

A photograph of a winter scene. In the foreground, a wooden fence with three horizontal rails is partially covered in snow. To the left of the fence, there is a large, snow-laden bush. The ground is covered in a thick layer of snow. In the background, there are many bare trees with snow on their branches, and a few evergreen trees are also visible. The sky is overcast and grey.

Citizens Advisory Committee Meeting

Anthony Beery

Beery Farms Inc.

Mt. Crawford, VA

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Our Farm

Dairy, Poultry and Crop Farm

Family farm

24,000 Broiler Breeders
-Georges grower

500 acres crop ground
-Corn, alfalfa, soybeans,
small grain

300 cow dairy

Harvestore silo parts and service business



BMP's we have used or/are using

Confined feeding areas for youngstock

Long term manure storage –
dairy, bedpack, litter shed

Manure injection of dairy slurry

Transfer poultry litter off farm

Cover crops – multi species

BMP's we have used or/are using, cont.

Short term rotation perennials (alfalfa)

Split application of N on corn and small grain

Use of PSNT on corn with side dress N application

Banding N at planting on corn instead of broadcast

Stream exclusion fencing

NMP implemented

BMP's we have used or/are using, cont.

Vegetative buffers next to creeks and ponds

Precision (GPS based) equipment for manure and fertilizer applications

- Boom shutoffs on sprayer
- Row shutoffs on planter
- Computer controlled application rate
- Auto steer for swath control
- Yield mapping
- Flow meter for slurry application

BMP's we have used or/are using, cont.

Continuous No till (10 yrs)

Various test plots to determine better N management

Working with WSI to quantify nutrient reductions on the
farm

What have we learned?

The environment is a dynamic system.

- Need to keep the soil in place and growing.
- N usage is difficult to predict and manage.
- Yield losses will result from constricting of N too far.

NMP's are both too complicated and oversimplified.

Key Misunderstanding

Nutrient Use = Nutrient Loss

Idea created by programs such as WIP's and NMP's

Systematic Approach to Soil Health

Nutrient Management = Soil Health

Healthy soil sequesters nutrients and water

May or may not mean fewer nutrients applied

Barley, Pea, Vetch



Barley and Vetch



Barley and Crimson clover



Triticale and Hairy Vetch



Short rotation perennials



Manure Injector



Planting Corn/Precision Equipment



Spraying with Row Shutoffs and Guidance



Precision equipment results



Results of No till



No-till vs Tilled



What is the benefit of reducing nutrients?

None -

if you need them to improve the soil or grow crops.

How can we further reduce nutrient losses?

Stop bad actors

Improve BMP's

Empower 3rd party consultants
- whole farm BMP
- Safe haven

Focus on Nutrient management system, not Nutrient diets

Achieve greater reductions in nutrient loss by
most farmers doing a better job
managing nutrients rather
than severely constricting
a few.

Questions?

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