United States: Corn

Agricultural Outlook Forum
Crystal Gateway Marriott Hotel
February 24, 2012

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Washington, D.C.

Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at http://www.usda.gov/nass/.

- Major areas combined account for 75% of the national production.
- Major and minor areas combined account for 99% of the total national production.
- Minor areas and state products are based upon averaged NASS county-level data from 2000-2004.
U.S. Crop-Weather Outlook for the 2012 Growing Season

- A review of conditions experienced in the winter of 2011-2012: “Year Without Winter”
- Current conditions
- Projected weather patterns for the spring of 2012
- Outlook for the summer of 2012
NWS Outlook
November 2011 – January 2012
Issued October 20, 2011

Temperature
Precipitation
Nationally:
6th-Warmest Nov-Jan Period

1. 40.0°F in 2001-02
2. 39.8°F in 1999-00
3. 39.4°F in 2005-06
4. 38.8°F in 1998-99
5. 38.8°F in 1933-34
6. 38.7°F in 2011-12
Nationally: 44th-Driest Nov-Jan Period

Nov 2011-Jan 2012 Statewide Ranks
National Climatic Data Center/NESDIS/NOAA

Precipitation

1 = Driest
117 = Wettest

- Record Driest
- Much Below Normal
- Below Normal
- Near Normal
- Above Normal
- Much Above Normal
- Record Wettest
End-of-February and End-of-July Drought Monitors in Years with Warm Winters

Feb. 29, 2000

Feb. 26, 2002

Aug. 1, 2000

Jul. 30, 2002

Drought Severity
- D0 - Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional
End-of-February and End-of-July Drought Monitors in Years with Warm Winters

Feb. 28, 2006

Aug. 1, 2006

Feb. 21, 2012

Jul. 31, 2012

Drought Severity
- D0 - Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

USDA
U.S. Crop-Weather Outlook for the 2012 Growing Season

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• Current conditions

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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://droughtmonitor.unl.edu/
Drought Monitor Change
Since September 27, 2011

Sep. 27, 2011 - Feb. 21, 2012 [WATER YEAR]
Equatorial Pacific (180-100°W)  
Sea Surface Temperature (SST)  
Departures From Normal (°C)

La Niña conditions originally developed in June 2010 and returned in autumn of 2011. La Niña appears to have peaked in intensity and is expected to weaken during the spring of 2012.

ENSO-neutral conditions during the spring and summer of 2011 were replaced by a return to La Niña during the autumn of 2011. Since early 2012, La Niña has appeared to weaken.
Sea Surface Temperature (SST) Animation

Week centered on 23 NOV 2011
SST Anomalies (°C)
North Atlantic Oscillation

- Strongly negative most of the time from autumn 2009 to early 2011 (e.g. blocking high-pressure system over the North Atlantic Ocean), leading to cold, stormy U.S. weather.

- Strongly positive for much of the winter of 2011-12, preventing cold air from reaching the U.S. for any length of time.
U.S. Crop-Weather Outlook for the 2011 Growing Season

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**Note:** USDA does not make official weather or climate forecasts for the federal government. The National Weather Service’s Climate Prediction Center provides such outlooks.
Pacific Niño 3.4 SST Outlook

- Nearly all models indicate that La Niña will weaken in the coming months.
- A majority of models and all three multi-model forecasts indicate ENSO-neutral conditions developing during spring 2012 (Niño-3.4 SST anomalies between -0.5°C and +0.5°C).

For more information go to: http://www.cpc.noaa.gov/products/precip/CWlink/MJO/ enso.shtml
ENSO Probabilities for 2012

Official Early-Feb CPC/IRI Consensus Probabilistic ENSO Forecast

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: $-0.45^\circ C$ to $0.45^\circ C$

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<th>Time Period</th>
<th>JFM 2012</th>
<th>FMA</th>
<th>MAM</th>
<th>AMJ</th>
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NWS Outlook
March – May 2012
Issued February 16

Temperature

Precipitation
NAO-Temperature Correlation
Spring (March-May)
The Bottom Line: March-May 2012

• If La Niña rules the roost, expect a dry spring in the **Southeast** and **Southwest**. Cool conditions will likely be confined to the **Northwest**.

• If the positive phase of the North Atlantic Oscillation overwhelms the La Niña signal, unexpectedly wet conditions may continue in the **south-central U.S.** Wetness could also affect the **lower Great Lakes region**, while dry conditions will plague the **Southeast** and much of the **West**. Warm conditions may shift farther north and west than expected.
U.S. Crop-Weather Outlook for the 2011 Growing Season

• A review of conditions experienced in the winter of 2011-2012: “Year Without Winter”
• Current conditions
• Projected weather patterns for the spring of 2012
• Outlook for the summer of 2012
NWS Outlook
June – August 2012
Issued February 16

Temperature

Precipitation
The Bottom Line: June-August 2012

• If La Niña remains a force, abundant rainfall across the **South** and **East** will contrast with hot, dry conditions from the **Pacific Coast into the western Corn Belt.**

• If the positive phase of the North Atlantic Oscillation plays a big role, expect a warm summer across the **nation’s northern tier** and a rather cool summer from the **southern Plains into the Southeast.** The **northern Plains** and **Midwest** will need to be watched for potential drought development or intensification.
Questions or Comments?

• Contact Information:
  – E-mail: brippey@oce.usda.gov
  – Phone: (202) 720-2397
## U.S. Winter Wheat Condition, 2011-12

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Corn Production

United States: 3200000 MT
China: 1500000 MT
EU-27: 500000 MT
Brazil: 200000 MT
Mexico: 50000 MT

2008 to 2010 Average (Last Update: February 2011)
Oilseed, Soybean Production

- United States
- Brazil
- Argentina
- China
- India

2008 to 2010 Average (Last Update: February 2011)
United States: Corn

Yellow numbers indicate the percent each state contributed to the total national production. States not numbered contributed less than 1% to the national total.

Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at http://www.usda.gov/nass/.

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USDA World Agricultural Outlook Board
Joint Agricultural Weather Facility

Corn crop calendar for most of the United States

Crop calendar dates are based upon NASS crop progress data from 2000-2004. The field activities and crop development stages illustrated in the crop calendar represent the average time period when national progress advanced from 10 to 90 percent.
United States: Soybeans

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USDA World Agricultural Outlook Board
Joint Agricultural Weather Facility
United States: Winter Wheat

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