Soil Health on Pastures with Heavy Use Area Management

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Is this a familiar scene?

- Beautiful Farmstead
- Oaks/Maples the occasional Chestnut or Elm in the yard
- Barn with animals

But in order to get to the barn.....

the animals have to go through this:

Not to worry – every problem has a solution:

Farm Planning

Animal & Manure Management or

Plant Management for animal production

Goals

1) The effects of winter sacrifice areas on soil health and forage quality.

2) Different ways of managing animals during winter will be discussed to help maintain your existing pasture, minimize loss, and allow you to focus on soil health
    - **Animal Management methods**
    - **Building Management methods**

    * **Plant Management for animal production & health**

Healthy soils lead to:

Increased Production

- Good organic matter
- Good soil organisms
- Good soil structure
- Good drainage
- Good aeration
- Good water retention
- Good soil nutrients

Probably don’t need to argue the downside
of mud or the benefits of keeping grass on the pastures.

Good Forage : Good Animals

Forage is what feeds the animals in a pasture system – emphasis on growing good forage will likely lead to growing good animals.

Covered Soil = Useable space

The tensile strength of mud is much less
than the tensile strength of grass – of gravel – of concrete.
How wet are you willing to walk across a yard/field/pasture of
Mud vs. Grass vs Gravel vs Concrete

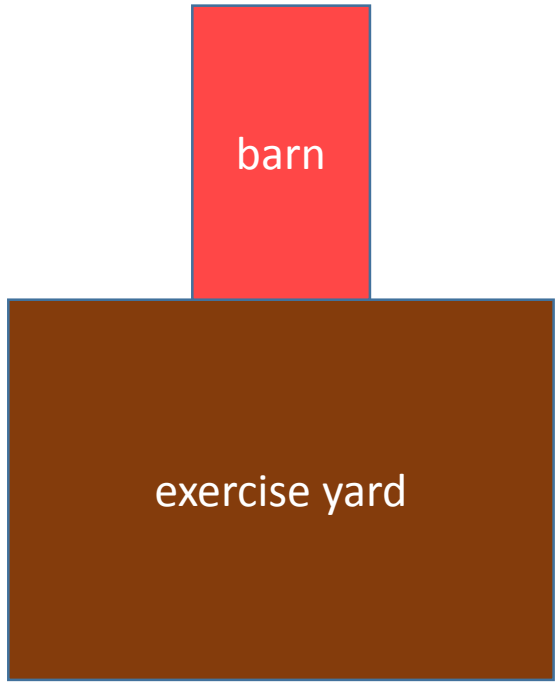
Main Idea:

Cover the mud.

Cover exposed soil or mud with grasses, gravel, concrete and/or roof

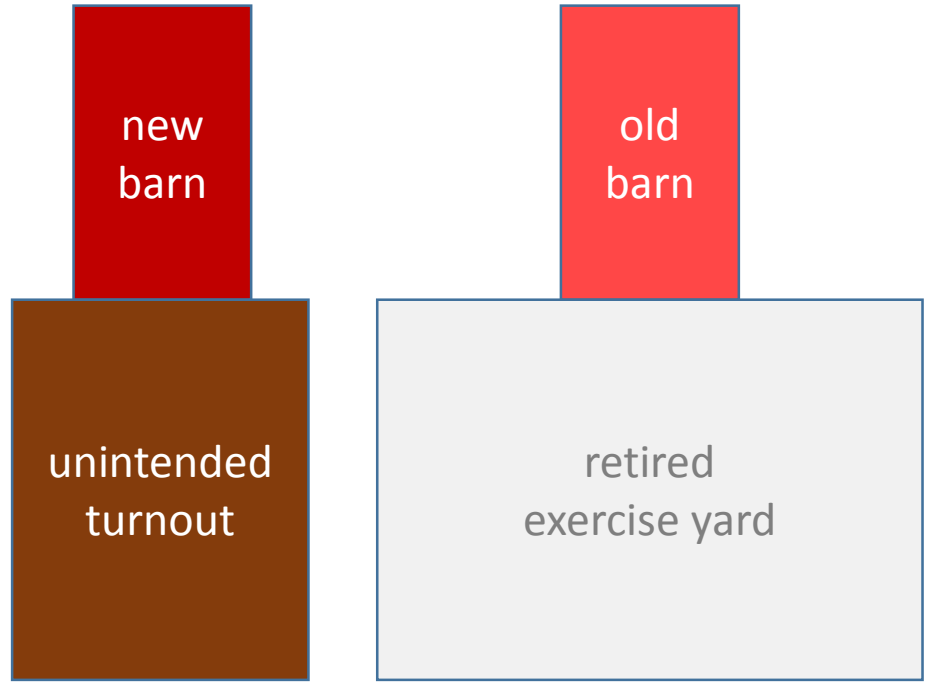
Typical Scenario

Before



Older barn with large exercise yard

After

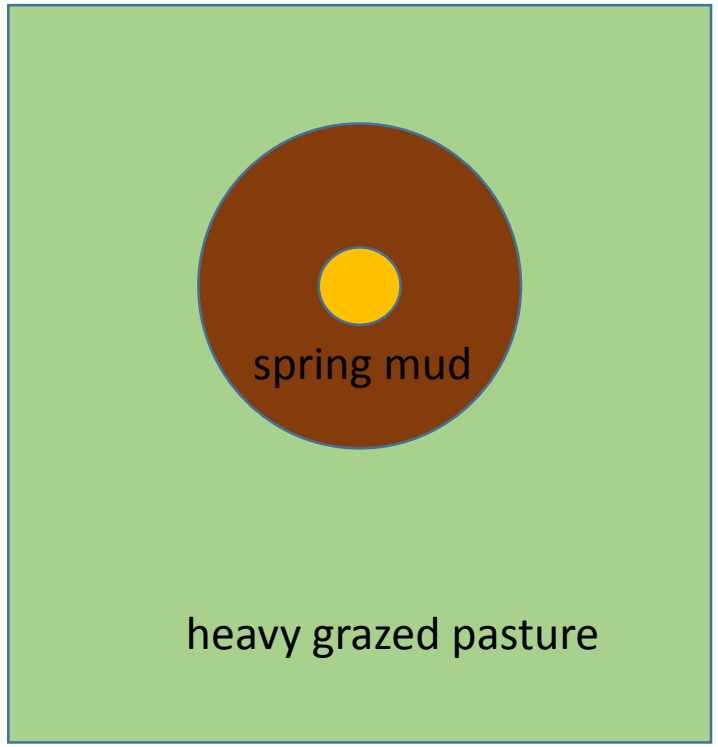


New barn with smaller exercise yard

(* NRCS goal for protecting soil and water are not met)

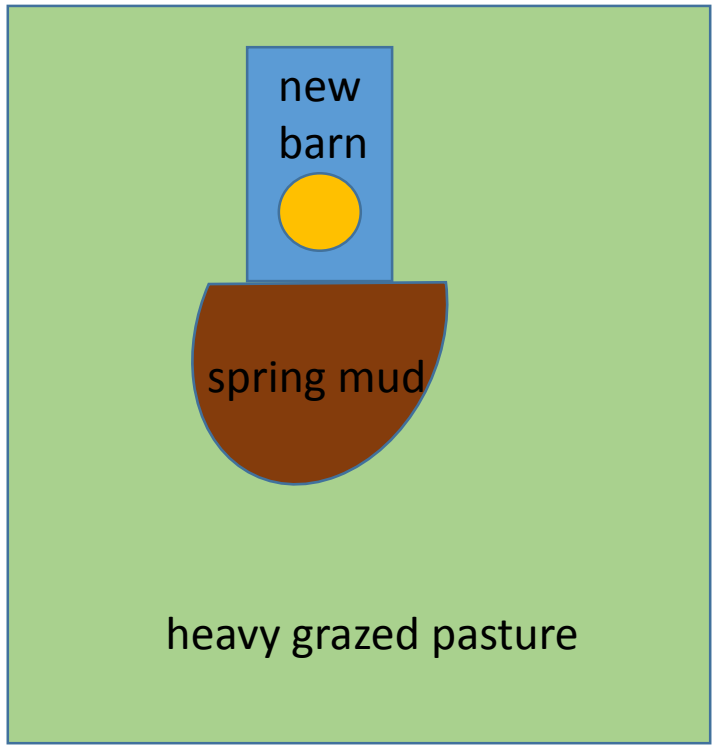
Typical Scenario

Before



Pastures with winter feeding ring

After

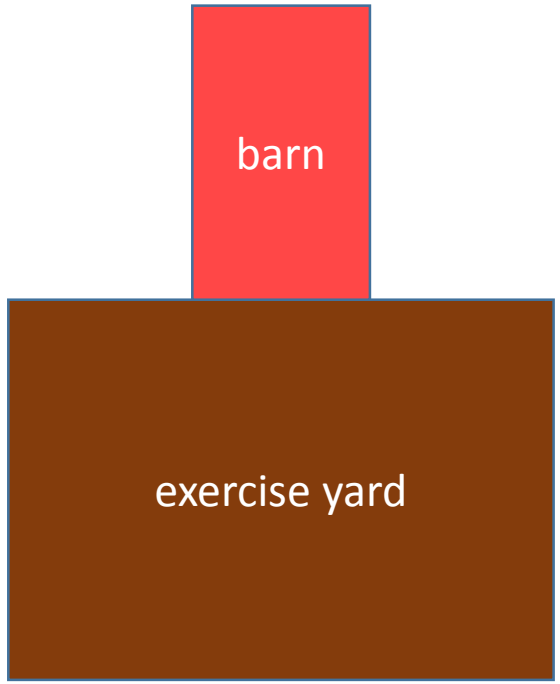


New barn with feeding ring (and turnout)

(* NRCS goal for protecting soil and water are not met)

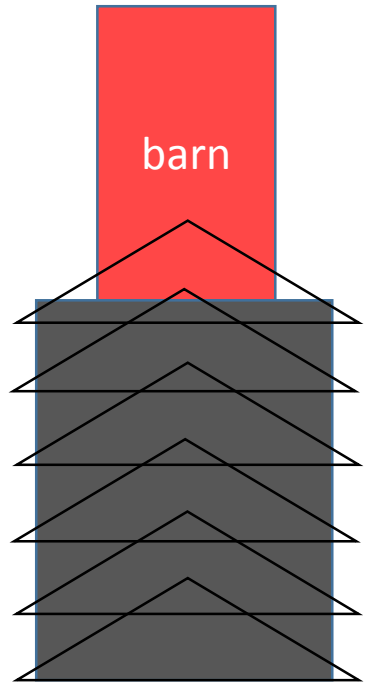
Ideal Scenario

Before



Older barn with large exercise yard

After



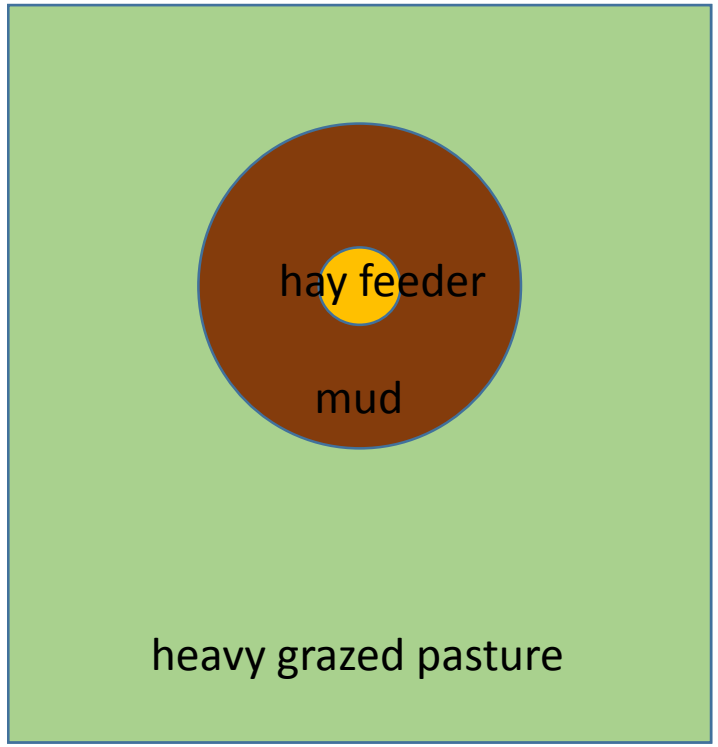
covered
exercise yard

Same barn with covered, smaller exercise yard

(or any scenario where both NRCS and Farm goals are being met)

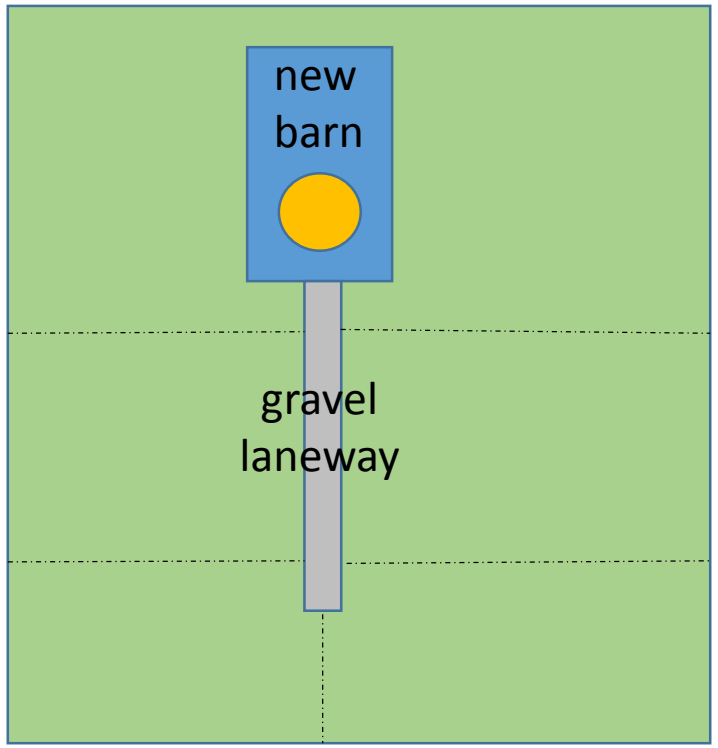
Ideal Scenario

Before



Pastures with winter feeding ring

After



New barn with feeding ring (and turnout)

(or other imaginative scenario where both NRCS and Farm goals are being met)

Part of the planning process is for you to figure out what would work for

- you,
- your management type,
- and your farm

Any number of different ways to protect your pastures and your soils.

- For example, with bale feeders,
  they get moved before mud or dirt shows up
  or enough extra hay is placed to cover the mud or dirt

dirty animals = more bedding

Or Buildings can be put up to get the animals off pasture, and allow the pasture to rest as needed during the hot months, or not be disturbed during the winter months

Mono roof

Choice of building type should be dependent on
Budget, farm management, and animal needs
(ie. groups – calves, youngstock, production)

Fabric Roof

Free stall barn with concrete work area surrounding

Pole Barn

on a wall,

or in the ground

CT - NRCS currently uses an open pole barn for either

“scrape –n- stack”, or

bedded pack (regular additions of bedding)

The key to success is **bedding**
(happy/clean animals = happy farmer?)

The bedding can be managed for big or small operations –
Particle size, moisture content, and material
will have an effect on how much bedding is needed

Bale Shredders

In a bedded pack system – plan on about 10 lbs of bedded per animal per day

The cleanliness of the animals and the “clumpiness” of the pack will determine how much more or less bedding to add daily or regularly

With good planning –

What may feel like a headache today.....

may lead to happy customers tomorrow!