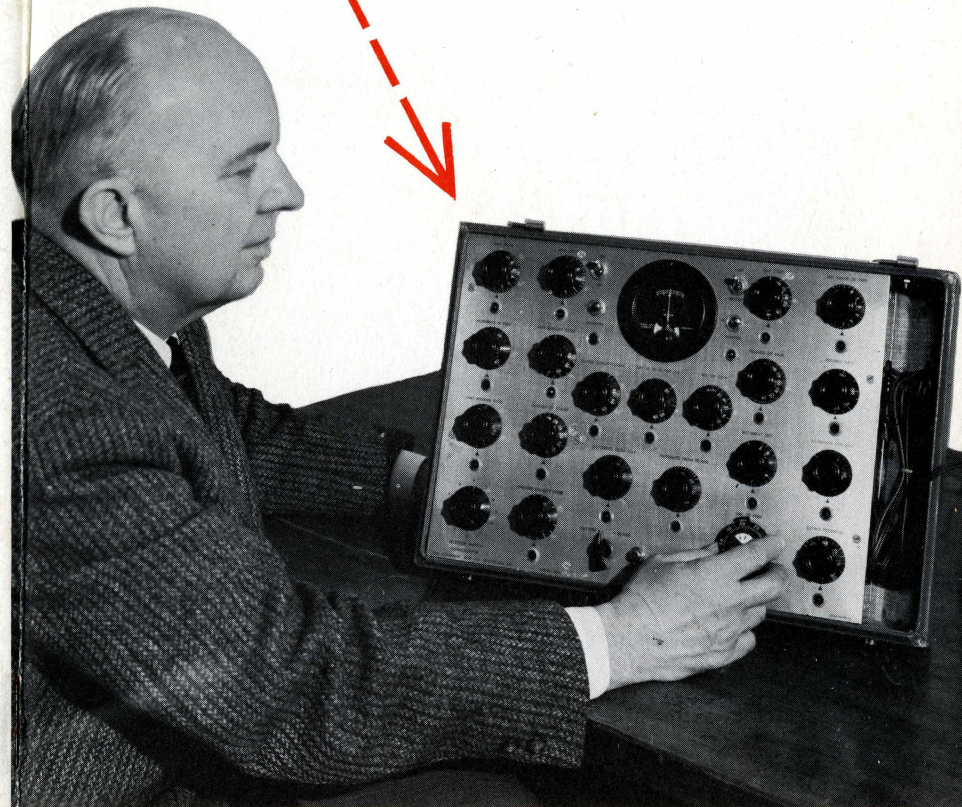
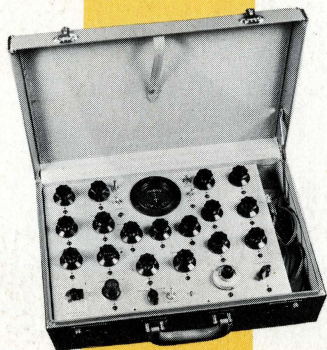


Getting The **FACTS**

for the **COWCULATOR**



Southern States Cooperative

General Offices



Richmond, Virginia

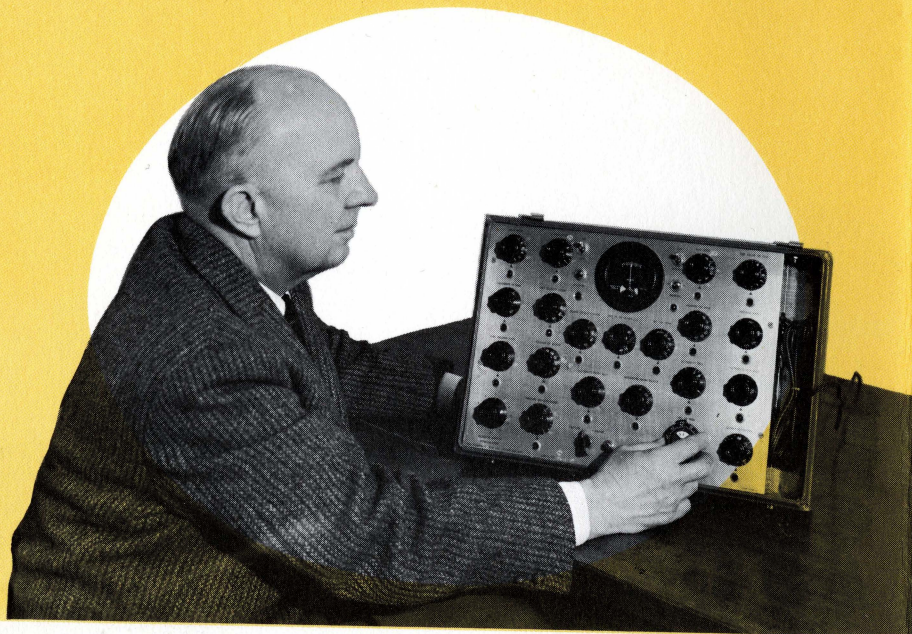
in *Southern States*



MAXIMUM PROFIT

DAIRY PROGRAM

The COWCULATOR



And Southern States

MAXIMUM PROFIT

Dairy Program

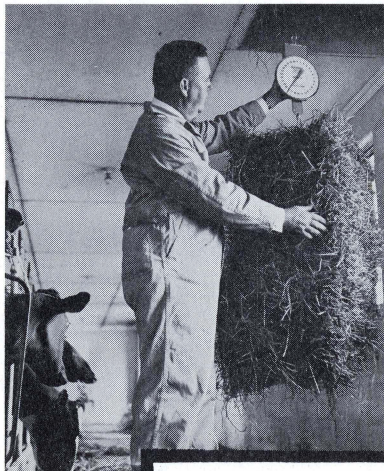
The Cowculator was developed to overcome one of the greatest obstacles to maximum profits in dairying today: Overfeeding the poor-producing cow and underfeeding the high-producing cow. At the heart of the problem lay the question: "What is the correct amount of grain to feed each cow to get maximum profits from her—based on the price of milk and grain?"

Dr. C. D. Caskey, Director of Research for Southern States, invented the Cowculator to make the necessary computations quickly and accurately.

The Cowculator is the heart of Southern States Maximum Profit Dairy Program. It has proven itself on many farms. It is not a substitute for programs like DHIA, EDPM, HIR, and DHIR. Rather, the Cowculator Program is designed to work *with* these other programs and add to their value—since the Cowculator takes the economic factors of milk and grain prices into consideration.

The Maximum Profit Dairy Program was developed by Southern States Cooperative to help its dairy feed patrons enjoy a higher standard of living. Right now, the Program is materially increasing the level of prosperity on scores of farms.

5. Determine the pounds of hay consumed by the milking herd daily for each 100 pounds of body weight. (A) If hay is hand fed: Weigh several bales or forks to get an average



weight. Then, using this average figure, determine the total pounds fed daily. Deduct wastage. Add individual weights of milking cows in herd and divide by 100. Then divide this figure into pounds of hay consumed. Enter your answer after item 5. (B) If hay is fed free choice: The average cow will consume 2½ pounds of hay daily for each 100 pounds of body weight. Enter this figure after item 5 if no silage is fed. If silage is fed, reduce this figure 1 pound for each 3 pounds of silage fed per 100 pounds of body weight. If cows are on pasture, hay intake will be reduced, depending on pasture, height, quality and length of grazing period.



FORAGE QUALITY CODES		FORM NO. 16-1 (7-51)	
Southern States MAXIMUM PROFIT DAIRY PROGRAM			
CHART I HAY QUALITY CODES Grasses, Legumes and Grass-Legume Mixtures			
DATE OF CUTTING (SAME DATES APPLY FOR CHART III) Contact Your Southern States Agency or County Agent for Dates that Apply	STAGE OF GROWTH	QUALITY CODES for DRY HAY*	
	Early Vegetative or Pasture Stage	57	
	Grasses Before Heading or Legumes before Budding	50	
	Grasses in boot stage or Legumes in 2/3 Bloom	43	
	Grasses in Bloom or Legumes in Full Bloom	37	
	All Ways After Bloom (Soft Dough Stage)	31	
	Ripe (Hard Dough Stage)	25	
	Second and Third Cuttings	41	
* Drop One Grade if Hay is Seriously Damaged by Weather.			

CHART II PASTURE QUALITY CODES		FORM NO. 16-1 (7-51)						
Southern States MAXIMUM PROFIT DAIRY PROGRAM								
DESCRIPTION	USE CODES IN THIS COLUMN IF PASTURE IS ONLY FORAGE FED (NO HAY OR SILAGE)			USE CODES IN THIS COLUMN DEPENDING ON AMOUNT OF SUPPLE- MENTAL FORAGE (HAY, SILAGE, ETC.) FED IN ADDITION TO PASTURE				
	GROWTH AVAILABLE			AMOUNT OF SUPPLEMENTAL FORAGE				
	1. AMPLE	2. MEDIUM	3. SHORT	4. One Fourth Feeding	5. One Half Feeding	6. Three Fourths Feeding	7. Full Feeding	
SEEDED LEGUME GRASS COMBINATION	Early Leafy Stem	10	10	7	8	6	4	3
	After heading	11	8	5	6	5	3	2
IMPROVED PERMANENT	Early Leafy Stem	13	9	6	6	7	5	3
	After heading	10	6	4	5	4	2	1
UNIMPROVED PERMANENT	Spring	10	7	4	5	4	3	2
	Summer, Fall	7	7	1	3	2	1	—
AFTERSWATH OR TEM- PORARY (GALTS, EYE, SODAS, ETC.)	Immature Leafy	13	10	7	8	6	4	3
	Second Growth	11	8	5	6	5	3	2

1. Ample - Use this column when pasture is in the leafy actively growing stage and cows can graze to full capacity with little effort.
2. Medium - Use this column when pasture is slightly limited or when it is evident that cows are not getting all the immature forage they could consume. Cows would eat appreciable amounts of supplemental forage if available.
3. Short - Use this column when the growth is very short (under three inches) and cows spend considerable time (8 to 12 hours) grazing.
4. One Fourth Feeding - Use this column when cows consume good forage in the barn or yard at about one fourth the rate of full barn feeding. If forage is hand fed increase quality code by one if cows are on "abundant" pasture and decrease by one if on "short" pasture.
5. One Half Feeding - Use this column when cows consume good forage in the barn or yard at about half the rate of full barn feeding.
6. Three Fourths Feeding - Use this column when cows consume good forage in the barn or yard at about three fourths the rate of consumption in winter months.
7. Full Feeding - Use this column when cows are consuming essentially as much forage in the barn or yard as they do in the winter months.

(over)

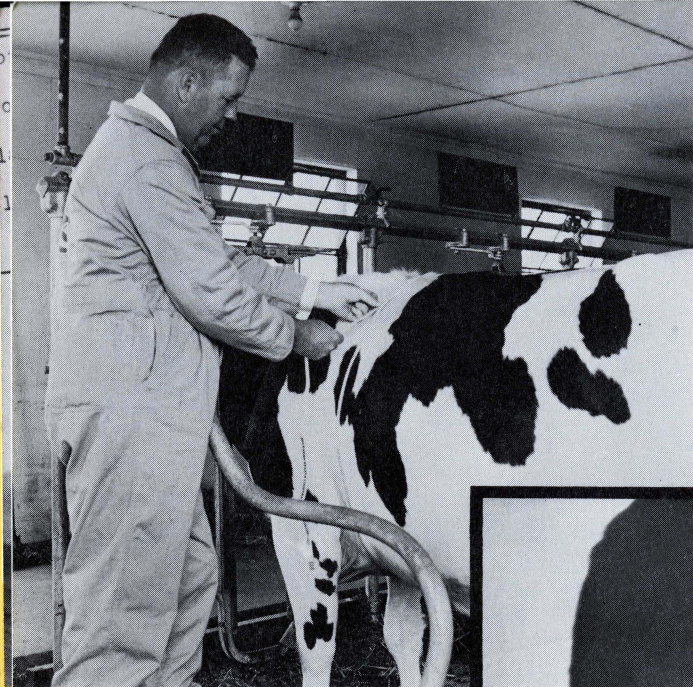
6. Get hay quality code from chart number I and enter after item 6 on data sheet. 7. Get pasture quality code from chart number II and enter after item 7. 8. Get silage quality code from chart number III or IV and enter after item 8. 9. Determine dry matter of silage by consulting chart number III or IV. Record figure after item 9.

Be careful—there is a widespread tendency to overvalue forage. Evaluate forage as realistically as possible.

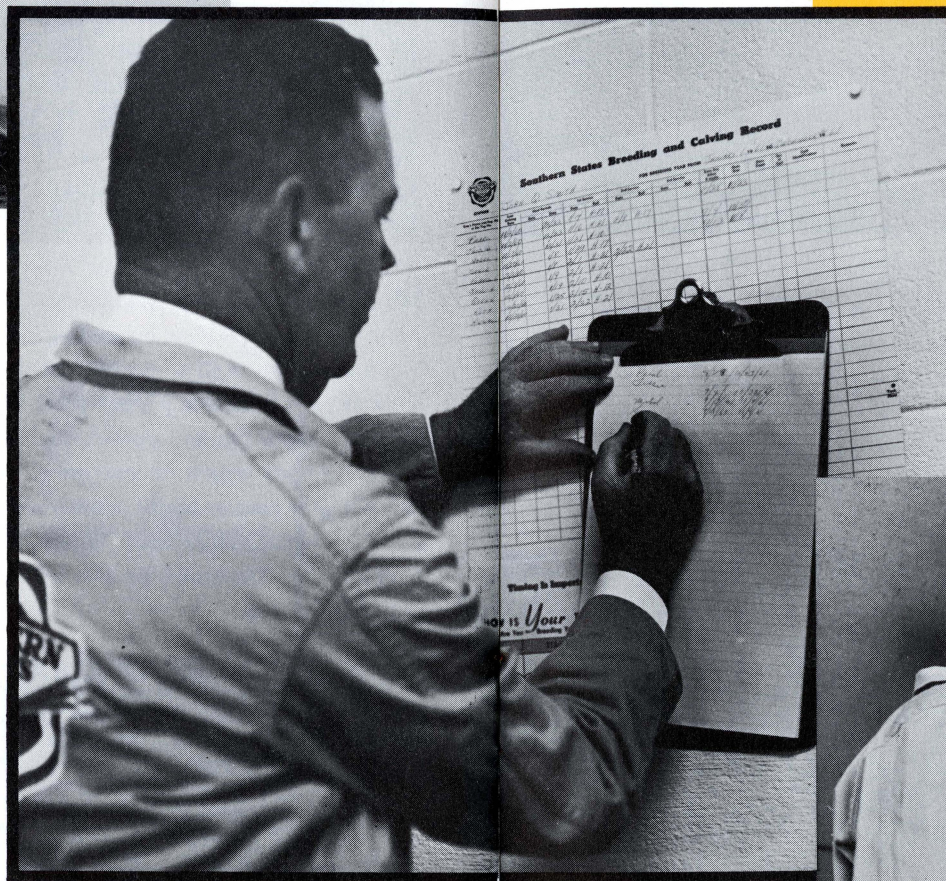
10. Determine the silage feeding rate. Your answer will be entered after item 10 or item 16, depending on feeding method. (A) If silage is fed free choice: The average cow will consume 7 pounds of silage for each 100 pounds of body weight when no hay is being fed. Enter this figure after item 10. If hay is fed, reduce this figure 3 pounds for each pound of hay being fed per 100 pounds of body weight. If cows are on pasture, silage intake will be reduced, depending on pasture height, quality and length of grazing period. (B) If silage is fed on an individual basis: Weigh several forks to find average weight of each fork full. Determine pounds fed each cow per day and enter this figure under column 16.



11. Record cow's name, barn number or eartag in column 11 on data sheet.



12. Enter cow's weight on data sheet under 12. Weight is determined by taping cow as shown. Pull tape snugly behind front legs. There will be a minimum of disturbance if owner, herdsman or milker does the taping.



13. Record the last freshening date in column 13 on the data sheet. **14.** In column 14, check where it applies: first calf . . . second calf . . . third calf or over. Then write in the cow's actual age in months. **15.** Check the space that applies in column 15: less than 3 months to calving . . . or, more than 3 months to calving. Use DHIA records or breeding chart. (Information for column 16 is covered under item 10.)



17. Determine daily milk production for each cow. Record the pounds per day in column 17. DHIA records may be used if weights are recent (within the last week). If such records are not available, weigh the milk for each cow at both evening and morning to arrive at daily milk production in pounds.



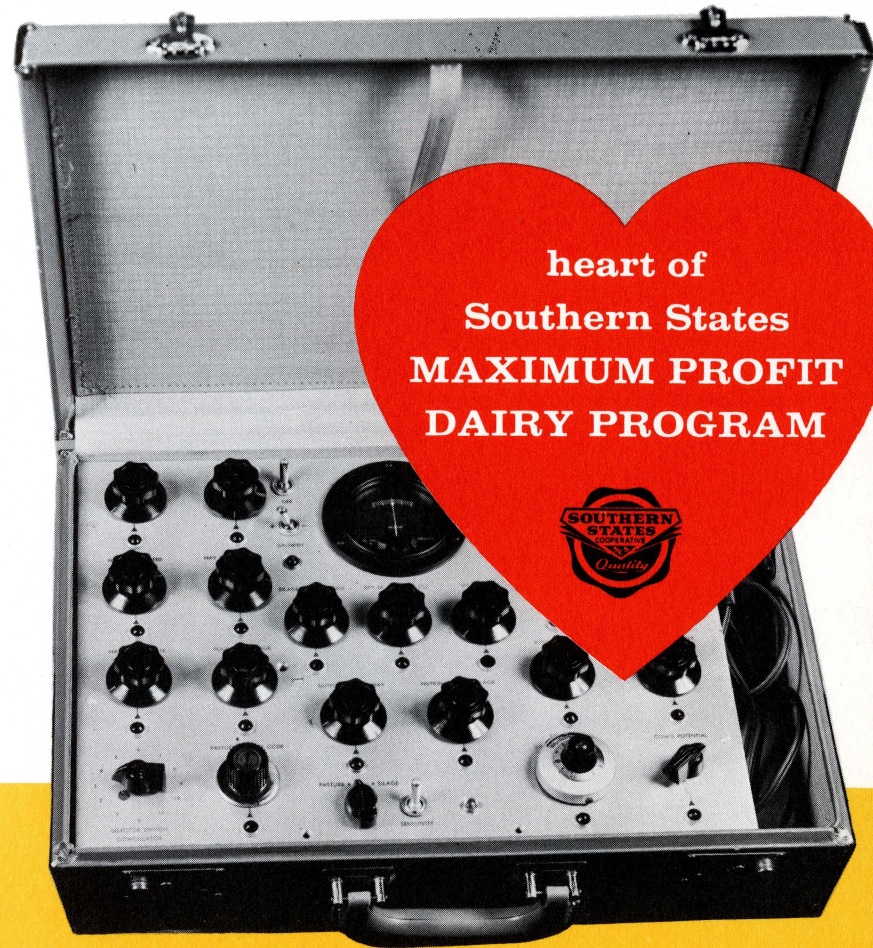


Maximum profit can be obtained from this revolutionary program only if the necessary information is kept up-to-date. New data sheets should be filled out and "cowculated" under the following circumstances:

1. For individual cows that have just freshened
2. When the milk price changes 50c per hundred or more
3. When concentrate cost changes \$5.00 per ton or more
4. When hay value changes \$5.00 per ton or more
5. When forage feeding program or feeding rate is changed
6. When forage quality codes change
7. When butterfat test changes 5% or more

Together, the dairyman and the Southern States agency man, must work closely to keep the Cowculator Program up-to-date—to keep the increased profits coming in.

The COWCULATOR



heart of
Southern States
MAXIMUM PROFIT
DAIRY PROGRAM



**CAN DRAMATICALLY
INCREASE A
DAIRYMAN'S PROFITS**