Getting The FACTS
for the COWCULATOR

in 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 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.
The Cowculator can dramatically increase a dairyman’s profits. It has proven this. However, to do so it must have facts and these facts must be accurate. Getting accurate facts for the Cowculator is an all-important job. The Cowculator is no better than the information given to it. *Be accurate.*

**First** of all, you will need data sheets. On the data sheets you will record all information you gather for the Cowculator. Start by filling in dairyman’s name, address and the date.
1. Determine net price of milk per cwt. at the farm. Enter after item 1 on the data sheet. Be sure to deduct hauling and other fees that are charged on a weight basis. If a percentage is sold for base at Class I price and another percentage for another price, use the blend price. In a base-surplus market, determine price that would be received if an extra 100 pounds of milk were produced. Enter that price.

2. Determine concentrate cost at farm. Enter after item 2 on the data sheet. (Generally dairy feed delivered in bulk is the best buy.)

3. Determine the nutrient value of concentrate and record the figure after item 3. If cows are getting a complete Southern States Feed such as 16% Dari-Krunch, use the energy or total digestible nutrient (TDN) content indicated on the open formula sheet available at the Southern States Cooperative Agency.

If a supplement mixed with grain is being fed, calculate the energy or TDN of the mixture.

4. Determine the hay cost (value) at farm. This should be expressed in dollars per ton, and recorded after item 4.
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 pound of hay being 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.

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 ear tag 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.
18. Record butterfat test for each cow in column 18. You can get this figure from DHIA records. If not available, get the average of the herd, based on last milk payment. Assign this figure to each cow.

19. Determine the pounds of concentrate (grain) being fed to each cow per day. If cows are being fed by scoops or other measures, determine weight of concentrate by actually weighing. Enter the figure in column 19.

When column 19 is completed, data sheet is ready for the Cowculator. (Columns 20 and 21 will be completed by the Regional Office using the Cowculator.)
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 dairymen and the Southern States agency man, must work closely to keep the Cowculator Program up-to-date—to keep the increased profits coming in.