Winterizing Your Grazing Facilities – adapted from an article by Rob DeClue, Chenango County SWCD, October 1999

Shortening daylight, crisper morning air, frost coated grass, and the changing of the leaves undeniably signal the end of yet another grazing season, unless you have stockpiled some pasture. For most graziers, the livestock will shortly come in under cover for shelter and feed under green-up next spring. The end of the growing season also triggers the task of winding down field work, and putting equipment away for the winter. Just as with farm machinery, your grazing equipment – fencing and watering system components – should be winterized until the needs for them returns in the spring. These tools that permit you to get the best forage quality out of your pastures are an investment, so taking care of them now ensures their long-term use over several seasons. Here are five quick pointers to get you started:

- 1) **Back off tension on high-tensile fencing**. This is important near public roads where heavy snow tends to pile up, and along woods that might shed large limbs or even an occasional tree. Reducing the lateral pull of the strands at the corners, ends, and gates diminishes the shifting of the posts during changes in ground conditions of freezing and thawing.
- 2) Unplug power cord of energizer from 115/230 VAC outlet. Simply turning off the unit will not entirely guard it from surge coming into it from the utility side. Having a surge protector between the energizer plug and the outlet also helps, but unplugging completely eliminates the potential for damage. Although there isn't much lightning during the winter months, surges can result from other issues on the utility side.
- 3) Store temporary/portable fencing material under cover. The ultraviolet rays in sunlight cause deterioration of the plastic and resins used in electric twine/ribbon, plastic and fiberglass posts, and other products. Keeping them out of the weather extends their useful life considerably.
- 4) Shut off the water to your watering system. While this seems intuitive, if not done it can quickly ruin your distribution network of pipes. The pressure generated at the supply end combined with the pressure of ice in the pipes can crack or break the pipes easily. Also drain the pipes if they are above the frostline to prevent ice from damaging them over the course of the winter.
- 5) **Lengthen above ground plastic pipe as necessary.** Black polyethylene pipe has a relatively high thermal expansion/contraction coefficient. As an example, for a 1000-foot run there would be a change of almost 4 feet in length when the daily temperature changes by 40°F. This can cause pipe to separate at junctions or other fittings, so putting some slack in the line either by repositioning the pipe or adding extra footage in the pipe will prevent this from happening. If your pipe has separated during the grazing season, that's a sure sign that there isn't enough "give and take" in the line for temperature variations.
- 6) **Disconnect leadout wire from energizer**. Similar to unplugging the power cord from the outlet, this is for both safety and equipment protection. Surges can also come from the fence side, so disconnecting the leadout wire eliminates the potential for damage.
- 7) **Open all cut-out switches**. This also reduces and isolates the potential damage caused by electrical surges.
- 8) Walk fenceline to check on general condition of the fence, and trim back vegetation around fencelines. Look for problems such as cracked or split insulators, rotted, broken, or shifted posts, broken or weakened wire strands, damaged insulation on leadout or underground wire, missing staples, and so on. Finding those issues now will give you a head start on determining supplies needed and planning for repairs or improvements in the late winter or early spring. As long as you're out there, you might as well trim back any plant material that won't eventually be flattened by snow this will help to reduce any electrical load on the fence when you turn it on again in the spring.
- 9) Drain your water distribution network where pipes are above the frostline. This was mentioned briefly last month, but there are additional reasons to do this besides minimizing ice damage. Open up valves at all connection points, including those at higher sites. This allows the pipes to drain faster and more completely, and using compressed air can be helpful in speeding up the process or to blow out stubborn residual water. Once drained,

- close the valves to prevent small rodents and other creatures from crawling up the lines and becoming an obstruction.
- 10) Separate and cap ends of water pipes crossing streams. Any time a reach of pipe crosses a watercourse at grade, and it is a high flow stream or river, there is a high chance the spring runoff will cause abrasion, crushing, puncturing, and other physical abuses on that portion of the pipe. The simplest way to avoid potential problems is to sever the line at one of the banks and place the open ends in a protected area above the high water mark. Be sure to insert plugs in the open ends to prevent contamination of the lines by animals and possibly polluted water.