

Mitigating Drought Impacts on New Windbreaks

Bottom Line: The root systems of young windbreaks are less extensive compared to established windbreaks making them more susceptible to the impacts of drought, however, owners of new windbreaks can take actions to help ensure that these valuable forest resources aren't lost.

Tips to help your new windbreak tolerate drought...

- For brand-new plantings, provide supplemental water immediately after planting, especially if planted into dry soil.
- Install an inexpensive rain gauge near the windbreak, or check weather station data in your local area weekly. In the absence of timely rains, provide supplemental water to the windbreak. For some locations drip irrigation systems can reduce the time devoted to watering.
- Control competing vegetation in a 3-foot radius around each plant or in a 3-foot wide strip along each side of each row. For windbreaks installed with fabric mulch, this includes controlling vegetation in the planting hole.



Long-term strategies...

- Remove sod-forming grasses (especially smooth brome) from the planting area. Consider planting warm-season grasses between the rows, and keeping the grass mowed. This can be very beneficial for established windbreaks as well!
- If fabric mulch was not installed at planting, wood chip mulch can be added at any time.



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Two examples of young windbreaks that are being managed to mitigate the impacts of drought. Note there are no weeds or grasses growing through the holes in the fabric.

Keep in mind...

- **No mitigation strategy can make up for unsuitable planting sites or inappropriate species selections.**
- **For more advice on how to help your windbreak “weather” a drought, contact North Dakota Forest Service or your local Soil Conservation District!**

Additional resources:

NRCS Tree Water Management Fact Sheet, 2006

https://efotg.sc.egov.usda.gov/references/public/ND/tree_water_management_fact_sheet.pdf

NRCS Synthetic Mulch (Fabric) Management Fact Sheet, 2005

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs141p2_001538.pdf

NRCS Warm-Season Grass Cover Between Tree Rows, 2011

https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/ndpmctn6468.pdf

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