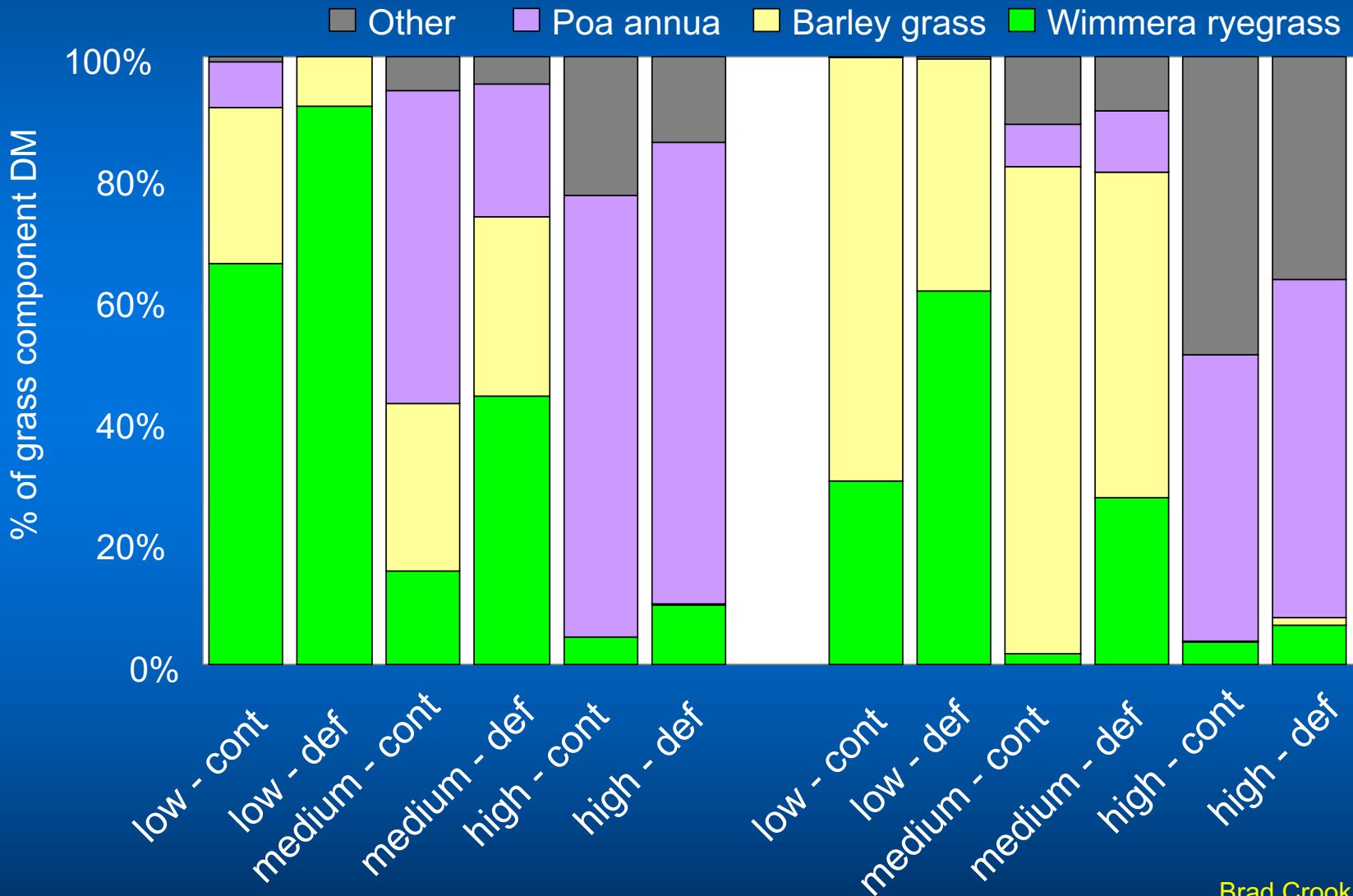
Autumn deferment vs continuous grazing: botanical composition



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Autumn deferment vs continuous grazing: grass component



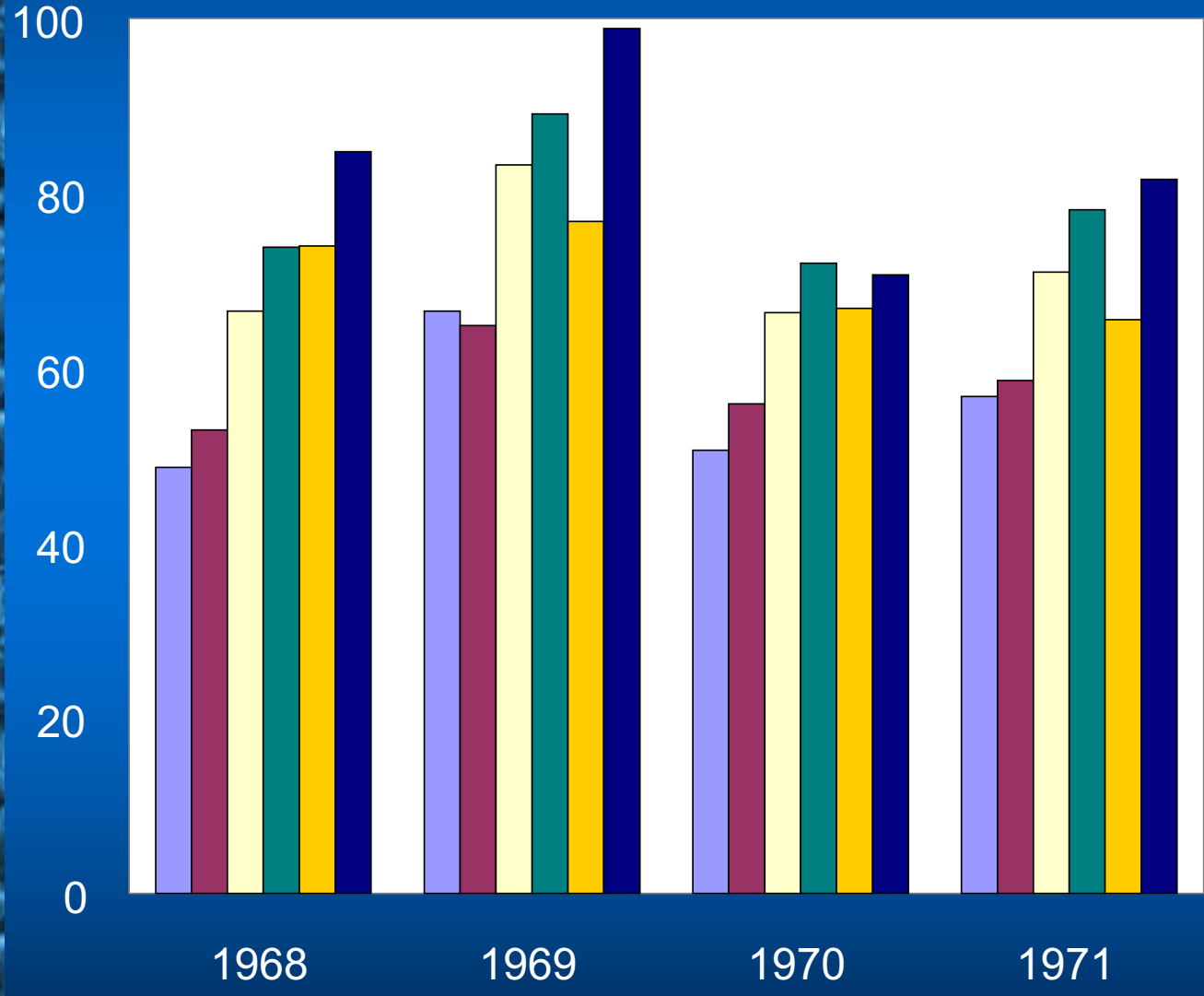
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Brad Crook
Source: Brown (1976)



Autumn deferment vs continuous grazing: clean wool production per hectare

kg clean per ha



- low - cont
- low - def
- medium - cont
- medium - def
- high - cont
- high - def

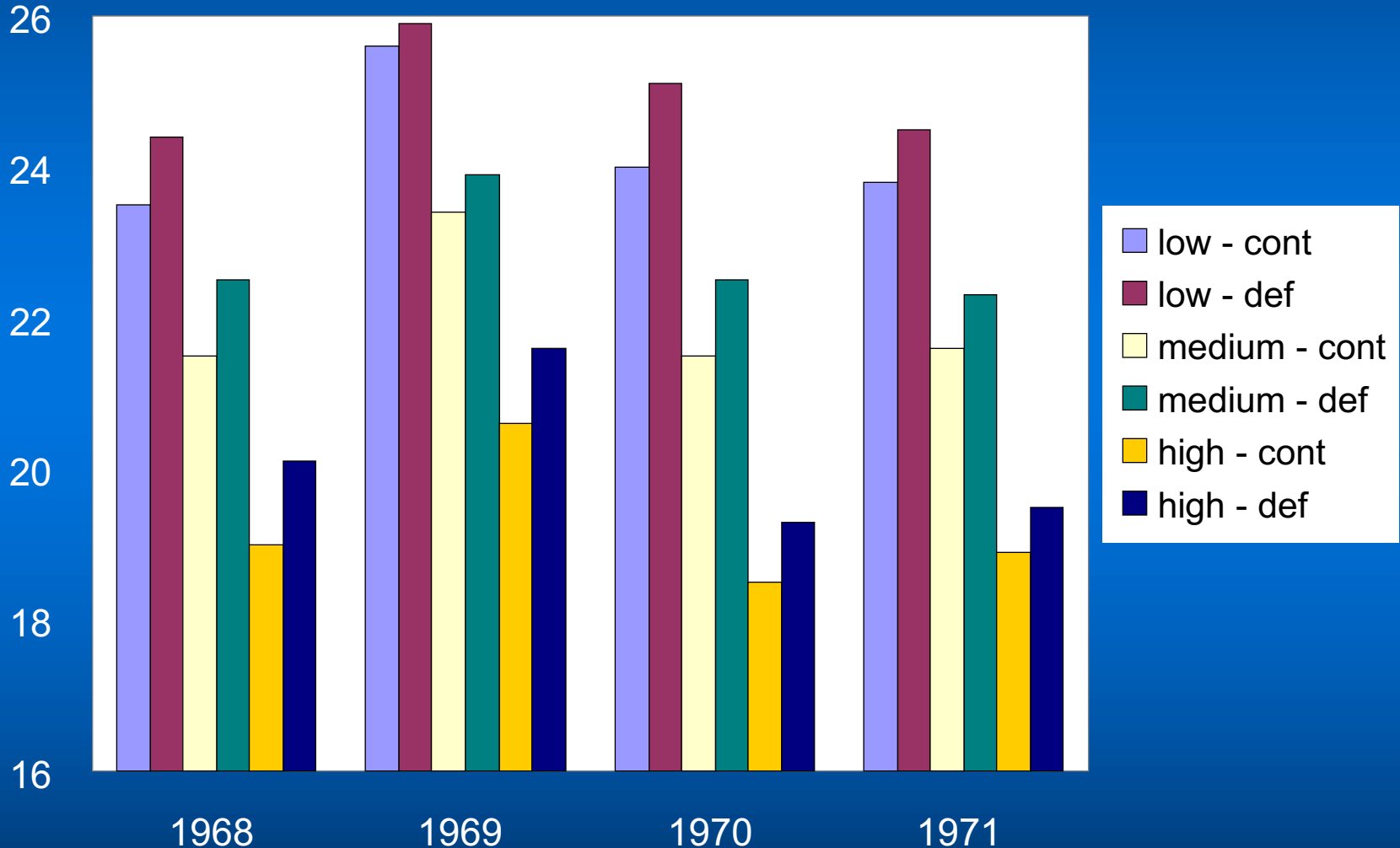
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Source: Brown (1976)



Autumn deferment vs continuous grazing: fibre diameter

fibre diameter (μm)

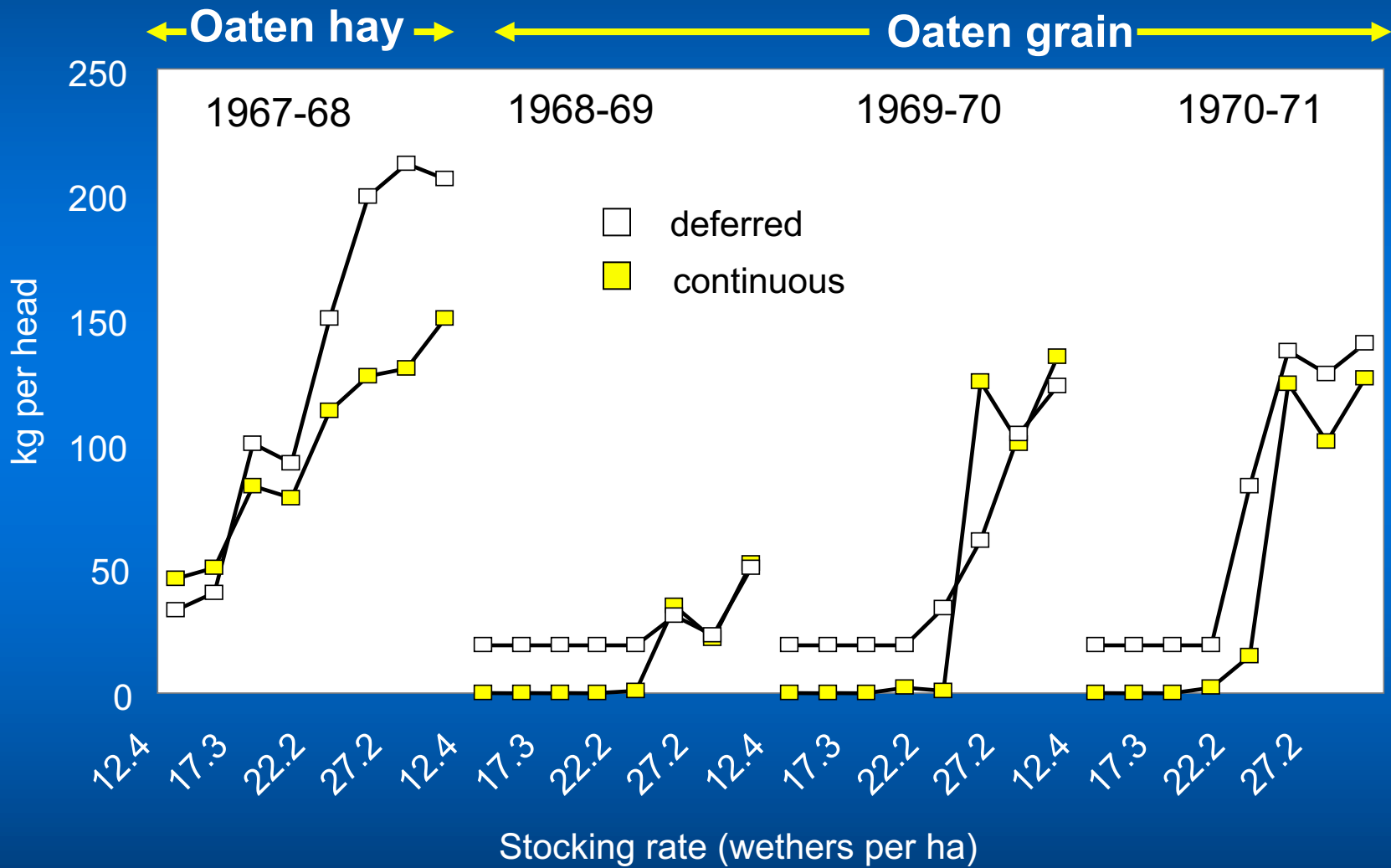


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Source: Brown (1976)



Autumn deferment vs continuous grazing: Supplementary feed requirements




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Source: Brown (1976)



Conclusions

- **Sheep production:**
 - autumn: liveweight and wool growth rate lower with deferred grazing
 - winter: liveweight and wool growth rate higher with deferred grazing
 - deferred grazing: slight advantage in wool production per hectare but also slight increase in fibre diameter
 - **up to 22.2 wethers per ha:**
 - continuous grazing: required little/no supplementary feeding
 - deferred grazing: supplementary feeding required, cost could outweigh benefits in wool production
 - **> 22.2 wethers per ha:**
 - high levels of supplementary feeding needed for both strategies
 - pasture degeneration under both grazing strategies
-  **autumn deferred grazing did not enable stocking rates to be increased (for wethers)**

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Autumn deferment and breeding ewes: Kybybolite, SA

- Merino ewes, joined in January
 - stocking rates: 4.9 to 19.8 ewes per hectare
 - continuous grazing vs autumn deferment for 6 weeks
 - up to 17.3 ewes per ha:
 - continuous grazing: required little/no supplementary feeding
 - deferred grazing: large supplementary feed requirements, to avoid high incidence of pregnancy toxaemia
 - deferment gave little or no advantage in sheep production (e.g. ewe live weight, wool production, reproduction rate, lamb growth rate)
- autumn deferred grazing did not enable stocking rates to be increased for breeding ewes and their lambs

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