Pasture Rotation

(Continued from Page D2)

those numbers with just two fields-I could only keep 60 comfortably and those extra 90 sheep more than cover the additional fencing costs."

Additional management is also required, but not as much as might be expected. "We just put them on a pasture and then let them mow it down. If you go by the book, the sheep are only supposed to be in there three days," he says. 'Normally though, we like to move them every two weeks or three, depending on the rainfall and the size of the field."

There isn't any other set rules either. "Normally we like them to graze within an inch because that grass will come back quicker." Turner relates. "It takes a little more management to make sure they're properly rotated when necessary, but we have no written schedule. It's the 'farming by feeling' method; when it feels like it's time, that's when we move

According to Dr. Harlan White,

extension agronomist for forages at VPI, pasture rotation is a form of grazing management. It works because it's based on light interception and organic food reserve. Leaves intercept light from the sun, and through the process of photosynthesis, manufacture food for production of new leaves and other plant parts.

"Food in excess of that needed for growth is stored in the lower portion of the plant as organic food reserves and is used later when there are not enough leaves to furnish adequate food for growth," says White. "If the leaves are not allowed to develop because of overgrazing, or are removed too early by grazing or mowing, the plant does not have sufficient time to manufacture organic food in amounts necessary for growth and replenishment of food reserves. Thus the plant is weakened, regrowth is slow, and some plants may be lost," he concludes.

This makes sense to Mike Goldwasser, a cattleman from Hillsville in mountainous south-

Virginia Goldwasser takes advantage of the spring and fall growth spurts of pasture grasses by running stocker animals on his fields during these times-then selling them when the grass grows dorman in summer and winter, losing its high nutritional value and ability to put pounds of beef

According to Goldwasser, pasture rotation is a vital part of his program since he has to make the most of these growth spurts. Nonetheless, "I've become more and more convinced for a lot of reasons, and not just for increasing your number of grazing days, that it's good to take cattle off your land for a while," Goldwasser reveals.
"Think of it in terms of an in-

dividual grass plant. If it's eaten today and starting to grow again when a cow comes along five days later and eats it off again, that puts a lot of stress on that plant. In 90 percent of the pastures in Virginia, that happens all summer long. A plant can only grow as fast as it can photosynthesize and it can only photosynthesize in proportion to the amount of leaf it has," he says, echoing Dr. White.

It needn't be complicated,

though he advises. "If you have 100 acres and can divide it in half, it helps. You shouldn't go to a lot of expense to do this; the whole point of it is to be economical. Yet I fully believe that one fence is going to increase my stocking capacity 5 to 10 percent on the whole farm. Well if I can keep one more animal, then it will pay for that fence (high tensile) in one year and I don't have any increased variable costs except veterinarian and interest. There's no question in my mind that you increase your stocking rate every time you put up a cross fence.'

Fencing and pasture rotation can also be applied to benefit dairy farmers even though most don't use grass in their ration program. Ron Roudabush, a Mt. Solon dairy farmer, and Jerry Swisher, the Augusta County extension agent working with dairymen redesigned the farmer's hilly loafing lot using the principles of pasture rotation.

"It's officially a livestock management rotational system. It's been recognized that many dairy operators in the Shenandoah Valley, and nationwide, have a common problem with the use of

dry lots, loafing lots, exercise lots or paddocks. These areas are subject to heavy concentrations of livestock on a daily basis,' Swisher notes, adding that any sod soon disappears and problems take its place.

These problems include everything from soil erosion, lowered water quality in nearby streams, increased herd health problems such as mastitis, hoof problems and even reproductive disorders. What's more, it also gives a lowered aeste-etic value to the farm with all the barren ground, he notes, in the landscape. Not even a dairy farmer can admire a muddy, miry loafing lot.

"What we're trying to do is come up with a management rotational system of where we go in and establish a very thick, vigorous sod to basically hold the soil together to prevent soil erosion and to prevent pollution in adjacent streams, while, at the same time, giving the animals-particularly the lactating cows-the opportunity to go to an exercise lot and utilize that where it's basically clean and dry."

So far it's working. Roudabush divided his 14-acre, steeply sloped loafing lot into four paddocks with fiber glass posts and three strands of electric wire. Cattle stayed on three of the four lots while he established a thick sod of fescue on the first paddock, then used that and two others while he established sod on the second paddock. By rotating his cows from paddock to paddock, the sod has time to recover from the wear and tear before erosion can begin to occur.

The lots need very little maintenance, Roudabush notes, since the manure keeps them fertilized and heavy traffic keeps them grass worn down. Gates open into each block to make moving the cattle easier, he explains, "It's an off-shoot of pasture rotation," his extension agent emphasizes, "But the cows don't graze the pasture. This is not being used as a feed source, but as a conservation and management practice."

GLENWOOD METAL FORMING

"SPECIAL OF THE MONTH"

29 Gauge Painted Steel

* Gold * Dark Brown * Tan * Dark Blue

Per Covered Sq.

While Supplies Last

PLUS OUR REGULAR LINE OF:

29 Gauge **Painted Steel At**

2.00 Per Covered Sq.

White * Barn Red * Sand Tan

Cypress Green & Earth Brown

.024 Mill Finish Alum. *42.00 Per Covered Sq.

29 Gauge Galvanized Metal

*32.00 Per Covered Sq.

Painted White Alum. At *52.00 Per Covered Sq.

28 Gauge **Galvalume At**

ONLY *38.00 Per Covered Sq.

26 Gauge **Painted Steel At**

*45.00 Per Covered Sq. Tan * Gold * Harbor Blue • Brown

Notice - All Pannels Listed Above Are A Standard Width 36" Coverage, And We'll Cut Length To Your Order, At No Extra Charge.

We Also Stock:

Galvanized **Roofing Nails** With Neoprem Washers

#200 Agri Built Windows, Tension Socied, Self Flashing 2 Sizes

24"x36" At *55.00 36"x48" At *75.00

Glenwood Metal Forming

RD #3 Box 503A Ephrata, PA 17522 Phone 717-733-9590

Wood Grip Screws

Wood ZAC Scrows

#410 Stool Insulated Door, Four Way Pro Hung Steel Face, Size 3x6'8"

> ***153.00** w/o Window (Window Available)

P.S. Prices Subject To Change Without Notice Prices F O B Ephrata

Klaver Roofline Didaolato 10' Length, Painted White At *67.34 Per Unit

Plus, Ridge Cap, Corner Trim, Fascia Trim, Door Trim, Double Angle Trim, J-Channel. Door Track Cover

> DEALER: Robert Zimmerman RD #2 Box 299 Newville, PA 17241 717-776-5951



CUSTOM MADE FEED BINS FOR FARMS — FEED MILLS



- Made of 13 gauge Steel
- All welded seams
- Gravity Flow or Auger

Free Estimates

Also - Steel Roof Trusses for **Buildings - Portable Hog Buildings** - Bucket Elevators - Grain Augers **Distributors - Flow Pipes &** Accessories

We Sell, Service & Install Ph: 717-345-3724

STOLTZFUS WELDING SHOP

Owner - Samuel P. Stoltzfus RD 3, Box 331 Pine Grove, PA 17963