Micro snow control can play big role in minimizing drifts

Tired of shoveling driveways and walkways after every snow storm?

Consider installing a fence of plants or a man-made fence to capture the snow before it lands in areas where it is not wanted. Many are familiar with large windbreaks, but even smaller plantings and structures can help provide some micro snow control along walkways, front doors, and other areas.

Consider the information below before grabbing your shovel!

Benefits of live plants as snow fences

Properly placed plants offer numerous benefits all year. Planting flowers and shrubs in areas that will assist in capturing windblown snow will increase soil moisture in the area of the drift during spring thaw. Plants near these snow fences can benefit from this additional water source. Perhaps there is a vegetable

garden or ornamental plantings you would like covered by snow in the winter? This can add additional soil moisture or protect susceptible perennial ornamentals from drying winter winds and winter sunburn. (Other plants, such as trees or shrubs with brittle branches that can be damaged by the weight of winter snow drifts, would not be suitable for these locations.)

Snow fence (and/or windbreak) plants can provide other benefits during the rest of the year. They can bring varying colors and shapes to a landscape, and some are excellent sources of nectar for pollinators or provide native berries for wildlife.

Benefits of non-living fences

Small, non-living fences, such as temporary snow fencing (plastic or wood-slatted fencing) or more permanent ornamental fencing, can also provide benefits, often with less maintenance than living plantings (no watering required!). The density (the amount of area of the fence that is solid versus the amount that lets wind through) and height of the fencing are the main considerations for fence selection and placement. If temporary, the fencing can be moved/adjusted the next year if the snow didn't land quite where you wanted.

Proper placement

Below are considerations to determine whether a living or non-living snow fence is preferred and their proper placement.

Observe a winter season or two at your location prior to any plantings or construction. This will help determine the need and proper location. Remember, improper placement can make drift issues even worse. Where does most of the season's snow accumulate and



Drifts form downwind of these snow fences.



Drifts can be major challenges when they block doorways.

photo: Tony Hoch



Proper snow fencing can help avoid drifting on driveways and sidewalks.

will the fence placement increase or decrease snow drifting on that area? Snow drifts will form on the downwind side of plants or fences, but also be mindful of redirected winds (eddies) from existing structures when determining proper placement.

Will there be enough space for the fencing to work correctly? A properly placed fence can create a drift length of up to 15 times the height of the tallest plant or fence structure. For example, proper placement of a flowering shrub that will be 2-foot high at maturity would be 20 to 30 feet or further from a walkway or driveway. This will allow an area for the snow to accumulate into a drift, so little is left to land on the walkway/driveway.

How much plant material versus open space (density) is available to reduce wind speeds is also a big consideration when choosing plants.

Consider a healthy Colorado blue spruce and a chokecherry in winter. The spruce has much more density than the chokecherry. Different densities can be created through the types of plants selected (species), how close they are planted together, and if there are multiple rows of plants (such as multiple rows of shrubs). The density of the planting should be greater than 50 percent

for capturing snow. A deciduous tree in full leaf has a density of 65 percent or greater. A deciduous tree without leaves has a density from 40-65 percent, depending on the species. An evergreen tree has a density of 65+ percent year-round.

Height and density should also be considered when placing non-living fences. For example, a 2-foot-high slatted fence with 40 to 50 percent spacing between slats will function similar to a row of 2-foot tall evergreen shrubs. The proper placement of a 2-foot fence is also 20 to 30 feet or further away from a walkway/driveway.

Other considerations

What type of soils are present? This will help determine which plants will grow best without amending the soil. Select plants that grow well in your soils. Soil characteristics also might influence your decision

between a living fence or a non-living one. Soils and other environmental conditions may mean that it will take a very long time for living plants to grow to the height you need. In that case, a temporary or permanent snow fence may be needed to address drifting issues. The soil type will also tell you how hard it would be to dig a fence post hole.

Will you be able to provide the plants with water? How easy will it be? Will you need to haul water? Keeping up with supplemental watering for a plant close to a house can be fairly easy; it's more of a challenge if farther away. Drip systems and timers make watering a lot easier, but these systems still require oversight and periodic maintenance (swapping out clogged emitters, checking for rodent damage, emptying the lines and removing any batteries in timers before winter).

What critters are about? If a yard is unfenced and lots of wildlife visit it, then a non-living snow fence may give you more satisfaction and less stress. Waking up to find that deer, rabbits, elk, or moose have eaten your shrubs down to sticks during the night can be discouraging.

Depending on the scope of the project, your local UW Extension. conservation district, or Natural Resources Conservation Service offices are available to assist with your project.

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