



## Fundamental Analysis

**DEFINITION:** Fundamental Analysis is an approach to analyzing market behavior that stresses the study of underlying factors of supply and demand. It is done in the belief that such analysis will enable one to profit by being able to anticipate price trends. A Fundamentalist is a market observer-and/or participant who relies principally on Supply/demand considerations in price forecasting.

Components of Fundamental Analysis:

### Supply

- Weather
- Acres planted to a crop
- Government Programs
- USDA Reports

### Demand

- USDA Reports
- Domestic usage - Feed & processing
- Value of the Dollar
- Actions of Other Countries
- Exports
- Transportation

### GROUP EXERCISE:

Which Fundamental factors listed above have the most impact on the price of grain?

### Weather

Weather can have a major impact on the price of any agricultural commodity. The Chicago Board of Trade has three relevant publications that you can order by calling 1-800-843-2268.

- Weather and the Corn Market
- Weather and the Soybean Market
- Weather and the Wheat Market

These booklets discuss growth cycles; years in which weather had a significant impact on prices; and weather spreads.

Have any of these publications that apply to the crops grown in your area available at your meeting.



## Acreage

Obviously, the number of acres planted can greatly impact the supply of a commodity. USDA publishes planting intention reports for corn, soybeans and other spring seed crops on March 31st. The estimates of planted acreage in this report are based primarily on surveys conducted during the first 2 weeks of March. Over 70,000 farm operators are surveyed. On June 30th, USDA releases its annual acreage report.

Acreage report releases:

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| ✓ Winter Wheat                    | Mid-January (Wheat & Rye Seeding) |
| ✓ Corn, Soybeans,<br>Spring Wheat | March 31st (Prospective Planting) |
| ✓ Corn, Soybeans,<br>Spring Wheat | June 30th (Acreage Supplement)    |

## Government Programs

Marketing loan program

The Farm Service Agency (FSA) on behalf of the Commodity Credit Corporation (CCC) administers non-recourse marketing assistance loans for wheat, corn, grain sorghum, barley, oats, soybeans, minor oilseeds, rice, and cotton. Market loan repayment and loan deficiency payment provisions apply to each of these commodities. The purpose of the loan program is to provide eligible producers with interim financing on their eligible production.

Loan Deficiency Payment (LDP)

An LDP is defined as the difference between the county loan rate and the posted county price. Producers who are eligible to obtain a loan, but who agree to forgo doing so, are eligible to receive an LDP.

Example:	Loan Rate	\$1.89
	PCP	<u>\$1.79</u>
	LDP	\$0.10

To collect an LDP, one must be a participant in the 1996 Farm Program and provide production evidence in order to prove the grain existed within one year of the respective crop's last date of eligibility. LDP's consist of four types: *basic, field direct, high moisture, and farm processor direct.*



## Export Enhancement Program (EEP)

First authorized in the 1985 Farm Bill, EEP provides bonuses to individual companies which export commodities into markets where competition is subsidized - if the company is able to deliver the commodity at or below market costs. Three main objectives of the EEP are:

- ," Counter competitors' subsidies or unfair trade practices Develop, maintain, or expand markets for U.S. commodities Provide minimal impact on non-subsidized competitors

## USDA & Board of Trade Reports

### Daily Reports

#### Volume and Open Interest

Volume is the number of commodity contracts traded in a given time period. Open interest is the cumulative number of contracts which have not been liquidated. These reports are usually issued by the respective exchanges.

#### Receipts and Shipments

Issued by the Chicago Board of Trade, this report lists the arrival of commodities at Chicago area elevators and processors. It provides a general idea of whether potentially deliverable stocks are increasing or decreasing. Other exchanges offer similar reports.

#### National Average Cash Prices

The USDA compiles one-day and five-day moving averages of various national average cash prices for commodities eligible for loan programs. These prices can be used to determine when the commodities in the loan program might be released into the market. This information is released daily on the news wires.



## Weekly

### Export Inspections

This report is a compilation of specific commodity exports by the Census Bureau and is usually released on the news wire. Traders can track the inspection numbers relative to the projected USDA figures. In general, export numbers are positively correlated to the market.

### Weekly Weather and Crop Bulletins (Crop Progress - Monday 3prn CST)

As technology progresses, this report becomes more and more efficient and accurate. It outlines the previous week's weather and crop conditions on a state-by-state level. Both the National Weather Service and World Agriculture Board research these conditions, which are important determinants of yield potential.

### Deliverable Stocks Report

Released each Tuesday, this report details the volume of exchange-traded commodities registered in warehouses in Chicago, Toledo, Minneapolis, and St. Louis. It lists registered as well as unregistered totals. Unregistered totals are important because they can become registered overnight. Increasing deliverable stocks may signify increasing supplies in the long run.

### Loan Entries

The CCC of the USDA reports the weekly changes of commodities under loan. This report can be quite important when a short or long crop exists. Traders watch the number of bushels remaining and the number of free bushels released. 1998 is a good example of stocks being held towards the end of the program as a result of low prices.

### National Oil Processing Association (NOPA) Weekly crush report

This report details the quantity of soybean bushels being crushed by NOPA members. It represents the previous week's crush and enables traders to compare actual NOPA numbers to the USDA's projections. Market prices will usually reflect the rate of crushing and the availability of the commodity.



## Export Sales Report

The USDA reports the volume of soybeans, soymeal, soyoil, corn, and wheat sold for export to various destinations. The numbers are generally one week old and update the total outstanding sales that have or have not been exported. This may be the best report for estimating total demand.

## Monthly

### Monthly Supply Demand Reports

One of the most analyzed reports during the growing season, the supply and demand report can significantly move the market in a single day. Furthermore, this report is only a "snapshot" of current crop conditions and any of its components could change considerably in the following report. The most important items in the report include:

- ✓ *Planted acres* - Number of acres believed to be planted domestically.
- ✓ *Yield* - An estimate of bushels per acre of a specific commodity.
- ✓ *Beginning Stocks* - Amount of carryover from the previous growing season.
- ✓ *Production* - This number is generally the most important during the growing season and represents the total number of bushels expected to be harvested in each commodity.
- ✓ *Domestic Use* - An estimate of the total number of bushels to be utilized domestically.
- ✓ *Exports* - Number of bushels expected to be exported to foreign countries.
- ✓ *Ending stocks* - This number is represented by taking supply and subtracting demand from it. The quantity left over is usually carried over to the next year as carryover.
- ✓ *Stocks/Use Ratio* - A high number generally represents slow demand and larger carryover. The number is derived from dividing ending stocks by total demand. Large stocks/use ratios over long periods of time have a major negative impact on market prices.

### Quarterly Grain Stocks

This report from the Crop Reporting Board of the USDA lists the total stored stocks of grain; classified as on-farm and off-farm storage. It is released on the first of January, April, June and September. The quarterly stocks report often has the biggest impact on corn since most corn is fed and is therefore not reflected in the weekly or monthly releases. The estimates are based on two sets of surveys - one sent to producers across the United States in order to derive the amount of on-farm grain stocks, and the other to commercial grain storage facilities to estimate off-farm storage.



## World Agricultural Supply and Demand Estimates (WASDE)

USDA releases monthly WASDE reports. These reports are similar to the USDA monthly supply/demand reports.

## Crop Production (NASS)

The crop production report is published monthly by National Agricultural Statistics Service (NASS). This report estimates, by state, the acreage, yields and production of various commodities.

### **Where to Find These Reports**

Internet	<a href="http://www.usda.gov/nass/">http://www.usda.gov/nass/</a> select today's reports or publications.
E-Mail	To subscribe, send e-mail message to: <a href="mailto:usda-reports@usda.mannlib.cornell.edu">usda-reports@usda.mannlib.cornell.edu</a> .
Fax	Autofax call: 202-720-2000
Mail	To order call: 800-999-6779

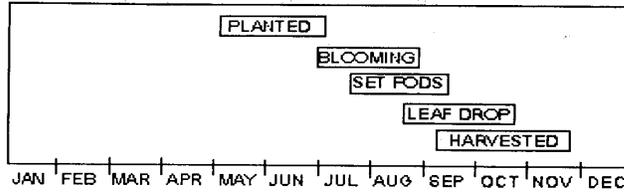
### **GROUP EXERCISE**

Break up into groups of 5 to 8 and list the 5 reports that have the most impact on the price of grain grown in your area.

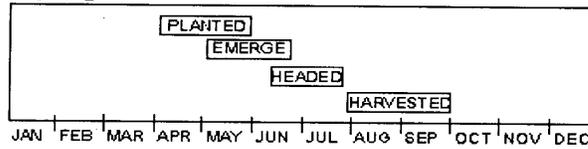
# USDA/NASS Crop Progress Timetables

Approximate Dates Tables are Released

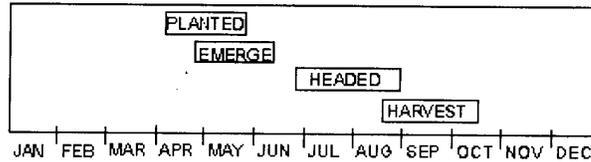
## Soybeans



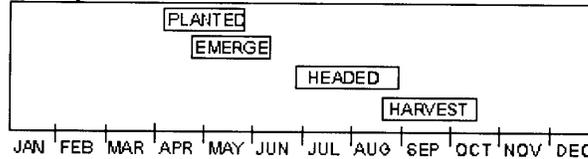
## Spring Wheat



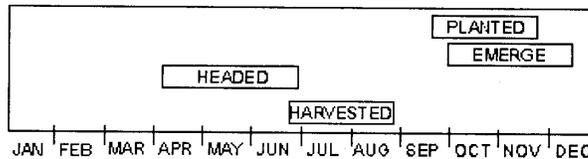
## Oats



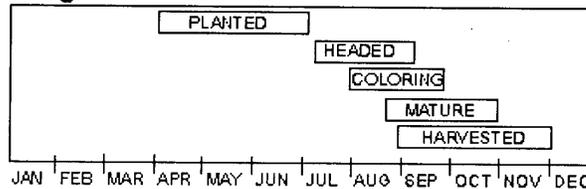
## Barley



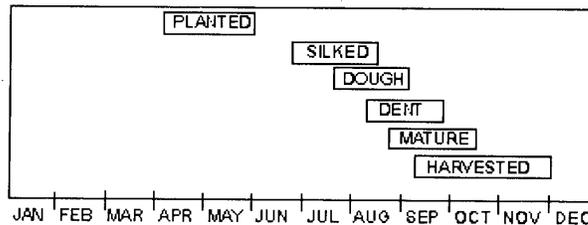
## Winter Wheat



## Sorghum

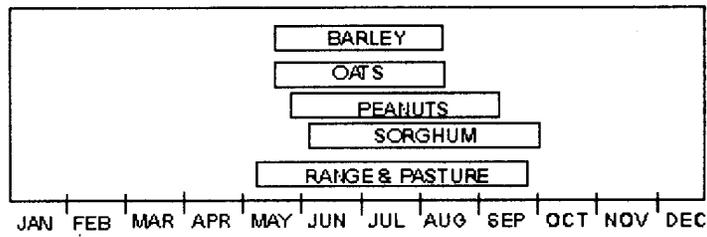
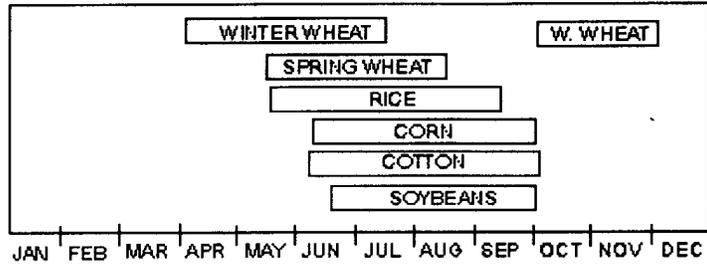


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# USDA/NASS Crop Progress Timetables

Approximate Dates Tables are Released



USDA-National Agricultural Statistics Service  
Crop Progress / Crop Weather  
TERMS AND DEFINITIONS

General:

These terms and definitions should be used only as guidelines. Individual interpretations may vary from State to State. Only those items included in the National Crop Progress release are discussed.

Definitions:

**Top and Sub-Soil Moisture:** (with top-soil defined as the top 6 inches):

- ✓ Very Short - Soil moisture supplies are significantly less than what is required for normal plant development. Growth has been stopped or nearly so and plants are showing visible signs of moisture stress. Under these conditions, plants will quickly suffer irreparable damage.
- ✓ Short - Soil dry. Seed germination and/or normal crop growth and development would be curtailed.
- ✓ Adequate - Soil moist. Seed germination and/or crop growth and development would be normal or unhindered.
- ✓ Surplus - Soil wet. Fields may be muddy and will generally be unable to absorb additional moisture. Young developing crops may be yellowing from excess moisture.

**Days Suitable for Fieldwork:** A 'suitable' day is one where weather and field conditions allowed producers to work in fields a major portion of that day.

**General Crop Condition:**

- ✓ Very Poor - Extreme degree of loss to yield potential, complete or near crop failure. Pastures provide very little or no feed considering the time of year. Supplemental feeding is required to maintain livestock condition.
- ✓ Poor - Heavy degree of loss to yield potential which can be caused by excess soil moisture, drought, disease, etc. Pastures are providing only marginal feed for the current time of year. Some supplemental feeding is required to maintain livestock condition.
- ✓ Fair - Less than normal crop condition. Yield loss is a possibility but the extent is unknown. Pastures are providing generally adequate feed but still less than normal for the time of year.
- ✓ Good - Yield prospects are normal. Moisture levels are adequate and disease, insect damage, and weed pressures are minor. Pastures are providing adequate feed supplies for the current time of year.

Excellent - Yield prospects are above normal. Crops are experiencing little or no stress. Disease, insect damage, and weed pressures are insignificant. Pastures are supplying feed in excess of what is normally expected at the current time of year.

**Crop Progress Percents:** Progress percents relate to acres and should indicate the progress of field activities or crop development. Generally, an acre should be considered in or beyond a phenological stage when 50 percent or more of the plants in that acre are in or beyond that stage.

**Planted:** A crop is considered planted when the seeds are placed in the ground. For transplanted crops, the planting period refers to the time of setting the plants in the field.

**Harvested:** A crop is considered harvested when the crop is cut, threshed, or otherwise gathered from the field.

### **Corn Phenological Stages:**

- ✓ Emerged - As soon as the plants are visible.
- ✓ Silking - The emergence of silk like strands from the end of ears. Occurs approximately 10 days after the tassel first begins to emerge from the sheath or 2-4 days after the tassel is emerged.
- ✓ Dough - Normally half of the kernels are showing dent with some thick or dough-like substance in all kernels.
- ✓ Dent - Occurs when all kernels are fully dented and the ear is firm and solid. There is no milk present in most kernels.
- ✓ Mature - Plant is considered safe from frost. Corn is about ready to harvest with shucks opening and there is no green foliage present.

### **Soybean Phenological Stages:**

- ✓ Emerged - As soon as the plants are visible.
- ✓ Blooming - A plant should be considered as blooming as soon as one bloom appears.
- ✓ Setting Pods - Pods are developing on the lower nodes with some blooming still occurring on the upper nodes.
- ✓ Dropping Leaves - Leaves near the bottom of the plant are yellow and dropping, while leaves at the very top may still be green. Leaves are 30-50 percent yellow.

### **Sorghum Phenological Stages:**

- ✓ Headed - The head is present, visible, and fully emerged.
- ✓ Coloring - The head is turning color from green to reddish brown or white. Leaves are also turning yellow or brown.
- ✓ Mature - Grains readily part from the head and are tough and not easily crushed by the thumbnail.

### **Barley, Oats, Wheat and Rice Phenological Stages:**

- ✓ Emerged - As soon as the plants are visible.
- ✓ Headed - The head is present, visible, and fully emerged.