

Solar grain dryer makes a "bushel"

JACKSON COUNTY, Ohio — "I bought it all at the local cash and carry hardware," said Chuck Harley, a farmer here trying to beat the high cost of energy by building his own solar grain dryer.

"The total cost was just a mite under the \$600 I had estimated," he said. "Since I spent a bit more than \$600 last year for the propane gas I used to dry my corn, I figure this dryer will soon

pay for itself."

The dryer is an amazingly simple triangular structure with a 12x24 foot collector surface. On any sunny or cloudy-bright day the sun heats the air in the collector. An electric fan draws the warm air off through a duct into the bottom of a grain storage bin. The air rises through the grain and leaves through the bin's top, taking moisture with it

Harley is a full-time employee of the Goodyear Atomic plant in neighboring Pike County. With his weekends, evenings and other free time he also operates a 150-acre farm in this Appalachian foothill region of southern Ohio.

He grows corn, soybeans, wheat and hay on a farm reclaimed from an old peach and apple orchard with the help of erosion control and conservation loans from the U.S. Department of Agriculture.

Last February, a month when farmers get out their pencils to figure cost and profit possibilities of the coming crop season, Harley was worried about increasing operating expenses, especially for fuel.

Leafing through a farm magazine, he saw an article about a small portable solar grain dryer that seemed to him both practical and possible. He sent away for the plans.

After talking it over with friends and other farmers, Harley decided he could build the dryer himself if he could find the money. He estimated the cost of materials at around \$600.

Fortunately for him, the Jackson County office of the department's Agricultural Stabilization and Conservation Service announced about that time it was making farm facility loans for solar grain dryers. When he learned that, Harley lost no time making out a loan application

While Harley became the first farmer in the United States to use a department farm facility loan to build a solar grain dryer, the loans have been available for years to help farmers build on-farm storage facilities and obtain needed grain drying and handling equipment.

It has been only since June 1979 that solar drying units have been eligible — and encouraged — for such loans nationwide, through county ASCS offices using department approved plans.

Loans are also available for commercially constructed solar grain drying systems and for multiple use solar systems — both commercial and homebuilt — provided one of the intended uses is grain drying.

Harley built the dryer out of plywood, greenhouse-type clear fiberglass sheets, 2 x 4 inch studs, hardware cloth and black paint for the solar ray collector. He also needed metal framing and supports and miscellaneous nuts, bolts, hinges and electric wiring for the fan, which runs off house current.

He hooked the dryer up to his 5000-bushel grain bin.

Harley built the dryer on skids so he can use it at other buildings.

Although Harley's solar dryer is designed primarily for crop drying, it can help heat brooding houses and other livestock shelters or farm machine shops and machinery sheds.

If you have a garden you're one of 33 million

BURLINGTON, Vt. — This year 33 million American households — two million more than in 1979 — grew some of their own food in home or community gardens.

Americans are returning to the pleasure — and treasure — of a garden in their own back yards as inflation and energy worries eat away at family incomes and make energy-expensive leisure activities less attractive.

Results of the 1979 National Gardening Survey conducted by the Gallup Organization were released in the fall issue of Gardens For All.

Forty-two percent of America's 78 million households had food gardens, making gardening one of the most popular productive leisure activities in America.

Survey results indicate food gardening is more popular than 22 other common activities, including fishing, golf, tennis, jogging, photography...even taking vacation trips.

According to the survey 1979 may be a benchmark year because it marks the end of a gradual decline in food gardening that began in 1975, when a high of 49

percent of the households had vegetable gardens. Last year, 41 percent or 31 million of the households gardened.

Gardens For All sponsors the National Gardening Survey each year. It is the only complete survey on gardening available. A free summary of the 1979 survey findings is available from Gardens For All, The National Association for Gardening, Dept. 92000, 180 Flynn Avenue, Burlington, Vermont 05401.

Here are some of the other findings from the survey:

The total retail value of produce from U.S. gardens was \$13 billion.

The median garden size was 595 square feet, down from 620 last year because new gardeners tend to start small.

The average cost per garden was \$19.

The average dollar yield per garden was \$386.

The total net saving per garden was \$367.

Economy, pleasure and taste are the three main reasons for gardening's popularity among gardeners.

Three out of four gardeners preserve some of the harvest, and freezing is the most popular method.

DETWEILER SILOS

Increase Your Present Silo Capacity By Extending Your Silo

Dollars per ton an extension costs less than a new silo. We can extend most brands of concrete stave silos.

New Silos and Extensions
Tear Down and Rebuild
Silo Repairs

Jamesway Equipment

Write or Call
RD#2 Box 267D
Newville, PA 17241

PHONE
717-776-7533
or 717-776-3288

THE PATZ SOLUTION: Rugged, Dependable Gutter Cleaners



Heavy-duty link (left) and extra heavy-duty link (right) for long chains and heavy loads

No tools needed to remove or replace Patz hook-and-eye links

Adapts to varied installation layouts



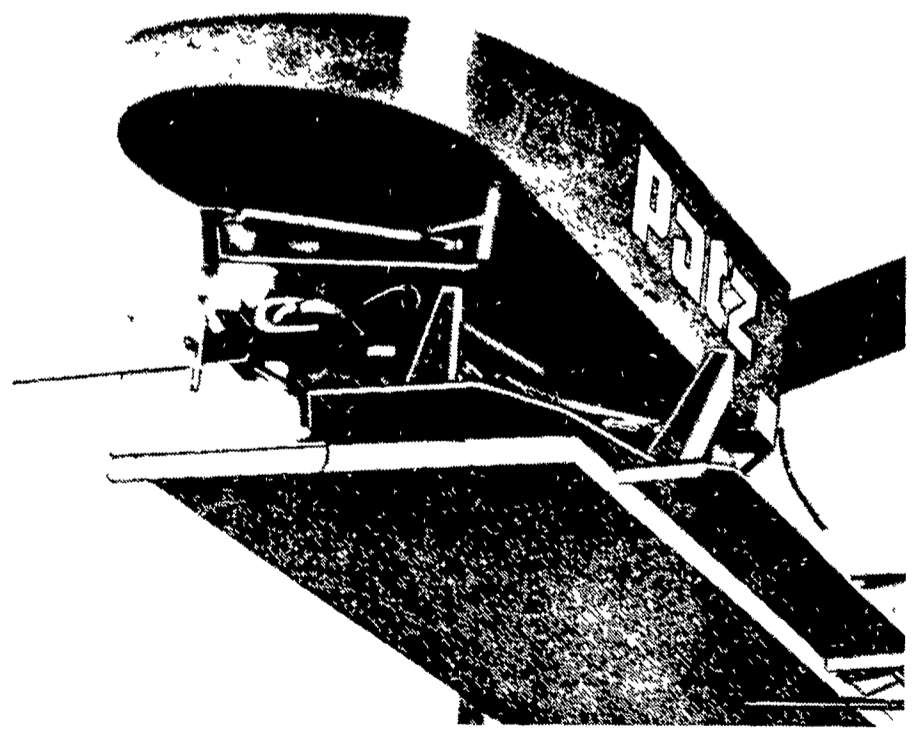
Your gutter cleaner has to work day after day, year after year. Better make sure you can depend on it

Patz gives you over 30 years of quality and dependability in every gutter cleaner we make. We're the ones with the proven forged steel hook-and-eye link — the secret to Patz performance. You can easily remove or replace links and flites without tools.

Your Patz gutter cleaner becomes a wise investment for you over the years because it's built to last. The all-steel slide and one-piece steel flites with wear shoes are engineered to withstand the rugged wear of everyday operation. And Patz gutter cleaners are adaptable to many layouts.

Thinking of stacking manure? Consider a Patz Tripod Supported Stacker or a Swinging Slide Stacker. You'll save with Patz because one motor and reducer run both the gutter cleaner and stacker.

Talk to your Patz dealer. He'll show you how Patz performance means fewer problems for you. And that gives you more time to manage your livestock operation for greater profit.



Patz Pound, Wisconsin 54161 U.S.A.
Performance Strong as Steel