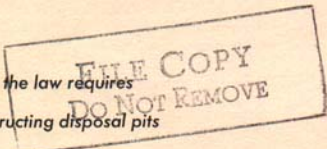


SANITARY DISPOSAL OF POULTRY CARCASSES

What the law requires
Constructing disposal pits
Using incinerators



Cooperative Extension Service

Michigan State University

East Lansing

By J. H. WOLFORD and C. C. SHEPPARD,
Poultry Science Department
and

C. J. MACKSON, Agricultural Engineering Department

SANITARY DISPOSAL of dead birds is a problem particularly in large commercial operations. Dead birds endanger the health of the owners and neighboring flocks. On some farms they are tossed out behind the poultry house, scattered over nearby fields, dumped into the wood lot or delivered to the town dump. These methods are not only ineffective and objectionable — they are, in fact, illegal.

The law (Act No. 225, 1929) regulating dead bird disposal in the State of Michigan requires that "every part of the carcass be covered with at least 4 feet of earth when the carcasses are buried. In case the birds are destroyed by burning, the place of burning shall be so located, constructed, and arranged as to cause no annoyance to any citizen or to interfere with life or property."

DISPOSAL PIT

The use of a disposal pit is a practical way to dispose of dead birds. It saves labor, is sanitary, can be used during all seasons, and animals cannot get at the decaying carcasses. If the pit should fill up, another pit can be built. The two pits can then be used on an alternate basis.

Location of pit Convenience, distance from the farm water supply, type of soil and slope of land determine the location.

For greatest convenience, the pit should be located near the poultry house.

It should be at least 100 feet from the well, and so located that sub-drainage is not in the direction of springs or wells. The slope of the land should be considered

so that surface drainage will not cause the pit to fill with water and water-borne soil. If the pit is on a slope, a diversion ditch is desirable to prevent water from running into the pit.

The soil over the pit should be higher than the surrounding area and sloped to provide surface drainage away from the pit.

Size of pit Many pits are too small. Approximately 70 cubic feet of disposal space is required per 1,000 laying hens. A pit 4.5 feet wide, 10 feet deep and 8 feet long would provide enough space for a flock of 5,000 laying hens. In a shallow pit, the rate of decomposition is slowed during the winter months. The deeper the pit, the more rapid is the decomposition. It is suggested that the pit be constructed no wider than 5 feet and no longer than 8 feet.

Construction of pit Properly constructed pits should last several years. Best results are obtained when the cover for the pit is extended well beyond the edge. A wide support helps to prevent the sidewalls from caving in. A cover below the frost line reduces the damage to side walls from freezing and thawing. A casing inside the pit should be used to prevent caving in.

A pit cover made of reinforced concrete will last indefinitely. Wood, if used, should be pressure treated with a preservative. The material used for the pit cover should be strong enough to prevent a truck or tractor breakthrough.

When the pit is filled, a new one is dug; however, when a pit is closed, the carcasses must be covered with at least 4 feet of soil.

To reduce the labor of digging the pit, some poultrymen have used bulldozers.

The following description provides information which will help poultrymen construct a pit suited to the size of their operation.

The top of the hole should be made about 4 feet wider than the hole itself. This greater dimension provides a shoulder or ledge to support the cover. The top of the ledge should be 1 foot below ground level (Figure 1).

Framing the inside of the pit is necessary to prevent caving in due to freezing and thawing and to keep animals from digging into the pit. Cover and frame the pit with 2-inch pressure treated plank. The cover should contain two layers laid at right angles to each other (Figure 1). Cut a hole in the center of the cover and place a 6-inch or larger tile in this hole (bell end down). Then add 12 to 18 inches of soil around the cover, sloping it to provide surface drainage away from the pit. An inverted can or pail may be used as a fly-tight cover for the tile.

INCINERATORS

Well constructed incinerators do an efficient job of destroying dead birds. Burning the carcasses is more sanitary than burying. The incinerator rapidly destroys disease producing agents, leaving only a small amount of ash. Objectionable fumes from the incinerator while

it is in use can be reduced by the use of burners which produce extreme heat resulting in more complete and rapid combustion. Also, the gases can be disseminated more widely with the use of a higher stack. On some poultry farms, the incinerator may be operated during the early morning hours when fewer individuals would be affected.

Plans for building your own incinerator are available for \$1.00 from the Milwest Plan Service, through the Agricultural Engineering Department, Michigan State University, East Lansing, Michigan.

More information on the use, efficiency, and availability of this type of incinerator is available from commercial companies. Three companies known to the authors are Sears Roebuck, Consumers Power Co., and the Shenandoah Equipment Co., Harrisonburg, Va. Readers may know of other manufacturers. Products of the three mentioned above are representative of the type of incinerator suitable for disposal of dead poultry. Mention of these companies does not constitute recommendation, endorsement, or approval of them or their products by the authors or by Michigan State University.

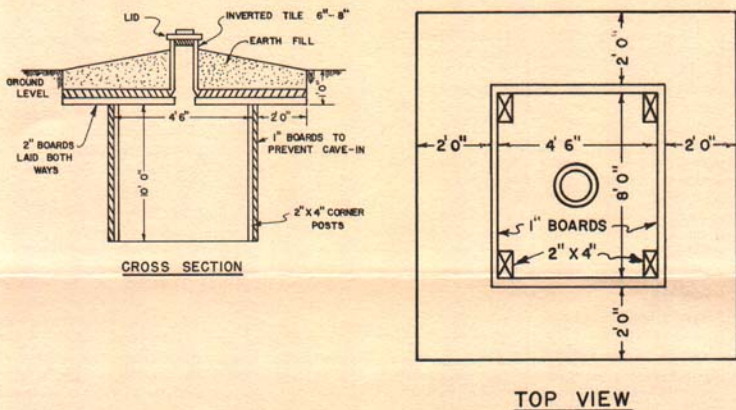


FIGURE 1