

Managing weeds with sage-grouse in mind

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Do invasive weeds really
impact sage-grouse habitat?

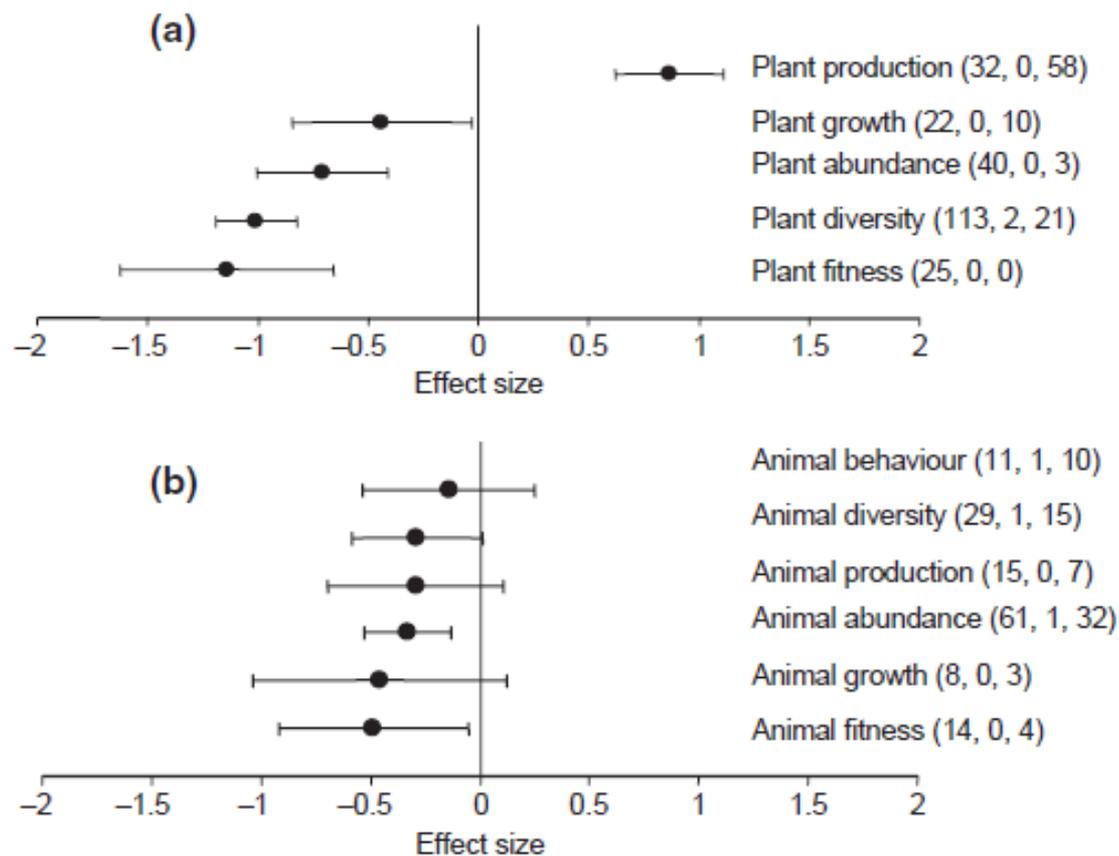


Figure 1 Mean effect size (Hedges' d) of differences between alien plant species impacts to (a) plant species and communities and (b) animal species and communities. The bars around the means denote bias-corrected 95%-bootstrap confidence intervals. A mean effect size is significantly different from zero when its 95% confidence interval do not bracket zero. Positive mean effect sizes indicate that the invaded plots had on average greater values for variables describing a particular impact type. The sample sizes with Hedges' $d < 0$, Hedges' $d = 0$ and Hedges' $d > 0$ are given next to the bars.



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Does weed control improve
sage-grouse habitat?

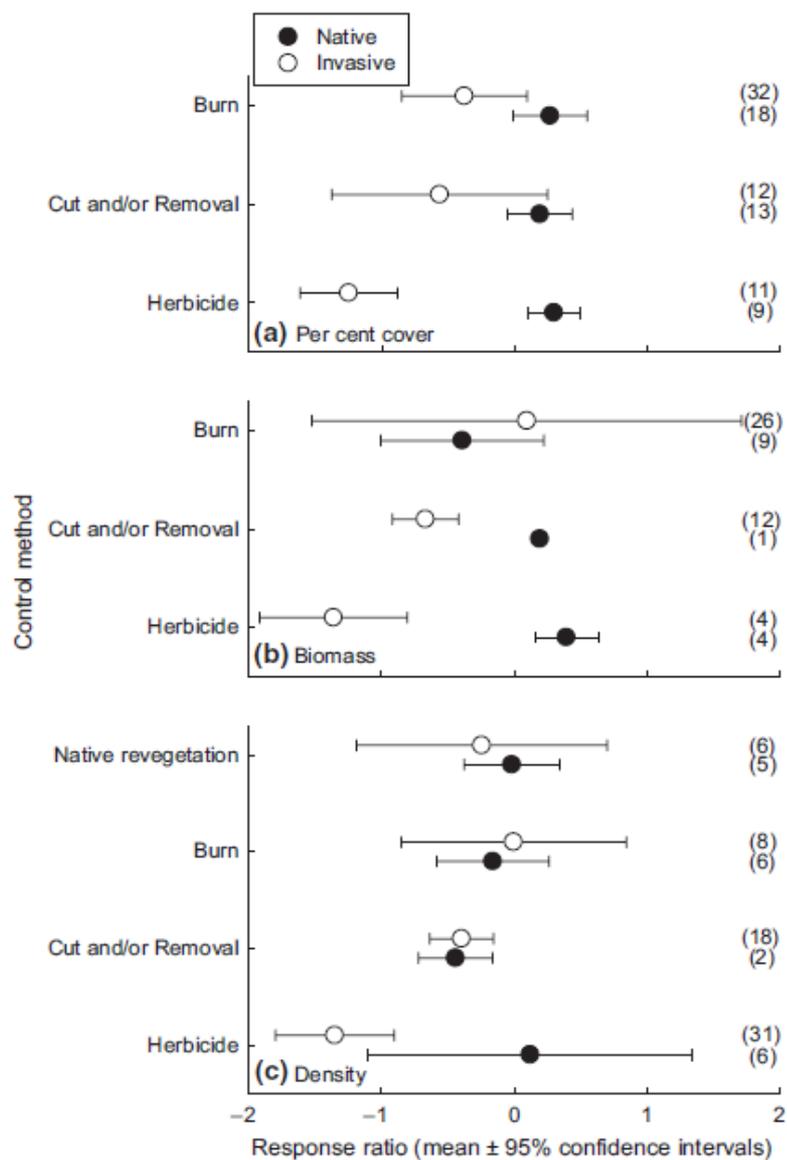
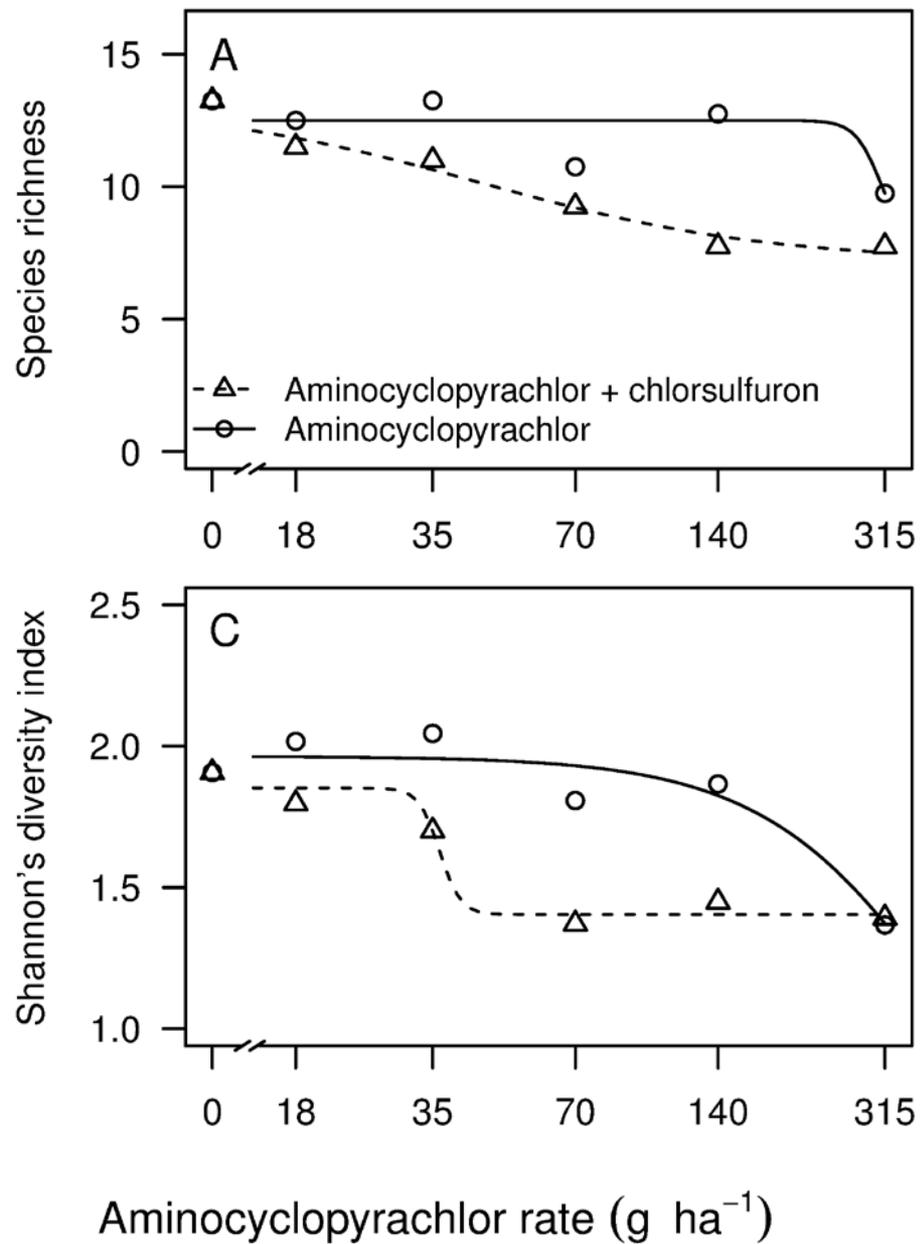
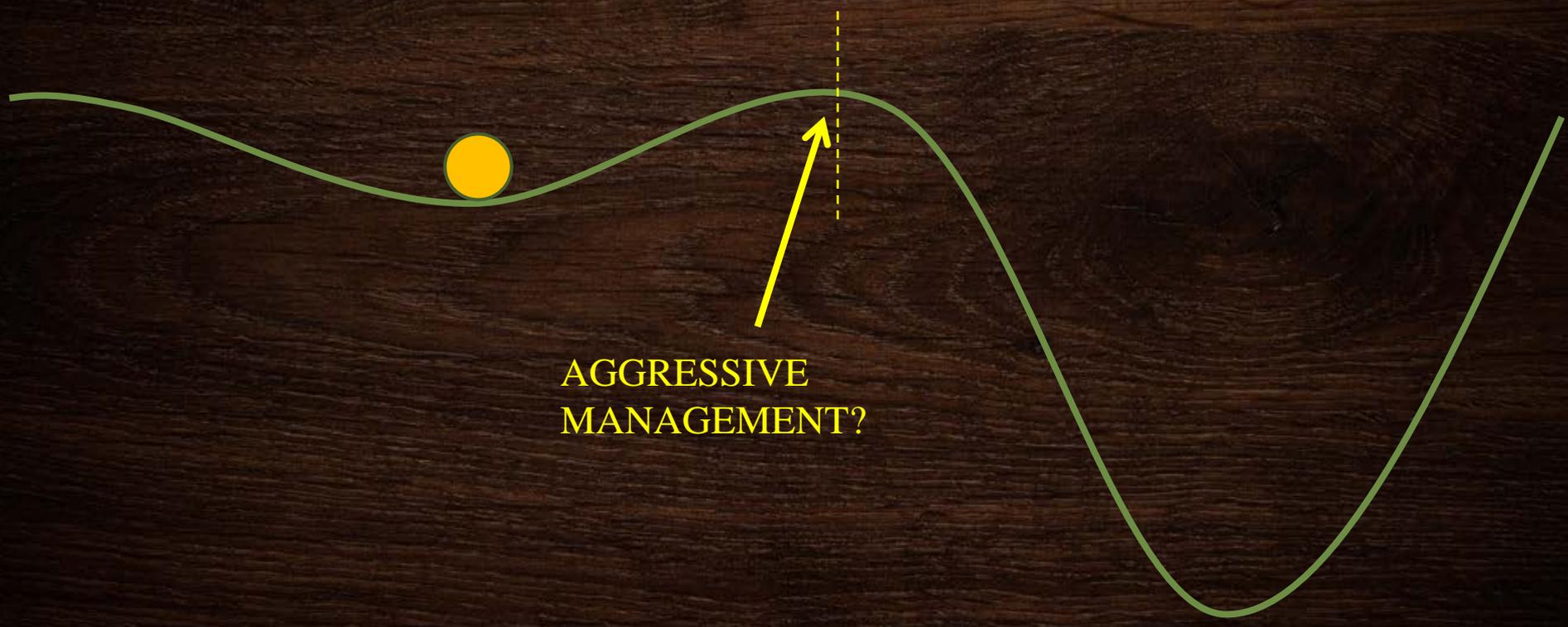


Fig. 5. Meta-analysis results on effects of control methods on per cent cover, density and biomass of native and invasive plants (number of studies summarized per response ratio is given to the right of each graph). Response ratio means and confidence intervals allow for relative comparison between treatment responses. Studies reporting 'fell and remove', 'cleared', 'mechanical removal', 'grazed', 'clipped' and 'burned' were coded into the 'burn' (or 'cut and/or remove') treatment.

Diversity Paradox

- Dense weed invasions reduce plant diversity.
- Herbicides often reduce plant diversity.
- ????





AGGRESSIVE
MANAGEMENT?

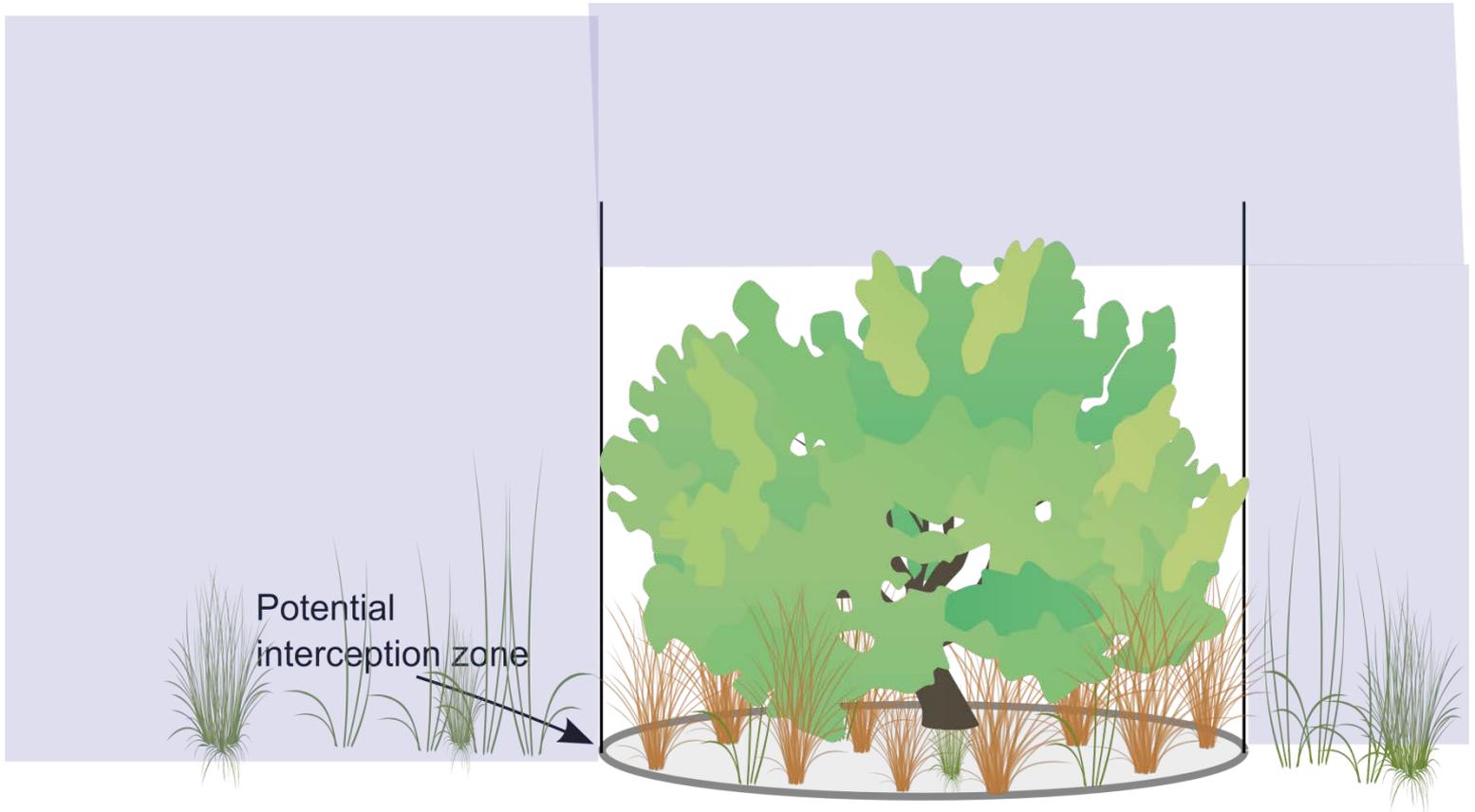
Maintenance /
prevention

Eradication of
source populations

Long-term
management

Restoration /
Abandonment







Will Rose photo



Other weeds
to keep in
mind



Recap/Discussion

- Weed management = habitat improvement?
- Is proactive weed management feasible?
- Should we focus efforts on high value sites with high recovery potential?

