***Lesson 4: Exploring Wheat- Teacher’s Guide***

**Estimated Time for Completion- approximately 90 minutes**

**Student Learning Objectives:**

* As a result of this lesson, the student will…
  + Explore wheat production in the U.S.
  + Examine wheat production, marketing, and consumer concerns in the U.S.
  + Understand production-related issues facing wheat enterprises.

**Purpose:** In the Unites States, only corn and soybeans are produced in greater quantities than wheat. Wheat has some unique properties that give the crop an advantage over its competitors such as being able to survive winter conditions making it more suitable to harsher climates. Useful in many food products, wheat production levels are far superior to what they were in centuries past, even though the per capita wheat usage has changed. What role does wheat play in the United States agricultural and consumer markets?

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

1. In which states is most of the wheat crop produced in the United States? What makes these areas hospitable for wheat? (Hint: Think climate)

* First, select the “Commodities and Products” link.
* Then select the “Grains and Oilseeds” link.
* Select the “Wheat” link.
* Look in the “Overview” 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, “per capita wheat consumption has been declining for more than a century”. What do you think could have caused this? What implications could this hold for the wheat industry? (Hint: Think changes in consumer preferences)

* First, select the “Commodities and Products” link.
* Then select the “Grains and Oilseeds” link.
* Select the “Wheat” 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. How has the wheat industry responded to various consumer preferences and needs in terms of value-added products?

* First, select the “Commodities and Products” link.
* Then select the “Grains and Oilseeds” link.
* Select the “Wheat” link.
* Look in the “Value-added Opportunities” 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 effects have the corn-based ethanol industry had on the wheat industry and its respective markets? What implications could these effects have on the wheat industry? The corn-based ethanol industry?

* First, select the “Commodities and Products” link.
* Then select the “Grains and Oilseeds” link.
* Select the “Wheat” link.
* Look in the “Competitive Analyses” 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. Genetic engineering has, within the wheat industry, not yet taken place. Accordingly, “the primary factor for this resistance has been consumer concerns.” What concerns do you, as a consumer, have regarding genetic modification in wheat? Even if you do not have any concerns, what concerns to other consumers have?

* Note: It is expected that students may also have to rely upon their critical-thinking skills to address this question’s content.

**Reinforcement activity: Wheat Revival**

For this activity you will need to put yourself in the role of an entrepreneur. The situation you are being given is that the per capita consumption of wheat is seeing a great decline. You need to think of a product or business that uses wheat in order to increase the amount of wheat people consume or use. The AgMRC website listed an increase of people eating pizza as an explanation of why wheat consumption went up in the early 2000’s. What can you come up with?

Working in small groups decided by your teacher, come up with your solution to the wheat usage decline. Put together a report with what your product is, how it uses wheat, and why people would want or need to consume it. Be creative in your efforts to find a solution to your situation.