laneway

and stabilization.

Laneways, noted the experts, are the "arteries" of a grazing system. They are used to transport livestock and equipment to and from grazing paddocks.

For beef and sheep farms that aren't intensively managed, laneways may not be necessary. But on a dairy, laneways are heavily used and usually require some sort of stabilization — a way of keeping them erosion-free — to avoid creating muddy or compacted areas. Muddy conditions can be dangerous for cattle movement, contribute to hoof disease, and create other problems.

Harold and Stout outlined the following important considerations in laneway design:

• First, determine the number and type of livestock and the size of any farm or service equipment that will be using the laneway.

• Second, determine the width of the laneway. If the lane is to be used for livestock only, it can be as narrow as eight feet. However, if a watering tank or equipment is



Lou Kopceyk, Indiana County Conservation District manager holding paper at right, speaks to the Project Grass group about stream crossings at the field day.



Dale Bracken, Indiana beef farmer, talks about laneway stabilization and stabilized feeding area at the Project Grass field day.



going to be used in the laneway, then the lane should be at least 12 feet wide. The laneway width should never exceed 20 feet.

• Third, Harold noted, keep livestock behavior and movement in mind when constructing the laneway for livestock. Do not design the laneway with sharp turns or with steep slopes. Design the laneways to provide fast, safe, and efficient movement for livestock and equipment.

For feeding livestock, take a forage sample. Rob Stout, extension agronomist for Armstrong, Indiana, and Westmoreland counties, showed how to use a forage probe when testing a round or square bale by inserting the probe into the side of the round bale and into the end of a square bale.

The agronomy agent also demonstrated how to use a square PVC pipe to rest pasture forage sampling. By tossing the square PVC pipe at random in a square acre area, where the piping lands is where you cut your fresh grass at the height of the frame for testing. Place the fresh cut grass into a bag and gently dry in a window with a fan directed on the bag. A certified private lab can then test the dried grass.

Dale Bracken, beef farm owner, near Indiana, and Lou Kopceyk, Indiana County Conservation District manager, spoke about Bracken's Project Grass grazing system.

moved to a tresh, green paddock for fresh food."

The relationship between the farmer and the cattle becomes friendlier with the opening and closing of each gate.

Bracken also showed the group two stream crossings he installed, alleyway stabilization, and a stabilized feeding area containing a filter region.

The keys to nutrient management were also outlined at the field day. Nick Pinizzotto, nutrient manager for Armstrong, Indiana, and Butler counties, explained that nutrient management involves controlling the amount, form, and timing of plant nutrient application. Nutrient management targets nutrients according to crop needs and amounts of available nutrients from all sources. Management prevents overfertilization, protects ground and surface water, and can reduce production costs and improve net income.

Record-keeping, according to Pinizzotto, is an important component of nutrient management. He suggested that farm managers consider the following management tips:

• Have soils tested by a certified private lab or land-grant institution to determine levels of phosphorous, potassium, pH, and organic matter.

• Nutrients can be surfaceied, injected, or banded.

Rob Stout, extension agronomist for Armstrong, Westmoreland, and Indiana counties, demonstrates how to collect grass samples for testing at Project Grass field day.

Bracken finishes 50 feeder stocker cows through the system every year. "Bracken stocker cattle never see a barn," said Bracken. The cattle are out in the paddocks year-round. In the winter, Bracken uses a sacrifice paddock to keep the cattle in.

From early spring to late fall, Bracken cows graze 17 paddocks on 26 acres with a rate of gain of 1.8 pounds per day. Bracken uses sixwire high-tensile fence on the perimeter of his land and one- to twostrand wire to divide the paddocks.

Bracken said, "One of the problems of stocker cattle is that they are wild and hard to catch. With rotational grazing, the herd knows that in two days they will be

 Test for nitrates during early corn growth. Test manure and organic wastes for nutrient content.

• When applying manure, avoid sensitive areas such as frozen soils, snow-covered soils, flood plains, and steep slopes.

• Test stored manure for nutrient content when there are feed program changes.

• Periodically calibrate and adjust equipment used to apply nutrients.

For more information on managing your nutrients, contact your county nutrient management specialist in the conservation district office for a free consultation.

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