

DROUGHT WATCH

(Continued from Page D2)

for grain and those to salvage as silage. The price for a corn crop salvaged as silage should be set somewhere between the potential returns from harvesting as grain (low) and the feed value of the crop (high).

The stressful conditions present here in August will likely contribute to increased standability problems this fall, as stalk reserves are depleted during grain fill and plants will be predisposed to stalk rot organisms. This may be a consideration in making plans for a timely harvest.

Purchasing the Lowest Cost Source of Protein

Energy rather than protein is much more likely to be the limiting nutrient in beef cow rations except when low quality forages are fed. Protein levels may be marginal and, in fact, for young growing animals protein may be

grossly deficient.

If supplemental protein is needed and producers want to compare the protein content of more traditional supplements with alternative feeds, the simplest and quickest method is to value feeds based solely on crude protein content per pound of dry matter. This method however, does not account for nutrients other than protein in the feeds such as minerals, vitamins and energy. As shown in Table 5, there is a range in cost per pound of crude protein from \$0.04 to \$0.61. In this example, the lowest cost protein source is urea, but urea by itself cannot be fed to cow herds. Additionally, urea and other nonprotein nitrogen (NPN) compounds are not recommended when low quality forages are fed as the sole component of the diet. Generally energy levels are too low in these diets for the animals to receive full benefit from NPN feeding.

Farmers, Homeowners Should Be Aware Of Consumptive Use Of Water

During a drought, it may be tempting to give the lawn a daily sprinkling, water the vegetable garden for an hour each morning or if you're a farmer, start irrigating your 300 acres of corn. Before you do, take note of how much

Conclusion

When feed supplies are limited, there are alternative feeds that may be successfully substituted in beef cattle rations. More than the price per ton of feed should be considered when choosing alternative feeds. Other factors to consider when comparing feeds include dry matter content, energy value, crude protein content, and feasibility of feeding in formulated rations. Finally, a good herd health program, forage testing and ration balancing are essential to obtain maximum animal performance and profitability from alternative feeds.

water you will consumptively use.

"Consumptive use of water occurs when water is drawn from a ground or surface source and not directly returned to the earth," said Dr. Al Jarrett, professor of agricultural engineering in Penn State's College of Agriculture. "It's a major concern during drought emergencies."

Consumptively used water doesn't disappear forever. But it is released into the atmosphere through evaporation. It can be reused only when it finally returns to the earth as precipitation — and in a summer like this one, that could take a while.

The water you sprinkle on your lawn and garden is consumptively used since it either evaporates or is taken up by the plants' roots. So are the 9,000 gallons of water taken from the soil by an acre of corn on a hot July day.

The five gallons of water used to flush the toilet or the 30 gallons used to wash a load of clothes is not consumptively used since it returns to the earth once it is treated. A dairy cow can drink 20 gallons of water in a day, but only half is consumptively used in milk production. The rest returns to the earth as waste.

"Not surprisingly, agriculture is one of the largest consumptive users of water," said Jarrett. "It requires an average 600,000 gallons of water each year to grow an acre of any crop. Except for the small amount that remains in the stems and leaves, all of this water is transpired into the air."

During a declared drought emergency, there are limitations on the amount of water farmers may consumptively use. In the Susquehanna River Basin, the limit is 20,000 gallons per day. In other areas, certain water uses may be restricted.

Homeowners watering lawns and gardens also should monitor water consumption during a drought. Garden hoses, sprinklers and basin faucets use from three to five gallons per minute. If you run a sprinkler for two hours, that can amount to 600 gallons.

During a drought emergency, you should contact the river basin commission in your area if you consumptively use more than 20,000 gallons of water a day or are considering a large irrigation project. The commission regulates water use and can assist with planning large water-use projects.

If you are located in the Susquehanna River Basin, contact the Susquehanna River Basin Commission, 1721 North Front Street, Harrisburg, PA 17102, (717) 238-0427. Growers in the Delaware River Basin can contact the Delaware River Basin Commission, P.O. Box 7360, West Trenton, NJ 08628, (609) 883-9500.

For further information or for a copy of a listing of fact sheets on water consumption and other issues, contact the Agricultural and Biological Engineering Department, 246 Agricultural Engineering Building, University Park, PA 16802, (814) 865-7685.

Table 5. Cost per pound of crude protein in various supplements

Supplement	CP (% DM)	Cost (\$/ton)	Cost CP* (\$/lb)
Soybean meal	44	200	0.23
Alfalfa hay	17	120	0.35
Urea	280	220	0.04
40% LP (35% NPN)	40	192	0.24
500# range block	25	304	0.61
50# range block	40	360	0.45
40% LP (all natural)	40	314	0.39
40% LP (19% NPN)	40	238	0.30
Wet brewer's grain	30	28	0.21
Cottonseed meal	41	150	0.18

* Not valued for other nutrients.

KEN CLUGSTON
(717) 665-6775

CRAFT-BILT CONSTRUCTION INC.

FARM-HOME BUILDING
1242 Breneman Road
MANHEIM, PA 17545
PH: (717) 665-4372

BUILDING & REMODELING FOR —
DAIRY RESIDENTIAL
SWINE POLE BUILDINGS
BEEF STORAGE

FRANK A.
FILLIPPO, INC.

- WANTED -
DISABLED & CRIPPLED
COWS, BULLS & STEERS

Competitive Prices Paid

Slaughtered under
government inspection

Call: Frank Fillippo -
Residence - 215-666-0725
Elam Ginder - 717-367-3824
C.L. King - 717-786-7229

**MILK.
IT DOES A
BODY GOOD.™**



MIDDLE ATLANTIC MILK MARKETING ASSOCIATION, INC

LET'S MAKE A CONNECTION...

Mobile and Portable Two-Way Radios Motorola Radius 2-Way

- UHF/VHF/800 MHz/Low Band
- Repeaters
- Phone Patch
- Many Accessories

The crisp sound of Motorola technology will meet your needs
3 Year Limited Warranty

MOTOROLA
Radius®

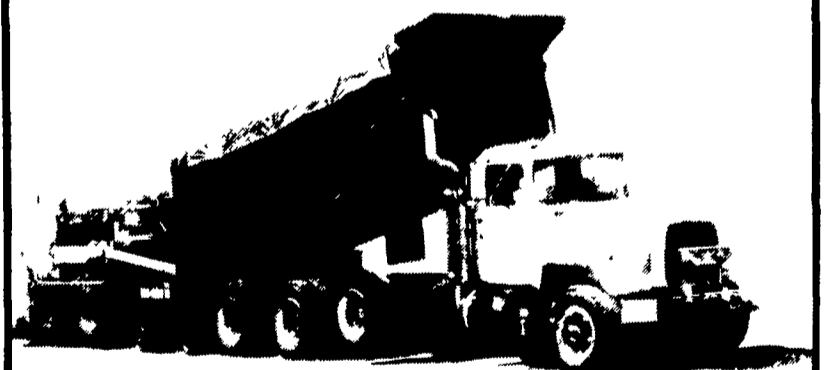
Call Triangle Communications today and ask about our "Ride the Waves" promotion. All qualifying units purchased through September may earn you a Bahamas Vacation

TRIANGLE COMMUNICATIONS INC.

NEW HOLLAND
(717) 656-2211

1-800-828-2211

READING
(215) 929-4211



Quality Asphalt Paving

- Farms
- Driveways
- Parking Lots
- Streets

**LYONS & HOHL
PAVING**

P.O. Box 161
East Earl, PA 17519
Phone (717) 355-9219

Attention

We Are Also Available For Grading,
Stoning & Rolling Which Is The
First Step In A Quality Paving Job.

For Estimates Call 717-355-9219