

# ***Agronomy 212 – Crop Growth, Productivity, and Management***

## **Small Grains – Importance and Use**

U.S. Cereal Grain Production

5-year Average 2001-2005

<b>Grain</b>	<b>Area Harvested</b>	<b>% of U.S.</b>	<b>Yield</b>	<b>Production</b>	<b>Price</b>	<b>Value of production</b>
	1,000 acres	%	Bu/acre	1,000 Bu.	\$	1,000 Dollars
	<b>4,083</b>	<b>1.3%</b>	<b>61.3</b>	<b>249,031</b>	<b>2.54</b>	<b>620,301</b>
	<b>71,556</b>	<b>23.1%</b>	<b>143.6</b>	<b>10,295,549</b>	<b>2.13</b>	<b>21,933,928</b>
	<b>2,227</b>	<b>0.7%</b>	<b>61.8</b>	<b>137,465</b>	<b>1.27</b>	<b>182,227</b>
	<b>282</b>	<b>0.1%</b>	<b>26.8</b>	<b>7,562</b>	<b>3.14</b>	<b>23,782</b>
	<b>7,151</b>	<b>2.3%</b>	<b>60.3</b>	<b>426,707</b>	<b>3.34</b>	<b>871,741</b>
	<b>49,496</b>	<b>15.9%</b>	<b>40.9</b>	<b>2,032,205</b>	<b>3.31</b>	<b>6,686,071</b>

USDA - National Agricultural Statistics Service

Wheat - Introduction

Wheat - Adaptation

## Wheat – Exporters

Country	Production*	Exports*	Market Share	Percent of production
	1,000 metric tons	1,000 metric tons	%	%
United States	56,055	25,702		
Australia	20,965	14,707		
Canada	22,539	14,501		
European Union	112,838	15,553		
Argentina	14,806	9,781		
<b>Total</b>	<b>581,726</b>	<b>105,921</b>		<b>18</b>

Source: USDA, NASS.

\* annual average 2001-2005

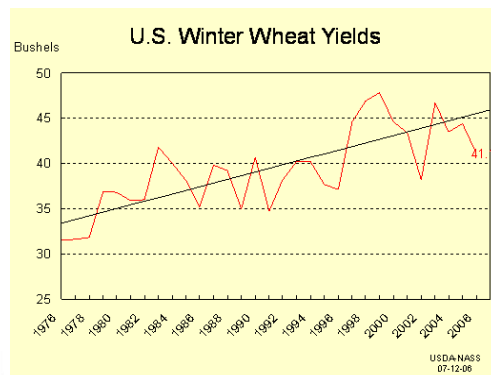
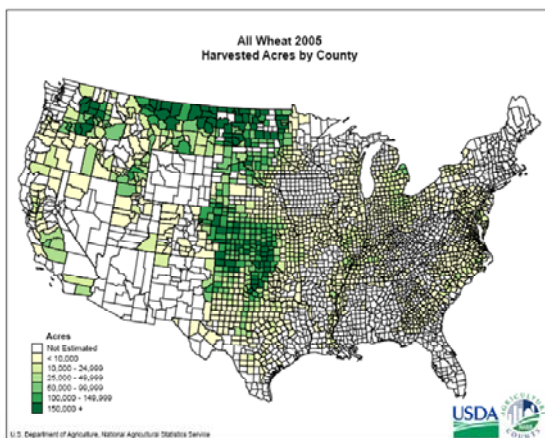
## Wheat – Importers

Country	Wheat Imported*
	1,000 metric tons
	8,491
	6,341
	6,953
	5,759
Algeria	5,116
Indonesia	4,185
South Korea	3,637
Mexico	3,352
Philippines	2,935

\* annual average 2001-2005

Source: USDA, FAS.

## Wheat – U.S. Production



Wheat Utilization

Environmental influence on wheat use and quality

## Market Classes of Wheat

Class	Protein	Texture	Uses
	8-12%	Soft, mealy	General baking, all-purpose flour, biscuits, pastries, crackers, cookies, and animal feed
	11-13%	Hard, vitreous	Bread, rolls
	12-14%	Hard, vitreous	Hard rolls, bread, often added to other flours to increase protein concentration
	13-15%	Very hard	Semolina (durum flour), pasta
	8-10%	Soft, mealy	Pastry flour, noodles, crackers, cakes, and cookies
	11-14%	Hard, vitreous	Bread
	Mix of others		

## Adaptation

Class	Growth habit	Production environment
	Winter	South and east of 35" precipitation line
	Winter	Subhumid to semiarid climate with 10-30 rainfall, winter soil temperatures remain above -4°F
	Spring	Subhumid to semiarid with 10-25 inches precipitation, winter temperatures too severe for winter wheat
	Spring	Subhumid to semiarid with 10-25 inches precipitation
	Winter	Humid climates with dry spring conditions (susceptible to preharvest sprouting)
	Winter or spring	Lower rainfall areas (susceptible to preharvest sprouting)
	Mix of other classes	South and east of 35" precipitation line



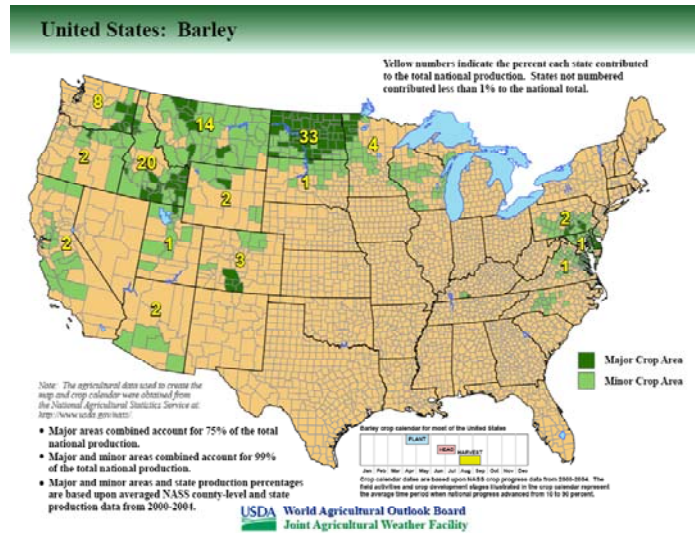
# Wheat – U.S. Production by Kind

Average Annual for 2001-2005

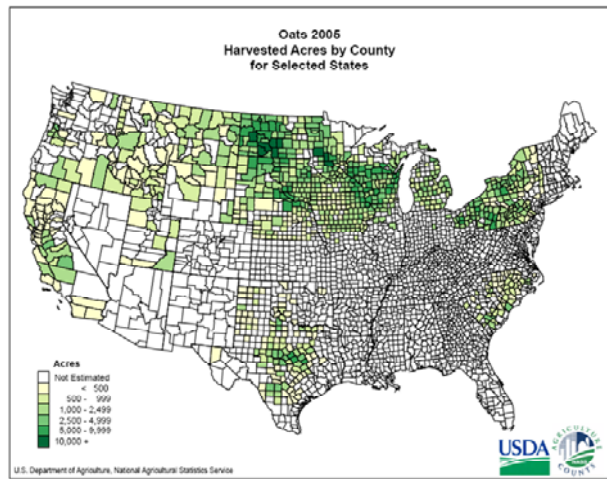
Kind	Area		Yield per acre	Production	Price	Value of production
	Planted	Harvested				
	1,000 acres	1,000 acres	Bushels	Bushels	Dollars	1,000 Dollars
Winter	42,375	33,183	43.2	1,441,081		
Durum	2,812	2,689	33.7	90,230		
Spring	14,572	13,623	36.8	500,894		

USDA - National Agricultural Statistics Service

# Barley



# Oats



# Rye

