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Freeze and Forages

Winter or spring? The dates on the calendar delineating between the two sometimes get blurred by reality. A spring with bouncing temperatures (and somewhat sporadic moisture) like 2026 can heighten concerns for our cool/early season forage crops. Should we be? Maybe...

Cereal crops were visibly injured but unless they were pretty tall, the growing point was likely below ground and damaged forage will 'melt away' as plants regrow (if the growing point was above ground, things get more complicated...). Unfortunately, that may not mean zero impact. While the long term effects to plants with protected growing points will likely be limited, the wrong type of tissue injury can persist through the growing season. If 'good' conditions persist, we might see few significant effects. If stressful conditions occur, plants with limited vascular systems could face challenges. Impacts will vary greatly (with grain crops likely affected to a greater degree than forage crops), but all cereals *could* experience losses due to everything from growing point injury to lost production days during plant recovery.

Alfalfa was also visibly injured, with some early hatching alfalfa weevil mortality noted as well. Healthy stands seemed to recover relatively quickly with the greater concern being any early weevil insecticide applications. Insecticide effectiveness is based upon contact with the weevil and that means getting product to green leaf tissue. Freeze damaged tissue could either intercept insecticides weevils will likely never feed on or will open up the canopy as it falls from the plant, allow more insecticide to reach the ground – where weevils also aren't feeding. Fortunately, most dead tissue will be replaced by new tissue prior to insecticide applications.

Injury to bromegrass might be the great unknown. Bromegrass's cool season growth characteristics and longevity as a perennial forage can give us a false sense of security about its tolerance to these events, but that doesn't mean it's bulletproof. Alaska research from the 80's suggests that while bromegrass *can* tolerate low temperatures, some of that tolerance is attributed to a *lack* of winter temperature fluctuations. When temperatures 'bounce' like they have this winter, injury potential seems to increase. You can read more in a post on the Meadowlark Extension District Agronomy Blog (<https://blogs.k-state.edu/meadowlarkagronomy/>) but the take home is: stands may have been injured as much by temperature *swings* as the true cold with 'weakened' stands (fall armyworm/drought/fertility/overgrazed...) potentially seeing greater impacts.

There's a lot of growing season left to counter any potentially detrimental impacts of the mid-March freeze, but it's a good event to keep in mind as you make observations through the rest of the season. Sometimes the unexplained might have more background to it than we think.