### The First Payback: Herd Health and Biosecurity

Background: Allowing animal access to streams and wet areas can create stagnant pools and puddles where mud, manure, urine & water mix and accumulate (any stagnant water area, not just in the stream—even in hoof prints). These provide reservoirs for potentially harmful microorganisms and expose your herd to unnecessary risk. Unrestricted access to streams also exposes livestock to risk of foot and leg injuries and often impairs the herd's drinking water.

### Risks of Unrestricted Herd Access to Streams and Wet Areas:

#### Stagnant Water Can Harbor Diseases

Bacteria that cause mastitis and leptospiosis are found in these areas. Mastitis is the single most costly disease to the dairy industry: milk production decreases, milk quality decreases, treatment costs are incurred, lactations are sometimes cut short, and some infections can even be deadly. Leptospirosis has been linked to stream access. It may cause mastitis and it also causes abortion. Lepto vaccines have limited effectiveness, and detection can be difficult.

Bacteria that cause "foot rot" and "strawberries" thrive in these areas. Soft, wet hooves are more susceptible to infection. This means more lame cattle: reluctance to move around, less feed intake, decreased milk production, weak estrus behavior, and more treatment costs incurred.

Several types of bacteria, parasites, and viruses that cause gastrointestinal problems are harbored here. Severe illness, even death, can result, especially in calves and "fresh" cows, and product safety can be compromised. Providing an ample supply of clean, fresh drinking water is very important.

# 2. Moving Water Can Carry Diseases With It

Cattle with access to streams are exposed to problems happening upstream. For example, the bacterium that causes Johne's disease is excreted with feces and has considerable lifespan even outdoors: access to streams could facilitate cross-contamination from upstream herds or cycling within a herd.

Cattle with access to streams can cause problems for neighbors downstream in the form of disease, streambank erosion, and sedimentation downstream.

## Benefits of Limiting Animal Access to Streams and Wet Areas

Decreased exposure to "hotbeds" for disease, enabling an increase in production and income, a decrease in treatment costs, and overall improvement in herd health.

Decreased exposure from problems and diseases upstream, and decreased problems for neighbors downstream, resulting in improved biosecurity.

Stabilization and decreased erosion of stream banks; improvement in drinking water quality for the herd; reduced risk of injury from steep banks and rocky stream bottoms.

## The second Payback: Financial Incentives

Currently there is financial cost share assistance in Crawford County for farmers who wish to fence livestock out of streams and muddy areas. There is also assistance for providing alternate watering sources and crossings for livestock. If you are interested in improving your livestock operation and the environment contact Tracey Crawford of the Crawford Conservation District at 814/763-5269 or Ron McCorkle of the Natural Resources Conservation Service at 814/336-2127

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