White Campion and Bladder Campion

History and Status: White campion (*Silene latifolia*) and bladder campion (*S. vulgaris*) are two species in the genus *Silene*, family Caryophyllaceae. Catchfly or cockle, in addition to campion, are common names for species in this genus. In Montana there are 19 *Silene* species, with about half of them being introduced from Europe, western Asia, or northern Africa. White campion and bladder campion may be the most notable “weedy” species. According to USDA Plants Database, white campion has been recorded in 32 Montana counties, mostly in the western half of the state. Bladder campion has been recorded in 28 counties, primarily in northwest to northcentral Montana. Neither species is noxious in Montana, but white campion is listed in Washington. Interestingly, Spalding’s campion (Spalding’s catchfly) (*S. spaldingii*) is a native species that is on the federal Endangered Species List. It grows in a few locations in northwestern Montana. See more information on this species, including photos, at the Montana Natural Heritage Program [http://fieldguide.mt.gov/speciesDetail.aspx?elcode=PDCAR0U1S0](http://fieldguide.mt.gov/speciesDetail.aspx?elcode=PDCAR0U1S0).

Identification and biology: White campion is an annual to short-lived perennial or biennial. It reproduces through seeds only. Bladder campion is a perennial and can reproduce through seeds and vegetatively. Both white and bladder campion grow 1 to 3 feet tall and have opposite leaves with smooth edges. Tube-shaped flowers are clustered at the top of branching stems and are white with five, deeply-notched petals. Occasionally white campion has pink flowers. The fragrant flowers typically open in the evening and close by noon of the following day. Both species have a swollen, balloon-shaped calyx, or outer portion of the flower that forms the base. The calyx is exceptionally swollen in bladder campion and the veins form a net-like pattern. White campion is most easily distinguished from bladder campion by its hairy nature. Rough, coarse (hirsute) hairs cover the plant, and upper portions of the plant are glandular and sticky. Bladder campion is mostly hairless and smooth. Additionally, white campion is dioecious meaning plants have either male or female flowers; bladder campion flowers have both male and female parts (perfect flowers). The stamens on bladder campion are long and extend beyond the flower tube while stamens rarely extend beyond the flower tube on white campion male flowers. Both species have papery, vase-shaped capsules that hold small seeds.

Management considerations: White campion and bladder campion are typically only nuisance species that grow in disturbed areas like the edges of trails, fields, and roads. White campion is occasionally weedy in crop fields. Cultural measures can be taken to prevent the spread of white and bladder campion. For example, establishing and maintaining competitive, desired vegetation is important for keeping these species at bay. In addition, campion seeds sometimes contaminate seed of alfalfa, clover, or grasses, so purchasing quality, clean seed is important for preventing new infestations. In situations where control is necessary, management should focus on stopping seed production. Hand-pulling, mowing, or herbicide applications are effective. Hand-pulling should be conducted in early summer when the soil is moist. Mowing is best once flower buds begin to form and/or flowers begin to open. Herbicides that contain the active ingredient dicamba or metsulfuron-methyl are effective on campion. Consult the product label for directions on application rate and timing. Even though the habitat of white and bladder campion do not overlap with the habitat of the endangered Spalding’s campion, please be careful not to mistake them for each other. Spalding’s campion has greenish-white flowers, and the tips of the petals are not as deeply lobed as those of white or bladder campion. If you unsure, take a picture of the plant and share with a local botanical expert before conducting any control efforts.
Crossword: Test your knowledge of white campion and bladder campion

Across:
4. "Up, up and away in my beautiful ________ "-shaped calyx
7. Term used to describe flowers that have both male and female parts
8. Likely mode of introduction of weedy campion species
9. Botanical term used to describe rough, coarse hairs

Down:
1. This species of campion is a federal endangered species
2. Separate male and female plants, from Greek meaning "two households"
3. Another common name for species in the genus Silene
5. These male plant parts are longer on bladder campion than white campion
6. Most widespread threat to the endangered Spalding's campion* (2 words)

*See Montana Heritage Program website for answer
Solutions are posted to the MSU Extension Invasive Rangeland Weed website:
http://msuinvasiveplants.org/extension/monthly_weed_post.html