INTRODUCTION

THIS CHAPTER INCLUDES:

- a brief discussion of causes of on-farm livestock and poultry losses
- an overview of disposal options
- results of a recent Ontario survey.

On-farm livestock mortalities – referred to as deadstock throughout this book – are unwanted for many reasons. Livestock producers do whatever they can to avoid them, reviewing production and handling practices regularly. Today's livestock and poultry are genetically superior, receive proper care and nutrition, and are housed and managed to protect them from predators. As a result, deadstock, as a percentage of the total numbers on farms, is low.

Despite best efforts, mortalities are inevitable and must be dealt with to safeguard everyone's well-being. The alternative poses risks to environmental quality, animal health, and public health – including the farm family's. Improper disposal of deadstock is also a sensitive public relations issue.

Proper disposal takes knowledge, planning tools, and technology. This book begins by examining the environmental, health and legal issues involved in the disposal of deadstock. We'll then examine the options in detail, and review provincial regulations.

You will also find what you need to know to decide which disposal method or methods best suit your operation.



Safeguarding animal health is an integral part of livestock agriculture.



Mortality rates can be reduced by following strict biosecurity protocols.



In most cases, mortality rates are highest at birth.



In extreme cases, catastrophes – such as disease or power failures – will require mass disposal.

The highest mortality rates occur at birth or shortly after. Birthing deaths can be managed similarly to deaths where physical injury is the cause.

However, if the cause of death involves pathogens or infectious disease, caution is required to prevent the spread of disease to other livestock and, in some cases, humans. Handling and disposal methods in these cases are critical for the biosecurity of the operation and neighbouring farms, as well as for wildlife.

"Catastrophic mortality" is the term used to describe the conditions when an epidemic or natural disaster causes a massive die-off of animals in a short period of time. There may also be situations when an entire herd or flock has to be destroyed to prevent the spread of infectious disease in animals and protect human health.

If a foreign animal disease or a reportable disease is suspected, it is necessary to contact the Canadian Food Inspection Agency. See the back cover for contact information.



For disposal of catastrophic mortalities, special procedures must be followed to prevent the spread of infectious disease and water contamination.

OPTIONS FOR DISPOSAL IN ONTARIO

A recent survey revealed that the majority of Ontario's farmers currently prefer to use a single method of disposal, but at least 25% choose multiple methods, depending on the circumstance.



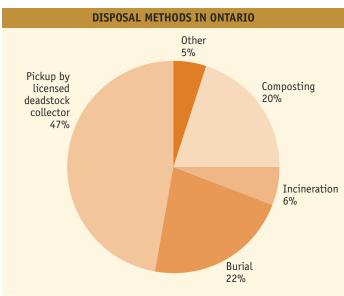
Deadstock removal to rendering plants is an option many livestock producers take advantage of where available.

Deadstock are rendered into tallow, meat meal and bonemeal. These finished products after rendering are still used in many products on the market today. As greater restrictions are placed on the use of rendered products, the costs increase for deadstock pickup. In some cases, restrictions are placed on the species allowed for use in rendering.



Composting of deadstock is a management-intensive option that can reduce the pathogen count and also provide a valuable soil amendment.

Burial is a solution to predator and odour problems. It involves more time on the farmer's part and is difficult to do in the winter months when the ground is frozen.



This chart shows data from an Ontario survey of the methods chosen for disposing of deadstock. Pickup by a licensed deadstock service is the most commonly used and preferred method. Composting and burial are also employed with some frequency.



Incineration of deadstock on the farm is a viable option with the proper equipment and management.



Disposal vessels restrict predator access while allowing natural decomposition inside a watertight (but not airtight) vessel. Odours are a factor with this method, which makes site selection for vessels so important.

Research continues and results are being used to develop disposal guidelines and regulations. The intent of this work is to balance a need to protect animal and public health and the environment with the need to reduce management and economic implications for livestock producers. In the next chapter we'll examine the issues more closely.