Sheep Windbreak
Brian Magee

The hexagonal (six panel), 40-foot long windbreak pictured has provided shelter for as many as 400 pregnant ewes through an entire winter. Ewes in these large flocks will line up on the leeward side of the windbreak eight to 10 sheep wide stretched out as much as 200 feet long. No matter how strong the wind, they never crowd or pile on top of each other, as they will if crowded against a fence with no wind protection. Drifting snow first piles up in the center of the windbreak and, after filling the center, additional snow will either go around or over the top leaving the sheep well protected. The plastic mesh (XB5300 product) windbreak serves its greatest function by protecting the sheep through the worst weather conditions, so that when the wind subsides, the sheep are right out in the windswept parts of the pasture where the forage has the least snow cover in mid to late winter. By contrast, areas with natural windbreaks usually are more heavily snow covered after blizzard conditions. Such areas are grazed earlier in the season.

Materials and construction

A windbreak with six or seven panels is recommended for a flock of 500 ewes or less. Forty feet of plastic mesh is required for the six-panel unit.

The directions here are for 4’ wide mesh. Brian Magee’s orginal directions were for 3’ wide mesh that is no longer available. However, the 4’ wide mesh could be cut to 3’ if a shorter windbreak is desired. In that case, the vertical PVC pipe should be cut 1 foot shorter, to 3-½ feet.

Six pieces of 20 foot by one inch schedule 80 PVC tubing are each cut into two 4-½ foot and two 6 ½ foot lengths to form the frames which are connected with four elbows per panel. Before gluing the frames, each 4-½ foot end is first woven into the plastic mesh at 18-hole intervals. The 6-½ foot pieces are then connected on the top and bottom with the four elbows. For nonplumbers - be generous to the point of even sloppy with the glue making sure to first coat all surfaces making contact before connecting each elbow. A six or seven panel unit will fold flat in an accordion pattern with the plastic mesh alone hinging each panel together. With each end tied together, the windbreak is easily moved by balancing it lengthwise over one’s back or, for long hauls, in the back of a pickup. The total material cost including fiberglass posts to secure the windbreak in the field is less than $150. The payback is almost instantaneous with 400 pregnant ewes - the opportunity to continue winter grazing saves better than $50 daily in feed costs over the feeding of hay or silage of equal nutritional value. The first windbreak we built is five years old and shows little wear except for being faded.

This portable lightweight (75 pounds) windbreak is a major component of our winter grazing program. The windbreak is secured with four 5-foot by 1-inch fiberglass posts. The secured windbreak is located within a paddock in such a way that the sheltered sheep will not come in contact with the fence no matter which way the wind blows. Fiberglass posts minimize wear from rubbing the plastic mesh and are most easily pulled from frozen soil. Manure buildup is never excessive because the wind rarely blows from the same direction and because the sheep are moved to new paddock.