PFGC ❖ INDUSTRY CORNER ❖

(Continued from Page 21)

ly.

The second easiest method is the calculation method. In this method we simply use "known" pounds per acre-inch of grazeable forage and other "known" infomation and calculate RHD without doing field harvests. We often "re-determine" pounds per acre-inch for our forages by doing a few sample field harvests. Anyone would be wise to do so for itself. Otherwise, there are standardized figures available to use to cheat the system. In this case, we must measure or estimate the average inches of grazeable forage available per paddock. Let's assume our grass is bermudagrass and bahia grass at 250 pounds per acre-inch. In this case we must know acres and stocking rate. (See Table 2.)

This method is easy to use, grazier friendly and a good countercheck with the visual readings.

Now, let's do the same example using the measured estimates method. In this case we must hand harvest a representative sample(s) from each paddock, weigh it, tally the results and factor in the livestock need. We use a 3.1-foot square frame for the sample size (grams x 10 = lb/ac) and we cut at the recommended residue height for the forage in question. Again, I record this in my notebook or on a form. In this case, we must also know acres and stocking rate, etc. (See Table 3.)

This method is good, but most graziers are not inclined to go to such extremes to gather the data. We have a form available to help determine data for methods 2 and 3.

Within any of these methods we can make it complicated and factor in additional expected forage production, livestock weight changes, differences in pounds per acre-inch of forage depending on height of forage, etc. But, in practice all of that makes little difference in the practical use of the methods. A one-inch rain at the right time is worlds more important. The RHD and the ebbs and flows of it are much more important than the minnute difference shown by adding more complications. The average of the three methods is 27.7 (or 28).

So, what does that mean? It means that there is 28 days of feed available without serious changes. A major use of RHD is to also easily measure the ebb and flow of forage supply.

The ebb and flow of the RHD range does not make much sense unless we know something about what the expected RHD parameters need to be. For example:

1. In the green, actively growing season, there are only 10-14 RHD needed to have forage for the herd to graze al the grass "as it grows." More would be excess and less is often a problem indicator.

2. For summertime grazing, we need to build to have 40-60 RHD ahead of the herd by about June 15. That excess gets our herd through the summer forage slump.

Date: May 10, 1997				
Paddock Number	Acres	Forage In. Available Per Ac.	Pounds Forage Available	
			Per Acre	Per Paddock
1	20	2 x 250 =	500	10,000
2	20	3	750	15,000
3	20	1	250	5,000
4	15	Trace	0	0
5	25	6	1500	37,500
6	10	5	1250	12,500
7	40	2	500	20,000
8	10	16	4000	40,000
Totals/ Averages	160	3.5	875	140,000

Table 2

3. For winter stockpile, we need 150-180 RHD to go through al winter no-growth times. When there is less, we can plan hay needs. There are other correlations, too.

The 28 RHD means that there is more forage growing than the stock are eating. Why? Because, to graze all grass as it grows and have no reserve requires only the 10 to 14 RHD. That is exactly what we try to do in the spring grazing of winter annual grass pastures. If our objective is to graze all grass as it grows: (1) we could add more stock or (2) cut some for hay, etc., or (3) leave the excess for later grazing.

How can we use RHD to determine amount of hay to cut? First, we need more RHD for grazing than we are using. If we have 28 RHD and need only 14 RHD, then ½ of the area can be cut for hay (28 - 14/28 = 50 percent). If we have 28 RHD and need 21 RHD, then we can harvest only ¼ of the extra forage (28 - 21/28 = 25 percent).

If the RHD were only 10 to 14 or less and declining, that would indicate a forthcoming deficient forage supply and a need to adjust management. Do we de-stock some or all? Do we project ahead to a sale date and get ready to sell all of the cattle? The ebb and

(Turn to Page 23)