

42 Sheboygan Press, Friday, March 30, 1973

Feed, Fuel, Fertilizer, Building Blocks . . .

Animal Wastes--Just Resources Out Of Place

In case you haven't heard, it's "methyl sulfide," among other compounds, that makes city folks who moved to the country for "a breath of fresh air" wince on those warm days when the wind is blowing in their direction.

It's methyl sulfide, ammonia and organic compounds such as aliphatic amines and mercaptans that make dairy farm neighbors particularly distraught!

But hope is in sight for those who would prefer to have the "fresh country air" rural residents are so proud of stay down on the farm, according to a recent animal wastes wrap-up survey conducted by research engineers with Sperry New Holland, the farm equipment division of Sperry Rand Corporation.

At Ohio State University, the survey states, research is being conducted by Richard White and his agricultural engineering associates to pinpoint the "villains in dairy cattle manure that makes its odor offensive. Their study, however, is only one of dozens going on in the treatment, storage, handling and spreading of livestock and poultry wastes.

As a result, reports Sperry New Holland, a lot of people—including some feedlot owners

—may not be calling manure a waste much longer.

Roy Koltman, dean of Ohio State's College of Agriculture, says:

"Wastes are simply resources out of place. Sometimes they are in the wrong form to be useful, but they are nevertheless resources that can be put in their proper place and changed to useful form."

Superheated

Among other findings, Sperry New Holland's survey has uncovered that researcher Joseph MacArthur of Drexel University in Philadelphia, Pa., has come up with a system using superheated steam to dry manure. He says the manure ends up as a soil conditioner or fuel, is odorless and convenient for storing and transporting.

Similarly in Pittsburgh, Bureau of Mines researchers have developed a process for the conversion of animal wastes into crude oil having an extremely low sulphur content. Processing a mixture of raw manure and carbon dioxide, and heating it to 300 degrees C, yields 30 per cent crude oil and 70 per cent water. One ton of dry manure, reports the Bureau, produces about 3 barrels of crude oil.

The potential versatility of

manure is also being exploited with some success by an Illinois firm which recently announced a new process for changing dairy cattle manure into bedding, fertilizer and roughage. Although refeeding animal wastes is a natural occurrence among various members of the animal world, most recent research efforts have been to upgrade the digestibility and protein quality of livestock and poultry waste under controlled conditions. Studies indicate that both chemical

and biological treatments are feasible, though the economics have yet to be established.

One of the most startling uses for this "resource out of place" was reported by a California researcher who has developed a technique whereby dried manure is mixed with crushed glass to form a new building material. The new product is said to be very economical, can be molded into any shape and consistency, is five times as light as concrete blocks with comparable tensile

strength, is fireproof and can be cut with an ordinary saw and nailed. It can be made into boards or panels, tiles or shingles, and also can be used to filter water.

Top Fertilizer

The overriding and most practical farm use for manure, however, is as a fertilizer, concludes the survey. And university and industrial researchers who are taking a look at the handling of farm-used animal wastes foresee a need not just for better mechanization, but

for better mechanization as well.

Adam K. Gehr, Sperry New Holland's manure spreader product manager, indicates current research by his company shows farm requirements are for spreaders with increased capacity and durability.

"The chemical makeup of animal wastes requires that manure handling equipment be highly durable and corrosion resistant," says Gehr. "Sperry New Holland engineers feel specially treated alloy steel lends itself best to spreader use, and we employ these steels throughout our spreaders."

Spreading an annual application of 15 tons of manure per acre over a four-year period, Dr. C. S. Baldwin of Ontario, Canada's Kijikowen College of Agricultural Technology says corn yields were increased each year by an average 40 bushels per acre. Steer manure was plowed down with corn stubble. The non-manured check plots averaged 88 bushels per acre during the four years, while the manure plots resulted in an average 128 bushels per acre.

Commercial fertilizer (nitrogen, phosphorus and potassium), when applied with the barnyard manure, did not show yield increases above the 40-bushel level.

In other words, as Dr. Baldwin's tests verify, and as the Sperry New Holland survey concludes, the manure treatment gave as good a yield as manure plus commercial fertilizer. Manure has proved to be an extremely valuable fertilizer, with the added advantage of saving farmers considerable money on commercial fertilizer costs.

Veterinary Services Field Structure Realigned By USDA

The U. S. Department of Agriculture (USDA) is realigning its Veterinary Services field structure to make its animal health programs more responsive to the needs of the livestock industry and the public.

Under the realignment, USDA's Animal and Plant Health Inspection Service (APHIS) will replace the current 47 Veterinary Services field offices—one in each state, for the most part—with 18 area offices, each covering two or more states.

In explaining the action, Dr. E. E. Saulmon, APHIS Deputy Administrator for Veterinary Services, pointed out that employment in Veterinary Services programs has been reduced by almost 20 per cent since 1967. "At the same time," he noted, "we have been faced with an unprecedented number of emergencies, such as Venezuelan equine encephalomyelitis, a sharp increase in the number of hog cholera cases, the heaviest infestation of screwworms in many years, the worst outbreak of cattle scabies in 30 years, a serious outbreak of cattle fever ticks, and a major outbreak of exotic Newcastle disease.

"We need a streamlined structure to meet these challenges," Dr. Saulmon emphasized. "We must have an organization that will give us a flexible, hard-hitting team to fight animal disease outbreaks. The realignment will establish a better working relationship with the states which we believe will be much more effective in carrying out our mutual responsibilities."

The realignment replaces the present four animal health field regions and one nationwide veterinary biologics field region with five regions that are compatible with the boundaries of the ten standard federal council regions. It also integrates veterinary biologics field activities with animal health activities at the regional level.

Dr. Saulmon said that with the change in location of Veterinary Services field offices,

APHIS will contract with the West Virginia; Area 4, Michigan and Ohio; Area 5, Illinois and Indiana; Area 6, Minnesota and Wisconsin.

— Southeast region: Area 7, Kentucky and Tennessee; Area 8, Alabama and Mississippi; Area 9, Georgia, North Carolina and South Carolina; Area 10, Florida, Puerto Rico and the Virgin Islands.

— South Central region: Area 11, Arkansas, Louisiana and Oklahoma; Area 12, New Mexico and Texas; Area 13, screwworm eradication program, Mission, Tex.

— North Central region: Area 14, Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming; Area 15, Kansas and Nebraska; Area 16, Iowa and Missouri.

— Western region: Area 17, Arizona, California, Hawaii and Nevada; Area 18, Alaska, Idaho, Oregon and Washington.

Location of the area offices within each area has not yet been determined.

YOU CAN BANK ON US

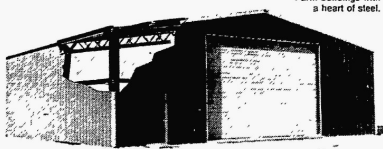
...for...

- Certificates of Deposit
- Savings Accounts
- Checking Accounts
- Christmas Club
- Farm Loans
- Home Loans
- Installment Loans
- Auto Loans

Organized In 1907

Cleveland State Bank
CLEVELAND, WISCONSIN

What to build when a pole barn would be too expensive.



Call Us Soon For Our Season Special

See Us For: • CLAY EQUIPMENT • LIQUID MANURE TANKS
• SLATED FLOORS • TOTAL CONFINEMENT HOUSING

BADGER STRUCTURES

Our Citation® all-steel buildings come in six sizes—up to 70 feet wide, and as long as you want to go.

Inside, there's extra headroom, because the rigid open-web steel framing used in a Citation® does away with low-hanging chords. The sidewalls are vertical—not slanted, not curved. So the floor space is 100% usable, and you can put doors, windows, and shelves anywhere.

And, yes—because of pre-engineering and mass production—a Citation® often does cost less than a pole barn.

Cuckler®
Farm buildings with a heart of steel.



TIME TO Clean-Up...

Your Yard And Sell Your Old Machinery And Miscellaneous

SCRAP

to the
SHEBOYGAN IRON AND METAL CO.

You'll Get

HIGHEST PRICES In Years

for

- Old Scrap Iron • Radiators • Batteries • Copper
- Brass • Aluminum • Old Tin • Rags • Paper



NEW AND USED
STEEL Products

- Deformed Reinforcing Rods • Pipes • Plates
- Floor Plates for Barn Cleaners • Channels
- Beams • Cable • Angles
- Square Tubing • Posts
- New Chain 1-inch • 1 1/2-inch and • 2-inch
- Also Canvas Covers 25 Sizes In Stock

Turn Your Scrap Into Cash At The . . .

Sheboygan Iron & Metal Co.

Whatever your corn harvesting needs . . . we can satisfy them!

No. 1 among
1-RROW PICKERS

the 1-row pull Superpicker.



No. 1 among
2-ROW PICKERS

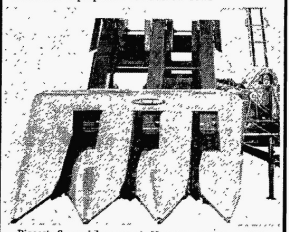
the 2-row pull Superpicker for wide or narrow rows. Optional shelling and grinding units.



Every new Idea picker has the famous Superpicker cage gathering head and snapping rolls. The long, tapered floating points that lift those down and tangled stalks. Trash rolls. Beaters. All the things that make a Superpicker a super picker. Stop in and ask for a look-see. And ask too, about the 3-row wide or narrow Superpicker or the exclusive 3-row Superseller. Its cage sheller interchanges on two-row pull Superpickers as well.

No. 1 among
3-ROW PICKERS

the 3-row Superpicker for narrow rows



Biggest Superpicker ever! Non-stop, non-plug picking—3 narrow rows at a time—on 28", 30" or 32" corn rows! Under normal conditions, you can set a steady 3 1/2-mph ground speed and pull through 150-bushel corn with ease. It's built to do the job with all the big capacity, low maintenance features such as aggressive snapping rolls, individual first elevators, big capacity husking bed, etc. Remember. In the picker race, new Idea Superpicker are first and first.

Uni-Picker



Greedy gathering units, big capacity husking unit, plus!



The only picker that can open a field and pick more than 2 rows at a time. It has a huge husking bed with 12 long rolls in line with the direction of travel. 312 powered rubber Flexi Fingers align the ears and keep them moving for fast efficient husking with minimum shelling.

Cornheads available are: the 2-row Superpicker (snapping roll), 2-row Stripper Plate, 3-row Stripper Plate for wide or for narrow rows, the 4-row Stripper Plate for narrow rows in seed corn and the 4-row Superpicker (snapping roll) for wide rows.

Uni-Picker is a great picker and is one of the reasons why we say

Uni-System just plain makes more sense!



Open Monday thru Saturday 7:30 a.m. to 5 p.m.

(A Division of A. L. Wagner Co., Haven, Wis.) Phone 458-7970 or 467-6582 NEWSPAPERARCHIVE®	"Sheboygan's Oldest and Largest Scrap Dealer" Established 1903 N. 19th Street and North Avenue Dial 457-5067	HUPEMAN S at HINGHAM Phone 364-3232 NEWSPAPERARCHIVE®
--	---	--