

Box Spreader Modification for Poultry Litter

Potomac Interagency Water Quality Office Fact Sheet
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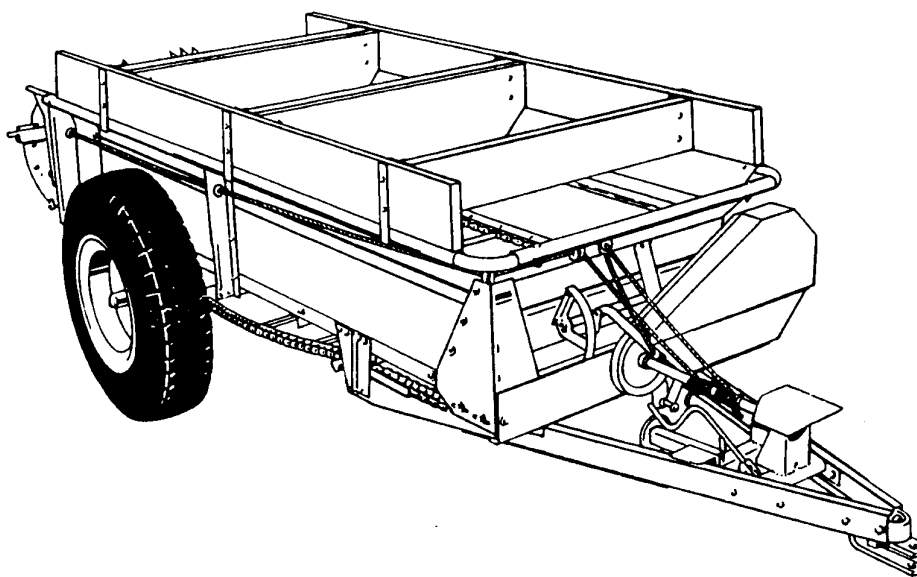
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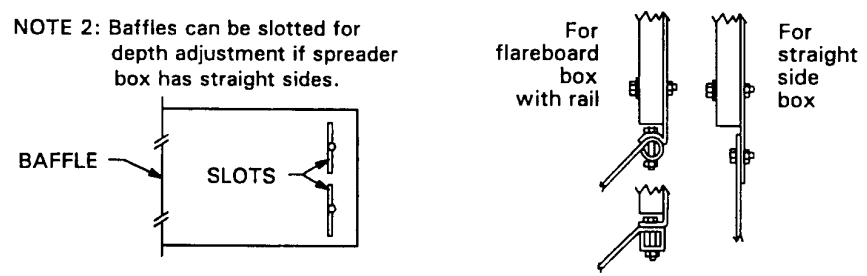
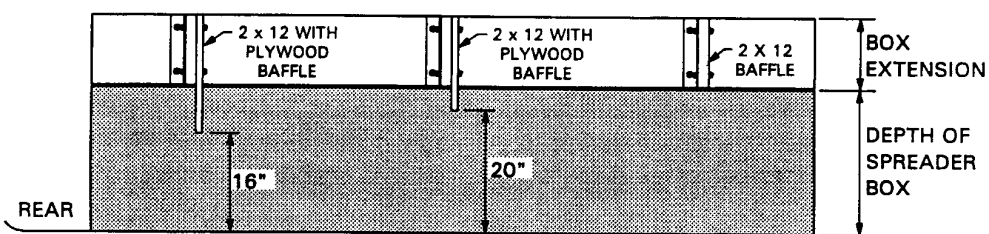
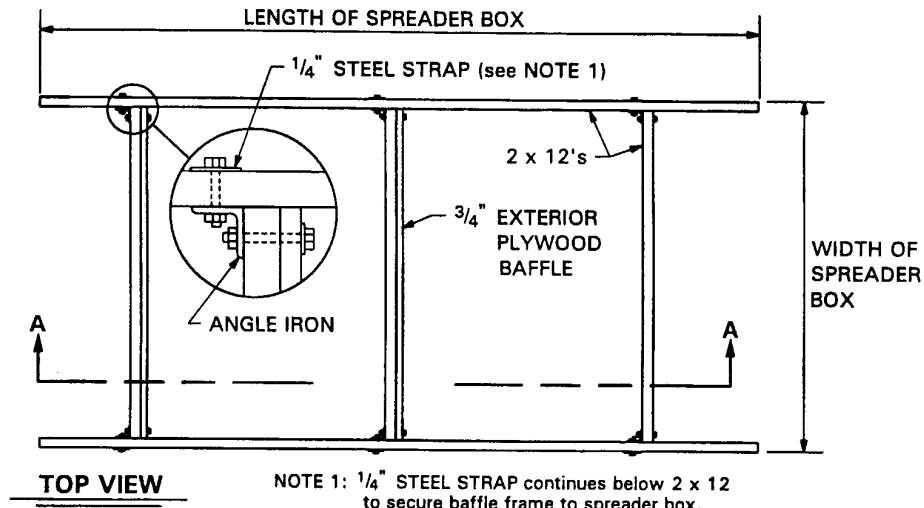
Correct litter application rates are important for maintaining desirable forage and crop yields. Overapplication of litter or other composted materials may adversely affect yields and can cause an increase in undesirable weed species. Misapplication also may contribute to imbalances in soil nutrients and will negatively impact quality of surface- and groundwater.

Conventional box spreaders typically are designed for use with cattle and dairy manures at application rates of 8 to 10 tons per acre. Their effectiveness is reduced when poultry litter is applied at recommended agronomic rates of 1 to 4 tons per acre.

This box spreader modification will enable farmers to reduce application rates significantly on crop and grassland at a reasonably low cost. Spreader calibration is necessary to determine actual application rate for a particular spreader after the modification is installed. Litter nutrient analysis is recommended so that producers can more closely match application rates to their specific crop or forage needs.

The modification will allow most spreaders to reduce litter application rates by 60-70 percent and also will provide additional spreader capacity. This modification can be removed easily when a producer wants to apply other livestock manures. When treated lumber is used for a 200-bushel capacity box spreader, materials will cost about \$135. Although using chromated copper arsenate (CCA) pressure-treated lumber is not required, it would be the most desirable for constructing a modification that will last longer.





Box Extension Attachments

The Potomac Interagency Water Quality Office wishes to credit Loring Barr, broiler producer and cattleman from Rig, W.Va., who initially designed the modification. Thanks are extended to Art Selders and staff of West Virginia University Extension Service for their assistance in preparing the design drawing. Thanks also go to the Potomac Valley Soil Conservation District for financial assistance in the construction and installation of modifications for farm demonstrations within the district.

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