

# Bags or Bins

## What's The Difference

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# Upright Grain Bins

- Grain Bins are permanent structures
- They can be used to hold large numbers of bushels of grain
- They are expensive to build but grain can be held for long periods
- They can be treated with insecticides
- They can be aerated to keep grain cooled
- So insects can't reproduce as rapidly.

# Upright Bins

## 44,000 bushel size



# Grain Bag Systems

- Grain Bags are a different method of storing grain for shorter periods.
- They are made of plastic material about 10mil thick.
- They can be left in the harvested fields for later pickup so the harvester can continue to harvest the grain.
- They are usually about 200 ft. in length.

# Grain Bagger

Store Your Grain the Easy and Economical Way!



PHOTO GALLERY

# Potential Problems with Bags

- Not safe from animal damage
- Potential leakage of water into bags
- Cannot aerate or treat once bagged
- Not for long term storage
- Cost about \$600 per bag
- Can store about 8,000 bushels per bag
- Perfect for short term storage

# Bag System Using Insect Probe





# Placement of Probes





# Common Glue Gun



# Bags

- If any insecticide needs to be used on stored grain bags it must be put on during filling of the bag.
- Most of the time insecticides aren't needed
- Grain moisture should not exceed 16% when stored in grain bags.
- Place bags on a slight incline to prevent moisture from collecting under them.

# Equipment for Bagging

Specialized equipment is required to bag grain with the bagging equipment. Costs: \$40,000 for bagger and unloader. A couple of producers in Tennessee went in together to purchase the equipment. There is limited usage of this equipment at this time, however; it may be used more as time passes.

# Bag Loading System



# Thoughts on Building On-Farm Grain Bins



On this page, you will find tips from the Extension Specialists from the Alabama Cooperative Extension System and the University of Tennessee about building grain bins. This is a work in progress - information will be added when it becomes available.

Thoughts from Kathy Flanders, Extension Entomologist, Alabama Cooperative Extension System, that relate to reducing future insect problems:

Spreader arms are a good idea because they keep all the fine particles from ending up in a central core.

The screenshot shows a web browser window displaying the 'UT Crops.com, Stored Grain' page. The page header includes the Alabama Cooperative Extension System logo, the date 'Wednesday, October 22, 2008', and navigation links for 'About Extension', 'County Offices', 'Calendar', 'Alabama A&M University', 'Auburn University', 'Staff Directory', and 'Employment Opportunities'. A search bar and a 'Google' logo are also present. The main content area features a navigation menu with categories like 'UT Crops', 'Corn', 'Cotton', 'Sorghum', 'Soybean', 'Wheat', and 'Stored Grain'. The 'Stored Grain' section includes a sub-menu with 'Insects: Types', 'Infesting Grain Bins', 'SLAM', 'Insecticides: Residual, Fumigants, Protectants', 'Sampling Stored Grain', 'Publications', 'Photos of Stored Grain Insects, Etc.', and 'Related Sites'. A text block discusses the importance of proper management in preventing grain spoilage, mentioning the 'SLAM' strategy and the use of insecticides. A photograph of a red grain bin with a spreader arm is shown on the right side of the page.



# Grain Bin Sampling





# What is a Grain Bag?

A grain bag is simply a long PE (polyethylene) bag that comes in the following sizes:

9 ft. x 200 ft. with a capacity of around 7,700 bushels of wheat or 7,500 bushel of corn. (empty bag weight is 270 lbs.)

9 ft. x 250 ft. with a capacity of around 9,700 bushels of wheat or 9,500 bushels of corn. (empty bag weight is 335 lbs.)

The bag is sealed airtight with a life of 1.5 years in the open, preventing the development and reproduction of fungus and insect. This airtight environment can eliminate the need for chemicals with an average bag cost of .07 ¢/bu. of stored grain/bushel. These unique grain bags allow for storage amounts to vary by simply cutting the bag and resealing it again.



# Bag Unloader

Store Your Grain the Easy and Economical Way!



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# Extractor

Store Your Grain the Easy and Economical Way!



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