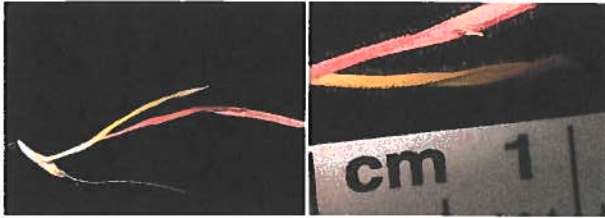
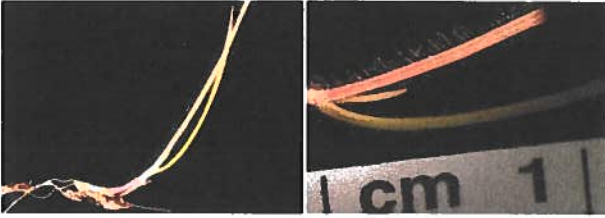


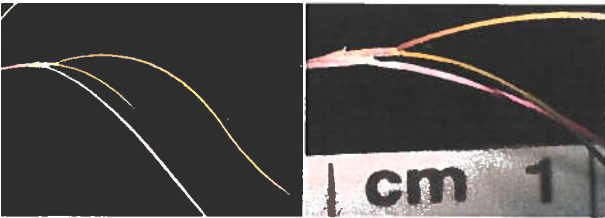
Seedlings



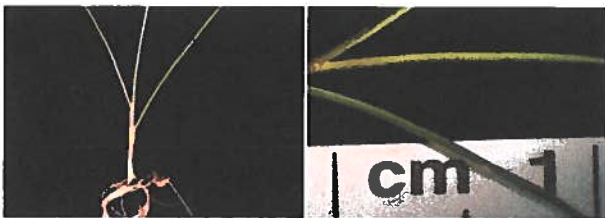
Cheatgrass seedling: multiple mid-length hairs on entire plant.



Japanese brome seedling: abundant mid-length to long hairs on entire plant.

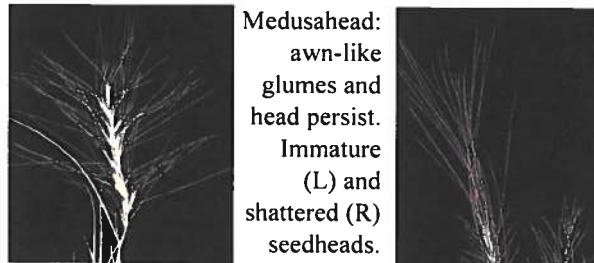
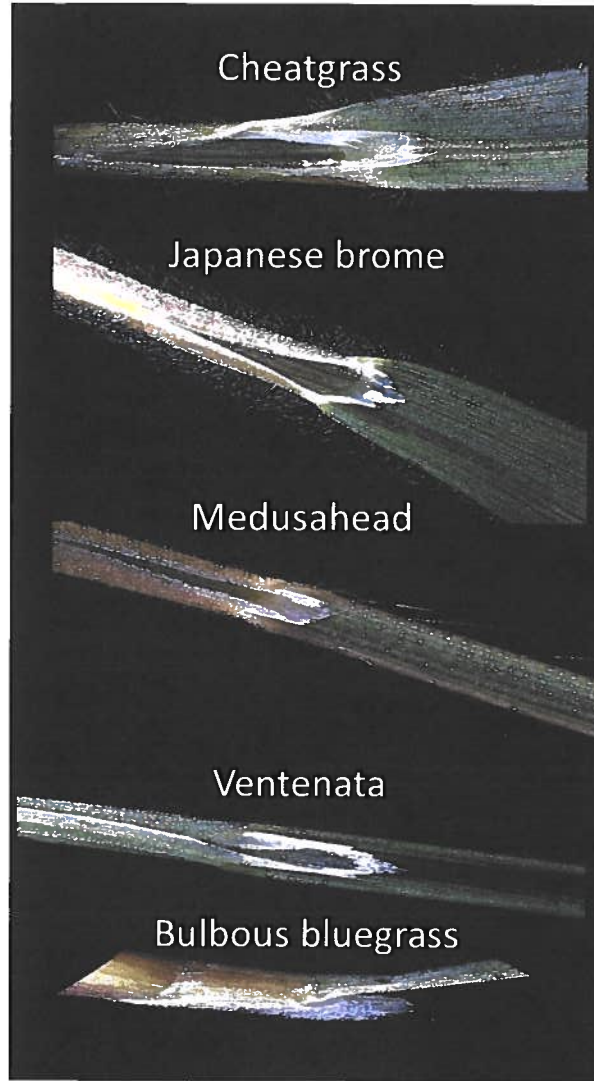


Medusahead seedling: few if any hairs (may be microscopic), long slender, almost rounded leaves.



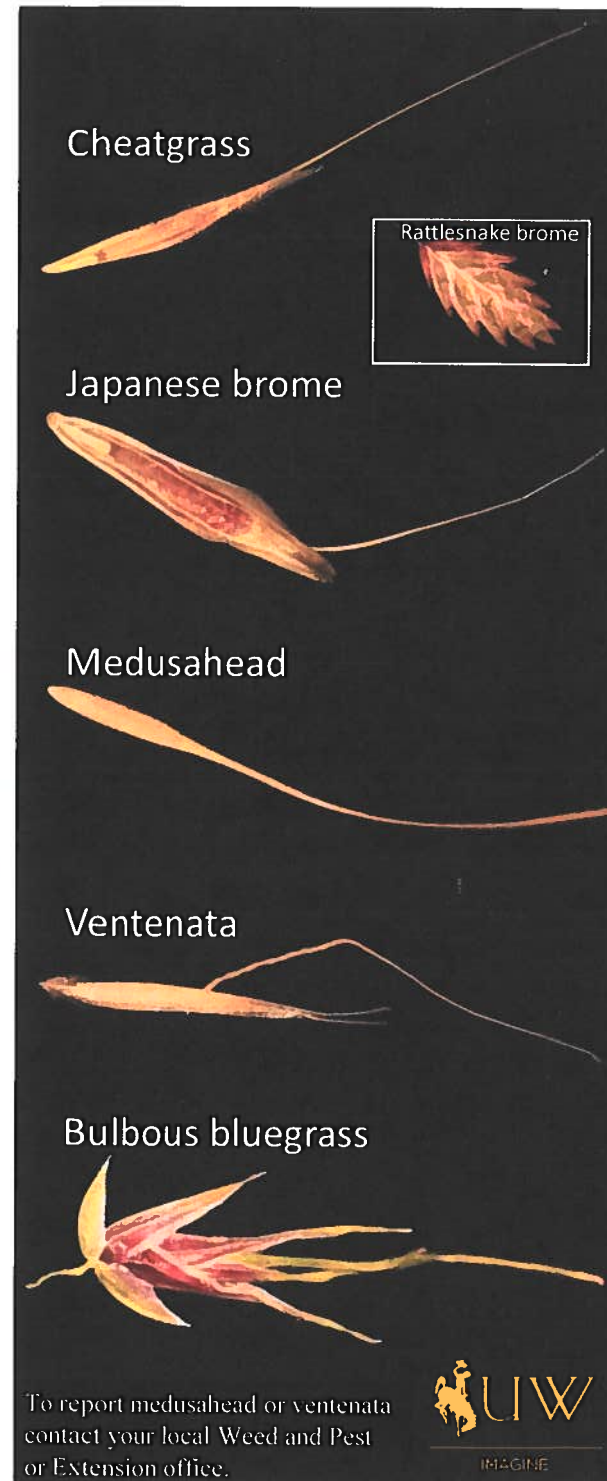
Ventenata seedling: no hairs, long slender, almost rounded leaves. Grows slower and is less robust during early season growth.

Ligules



Squirreltail: desirable perennial grass, awns / glumes shatter, head does not persist through winter.

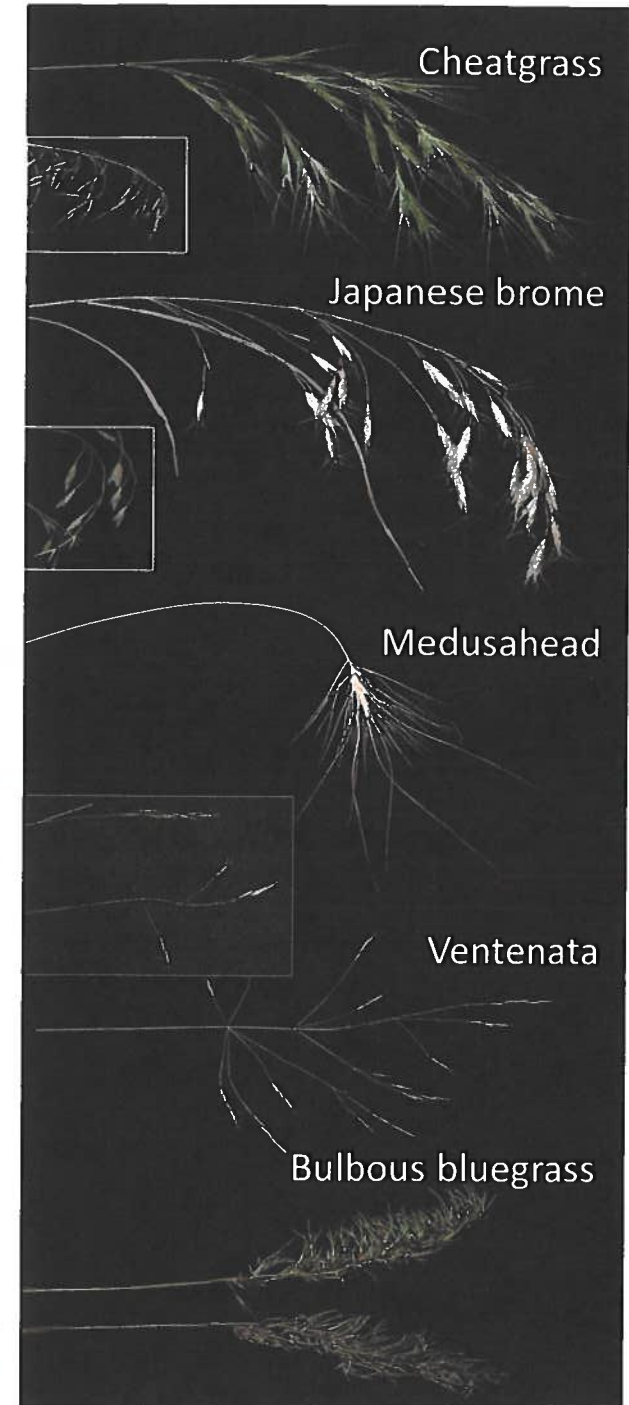
Seed



To report medusahead or ventenata contact your local Weed and Pest or Extension office.



Invasive Grass Quick Guide



Inserts: Glumes remain after seeds shatter on brome. Ventenata early stages before seeds shatter.

	Height	Leaves	Hairs	Node	Ligule	Inflorescence	Seedhead/ spikelet	Awns
Cheatgrass (downy brome) <i>Bromus tectorum</i> (Annual)	4-30 in	Flat leaves, 2-5 in x 0.12-0.28 in (3-7 mm); sheath flattened near collar	Leaves and stem densely covered with soft hair	Green, darker at maturity	Short, 1.5 - 3 mm; papery thin with a ragged edge	Open, slender and dense, drooping at maturity, flexible, 2-6 in long	Slender and nodding, 3/8 - 3/4 in long, 4-8 spikelets/ branch, 5-8 florets/ spikelet	Straight, 3/8 - 5/8 in; purple at maturity, turns brown/yellow at senescence
Japanese brome <i>Bromus japonicus</i> (Annual)	12-30 in	Flat leaf blade, 3-8 in x 0.04-0.28 in (1-7 mm), hairy with prominent mid-vein, sheath with long hairs; collars yellow or purple, constricted	Abundant long hairs prominent at all growth stages on leaves and stems	Green, darker at maturity	Membranous, less than 2 mm, rounded	Open panicle, flexible branches that can spread and droop 4.5 - 8 in long	1/4 x 1/2 in, 6-11 florets; broad lemmas, 7-9 mm, split or lobed at tip, fat appearance	1/4 - 3/4 in long; slightly twisted, bent, wavy; spread at maturity
Medusahead <i>Taeniatherum caput-medusae</i> (Annual)	6-24 in	Rolled leaf blades, >1/8 in x 4-12 in; open sheaths; slightly hairy	Soft short hairs; collar sparsely long-haired	Green, darker at maturity	Membranous, truncate, 0.3 - 0.8 mm	Long awned spike, nearly as wide as it is long, 1-4 in	Spikelet attaches directly to stem, 2 / node, 2 florets / spikelet, top floret typically sterile and smaller	1-4 in long; twisted, stiff with minute barbs at maturity; awned floret falls out, awn-like glumes persist on head through winter
Ventenata (wiregrass) <i>Ventenata dubia</i> (Annual)	6-27 in	3/4 - 2 3/8 in x 1-3 mm; narrow, rolled lengthwise or folded; open sheaths	Microscopic hairs that give a shiny appearance	Dark red or black	Membranous; long, cut into narrow segments	Lax, open pyramidal panicle, 8 in long; turns to light yellow with a distinct sheen	7/16 - 5/8 in long 2-3 florets / spikelet, 15-35 seeds per plant	Lower awns straight, 3/16 in; upper awns 3/8 - 1 in, bent and twisted, similar to wild oat; hairy at base (callus)
Bulbous bluegrass <i>Poa bulbosa</i> (Perennial) (bulbs at base of mature plant)	6-24 in	Narrow, flat or loosely rolled; boat tipped 2-6 in x 1-2 mm; sheaths open nearly to base, margins membranous	No hairs to short hairy; cobwebby hairs at base of lemma	Green, darker at maturity	Membranous, 1/8 in (3.2 mm); top rounded or pointed, sometimes slightly jagged	Open, slightly nodding ovate to lanceolate panicle, dense; contracted, branches ascending; 2-4 in long	Bulblets, not seed, with dark purple base; compressed, many spikelets 4-6 florets / spikelet	No awns, glumes and lemmas soft, forming bulb; bracts extend into slender tips 1/5 - 3/5 in long

Impacts

Medusahead and ventenata can negatively impact pasture and rangelands. They are capable of excluding desirable native species, and reducing livestock forage by up to 70%. Similar to cheatgrass, they can increase wildfire frequency and intensity. Awns can lead to physical injury in grazing animals while seeds attach readily to clothing, animals and equipment. Some managers consider medusahead and ventenata to be worse than cheatgrass and have observed these species replacing cheatgrass.

What Happens Next?

Early Detection Rapid Response (EDRR): We must find and manage populations quickly to eliminate these species or reduce their impacts.

Play Clean Go: To prevent accidental spread of seeds: clean boots, clothing, animals, and equipment before entering or exiting an area (for example, clean seeds from pant legs, remove mud from tires and boots, etc.)

Reporting: Report these grasses through EDDMapS, your local Weed and Pest or University extension office. This allows managers to start controlling the invasion and reduce additional spread. **Your help in reporting these species is critical.**

EDDMapS is a multiregional resource for reporting, tracking, mapping, identifying and managing weed species. Weed species locations can be reported online (www.eddmaps.org) or through a smartphone app (free download). A photo and GPS location or knowledge of the exact location of occurrence (if not using the app) are required.