





Control of Chilean Needle Grass

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Background

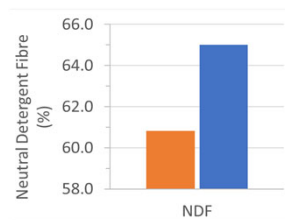
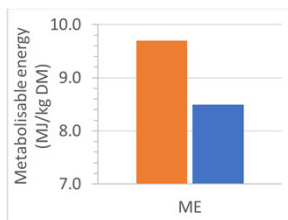
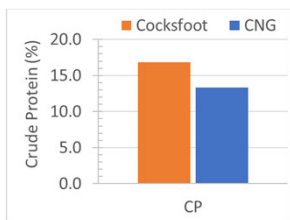
Chilean Needle Grass lowers stocking rate and productivity

- Generally unpalatable to livestock
 - especially once it produces flower stalks
- Invasive
 - greater than 3,000 seeds per m²
- Perennial
- Seed contamination
- Restricted stock access
- Reduced growth and quality during growing season



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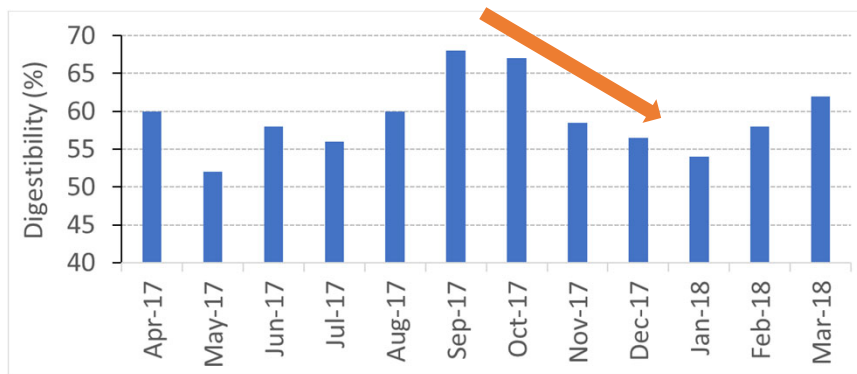
Chilean Needle Grass Feed Quality



Victoria Grech, 2007

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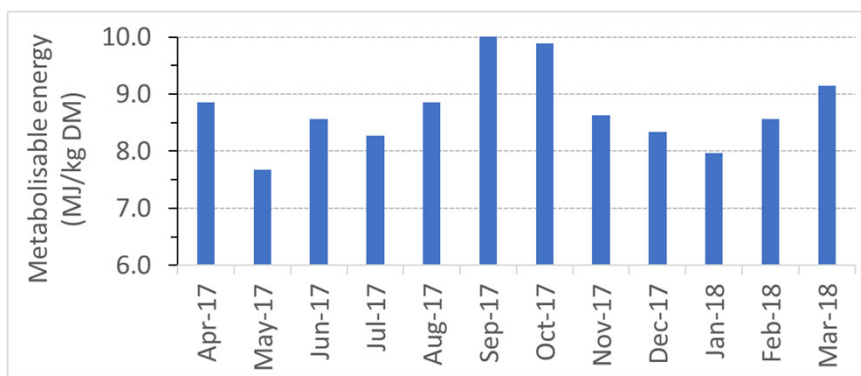
Chilean Needle Grass Digestibility



Wellingrove Carol Harris, 2018

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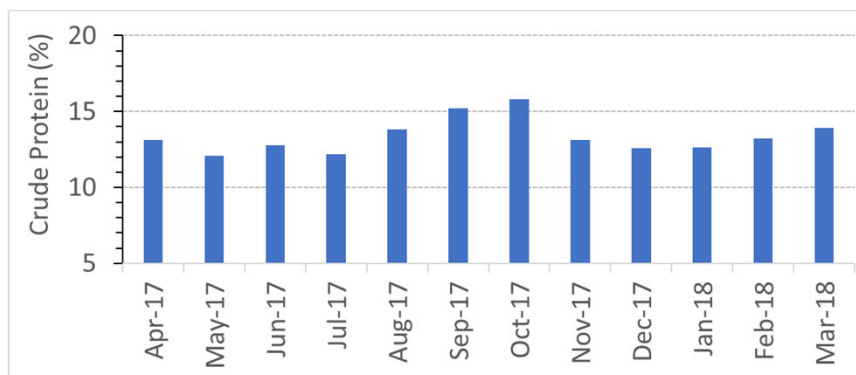
Chilean Needle Grass Metabolisable Energy



Wellingrove
Carol Harris, 2018

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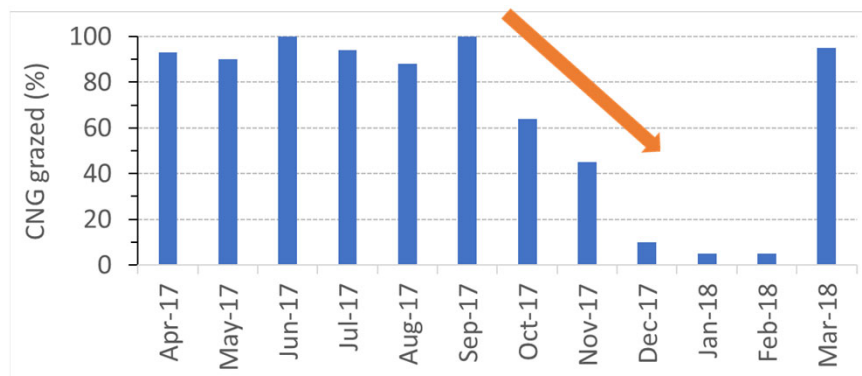
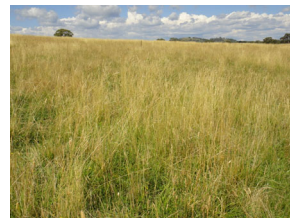
Chilean Needle Grass Crude Protein



Wellingrove
Carol Harris, 2018

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Chilean Needle Grass Percentage grazed



Wellingrove
Carol Harris, 2018

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What did we try to do?



- Reduce seeding in an attempt to reduce spread and increase palatability
 - pasture (spray) top with glyphosate at the rate of 110-120 g a.i./ha
- Selectively remove CNG plants from established pasture
 - flupropanate at the rate of 1.5 (2016) and 2.0 (2017) L/ha (1.1-1.5 kg a.i./ha)
- Slashing to increase palatability of CNG
 - slashing after seeding in December
- Spray out and resow to a new fescue pasture
 - glyphosate at the rate of 3.0 L/ha

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Sites



- All located in the Guyra and Ben Lomond districts
- Range of pastures
 - fescue/ocksfoot, tussock poa, mixed, CNG
- Mostly rotational grazing (some high density)
- Soil chemical fertility

Site	Phosphorus (Olsen)	Sulphur (KCl40)	Potassium (Colwell)	pH (CaCl2)	Organic carbon (%)
A	45	8.1	900	5.2	4.9
B	50	7.0	680	5.4	5.1
C	30	5.7	1200	5.0	2.4
D	12	6.7	410	5.1	2.1
E	11	4.3	720	5.4	2.4
F	24	30.0	450	5.0	5.1

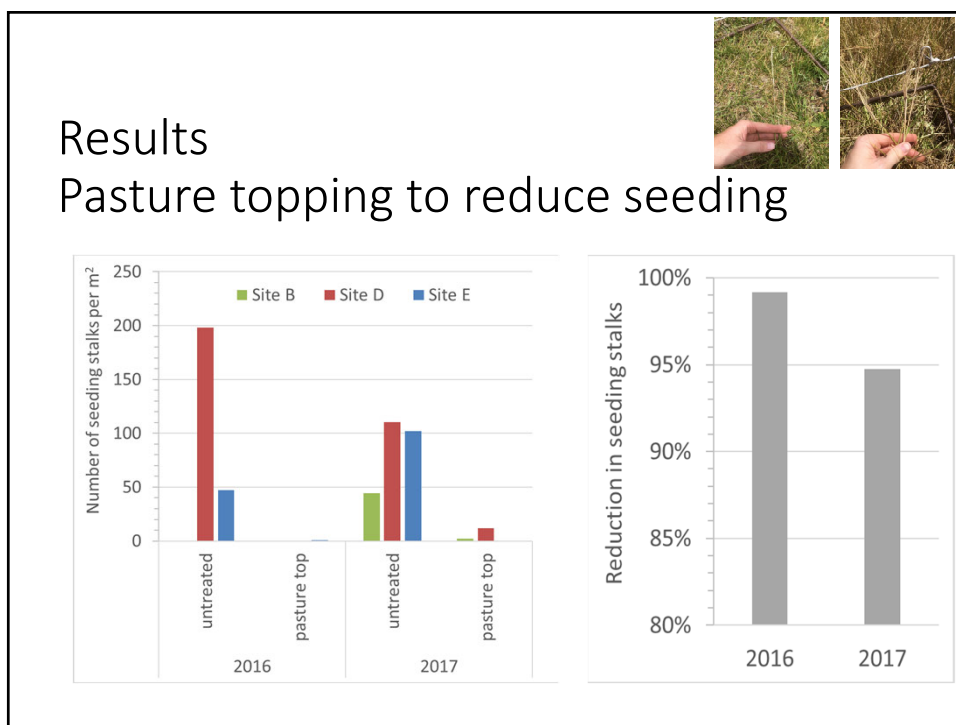
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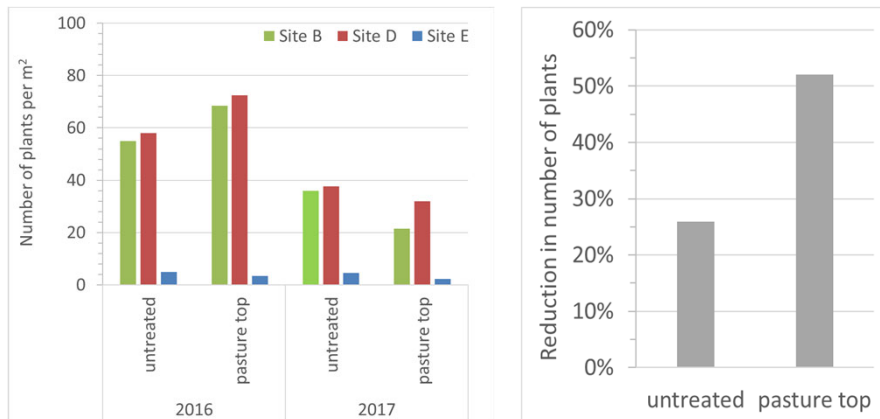


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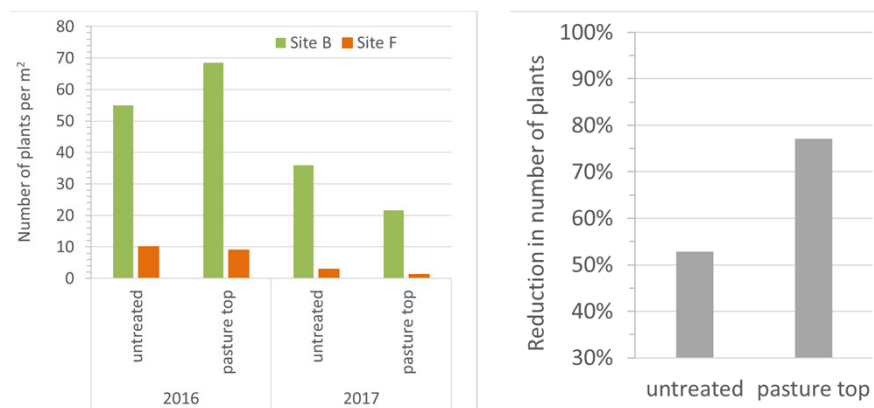
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Results Pasture topping and number of plants



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Results Selective removal with flupropanate



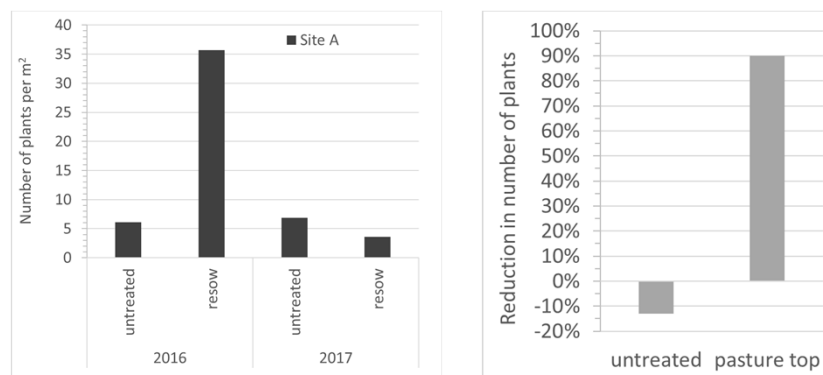
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Results Slashing: seeding and plant number



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Results Spray out and resow



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Conclusions



- Invasive perennial grass weeds are difficult to control
- Utilisation of Chilean Needle Grass is hampered by low palatability and seed contamination
- Pasture topping with low rates of glyphosate reduced the number of seeding stalks by about 95%
 - but little apparent change in palatability and utilisation
- Selective control with flupropanate is difficult
 - subsequent management restrictions
- Resowing may reduce mature plant numbers but new plants quick to emerge
- Effects of slashing on palatability were not determined

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Conclusions



- Quarantine practices to reduce spread on to the farm
- Reduce spread within the farm
 - farm tracks, vehicles, stock movements, edge paddocks
 - role for pasture topping
- Grazing management to keep pastures healthy and productive
 - cattle over sheep
 - higher stock density
- Consider and follow withholding periods and restraints for use of herbicides
- Don't have CNG - try and keep it out
- Have CNG in isolated patches – use herbicides to remove
- Have widespread CNG – use all management approaches to live with it

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POISON

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Water Soluble Herbicide
ACTIVE CONSTITUENT: 745 g/L FLUPROPANATE
(present as sodium salt)

GROUP J HERBICIDE

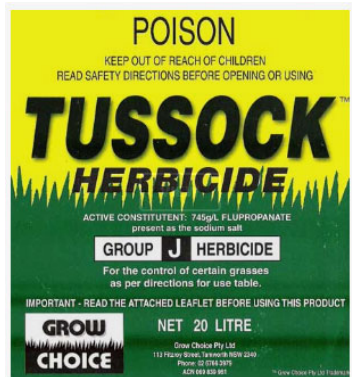
A component of integrated management of serrated tussock, giant parramatta grass, Giant rats tail grass, Chilean needle grass, African lovegrass and certain other grasses as per the direction for use table

VEE DRI (AUST) PTY. LIMITED 5223 Oullen Ford Rd Bungonia NSW 2580. Ph: 0408 404 505. Fax: 02 4844 4358

NET 20 LITRE

WITHOLDING PERIODS:
AREAS RECEIVING BLANKET TREATMENT (THAT IS TREATMENT OTHER THAN SPOT SPRAYING) ARE NOT TO BE GRAZED OR CUT FOR STOCK FOOD FOR AT LEAST 4 MONTHS AFTER SPRAYING.
AREAS RECEIVING SPOT SPRAY TREATMENT ARE NOT TO BE GRAZED OR CUT FOR STOCK FOOD FOR AT LEAST 14 DAYS AFTER SPRAYING. STOCK IS NOT TO BE GRAZED IN 'TASKFORCE®' TREATED AREAS FOR AT LEAST 14 DAYS PRIOR TO SLAUGHTER.
LACTATING COWS OR GOATS MUST NOT BE GRAZED IN 'TASKFORCE®' TREATED AREAS.

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Directions for Use

Restraints

Do **NOT** apply this product to steeply sloping sites when applying high rates recommended for perennial grass control.

Do **NOT** allow spray drift onto susceptible crops and ornamentals.

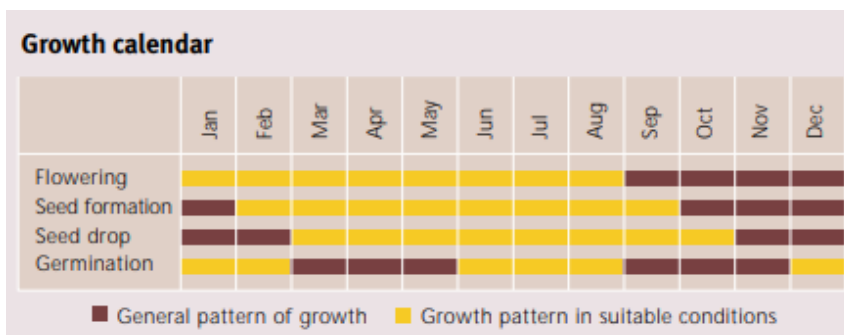
Do **NOT** spray near desirable trees.

Do **NOT** graze, or cut for stock feed, areas which have received spot spray treatment, for at least **14 days** after spraying.

Do **NOT** graze, or cut for stock feed, areas which have received any treatment other than spot spraying, for at least **4 months** after spraying.

Remove stock from treated areas and **DO NOT** slaughter or milk them for human consumption until they have been on clean feed for at least 14 days.

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CRC Weed Management, 2003

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