

Composting and the Benefits: Achieving Practice Change through Education to Reduce Nutrient Loads and Increase Adoption of Best Management Practices

Purpose

Florida houses roughly 500,000 horses and is also home to 700 freshwater springs; Marion County is, “Horse Capital of the World” and houses two first magnitude springs and each is currently in a restoration plan with the Florida Department Environmental Protection Agency (FDEP). The Florida Department of Agriculture and Consumer Services (FDACS) equine Best Management Practices (BMP) Manual recommends composting as an excellent manure management option.

Composting is a controlled biological process that decomposes and heats up organic material to produce a biologically stable humus, which can then be used as a rich soil amendment. Composting provides protection to the ground and surface waters by preventing excess nutrients from being leached out and running-off into the waters. It destroys up to 90% of weed seeds contained in manure and kills parasite eggs and pathogens. Additionally, the organic matter/compost helps prevent and control soil erosion and can improve both soil quality and productivity.

What did we do?

Individual and group programming has been developed to educate farm owners and managers about the benefits derived from composting horse manure/spent bedding. Since 2007, Over 800 farms have been seen in the county. In 2013 alone, 132 participants were involved in individual farm consultations or farm revisits, group presentations and composting workshops. Education was provided and supplemental materials were developed for clientele about



composting manure, compost bin construction and composting's soil-improvement capabilities.

What have we learned?

Pre and post-test results showed a 62% (82 of 132 total participants) knowledge gain from information taught. A total of 71% (n=12 of 17 farm revisit consultations) of farms revisited improved and



adopted recommended manure handling practices after receiving education.

Additionally, seven farms and facilities have begun cost-share planning with Southwest Florida Water Management District (SWFWMD) for compost bin construction.

Results/impacts show improved management practices and a greater understanding of BMPs, allowing for a decrease in nutrient levels to the ground and surface waters.

Pictures show sample bins which were constructed as a result of individual and group programming.

Future Plans

Continued group and individual programming needs to be continued, in partnership with trade journal articles being written about manure management, protection of the ground and surface waters and the benefits derived from composting manure/bedding.

Cost-share dollars, coming from state organizations,

will further incentivize farms to construct and use compost facilities as part of a regular manure management plan.



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Additional information

My eXtension.org Manure Management Strategies
Webcast: [https://connect.msu.edu/p8yko9zhhoq/?
launcher=false&fcsContent=true&pbMode=normal](https://connect.msu.edu/p8yko9zhhoq/?launcher=false&fcsContent=true&pbMode=normal)

eXtension.org –Manure Management page: [www.extension.org/pages/25674/horse-
manure-management](http://www.extension.org/pages/25674/horse-manure-management)

A Guide to Composting Horse Manure:

www.whatcom.wsu.edu/ag/compost/horsecompost.htm

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