

WASHINGTON

WHEAT FACTS

2010-2011

A PUBLICATION OF THE WASHINGTON GRAIN COMMISSION



Soft White

Hard Red

Washington wheat farmers grow five classes of wheat: **soft white, hard red winter, hard red spring, hard white and durum.** Every class of

wheat has different end-use characteristics. The protein content, bran coat color, milling and baking qualities. These all determine the most suitable end uses for each type of wheat. **Winter wheat** is planted in the fall and harvested the following summer. **Spring wheat** is planted in the spring and harvested in mid-summer to early fall. Winter varieties of all wheat usually yield more grain than spring varieties.

Most wheat farms in Washington rely completely on rainfall for crop moisture. They are called **dry-land farms.** In low rainfall areas, wheat producers use a **summer fallow rotation**—allowing half their wheat ground to rest and store moisture for a season to enhance the soil and ensure consistent yields. **Annual cropping** is employed in regions with higher rainfall and on irrigated farms. Most of the state's wheat is produced in 15 central and eastern Washington counties.

Acre for acre, no state can match Washington's abundant wheat production. The state's wheat farms produce 40 percent of the grain that No. 1-ranked North Dakota does. But Washington farmers produce many more bushels to the acre, and they do it on about a fourth of the acreage! The average value per harvested acre of wheat in Washington for 2009* was **\$265 for winter wheat** and **\$256 for spring wheat.**

In the rolling Palouse country of southeast Washington, **Whitman County has consistently been the No. 1 wheat-producing county in the United States every year since 1978!**

The ripple effect of wheat dollars on the state's economy creates jobs and revenue in food processing, transportation, wholesale and retail industries. **The value of wheat production in 2009* totaled \$596.9 million.**

The first wheat crop in the entire Northwest United States was planted at Fort Vancouver, Washington in 1825.

Today, the Pacific Northwest is the principal white wheat-producing area in the United States, and a major supplier for both national and international markets.

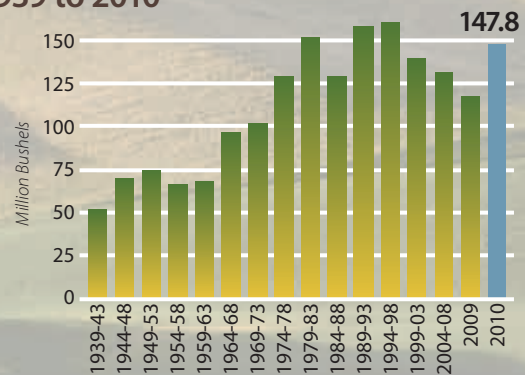
Washington Wheat by Class—2010

	Percent by Acres Planted
Common White	67%
Hard Red Spring	12%
White Club	10%
Hard Red Winter	10%
Hard White	1%

Spring vs Winter Wheat—2010

	Percent Grown	Average Yield
Winter wheat	78%	69 bushels/acre
Spring wheat	22%	52 bushels/acre

Washington Wheat Production History 1939 to 2010



2010 Top Ten US Wheat Producing States

Rank		Production (million bu)	Avg. Yield/Ac. (bu)	Ac. Harvested (million ac)
1	N Dakota	374.5	44.6	8.4
2	Kansas	360.0	45.0	8.0
3	Montana	216.6	44.4	5.2
4	Washington	147.8	64.7	2.2
5	Texas	127.5	34.0	3.7
6	S Dakota	123.4	45.3	2.7
7	Oklahoma	120.9	31.0	3.9
8	Colorado	108.2	45.5	2.3
9	Idaho	108.1	80.4	1.3
10	Minnesota	88.0	54.7	1.6

WASHINGTON IS WHEAT COUNTRY

DIFFERENT WHEAT FOR DIFFER

SOFT WHITE WHEAT



Common

Common white wheat made up 67% of total planted acres in 2010.

Winter and spring varieties of both common and club wheat are grown.

Club

77% of US club wheat is grown in Washington, and comprised 10% of total planted acres in 2010.

The Northwest is the principal white wheat-producing area in the United States, and a major supplier for both national and international markets. In 2010, **soft white wheat accounted for 78 percent of total wheat production** in Washington state. **More than 42 percent of all US white wheat comes from Washington alone.**

Pacific Northwest Soft White—contains soft white wheat from Washington, Oregon and Idaho. **The three states together produced 92 percent of total US soft white wheat in 2010.**

Western White—contains common white and not less than 10 percent club wheat, blended into a unique marketing class **available only from the Pacific Northwest.** Asia is the largest importer of Western White wheat.

Uses: pastries, pancakes, cakes, cookies, crackers, flat breads and cereals.



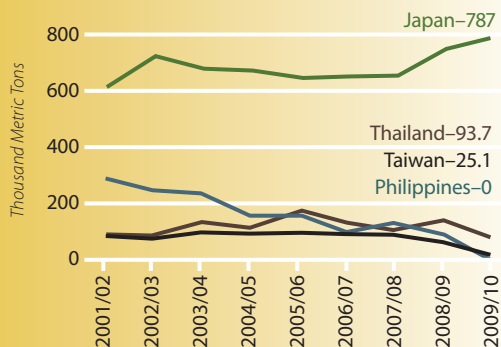
US White Wheat Exports 2009/10

	2006/07	2007/08	2008/09	2009/10
Asia.....	63%	77%	85.5	70%
Yemen.....	14%	17%	11.5	13%
W Hemisphere.....	6%	3.6%	1.6	8%
Egypt.....	16%	14%	0	0%
Other.....	1%	1%	1.4	3%

US White Wheat Exports top markets 2009/10

	Thousand Metric Tons
Japan.....	.794.5
Philippines.....	.621.6
S Korea.....	.573.6
Yemen.....	.516.7
Indonesia.....	.370.8
Thailand.....	.137.5
Nigeria.....	.119.5
Taiwan.....	.114.6
Iran.....	.113.2
Chile.....	.107.9

Western White Exports



DIVERSE WHEAT PRODUCTS...

2010 Red Wheat Acres..... 498,900
 Hard Red Spring.....277,200
 Hard Red Winter.....224,700

2009 Top Ten Washington Farm Products

Rank		Million Dollars
1	Apples.....	\$1,473.0
2	Milk.....	\$ 684.0
3	Potatoes.....	\$ 645.5
4	Wheat.....	\$ 596.9
5	Cattle & Calves.....	\$ 472.9
6	Hay.....	\$ 441.7
7	Nursery/Greenhouse..	\$ 292.5
8	Hops.....	\$ 263.8
9	Cherries.....	\$ 223.7
10	Grapes.....	\$ 210.0

Pacific Northwest All Wheat Production

	Million Bushels
Washington.....	147.8
Idaho.....	108.1
Oregon.....	63.7
Total.....	319.7

HARD RED WHEAT

Uses: yeast breads, hard rolls and bagels.

Hard red wheat is available in both winter and spring varieties. Red wheats are typically purchased based on protein levels.



HARD WHITE WHEAT

Uses: blended flours, Asian noodles, steambreads, panbreads.

Hard white wheat is the newest class of wheat grown in the US. Approximately 12,300 acres were planted in Washington in 2010.

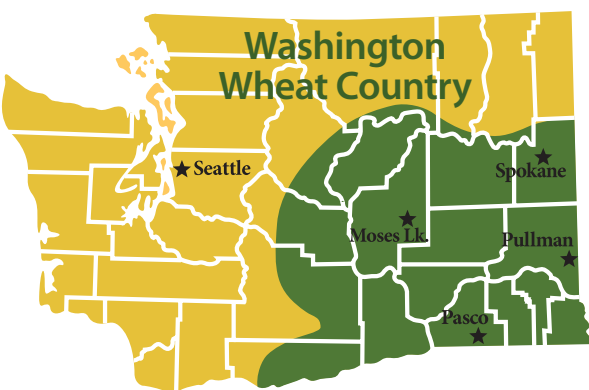
Hard white wheat has medium to high protein content, and characteristics like a hard endosperm and white bran.



DURUM

Uses: pasta.

Durum is the hardest of all wheats. It has a yellow endosperm, high protein and high gluten strength, making it the wheat of choice for pasta products.





FROM FIELD TO STORAGE TO MARKET . . .

Harvested wheat is taken by farmers' grain trucks to on-farm storage or nearby commercial grain elevators. After the wheat is sold, it is transferred by truck to regional rail- or barge-loading facilities. Over **60 percent** of Washington's wheat exports ultimately travel by barge from ports along the 400-mile Snake-Columbia river system to Portland. About **36 percent of the wheat is eventually transported by rail** to coastal grain terminals. From these seaport terminals, grain is loaded onto ocean freighters and exported to nations around the world.

Washington is one of the nation's leading wheat-exporting states, with **85 to 90 percent** of its production exported each year. Overall, about 40 percent of total US wheat is exported. Wheat is one of America's largest agricultural exports, and provides a positive contribution to the agricultural trade balance.

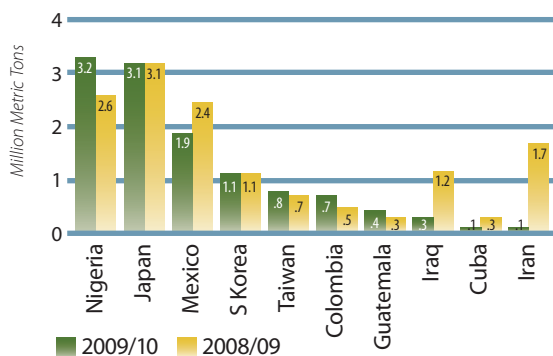
All over the world, every day, wheat makes a delicious contribution to the human diet. Wheat foods such as bread, pasta and cereal are low in fat and high in complex carbohydrates, providing long-lasting energy. They are excellent sources of vitamins, including vitamin E, the B vitamins, iron and zinc, and folic acid.

Wheat foods are a good source of soluble and insoluble fiber. Foods rich in fiber provide many health benefits, and whole wheat products satisfy appetites with fewer calories.



WASHINGTON WHEAT FOR THE WORLD.

US Wheat Exports Sales Comparison



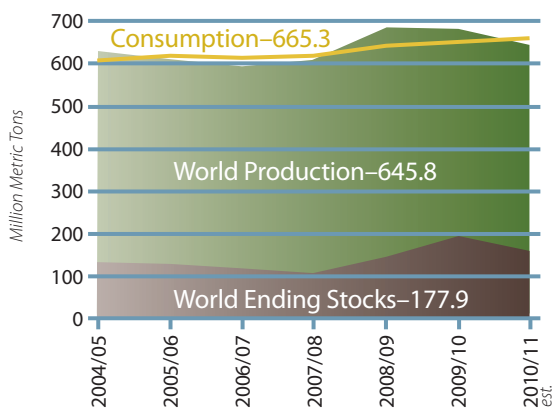
Top Ten Wheat-Producing Countries—2009/10

Rank	Country	MMT
1	EU	138.0
2	China	115.0
3	India	80.6
4	Russia	61.7
5	US	60.3
6	Canada	26.8
7	Pakistan	24.0
8	Australia	22.5
9	Ukraine	20.9
10	Turkey	18.4

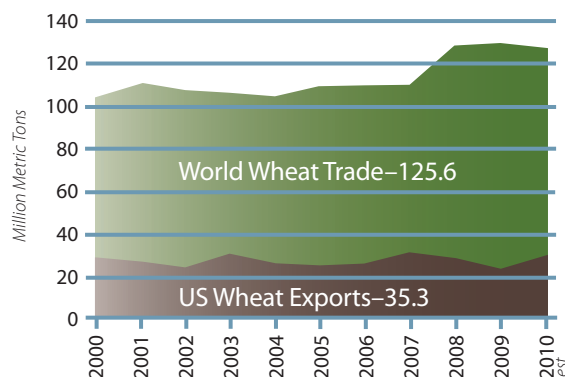
Washington Wheat Transportation

Mode	Percent of Crop
Truck/Barge	55%
Rail/Barge	5%
Rail	22%
Truck to final market	1%
Truck to other houses	15%
Other	2%

World Production, Consumption & Ending Stocks



World Wheat Trade & US Wheat Exports



WASHINGTON WHEAT ORGANIZATIONS



Washington Grain Commission (WGC)

The WGC is an official state agency created by producers in 2009 to merge the Washington Wheat Commission (created in 1958) and the Washington Barley Commission (created in 1985), increasing efficiencies and working for the benefit of producers growing these commodities. By voting to pay a small assessment on the sales of these crops, producers fund industry self-help programs with each bushel sold. The eleven members of the WGC (seven producers, three representatives of allied industries and one state government representative) allocate these funds to research, market development and education information programs designed to enhance the production and marketing of Washington wheat and barley.

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Spokane, WA 99224-1112
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E-mail: wga@wagrain.com
Website: www.washingtongrainalliance.com



Washington State University (WSU)

As Washington's land-grant university, WSU is responsible for most of the state's wheat research. Comprehensive research programs funded by the WGC, the Washington State Legislature and the US Department of Agriculture are conducted at facilities in Pullman, Lind and other parts of the state. WSU also provides a broad range of agricultural information programs to state residents.

Pullman, WA 99164
Website: www.wsu.edu



Wheat Marketing Center, Inc. (WMC)

Located in Portland, the WMC facilitates the sale of US wheat to foreign buyers. On-site research is conducted on the potential utilization of US wheat in foods consumed worldwide. In addition, international food technicians work with US wheats at the WMC to develop quality protocols and experiment with wheat blends for their products.

1200 NW Naito Parkway, Suite 230
Portland, OR 97209-2831
(503) 295-0823
E-mail: info@wmcinc.org
Website: www.wmcinc.org



US Wheat Associates (USW)

An international market development organization, USW promotes the overseas interests of US wheat producers. Funded in part by its member states, including Washington, USW conducts market promotion programs in more than 130 countries worldwide.

3103 10th Street, Suite 300
Arlington, VA 22201
(202) 463-0999
E-mail: info@uswheat.org
Website: www.uswheat.org



National Association of Wheat Growers (NAWG)

The NAWG is a national producer organization representing 22 wheat-growing states, including Washington. Based in Washington, DC, NAWG is particularly active in lobbying for strong US wheat and agricultural policies.

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Washington, DC 20002-4993
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Website: www.wheatworld.org



Washington Association of Wheat Growers (WAWG)

The WAWG is an association of wheat producers working together to improve Washington's wheat industry. WAWG is active in legislative matters at the state and national levels. Working with producer volunteers, WAWG also helps to administer wheat industry programs funded by the WGC. Wheat growers are kept informed on industry issues through a newsletter, and monthly magazine, *Wheat Life*.

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Website: www.washingtongrainalliance.com



Wheat Foods Council (WFC)

The WFC is an industry-wide partnership dedicated to increasing the domestic consumption of wheat-based foods. Members from all segments of the industry, including producers, millers, bakers and end-use product manufacturers, work to build demand for wheat foods through information, education and promotion programs.

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(970) 626-9828
E-mail: wfc@wheatfoods.org
Website: www.wheatfoods.org

ABBREVIATIONS

bu/ac = bushels per acre
mt = metric ton(s)
mb = million bushels
tmt = thousand metric tons
mmt = million metric tons

WHEAT MEASURES

Bushel = 60 pounds
Metric Ton = 36.74 bushels (2,204.6 lbs.)
Short Ton = 33.33 bushels (2,000 lbs.)
Acre = 43,560 square feet
Hectare = 2.47 acres