

## U.S. corn crop estimated 13% below last year

**C**orn production in the United States is forecast at 10.7 billion bushels (272 million tons) this year, the U.S. Department of Agriculture (USDA) said in its crop production report September 12. That is about 1 percent below USDA's August estimate and 13 percent below last year's 12.4 billion bushels (315 million tons).

The estimate, if realized, would represent the smallest U.S. corn crop since 2006 – although it would still be the eighth largest on record (see chart at right).

USDA estimated U.S. corn yields at 122.8 bushels per acre (7.7 tons per hectare), down marginally from its August estimate but 24.4 bushels (1.5 tons) below the 2011 average. If realized, this would be the lowest U.S. corn yield since 1995 – demonstrating just how

**Because of the drought, corn harvest began early this year in the United States. As of Sept. 23, USDA said 39 percent of the country's corn crop was harvested, compared to last year's more normal pace of 12 percent harvested.** Photo source: Iowa Corn.



severe and widespread this year's drought was in the United States. The trend yield for this year was

projected to be about 160 bushels per acre (10 tons per hectare).

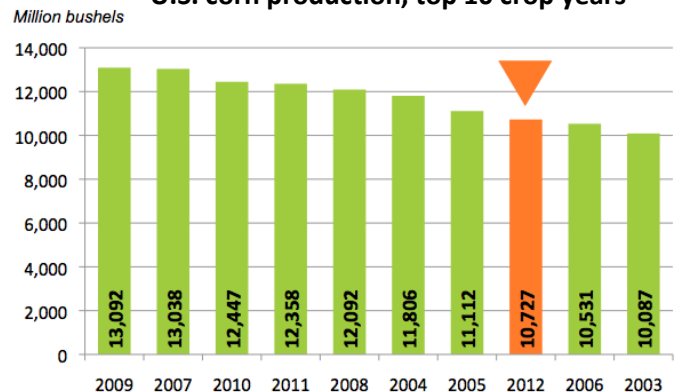
This year's U.S. drought has often been compared to the drought in 1988. Indeed, the two were similar, but this year's drought was more severe and widespread.

Despite a more severe growing season this year, U.S. corn yields are significantly ahead of those seen in 1988 when yields were 84.6 bushels per acre (5.3 tons per hectare), 38.2 bushels (2.4 tons) below this year's estimate. U.S. corn production in 1988 was 4.9 billion bushels (125 million tons), which is 5.8 billion bushels (147 million tons) below this year's estimate.

While U.S. corn production is projected lower this year, USDA did note that global corn production, at 841 million tons, is on track to be the

second-largest in history. USDA estimated that production in Argentina is up more than 30 percent over last year, while

**U.S. corn production, top 10 crop years**



**Despite the severe drought, U.S. corn production is set to be the eighth-largest on record.** Chart source: National Corn Growers Association and USDA.

Mexico increased output 19 percent, South Africa 17 percent, Canada 9 percent and China 4 percent. At 2.71 billion tons, USDA is also expecting the total 2012-13 grain supply (coarse grains plus wheat and rice) to be the second-largest ever.

As for corn use, Dan O'Brien, an ag economist with Kansas State University, said USDA's September supply and demand report showed that higher U.S. corn and grain sorghum prices had a "rationing effect" for the 2011-12 crop. That means there is more corn from last marketing year carrying into the 2012-13 marketing year.

See **Crop Production** on page 4

## Handbook offers insight into DDGS

**W**ith significant advancements in research and experience in feeding U.S. distillers dried grains with solubles (DDGS), the U.S. Grains Council has released a third edition of **A Guide to Distiller's Dried Grains with Solubles**.

"When you look at the increased breadth of knowledge surrounding U.S. DDGS, plus the new types of DDGS, we believe this new edition will help buyers and end users stay up-to-date on this high-quality feed ingredient," said Alvaro Cordero, manager of global trade for the U.S. Grains Council.

"The handbook is designed to provide buyers the tools they need in understanding U.S. DDGS and to aid in developing relationships with sellers," he said. "In the end, we believe it will help buyers be more confident of the value of the U.S. DDGS they purchase."

The third edition is greatly expanded over the previous edition. New chapters and expanded feeding sections provide greater detail in feeding methods. For example, the chapter on feeding DDGS to beef cattle doubled in length and includes details on beef quality and yield, as well as details on feeding DDGS to replacement heifers.

"Early chapters of the handbook explain different production methods for distillers grains depending on an ethanol plant's operations," Cordero said. "One of those methods includes pulling corn oil out of the ethanol production process. This means there is less oil, or less fat, in the DDGS, which can impact how it is fed."

Because removing oil from the process is common in the United States, the handbook includes information on low-oil DDGS in beef cattle, poultry, dairy cattle and swine diets. Chapters also

cover including U.S. DDGS in aquaculture, sheep, goat, horse and companion animal diets.

Chapters also go into detail on the nutrient composition and digestibility of DDGS and recommended laboratory analytical procedures. Details on the physical and chemical characteristics of DDGS and quality indicators are also provided, as are answers to commonly asked questions.

Finally, a section on U.S. DDGS suppliers allows global buyers and end users to seek out additional information and opportunities to buy.

"In this period of higher global grain prices, U.S. DDGS is one way to lower the cost of feed," Cordero said. "It is an excellent, lower cost alternative feed ingredient that continues to be produced in large quantities by the U.S. ethanol industry. When included in properly formulated feeds, it results in excellent animal health, performance and food product quality."

In total, there are 35 chapters, compared to 15 chapters in the second edition.

The handbook is available by contacting U.S. Grains Council global offices, going online to [www.grains.org](http://www.grains.org) or by emailing Cordero at [acordero@grains.org](mailto:acordero@grains.org). ♦



### A Guide to DDGS, Third Edition

1. Introduction to U.S. DDGS
2. Ethanol Production and Its Co-Products - Dry-Grind and Wet Milling Processes
3. Ethanol Production and Its Co-Products - Front-End Fractionation and Back-End Oil Extraction Technologies
4. Nutrient Composition and Digestibility of DDGS: Variability and In Vitro Measurement
5. Recommended Laboratory Analytical Procedures for DDGS
6. Comparison of Different Grain DDGS Sources – Nutrient Composition and Animal Performance
7. Physical and Chemical Characteristics of DDGS Related to Handling and Storage of DDGS
8. Is Color the Only or Best Indicator of DDGS Quality?
9. Antibiotic Use in DDGS Production
10. Mycotoxins in DDGS
11. Mycotoxin Situation with the 2011 U.S. Corn Crop and 2012 DDGS Production
12. Sulfur Concerns and Benefits in DDGS
13. Feed Safety and Other Possible Contaminants in DDGS
14. Use of DDGS in Beef Cattle Diets
15. Use of Reduced-Oil DDGS in Beef Cattle Diets
16. Is there a Connection Between Feeding DDGS and E. coli O157:H7 Shedding in Beef Cattle?
17. Use of DDGS in Dairy Cattle Diets
18. Use of Reduced-Oil DDGS in Dairy Cattle Diets
19. Use of DDGS in Poultry Diets
20. Use of Reduced-Oil DDGS in Poultry Diets
21. Use of DDGS in Swine Diets
22. Use of Reduced-Oil DDGS in Swine Diets
23. Managing Pork Fat Quality When Feeding High Amounts of DDGS to Growing-Finishing Pigs
24. Use of Enzymes in DDGS Diets for Poultry and Swine
25. Use of DDGS in Aquaculture Diets
26. Use of DDGS in Sheep and Goat Diets
27. Use of DDGS in Horse and Companion Animal Diets
28. Impact of Diet Formulation Methods and Tools on Assessing Value of DDGS
29. Factors that Affect DDGS Pricing and Transportation Logistics
30. Summary of U.S. Grains Council Sponsored International Feeding Trials
31. Frequently Asked Questions about DDGS
32. U.S. Suppliers of Distiller's Dried Grains with Solubles
33. Glossary of Terms
34. Website Links
35. Key Review Articles and Additional Reading

## Corn crop update: Iowa

**H**umboldt, Iowa farmer Jay Lynch and his dad began harvesting corn August 31. That is the earliest either can remember corn being harvested on their land in north central Iowa.

“That’s a drought for you,” Lynch said, explaining that early corn planted in April was already harvested by mid-September.

“We got a nice start harvesting the last day of August and have about one-third of the crop in, and it’s only September 19,” Lynch said. “It’s pretty amazing.”

Additional corn acres planted in May are ready to be harvested – or nearly so – but Lynch switched over to harvest his soybean crop. He’ll get back to corn in the next week or two.

As for corn yields, Lynch said he has seen significant variability across his land and within individual fields. That’s a sentiment expressed by many farmers who saw their crops affected by drought this year.

**Like most farmers affected by the drought this year, Iowa farmer Jay Lynch can find both poor (left) and good (right) looking corn in his fields. The corn on the left was stunted due to dry conditions and high temperatures, while the corn on the right fared better because of heavier soil that held more moisture.**



“Yield variability is shown pretty clearly by the yield monitor in the combine cab, and it closely follows

soil type,” he said. For example, lighter, sandy soil in one field yielded only 29 bushels per acre (1.8 tons per hectare). Heavier soils that better hold moisture, though, yielded anywhere from 170 bushels to 200 bushels per acre (10.7 to 12.6 tons per hectare).

“We’re hoping the average yield for the farm will be close to 150 bushels per acre (9.4 tons per hectare),” Lynch said, which is about 50 bushels (3.1 tons) below what they typically hope to see.

“By and large most farmers in this area are happy because yields are better than they thought,” he said.

Stalk quality is one concern farmers have with this year’s crop. During the drought, corn plants send all the moisture and nutrients they can into the ear for the production of kernels. That leaves stalks brittle and susceptible to falling over in a high wind.

“While that’s something to be concerned about, hybrids planted today are much better than those



planted during the last widespread drought in 1988,” Lynch said.



**Iowa farmer Jay Lynch.**

Lynch said there has not been any sign of aflatoxin in his fields, and corn test weights have been “surprisingly good.” He said he was expecting some 50 pound test weights, but corn harvested so far has been in the 54 to 58 pound range pretty consistently.

“This just shows how seed companies have done their due diligence in bringing test weights up,” he said, adding that “15-20 years ago we wouldn’t be talking this good of a story.”

### Iowa crop estimate

In its monthly crop production report Sept. 12, the U.S. Department of Agriculture estimated Iowa’s corn yields would average 140 bushels per acre (8.8 tons per hectare) this year. If realized, that would result in a 1.9 billion bushel (48.3 million ton) crop in the state.

A year ago, yields in Iowa were 172 bushels per acre (10.8 tons per hectare) and the state’s farmers produced a 2.4 billion bushel (61.0 million ton) crop. ♦

## Crop production: *from page 1*

Carry-in, production and imports put the estimated total U.S. corn supply at 12.0 billion bushels (305 million tons). Of that supply, USDA estimated 4.2 billion bushels (107 million tons) for feed/residual use in the United States and 4.5 billion bushels (114 million tons) for ethanol production, which will result in about 36 million tons of distiller's dried grains with solubles (DDGS) – which O'Brien said is equivalent to 1.4 billion bushels (36 million tons) of corn on a feed basis.

As for U.S. corn exports, USDA provided an estimate of 1.3 billion bushels (33 million tons).

### **Sorghum, barley**

In its September report, USDA estimated U.S. sorghum production at 246 million bushels (6.2 million tons), up from last year's production of 214 million bushels (5.4 million tons). Yields were estimated to be 48.3 bushels per acre (3.0 tons per hectare), off from last year's 54.6 bushels per acre (3.4 tons per hectare).

The average U.S. sorghum production over the 2011-13 marketing years is 130 million bushels (3.3 million tons) below the average during the 2009-11 marketing years. O'Brien said a combination of acreage reductions and drought in major U.S. grain sorghum production areas in the central and southern plains is largely responsible for declining production.

As for barley, USDA estimated U.S. production this year at 221 million bushels (4.8 million tons) on yields of 67.6 bushels per acre (3.6 tons per hectare). That compares to 155.8 million bushels (3.4 million tons) on yields of 69.6 bushels per acre (3.7 tons per hectare) last year. Although yields this year are lower, farmers harvested about 416,000 acres (168,000 hectares) more barley this year than last, leading to the larger production figure. ♦