

SUNY College of Environmental Science and Forestry

Digital Commons @ ESF

Living Snow Fence Fact Sheets

Living Snow Fences

2013

Introduction to Living Snow Fences

Justin P. Heavey

SUNY College of Environmental Science and Forestry

Timothy A. Volk

SUNY College of Environmental Science and Forestry, tavolk@esf.edu

Follow this and additional works at: <https://digitalcommons.esf.edu/lisffs>



Part of the [Agriculture Commons](#), [Forest Sciences Commons](#), and the [Plant Sciences Commons](#)

Recommended Citation

Heavey, Justin P. and Volk, Timothy A., The Research Foundation for the State University of New York College of Environmental Science and Forestry, "Introduction to Living Snow Fences" (2013). *Living Snow Fence Fact Sheets*. Paper 1.

<https://digitalcommons.esf.edu/lisffs/1>

This Fact Sheet is brought to you for free and open access by the Living Snow Fences at Digital Commons @ ESF. It has been accepted for inclusion in Living Snow Fence Fact Sheets by an authorized administrator of Digital Commons @ ESF. For more information, please contact digitalcommons@esf.edu, cjkoons@esf.edu.

Living Snow Fences

Fact Sheet Series - Fact Sheet #1

Introduction to Living Snow Fences



State University of New York
College of Environmental Science and Forestry

Living Snow Fences

Blowing and drifting snow on roadways can increase the cost of snow and ice control, increase travel time and reduce visibility and driver safety. Living snow fences are strips of densely planted vegetation designed to control blowing and drifting snow on roadways. Living snow fences disrupt wind patterns, causing snow to be deposited in drifts on both the upwind and downwind side of the fence before it reaches the roadway. This fact sheet series offers a basic guide to planning, installing, and maintaining a living snow fence. This fact sheet series includes an introduction and six additional fact sheets on topics that encompass the life cycle of a living snow fence: *Site Assessment, Design, Species Selection, Site Preparation, Planting, and Maintenance*.

This fact sheet series is an introductory guide to living snow fences. Designers should consult other resources listed at the end of each fact sheet for more detailed information on the structure and function of living snow fences. Living snow fences take several years to become effective, but can provide decades of blowing snow control if properly designed, installed and maintained.

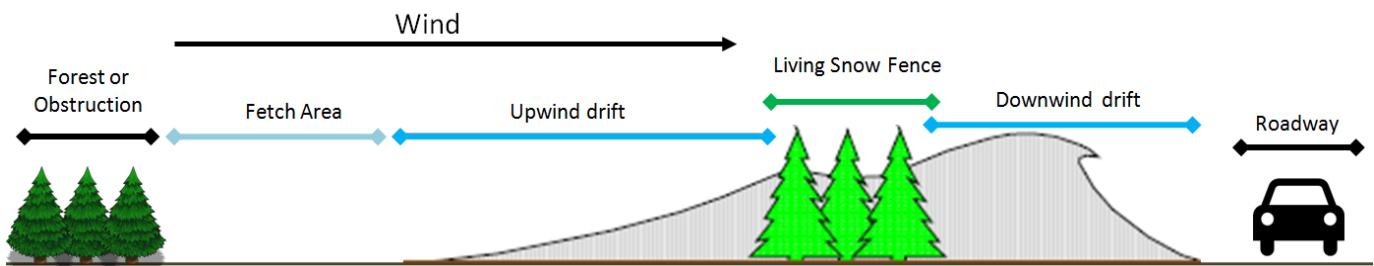


Figure 1 - Adapted from Tabler (2003)

Figure 1 above (adapted from Tabler, 2003) illustrates the basic function of a living snow fence from a cross-sectional viewpoint. Snow is picked up by the wind in the “Fetch” area and transported toward the roadway. The fetch is the unobstructed area upwind of the snow fence. The living snow fence disrupts wind patterns creating turbulence around the fence, causing snow to be deposited in drifts on the upwind and downwind side of the fence, before it reaches the roadway. More detailed information for living snow fence design is referenced below. The full fact sheet series is available online at the web address at the bottom of the page.

Additional Resources

Gullickson, D., Josiah, S.J., Flynn, P., 1999. *Catching snow with living snow fences*. University of Minnesota.

Tabler, R.D. 2003. *Controlling blowing and drifting snow with snow fences and road design*. Tabler and Associates. Niwot, CO.

Fact Sheet prepared for NYSDOT by:
J.P. Heavey & T.A. Volk
SUNY ESF, 2013
www.esf.edu/willow