

Compost: a profitable solution

by Bob Scott

For many years, fairs and shows have been in a quandary over the disposal of livestock and horse bedding. We had to get rid of it, but traditional disposal methods were no longer available.

But we have found a way to not only get rid of it, but make money at it.

Livestock shows use straw for bedding. Farmers came to the showgrounds and hauled it away. However, as the number of farmers diminished, disposal methods changed. We began dumping ours in a landfill area west of town. Since the landfill and the fairgrounds were owned by the Town of Estes Park, labor and equipment were the only costs we incurred. In 1984 however, the landfill was filled to capacity.

The problem was studied for almost one year before we decided that we'd use a private transfer station. The station compacted the used bedding and transported it by truck 37 miles down the mountain to the county landfill. However, it was soon discovered that the cost of this service was too much.

Affordable alternative

Other ideas and suggestions were kicked around, but only one option seemed to be able to handle the volume of the material the shows were producing. With the approval of the elected officers, we purchased a used 125 hp tractor and a used tub grinder to make compost.

However, the area's sandy soil and rocks made the maintenance of this machine too expensive.

In 1987 we replaced the standard hay tub grinder with a cone-type grinder that has about 1/10th the moving parts. As a result, the machine's maintenance cost is no longer a burden.

We have ground well over 1,000 cubic yards with this new machine. It eats rocks, small pieces of lumber and about everything else except horseshoes and oil pans (exhibitors will dispose of about any and every-

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thing in the used straw pile).

The standard tub grinder would throw rocks, horseshoes and about everything else out the top of the tub, sometimes as far as 200 feet away (and sometimes through the tractor cab window).



A cone-type grinder is much less expensive to operate than standard tub grinders for making compost. It's also safer and faster.

The cone-type machine has a hopper/feed table on top that prevents foreign object discharge, which pleased our insurance carrier immensely.

During the 45- to 60-day busy season, we store the bedding and let the rain and sun start the decomposing process for us. We begin daily grinding on October 1 with the intention of grinding all the used bedding at least once before the season's first hard freeze (ice creates excessive wear and breakage, no matter what type of machine you use).

During the grinding process, we add water by connecting a one-inch hose to a fixed sprayer head at the end of the conveyor. The presence of water and air are essential if the compost pile is to heat up to the desired 160° (140° and above is the temperature needed to kill weeds, fly eggs, etc.).

The temperature will come back down in about 10 days, as the weather elements tend to solidify the outside of the pile and cut off the air. Once the temperature drops down to around 110° (we have a three-foot thermometer for testing in the middle of the pile) we grind, mix and water it before heating it up again.

We grind twice with the cone machine. If we feel there is a need for fur-

ther breakdown of the material we just turn the compost pile with the loader.

With the right mixture of used bedding, water, and air we can get our first grind up to 160° within 10 days. The material is ground into windrows eight to 10 feet high and 150 to 200 feet

long. From the first grind, the piles will shrink about 30 percent. After the second grinding our total finished product is about 50 percent of the starting material.

The finished compost is very much like potting soil, dark in color and with smells similar to good black dirt. The compost has some nutrient value, but it's not a fertilizer. It is a soil builder that saves water and is a

very good bed for worms—which in time add air to the soil.

The end product

Compost, because it is darker than most soils, will absorb heat from sunlight, therefore extending the spring and fall seasons.

Thus far we have been able to find customers for every yard of compost we produce. Our local park department uses it for all their flower gardens by mixing it 50/50 with sand for a top dressing on the lawn areas in the fall. Local residents come to the fairgrounds with pickups and bring home a half-yard or more. We sell to landscaping contractors in 100 yard quantities and deliver bulk loads of two or more yards to consumers in our local area.

Peat moss enthusiasts, after learning about compost, tend to be some of our best customers.

For additional information on making, using and the benefits of compost, I recommend reading *Rodale Guide to Composting*, by Terry Minnich, Marjorie Hunt and the editors of *Organic Gardening* magazine. It is published by Rodale Press, Emmaus, Pa. There are, however, other books and articles about composting that you'll find helpful. **LM**