

Manure Pits¹

By Richard L. Witz²

A dairy cow (1) will produce about 21 tons of manure per year, 25 per cent urine, and 75 per cent feces. Each ton produced, with bedding added, contains 10 pounds of nitrogen, 5 pounds of phosphoric acid, and 10 pounds of potash. It is best to reinforce this manure with 50 pounds of 20 per cent superphosphate per ton, making a 10-15-10 fertilizer. The superphosphate also helps to prevent loss of nitrogen.

Nearly every bulletin on dairy barns includes a description and plan of a manure pit. Dairy experts have long recommended their use in areas where farmers could not or did not care to haul the manure each day.

The size of the pit will depend upon the size of the herd and the length of time between haulings. One publication (6) states that the pit should provide 1¼ cu. ft. for each day per 1,000-pound cow.

The pit should have a roof to keep out rain and snow, but the sides may be open. The roof may be extended on one end or side of the pit to provide protection for the manure spreader. If the manure pit is to be used in the summer months, it should be screened in to prevent the use of the pit for fly breeding. (Use of DDT may make screening unnecessary.) Doors and construction should be made to permit backing into the pit with the manure spreader, and also provide overhead clearance to permit use of a tractor-operated manure loader.

The floor should slope away from the door used for loading, and either to the center or to the opposite end. No drain is provided except when a liquid pit is to be used. A liquid pit is used only where bedding is scarce. In case bedding is short, a farmer must take his choice of: (1) buying additional bedding, (2) purchasing equipment to handle the liquid manure, or (3) losing the fertility of the liquid manure. Most farmers choose to purchase the additional bedding since it makes for a cleaner barn, and a cleaner herd of cows.

The manure carrier track should be extended into the manure pit.

In general, however, the best results (1) are obtained by placing the manure on the land as soon as possible after it is produced, unless storage is on cement floors and under conditions of tamping by livestock.

Plan No. MW74301 available from Agricultural Engineering Department shows a plan of a manure pit.

¹A review of literature on manure pits.

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BIBLIOGRAPHY OF INFORMATION ON MANURE PITS

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INTERESTING NEW BOOKS

This isn't the "reading and relaxing" time of year for you folks on farms, but for those whose chief interest is agriculture—and who do have time to read—we'd suggest a peek at the "Midwest Farm Handbook," published by the staff of Iowa State College. These staffers have collected and presented in this volume a lot of sound basic information in agricultural economics, agronomy, agricultural engineering, animal husbandry, poultry, dairy, horticulture, forestry, plant disease and insect controls, weed control, and several lesser subjects. This book is really a useable tool for the person who teaches, talks, tells or studies his agriculture.

Louis Bromfield, whose mind has developed as much as the soil on those wornout farms Bromfield bought down in Ohio, has a new book, "Out of the Earth," which is published by Harper's in New York. If you like the Bromfield style—as we do—you will enjoy this book about what he calls "the New Agriculture," and the amazing world which scientific research has discovered in the past few years. Bromfield believes "it is probable that we have learned more about agriculture and the soil in the past generation or less, than in all the history of the world."

Another Iowa State College publication which should be very usable up in North Dakota where farm management is becoming more and more of a profession, is "How to Make Your Farm Pay," a serious-minded text designed to help people with farm management problems. How to make out your farm plan and stick to it, how to decide legal, financial, personnel and cropping problems, all are attacked and met.

"Pigs: From Cave to Corn Belt," was written to entertain as well as instruct, by Charles W. Towner and Edward N. Wentworth. The University of Oklahoma Press, at Norman, is publisher. Much information is cleverly presented, and if you are building a livestock library you will want it.