Don't Forget Crop Rotation

Russell Kyper
Department Of Agronomy
Penn State

Planning your crop program for the 1998 season involves many important decisions: hybrid selection, balanced soil fertility, effective herbicide programs, insecticides . . . and the list goes on.

A key ingredient to the success of this program is your crop rotation, the backbone of any feed or grain production system. With tight financial margins and expanding dairy operations on limited acreage, maximizing the profitability and production of your cropping system is essential. For dairy farmers, careful attention must be given to the crop mix to insure that forage production matches the feed needs of the herd, forage inventory on hand, and storage capabilities.

This may be particularly important if you experienced a

shortfall of forages because of the drought conditions in 1997. A mismatch of your feed needs and crop production capabilities can cause a shortfall of one forage at a certain time of the year: Running out is expensive!

A good starting point is to evaluate alfalfa stands soon after green-up in early spring and determine if they are likely to profitable for another year. Alfalfa fields in the third or fourth year of production with less than 4 to 5 plants per square foot are likely candidates for rotation. These fields can be spring-killed and planted to full-season corn or, if conditions permit, double-cropped after first cutting haylage.

If stands are really thin or the perspective field is prone to drought, don't risk double-cropping corn after first cutting. The hay yield may be too low or the yield penalty on your com crop following hay may be too great.

Dairy farms that are able to produce adequate amounts of forage and have additional acres in continuous corn for grain may want to consider adding soybeans to their rotation. Substituting soybeans for corn in the later years of rotation can reduce inputs, help control perennial weeds, and improve the drought tolerance and yield stability of the crop system.

However, for dairy farms where acreage is limited and forage production must be emphasized, a shorter, 3-year com/alfalfa rotation can provide some of these same benefits while generating large amounts of high quality forage.

The key to making a successful rotation profitable is taking advantage of all rotational credits to reduce input costs and recognizing the yield impact of rotational effect. Corn following a legume, either alfalfa or



soybeans, will often outyield continuous corn by 15 percent to 20 percent under average conditions, and potentially much more under drought conditions.

A crop rotation with a large proportion of corn in the first year of production has a high level of drought tolerance.

Planning a successful crop rotation is not easy. It takes time and attention to detail, both for this year's production and upcoming years. First you must asses the feed needs of your livestock operation and

the production capabilities of your soil. Next, determine your current cost of production (for each crop) and actual crop yields. Then, match crops to soil capability, emphasizing forage production. Finally, take advantage of all rotational credits to reduce inputs in your crop program.

The profits of diversifying your rotation may not be in the soybean crop you add, but in the benefits it will bring the entire crop system. Recognizing and taking advantage of these benefits can truly pay off!



FARMERS # 1 CHOICE IN COMBINES

...with a kinder, gentler grain handling system.

Your grain doesn't have to take a beating anymore. With GLEANER's

exclusive Natural Flow processing cylinder, your crop never changes direction. Giving you higher grain quality and better returns at the elevator. Our unique transverse mounting system moves your crop in a ribbon-like fashion from the concave through the cage. It's never forced to make hard turns. You also get the cleanest grain with our combine. We have the longest cleaning shoe in the industry. 64 inches to be

exact And we've added "cleaning shoe" enhance-

ments, like a 4-degree sloped chaffer and sieve. for even finer cleaning and separation. To

find out just how gentle we can be, contact—your—GLEANER dealer.

You'll see that only GLEANER is engineered for better returns





1996 AGCO Corporation 1830 River Green Parkway Duluth GA 30136

HERNLEY'S FARM EQUIPMENT, INC. Elizabethtown, Pa. 717-367-8867

1-800-564-2511

GRUMELLI'S FARM SERVICE INC. Quarryville, PA

717-786-7318

BHM FARM
EQUIPMENT
SALES - PARTS - SERVICE
Route 934,
2 Miles North of
Annville, PA
717-867-2211

B. EQUIPMENT, INC. Waynesboro, Pa. 717-762-3193 ZIMMERMAN'S FARM SERVICE, Inc. 1/2 Mile West off Rt. 501 On School Rd., Bethel, Pa. 717-933-4114

C.J. WONSIDLER BROS. Quakertown, Pa. 215-536-7523 New Tripoli, Pa. 610-767-7611

Oley, Pa. 610-987-6257