Are You Farming Acres That Consistently Lose Money?

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Every field has yield variability – some areas yield higher than other areas. Often there is a degree of consistency. The higher yielding areas are consistently higher yielding and the lower yielding areas are consistently lower yielding. The problem is that farming consistently low yielding areas significantly lowers overall profits.

Jim Stordahl, U of MN Extension Educator, uses a real life example to demonstrate the cost of farming low yielding acres. The field in this example (Table 1) is 153 acres, 20 of which are consistently poor. Some years these poor acres produce some crop, while other years they produce nothing. Just 20 poor yielding acres in a field of 153 acres can greatly reduce overall income from the field.

Table 1. Cost of Farming Unprofitable Acres – Example.

Wheat	Acres	Yield Bu/A	Profit/A	Profit/Area	Total Profit
Good Acres	123	45	$23	$2829	--
Poor Acres - 1	20	25	-$53	-$1060	$1769
Poor Acres - 2	20	0	-$148	-$2960	-$131
Soybeans					
Good Acres	123	35	$75.50	$9288	
Poor Acres - 1	20	15	-$54.50	-$1090	$8198
Poor Acres - 2	20	0	-$152	-$3040	$6248

Wheat: Cost of production = $148/A, Price = $3.80/Bu.
Soybeans: Cost of production = $152/A, Price = $6.50/Bu.
Source: Jim Stordahl, University of Minnesota Extension Educator

So, what are some likely reasons that consistently low yielding acres continue to be farmed?

- Don't know which acres are low yielding or how low yielding they are
- Renter wants it all rented and farmed
- Don't want to farm around patches
- Need to have some cover so weeds don't get out of hand and soil doesn't erode
- Occasionally these acres give a profitable yield

Farming unprofitable acres is clearly a practice that should be avoided. What can we do to reduce the potential of farming unprofitable acres?

1. Identify your low yielding acres and determine what yield they are producing so you can quantify the economic impact. The best way to do this is by yield

mapping. Yield mapping will very accurately measure acres affected and yield lost. You may also be able to harvest different parts of a field and weigh them separately to quantify differences.

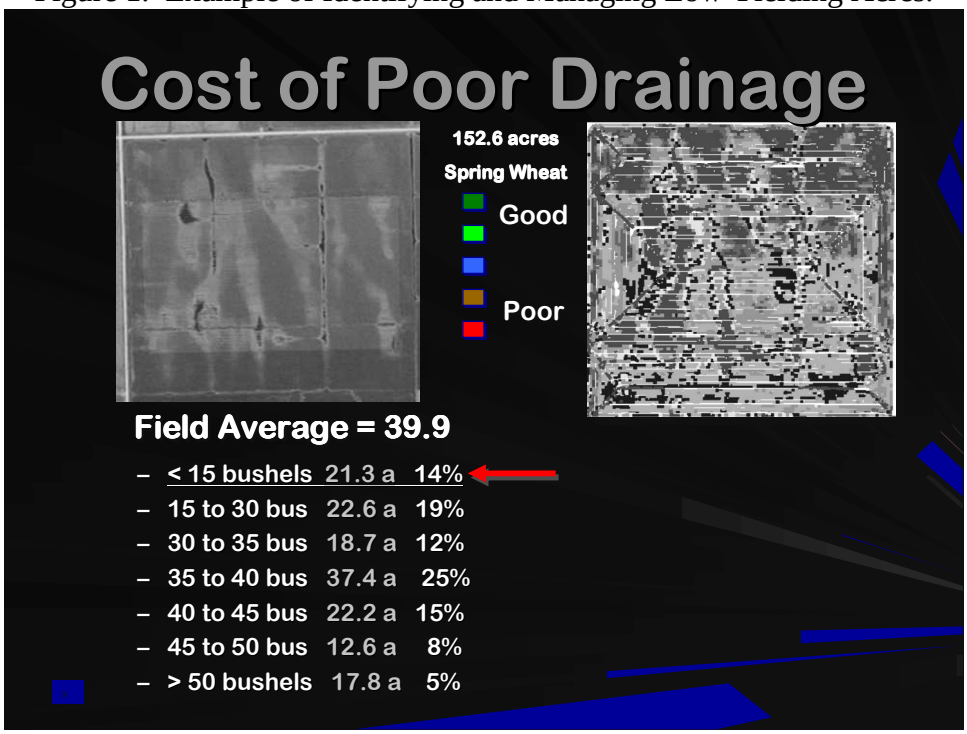
2. Know your cost of production. You need to know your break even yield levels so you know when depressed yields are losing you money.

Now that you have identified and quantified low yielding areas – what do you do?

- Identify the cause of the reduced yield and determine whether it is a manageable factor or not. For example, you may not be able to improve an area of the field that has droughty, low productivity soil, but you may be able to manage an area of the field that is low yielding due to poor drainage.
- Develop a plan to avoid farming poor yielding acres. That plan may take many forms, including:
  - Plant it to a perennial cover crop and farm over or around it.
  - Use it for forage or pasture – for yourself or rent it to another farmer.
  - Put it into a conservation program such as CRP, CREP, RIM, etc.
  - Eliminate the problem and farm it with the rest of the field.
  - On rented land, you may save enough money by not farming low yielding acres that you are able to increase the rent you pay on the good acres. It is a win/win for you and the land owner.

Figure 1 gives an excellent, real life example of how to deal with low yielding acres. First, the low yielding acres were identified, then the cause was identified (poor drainage), and lastly a solution was implemented.

Figure 1. Example of Identifying and Managing Low Yielding Acres.



Source: AWG Farms – Crookston, MN

In this example the crop was wheat and the field was yield mapped (see map and aerial image in Figure 1). 21.3 acres of the field yielded virtually zero and it was determined that these acres were consistently low yielding. The following loss estimates for these 21.3 acres were made for the various crops grown on this field:

- Wheat -$3195 at $3.75/bu, 40 bu/A
- Soybeans - $4473 at $7.00/bu, 30 bu/A
- Sugarbeets – $16,188 at $38/T, 20T/A

The cause of the yield loss was determined to be poor drainage. It was deemed that the most practical solution was to improve the surface drainage, and that the losses justified the cost of the improvements.

Different problems will have different solutions. However, this example demonstrates the process of identifying and managing low yielding acres. It just makes sense, from an economic and environmental perspective, not to farm acres that consistently lose you money.