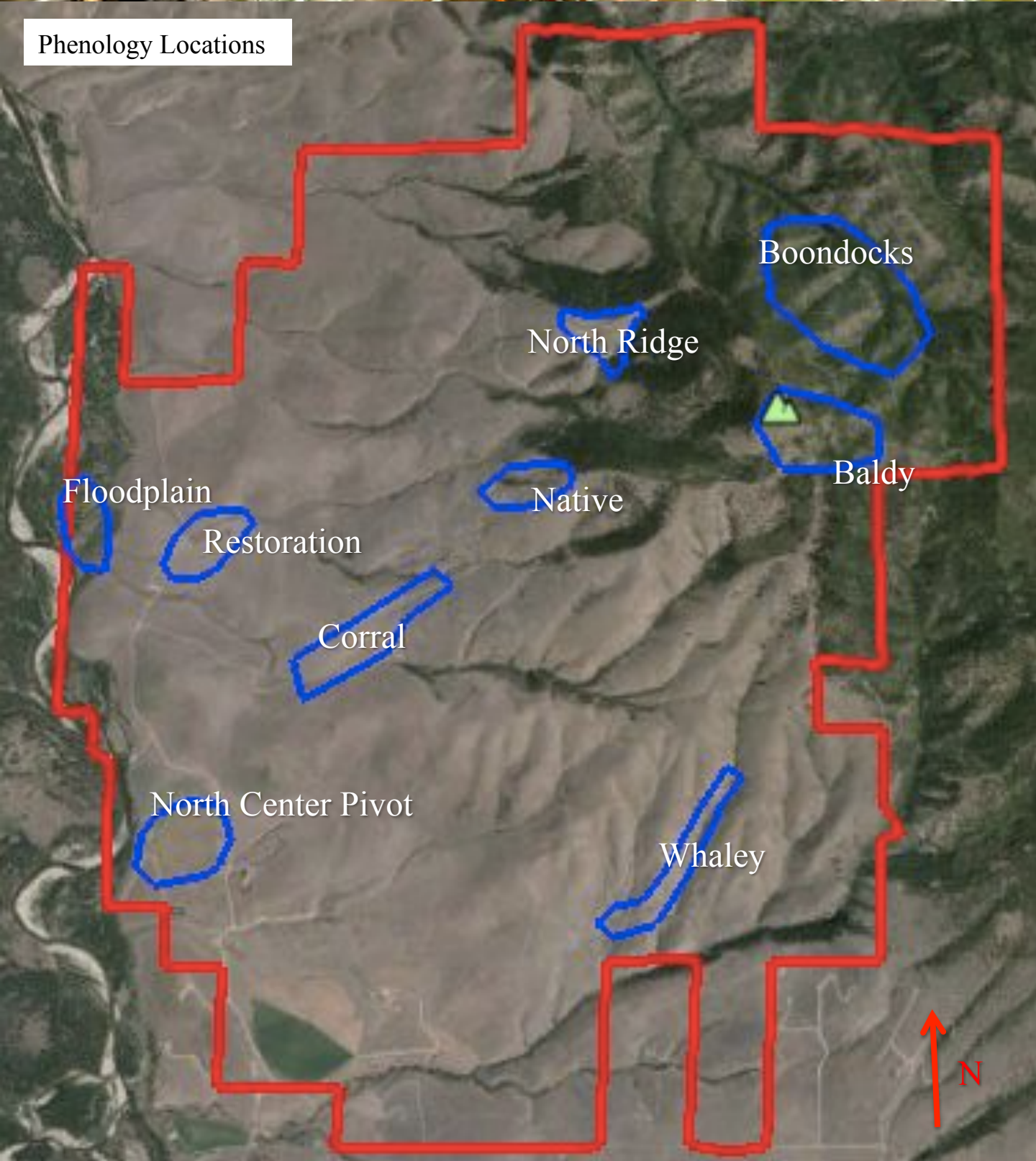




Phenology Field Note  
Late season colors and ripening seeds  
Prairie Wolfe  
August 5th, 2014



## Phenology Locations







Antelope bitterbrush seeds fall from the shrub when they reach maturity. Rodents covet this high-protein food source for winter caches (*Purshia tridentata*, Whaley).





Leafy spurge capsules dehisce upon ripening and fling seeds into the seed bank (*Euphorbia esula*, Whaley).



Knapweed seed head weevils feed on flowers before laying eggs (*Larinus minutus* on *Centaurea stoebe*). Eggs hatch within three days, after which the larvae enter the seed head (Lang et al. 1996).





Kochia continues its determined march toward seed production, despite repeated mowing (*Kochia scoparia*, Center Pivot).



Hazel hues sweep across wheat fields as the grain ripens (*Triticum aestivum*, Restoration).





The fungal pathogen *Ustilago bullata* readily infects cheatgrass (*Bromus tectorum*, above). I have also spotted similar looking infections in *Bromus carinatus* and *Bromus hordeaceus* (left to right, respectively). Infections occurred from the top of Baldy to the floodplain. *U. bullata* prevents host plants from producing viable seed.





Goldenrod (*Solidago canadensis*) is an important late-season pollen source (Mader et al. 2011). It blooms in the floodplain.



The wind-pollinated, reduced flowers of prairie sagewort offer little forage for pollinators (*Artemisia ludoviciana*, Baldy).





From the vibrant orange of ripe wax currant berries (*Ribes cereum*) to the rusty red of senescing ninebark leaves (*Physocarpus malvaceus*), warm colors mark the turning of the season as summer progress toward the equinox.







Brilliant violet blooms of aspen fleabane covered the forest floors throughout July (*Erigeron speciosus*, North Ridge).





Water once again became a scarce resource after the flood waters receded. This stark line in vegetative health occurs on an incline of less than 8 inches.



Snowberry flowers in earnest throughout the floodplain. Bees favor the delicate pink blossoms.





#### Works Cited:

Lang, R. F.; Story, J. M.; Piper , G.L. 1996. Establishment of *Larinus minutus* Gyllenhal (Coleoptera: Curculionidae) for biological control of diffuse and spotted knapweed in the Western United States. Pan-Pacific Entomologist 72 (4):209-212

Mader, E; Shepard, M., Vaughn, M., Black, S. H., LeBuhn, G.; 2011. Attracting Native Pollinators 1<sup>st</sup> ed. Massachusetts: Storey Publishing