

Solar grain drying not yet practical

LANCASTER - The potential value of solar-supplemental heat for grain drying is limited when compared to natural-air drying, says Vance Morey, agricultural engineer at the University of Minnesota.

Morey was a speaker at the Fifth Mid-Atlantic No-Till Conference held here January 4. More than 1300 farmers and industry representatives from six states attended the conference.

Except for special circumstances it appears that the justifiable investments are well below the installed

cost of even so-called "low-cost" collectors. The justifiable cost per square foot may be as much as doubled for collectors tilted at an optimum angle to the sun or designed for higher efficiencies. However, in most cases such collectors will have higher installed costs per square foot, Morey points out.

"Solar collectors of one acre or more in size are required to supply the heat energy for even a moderate-sized, high-speed system. Collectors which operate efficiently at the 120 degree F to 220 degree F tem-

peratures needed for high-speed systems are expensive," he notes.

Morey says the potential for supplying supplemental solar heat to in-storage drying systems appear to be more promising. The reasons for this include:

1. The long drying period (4 to 10 weeks or longer) provides an extended period for collecting solar energy.
2. Intermittent periods of cloudy weather are not a problem since the grain in the bin can act as an energy storage.
3. The high airflow requirements along with the

low temperature rises mean that relatively simple and inexpensive collectors can be used to collect the energy.

Although the concept appears promising at first glance, and many systems have been tried within the last few years with the results pronounced as "successful," further

Seed supply surveyed

WASHINGTON, D.C. - Production of alfalfa and annual ryegrass seed was down last year, but red

clover seed, Kentucky bluegrass seed, tall fescue seed and timothy seed production all moved up. Alfalfa seed output totaled 87.2 million pounds, down nine per cent from the 1977 total. Red clover seed production totaled 31.3 million pounds, up 26 per cent from the small 1977 crop. Annual ryegrass seed, 200 million pounds was down 13 per cent, according to USDA.

analysis of the concept is needed. As moisture contents increase, allowable drying time decreases which means higher airflow rates are required. As temperatures increase, allowable drying time decreases, again requiring higher airflow rates.

MASTER-MATIC SILO SYSTEM




FICKES SILO COMPANY, INC.

NEWVILLE, PENNA. 17241

Please send information on Fickes Master-Matic Silo System and Silage Master Silos

Fickes Silo Company Inc.

P. O. Box 7
Newville, PA 17241
Phone - 717-776-3129



Stock Cherokee Trailers
Trailers well worth their cost

Please send me information on Fickes Silos
 Please send me color catalog on the Cherokee horse stock trailers and GN flatbeds.

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____

THE SIGN OF QUALITY

YOUR FULL SERVICE DEALER



RD2, NEW PROVIDENCE, PA

Authorized Dealer -
Mopro Liquid Supplement

Route Service Available
Salesman: John Breckbill

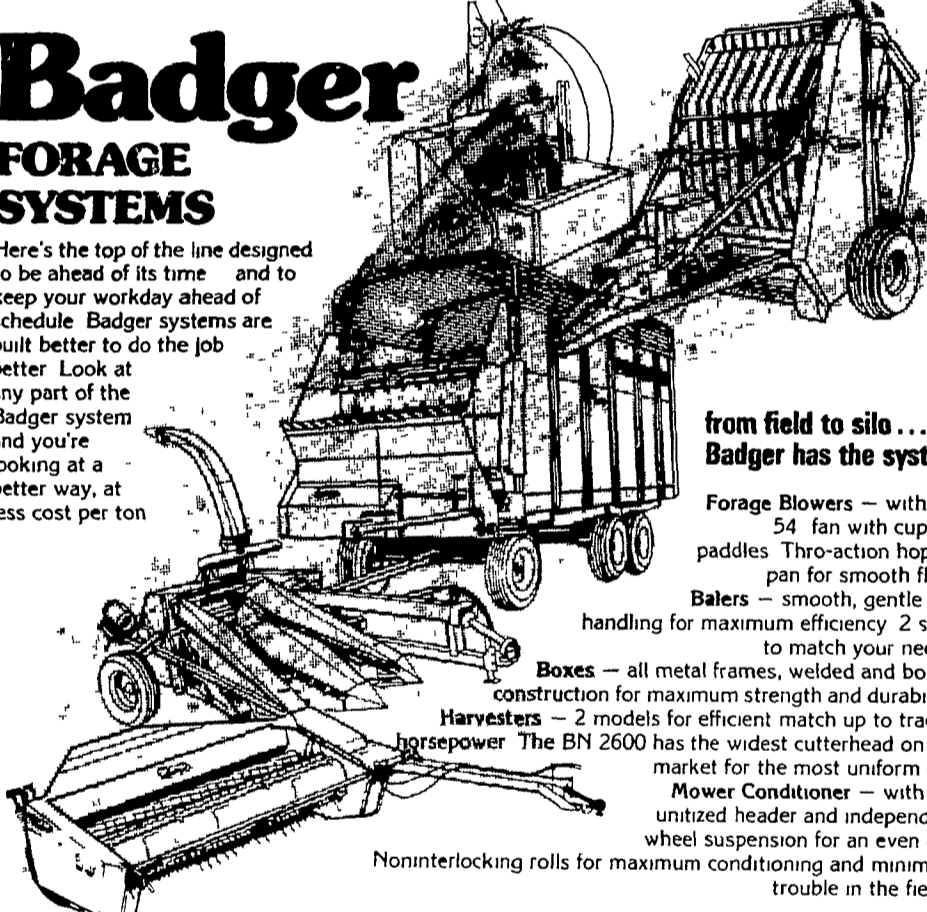
LET US HELP PLAN YOUR FEEDING PROGRAM

"20 YEARS OF OUTSTANDING SERVICE" CALL TODAY — (717) 786-2500
"SERVICE IS OUR GREATEST ASSET"

Badger

FORAGE SYSTEMS

Here's the top of the line designed to be ahead of its time and to keep your workday ahead of schedule. Badger systems are built better to do the job better. Look at any part of the Badger system and you're looking at a better way, at less cost per ton.



from field to silo ... Badger has the system

Forage Blowers — with big 54 fan with cupped paddles. Thro-action hopper pan for smooth flow.

Balers — smooth, gentle hay handling for maximum efficiency. 2 sizes to match your needs.

Boxes — all metal frames, welded and bolted construction for maximum strength and durability.

Harvesters — 2 models for efficient match up to tractor horsepower. The BN 2600 has the widest cutterhead on the market for the most uniform cut.

Mower Conditioner — with the unitized header and independent wheel suspension for an even cut.

Noninterlocking rolls for maximum conditioning and minimum trouble in the fields.


Badger the people that care ... about your farm, your business and you!

GRUMMELLI'S FARM SERVICE Mechanics Grove Quarryville, PA Ph. (717) 786-7318	ROY O. CHRISTMAN RD 1, Box 119 Hamburg, PA Ph. (215) 562-7218 488-1904	HEISEY FARM EQUIPMENT INC. RD 1 Jonestown, PA Ph. (717) 865-4526
PIKEVILLE EQUIPMENT INC. RD 2 Oley, PA Ph. (215) 987-6277	HUTTON FARM EQUIPMENT Mahaffey, PA 15757 Ph. 814-277-5504	PETERMAN FARM EQUIPMENT INC. 225 York Road Carlisle, PA Ph. (717) 249-5338
ALLEN ZEIGLER RR 1 Lehigh, PA 18235 Phone (717) 386-4593	McMILLEN BROS. RD 1 Loysville, PA Ph. (717) 789-3961	LLOYD E. KREIDER RD 1 Cochranville, PA Ph. (215) 932-4700
CECIL DAIRY SERVICE RD 1 Rt 274 1/2 Mi. South Rising Sun, MD Ph. (301) 658-6923	SHOW-EASE STALL CO. 523 Willow Rd Lancaster, PA Ph. (717) 299-2536	

BUSINESS OPPORTUNITY
LEBANON COUNTY BADGER DEALERSHIP AVAILABLE
 Write Box J-66 c/o Lancaster Farming, 22 E. Main St., Lititz, Pa. P.O. Box 366, 17543

Winter hardiness and high yield potential...two good reasons to plant either Pioneer Brand Alfalfa 520 or 524.

Supply of high quality alfalfa like 520 and 524 is limited. See or call your Pioneer salesman soon.



PIONEER BRAND ALFALFA SEED

PIONEER HI-BRED INTERNATIONAL, INC., EASTERN DIVISION, TIPTON, INDIANA 46072

The limitation of warranty and remedy attached to each bag of Pioneer brand seed is part of the terms and conditions of the sale thereof. Pioneer is a brand name, numbers identify varieties. Registered trademark of Pioneer Hi-Bred International, Inc., Des Moines, Iowa, U.S.A.