***Lesson 11: Digging for Worms- Teacher’s Guide***

**Estimated Time for Completion – approximately 45 minutes**

**Student Learning Objectives:**

* As a result of this lesson the student will…
	+ Explore the vermiculture industry in the U.S.
	+ Examine worm production and marketing issues in the U.S.
	+ Understand production-related issues facing worm production enterprises.

**Purpose:** Take a moment to think of all of the possible uses for worms. If you like most people you probably came up with fishing bait, and maybe using them to gross out a sibling. Other than those uses, do worms really serve a purpose? Believe it or not, worm production has found its own place in the market because of the great value worms have. But what use can those slimy creatures really be to us?

**Directions:** Access the commodities and products tab on the AgMRC website (<http://www.agmrc.org>) and find the link to Livestock. Utilize information located here to answer the questions below:

1. What is “vermiculture”? Why do you think that this industry is important to agriculturalists and everyday “hobby” farmers? Who else could this industry be important to?
* First, select the “Commodities and Products” link.
* Then select the “Livestock” link.
* Select the “Worms” link.
* Look in the “Demand” section to find the desired information.
* Note: It is expected that students may also have to rely upon their critical-thinking skills to address this question’s content.
1. What are the primary markets in the vermiculture industry? Which worms are utilized in each market segment?
* First, select the “Commodities and Products” link.
* Then select the “Livestock” link.
* Select the “Worms” link.
* Look in the “Production” section to find the desired information.
1. In what ways can the vermiculture industry help to accelerate the removal of waste products in landfills and waste composting facilities?
* First, select the “Commodities and Products” link.
* Then select the “Livestock” link.
* Select the “Worms” link.
* Look in the “Value-added Products” section to find the desired information.
1. What is “vermicompost”? What potential utility could it hold for the production agriculture industry? Why?
* First, select the “Commodities and Products” link.
* Then select the “Livestock” link.
* Select the “Worms” link.
* Look in the “Value-added Products” section to find the desired information.
* Note: It is expected that students may also have to rely upon their critical-thinking skills to address this question’s content.
1. According to the AgMRC website, “entry into the industry is extremely easy for both smallscale and large-scale producers”. However, this ease could represent significant production and marketing concerns for new and existing enterprises. What are some of these concerns and how do you think that they could be addressed?
* First, select the “Commodities and Products” link.
* Then select the “Livestock” link.
* Select the “Worms” link.
* Look in the “Competitive Intensity” section to find the desired information.
* Note: It is expected that students may also have to rely upon their critical-thinking skills to address this question’s content.

**Reinforcement activity: Fill Your Beds with Worms!**

For this activity you will not be filling the beds you sleep in with worms, but you will need to design a way to implement worm beds near your school or home. You will need to draw the actual design of the worm bed you come up with, create a list of materials you will need to make it successful, and write a description of how it would work. It may help to think of this activity as if you were trying to sell these worm beds to a customer. What information would you need to successfully sell the beds to someone? Be prepared to do some additional research on worm bed preparation, and as always, be creative and have fun!