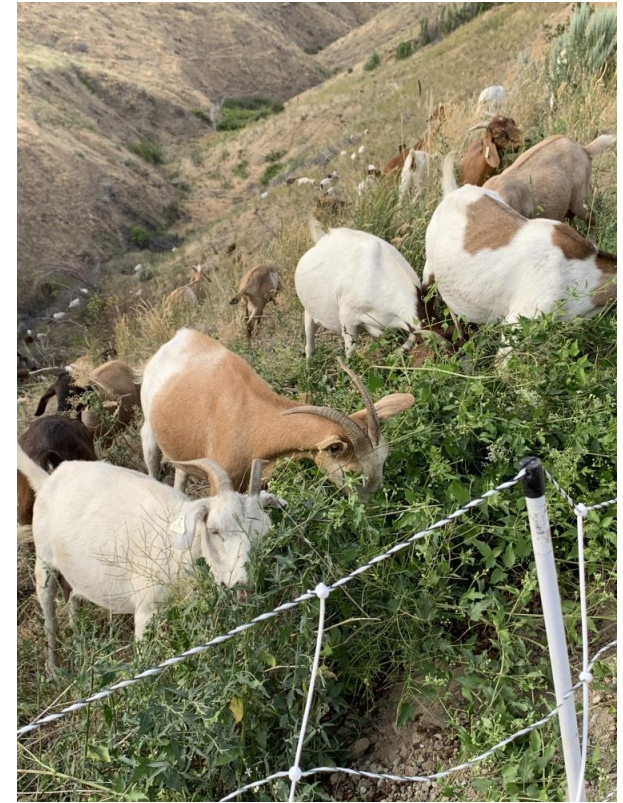


Biological Intervention: Grazing with Cattle, Sheep, Goats

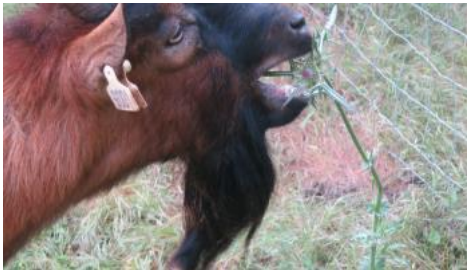


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Targeted Grazing: Key Points

- What do you want to control?
- What infrastructure do you have?
- What timing limitations are there?



To manage undesirables...

- Prevent seed production
- Deplete existing seed bank
- Prevent introduction

Medusahead Growth Stages



V2

Early vegetative, before elongation of internodes

Notes: This is the vegetative stage. Grazing can occur during this stage. In most years, more desirable grasses such as soft chess will mature earlier than Mh (V3 picture, Mh is still in the vegetative stage, soft chess has developed a seed head). This is also why late rains can benefit Mh. Once in the reproductive stage, most annual grasses will not put energy into growth, but instead into seed production.



V3

Late vegetative, elongation of internodes and boot stage
Photos: Emilio Laca

Medusahead Growth Stages



R4, beginning

From emergence of awns to full emergence of seedhead



R4

From fully emerged seedhead to opening of florets. Anthesis. Visible anthers.



R5

Anthesis to closure of florets. Beginning of kernel formation.

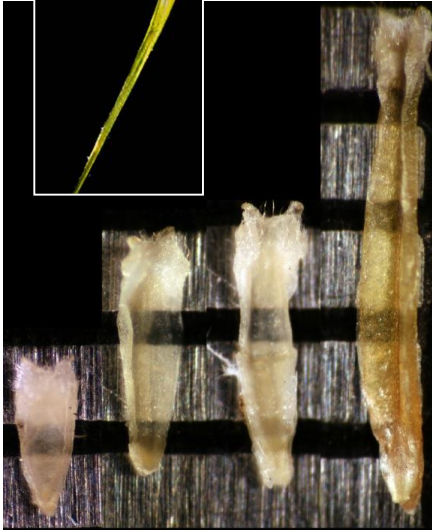
Notes: R4 starts the beginning of the reproductive stage of Medusahead. The awns are visible first, and then a seedhead emerges. In the R5 picture, you can see small Mh “flowers”. By this time, any control treatment to prevent seed development should have been completed.

Photos: Emilio Laca

Medusahead Growth Stages

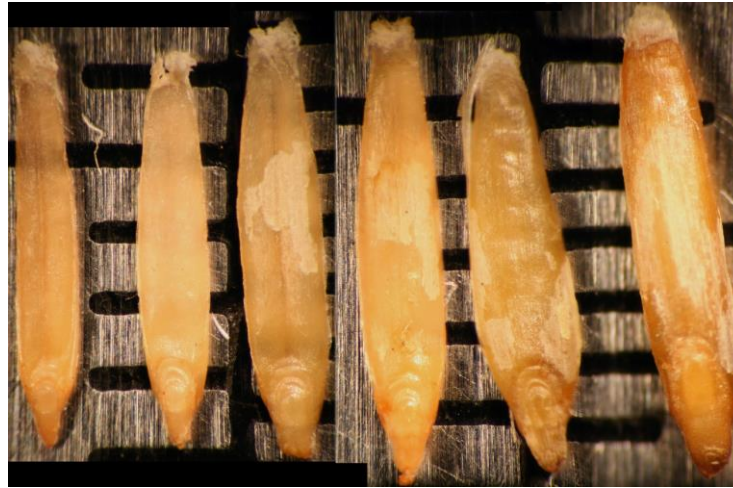


Seed kernel development.



R7

Kernel elongation inside floret until it reaches full length.



R8

Seeds in milk stage. Kernels occupy full length of palea.

R9

Seeds in dough stage.



M10

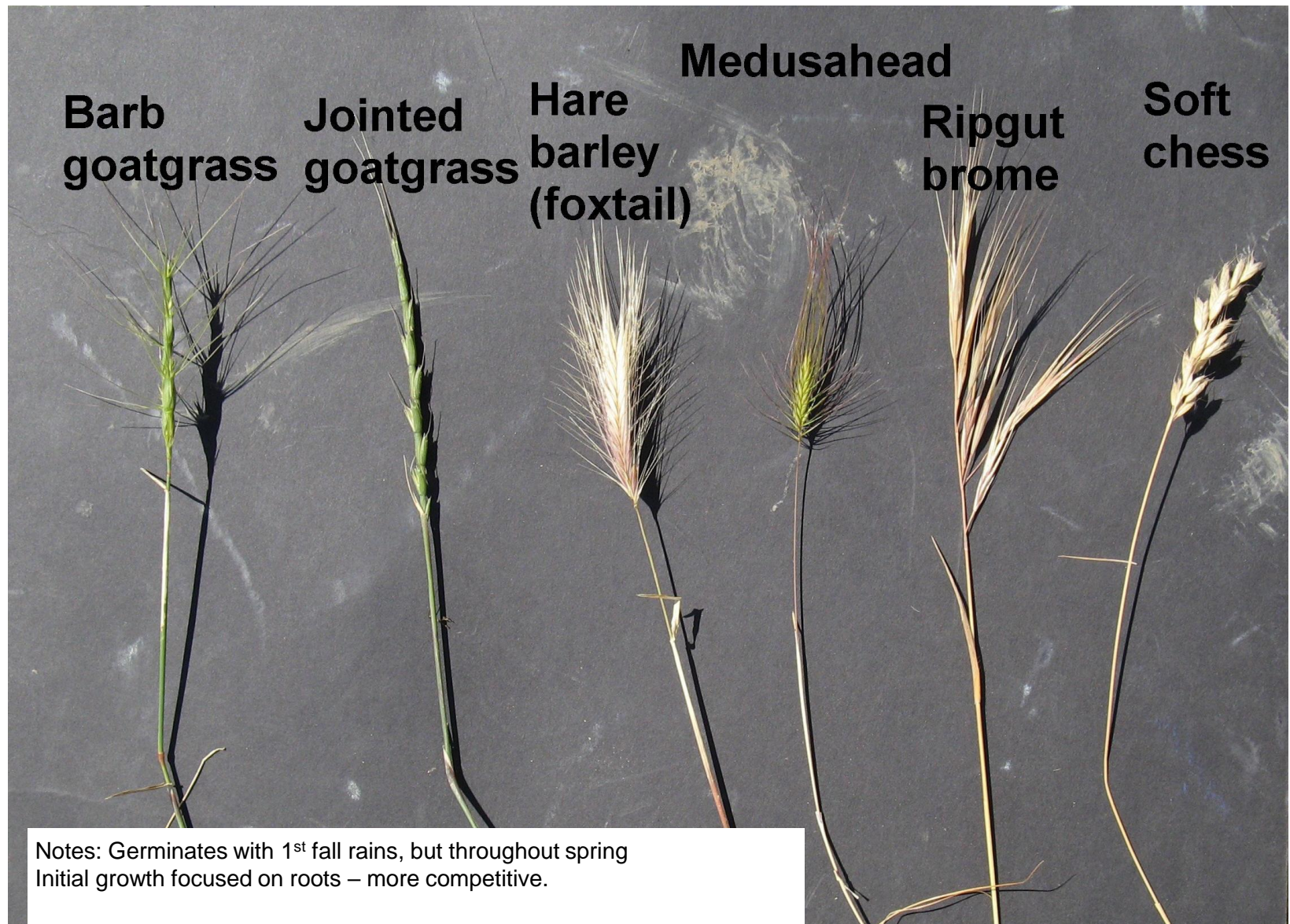
All seeds in seedhead are mature and hard. Plants are not dead yet. There is some red, brown and green in the seedheads. Glume veins are dark.

Notes: Seed development and mature plants. Plants then move into the dead and dry stage, and finally into the litter stage, or thatch.

Photos: Emilio Laca

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Medusahead & Barb Goatgrass Biology





Attractants:



Notes: Use of supplements to attract cattle (molasses tubs, hay, salt, etc.) has limited use. It will draw cattle into Mh patches, but you see no impact roughly 50 yards out. It is probably the cheapest method, but time needs to be spent moving supplement to the next Mh patch when needed. It is better than doing nothing to try and control Mh.

Photos: Josh Davy

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Notes: Caution to have extra –strong fencing for goats. They will climb or destroy weak fencing.



Notes: Goats prefer woody plants. In one restoration project, they left the fenced area to eat roses and other shrubs within sight of the pen rather than eat target plants.

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