Livestock Exclusion

What

Livestock exclusions use temporary or permanent fencing to control animal access to ponds, rivers and streams. Fencing livestock out of streams is a simple, cost-effective way for farmers to improve water quality in waters flowing through their farm. Utilizing either temporary or permanent fencing material, livestock are limited in their ability to directly access the stream and its banks. This provides a number of benefits to the herd, the farmer, and the land.

Permanent fencing runs the length of the brook along this pasture. Keeping livestock out of waterways helps to protect water quality and herd health.

Why

Installing livestock exclusions can improve animal health and reduce farm costs. When pollutants such as animal wastes and sediment are kept from the water supply, livestock drinking water quality improves. Weight gain may increase and milk and butterfat production may improve. Overall herd health may be enhanced. Denying livestock access to streams and other water features removes them from contact with a wide range of bacteria and viruses, including those responsible for foot rot, bovine virus diarrhea, fever, tuberculosis, and environmental mastitis. Stream exclusion also prevents leg injuries that cattle may suffer on muddy banks. Finally, water quality is protected when livestock are denied access to ponds, rivers and streams. In some cases The Vermont AAP's may require livestock to be excluded from perennial streams.

How

A number of fencing options are available, depending on the type of livestock. Fencing may be woven wire, barbed wire, polywire, or single- or multi-strand high tensile. Farmers considering enrolling in State or Federal cost-share programs should be aware that those agencies will cover only certain fencing types.

Where fencing is to be strung parallel to a watercourse or pond, Vermont's AAP requirements regarding buffer width will come into play. AAPs require a perennially vegetated buffer of a minimum of 10 feet in width between a water body and annual crop land, more where runoff is by concentrated flow.

In order to be effective, exclusion fencing must be maintained. This can be problematic where the fence is located within the floodplain. In this case, a forested buffer may provide some damage mitigation from debris during high flows. Farmers should check fences regularly and address repairs as soon as possible

Where exclusion fencing denies livestock former access to drinking water, alternative water facilities must be supplied.

Costs

Electric polywire fencing can cost less than $1 per foot, installed. High tensile electric wire fence can cost about $2.50 per foot, installed. Both scenarios assume a power source. (Solar chargers are not included in the cost). A woven wire fence costs a little more than $5 per foot.

Associated and Complimentary Practices

- Animal Trails and Walkways
- Alternative Water Sources

Benefits

Case Study

Livestock exclusion fencing and an armored stream crossing on Highbrook Farm, S. Woodstock, VT.

High Brook Farm South Woodstock, VT

Matt and Laura Spittle operate a Morgan breeding farm with several stallions and a small herd of broodmares. The farm is at the headwaters of the Kedron Brook in the Ottauqueechee watershed and the stream runs through one of their pastures. The Spittles have always been concerned about their horses being in the brook but had not found a satisfactory way to limit access.

The main concern was the type of fencing that could be safely used for mares and foals. With research, a high tensile wire encased in a one inch polymer fence was found to be acceptable. Four strands were used. Due to the wet soils where the fencing had to be installed, a composite post was used for support with treated posts at corners. The composite posts were predrilled to accommodate the fence and then pounded in.

Grant funds were secured to help the owners install two livestock crossings through the stream and for the fencing materials. The Spittles supplied the labor and machinery. Not only did the fencing project look great, it was safe for the horses and the stream was protected.