

Livestock Waste Management (Clinton County)

In a Nutshell

A livestock waste management plan specifies how, when and where animal waste will be handled. It is used for systems that store, stabilize, transport or apply animal waste to land. Best management practices are designed to prevent contaminated runoff water from leaving the owner's property and entering surface or groundwater. Proper manure handling, storage, and disposal ensure that farmers reap the maximum fertilizer value from animal wastes, while reducing risks of groundwater and surface water contamination from improper application of nutrients

The “How To”

The [USDA Natural Resources Conservation Service](#) provides a large and diverse amount of information for people to properly dispose of animal waste products.

The [USDA Natural Resources Conservation Service](#) provides a manure and nutrient management program.

The University of Missouri-Extension publishes a [guide to Beef manure Management Systems in Missouri](#). They describe the traditional forms of waste disposal and then discuss newer, less harmful forms that both comply with the law and provide vital nutrients for fertilizer.

The University of Missouri-Extension also provides a site entitled [“Missouri Dairy Resource Guide.”](#)

This site provides a long list of helpful links to topics including: General Resources, Permitting and Regulations, Site Evaluation, Soils and Manure Testing, Best Management Practices, Shelterbelt/Windbreak, Economics, Handling and Storage, Managing Animal Mortalities, Records and Inspection, and Biogas Production.

Planning & Zoning

The [Nebraska Department of Environmental Quality](#) publishes the “Planning Key to Livestock Waste Management.” The article lists the Nebraska statues on animal waste management and how those rules came to be.

The [Missouri Department of Natural Resources](#) provides multiple services for animal waste reduction under their soil and water conservation program. Under each service they provide a link to the state statute that regulates the waste disposal.

The [Illinois Department of Agriculture](#) runs the Livestock Management Facilities Program. It sets out the policies for where livestock facilities can be built and how the waste must be disposed of.

The [University of Missouri Extension provides](#) a site that lists the counties in Missouri that have imposed additional rules and fees on animal feeding operations.

Dollars & Cents

The University of Missouri Extension published a manual called [“Economic Considerations for Beef Manure Management Systems.”](#) The report lays out various tables which compare and contrast the monetary and environmental benefits of three systems: slurry, solid, and lagoon-gutter flush.

Extension, America’s Research-based Learning Network, provides a long list of economic information on [Manure Value and Economics](#). This page covers topics including: Value of Manure as Fertilizer, Manure Storage, Application, and Treatment Costs, Manure to Energy, Webcasts, Research Summaries on Manure Economics and Value of Manure, and Additional Resources.

The University of Missouri Extension provides a PDF on [“Calculating the Value of Manure as a Fertilizer Source.”](#) They also publish a PDF entitled [“Factors that Affect the Price of Manure as a Fertilizer.”](#)

Measuring Success

The Environmental Protection Agency, in conjunction with the Robert S. Kerr Environmental Research Laboratory put together [“A Manual on: Evaluation and Economic Analysis of Livestock Waste Systems.”](#) The purpose of this manual is to “describe and evaluate alternative systems and/or technologies currently used to handle wastes from livestock facilities of less than 1000 animal units. The systems are evaluated with regard to controlling water pollution and odor nuisance. An economic analysis of alternative livestock waste management systems for dairy, beef, swine, sheep and poultry facilities is provided.”

The University of Missouri-Extension publishes a [guide to Beef manure Management Systems in Missouri](#). This guide provides how the Clean Water Act applies to beef operations. They go on to describe the traditional forms of waste disposal and then discuss newer, less harmful forms that both comply with the law and provide vital nutrients for fertilizer.

The University of Missouri-Extension also publishes a guide entitled [“Reduce Environmental Problems with Proper Land Application of Animal Manure.”](#) This guide lists the benefits of proper management, such as: reduced cost of commercial fertilizers, improved production efficiency, improved animal health, and protection of water resources and air quality.

Discover More

The USDA magazine Rural Cooperative publishes the article, [“At Your Disposal”](#) which gives information on animal waste and multiple solutions to manage it.

The [Environmental Protection Agency](#) lists the many problems that can be caused by improper livestock management. They also publish a study discussing [“Forage and Grassland Improvement-Livestock Producers Explore Best Management Practices.”](#) It discusses the successes and improved practices of 15 test sites in Missouri.

The [North Carolina Department of Agriculture and Consumer Services](#) publishes the multiple ways they will provide assistance for animal waste management.

The University of Missouri-Extension publishes a [guide to Beef manure Management Systems in Missouri](#). This guide provides how the Clean Water Act applies to beef operations. They go on to describe the traditional forms of waste disposal, then they discuss the specific benefits to the new technologies and what the requirements are for installation.