

Crop Storage Institute

cropstorage@cs.com

FEATURE RELEASE

CONTINUED CARE OF AGRICULTURAL PLASTICS A KEY TO SUCCESS

For More Information,
Contact: Shefchik
(920)6553301

For Immediate Release

Continued care of agricultural plastic coverings used with forages and commodities can be key in saving thousands of dollars a year and aiding the environment. While the use of closed permanent structures essentially eliminates monetary losses, losses can be somewhat reduced by monitoring the plastic coverings carefully. Reducing environmental damage is difficult, but with some effort can also be reduced.

Chief among the monetary risks involved with plastic coverings and silage bags is the possibility of the plastic being compromised. University of Wisconsin-Madison's latest study on silage bags currently shows that 1 in 5 bags in the study saw dry matter losses exceeding 30%. While in some cases no damage was reported on the bags with excessive losses, in one-third of the trials the loss was due to bird damage that was not promptly repaired. Losses due to birds can be particularly hard to detect as it occurs on the top of the bag where it is difficult to see. Holes that go undetected or that are not repaired become very expensive. Some quick math will indicate that a routine checkup bag condition is well worth the time.

Attempts to limit pest animals and pets access to the bags can help to eliminate some problems with the plastics. According to Dr. Wayne K Coblenz, an extension agent with the University of Arkansas, to limit the problem "Weeds and other trash that potentially shelter rodents and other pests should be removed from the storage site." He goes on to note that, "If several bags are to be stored at the same site, regular mowing or herbicide treatment should be used to control plant growth around the bags."

Dr. Coblenz also offers suggestions on how to limit the damage. "Any holes should immediately be sealed with tape to prevent oxygen from entering the silage mass. Most manufacturers offer special patch tapes that adhere tightly to plastic silo bags and are weather and light resistant. Commonly available duct or masking tapes are not generally suitable for this purpose."

While no direct research is available, it is apparent that bunker silos are also susceptible to this kind of damage. Birds, rodents, deer, as well as wind may aid in damaging or removing the plastic covering. Repeated university research confirms that once the cover of the bunker is severely damaged losses will likely rise to the area of 30%.

The disposal of the plastics is also a growing concern. In the past wastes have been

handled through on site burning or dumping. However, several special problems that agricultural plastics face are the sheer volume of waste, the public concern over the long term effects of either burning or burying plastics, and the problem of collecting the waste in rural areas that may not have rural garbage or recycling pick up

Aside from the issue of pickup, recycling has other problems associated with it. Surveys from Cornell University state that while farmers “would like to recycle the materials but did not have an outlet to do so.” These same farmers also ”indicated that they would not be willing to pay extra for this service.”

Problems persist even where recycling is available and used. A University of Vermont study of agricultural plastic disposal found that 49% of the plastics brought to the recycling center or picked up by a route truck were rejected and found to be unfit for recycling. With greater farmer care, the refusal rate could have been reduced significantly.

These problems can be avoided by using permanent covered storage structures such as tower silos for forages and vertical bins for commodities, which are now feasible solutions for large producers. However, the immediate concerns associated with temporary plastics must be dealt with.

You can save thousands of dollars by carefully monitoring your plastics for holes. You can also help preserve the environment by seeking out recycling or safe landfilling options for your used plastics.