



In 1916, Carleton J Curtis, Harold's father, walked the initial herd of Jersey cows from Meadville to what is now Elmview Dairy. The Dairy is now run by Harold, Lee, and Mark Curtis and currently milks about 200 cows and farms over 800 acres.



*Stabilized animal walkway*

The Warren County Conservation District along with USDA Natural Resources Conservation Service assisted with the design of many best management practices (BMPs) that took place in conjunction with the construction of an additional barn. Funding assistance for the BMPs was provided through the Growing Greener Small Farm Agricultural Stewardship Program.

The stabilized animal walkway provides an erosion and mud resistant walkway from one barn to the next. Layering geotextile fabric, bankrun gravel, and crushed bankrun gravel provides a durable, comfortable and cleanable

walkway to move cattle from one barn to the next.

One of the very most important aspects of this project was finding a way to divert the clean rainwater and snowmelt away from the barn areas and outlet it into drainage ditches downstream where waterways will be kept safe from manure runoff. This was accomplished a few different ways. The photo below shows a storm water catch basin that diverts the bulk of the heavier runoff into 8 inch underground tile. The average low volume rainfall events travel down the grassed waterways to stable outflow areas.



*Drypond with riser pipe*

One nemesis of clean water that many people neglect to consider is that of impervious surfaces. On a farm setting, the biggest culprit is roof runoff. Many times, upwards of

hundreds of thousands of gallons per year of clean rain water are shed off the roofs of even one average sized dairy. Keeping this clean water clean is the objective and the simplest way to do that is with various types of gutter systems.

The average roof gutters on your house are not usually the industrial design needed and are often torn off by winter snow and ice melts. One of the accepted conservation practices in a farm setting is to use roof line drip drains. This practice is pictured below. A ditch is excavated below the drip line of the roof. Drain pipe is laid in this ditch and the ditch is filled to the top with washed gravel. Roof runoff drips through the gravel and finds the drainpipe, which is then evacuated to a clean and stable outlet site.



*Roofline drip drains under construction*