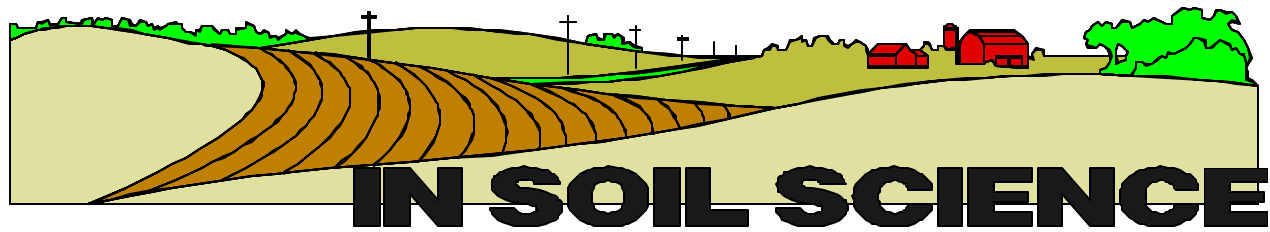


NEW HORIZONS



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Dairy Herd Expansion and Modernization Options Available in UW-FARM

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Industry professionals and producers who are considering modernizing their dairy operations can use UW-FARM to identify potential agronomic and regulatory impacts associated with the changes. UW-Farm runs on all versions of Microsoft Windows beyond version 3.x. The program can be downloaded from <http://uwlab.soils.wisc.edu> or requested on CD.

Herd Size

Entering the potential new herd numbers on the 'expansion/modernization options' screen will show the manure quantity, available N and corn acres needed to use manure available N from these numbers. The impact raising heifers on or off-farm is available. Either enter the possible number of replacements or accept the default weight/age distribution per 100 milking cows of 14 calves @ 150 lb, 30 yearlings @ 500 lb, 11 breeding heifers @ 750 lb and 33 bred heifers @ 1000 lb.

Forage Options

Increasing cow numbers increases the need for feed and Wisconsin dairy producers traditionally have met forage requirements by growing and feeding alfalfa. However, producers may opt to grow less alfalfa and more corn for silage when acreage is limited because greater tonnage can be realized from corn silage. Potential forage needs from alfalfa and corn silage are calculated based on a requirement of 10 T forage/cow + replacement/yr. Users can estimate the percentage of the forage requirement that will be supplied as alfalfa or accept default values of 25% alfalfa/75% corn silage. Total acres of each forage and total N need for corn silage is estimated. The impact of raising replacement heifers on or off-farm can be evaluated.

Phosphorus Supplementation

Feeding dietary phosphorus at NRC guidelines could decrease total manure phosphorus by 25 to 30%. The National Research Council (NRC) requirements for phosphorus in lactating cow diets ranges from 0.34 to 0.49% of DM, but diets commonly are formulated to contain 0.5 to 0.6% phosphorus. The potential decrease in available manure phosphorus by limiting dietary phosphorus can be evaluated by entering 'yes' on the 'expansion/modernization' screen to 'feed less dietary P'. The total tons of P_2O_5 required at optimum soil test P levels are totaled for the alfalfa/corn silage options.

Soon to be Released

New to appear in UW-FARM will include multiple manure storage or animal sources per plan. Liquid storage will include ability to base estimate of total gallons on herd numbers in addition to pit size. A calendar will highlight important dates/times for manure management. Revised manure availability values and animal species options appear and recommendations are available for a 4-yr crop rotation. Planning for any cropping year within the 4-yr rotation will be automatically available.