



Annual Forage (AF) Pilot Program

Jody Campiche

Assistant Professor & Extension Economist

JJ Jones

Southeast Area Extension Agriculture Economist

The Rainfall Index – Annual Forage (AF) Insurance Plan is a pilot program providing coverage for annual forage crops in Texas, Oklahoma, Kansas, Nebraska, South Dakota, and North Dakota (Figure 1). The program covers crops annually planted for forage or fodder intended for, but not limited to, grazing, haying, grazing/haying, grain/grazing, green chop, grazing/green chop, or silage. The plan offers Catastrophic Risk Protection (CAT) and buy-up coverage. The pilot program is very similar to the Pasture, Rangeland, and Forage Insurance (PRF) program, which covers perennial forage produced for grazing or harvested for hay. AF coverage includes, but is not limited to: small grains (wheat, oats, barley, rye, triticale) intended for grazing or forage, corn for silage, sorghum forage for grazing or forage, annually planted grasses (sudan, ryegrass, etc.) for grazing or forage, and annually planted mixed forages for grazing or forage. The program is administered by the USDA Risk Management Agency (RMA) and sold through private crop insurance companies, known as approved insurance providers (AIPs). Private crop insurance companies directly insure producers and their crops, and then the Federal Crop Insurance Corporation (FCIC) reinsures the companies against a portion of the losses they may suffer under the provisions of the Federal Crop Insurance Act. This product is similar to area risk insurance and provides area-wide coverage. The program is based on a rainfall index and insures producers

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<http://osufacts.okstate.edu>

based on the deviation from normal precipitation interpolated to their geographic area instead of the producers' individual farm. The program does not use actual crop production on the individual farm or in the geographic area. Producers receive an indemnity payment when interpolated precipitation in their area falls below the normal historical level. Details of the rainfall index program will be discussed below.

Rainfall Index

The Rainfall Index uses National Oceanic and Atmospheric Administration Climate Prediction Center (NOAA CPC) data. The areas where the Rainfall Index is available have been divided into grids and identified by a specific number code, referred to as a grid id. Each grid is 0.25 degrees in latitude by 0.25 degrees in longitude. The grids are created by NOAA CPC and do not follow county lines or township boundaries. Data used for the rainfall index calculation do not directly reflect the precipitation amounts measured at a specific weather station within a particular grid. This measure reflects a smoothed result of nearby weather station estimates in order to obtain an estimate for the grid. Most area risk insurance plans provide coverage at the county level, but this product provides coverage at the grid level, which may provide a more accurate estimate of precipitation for a particular acreage than a county

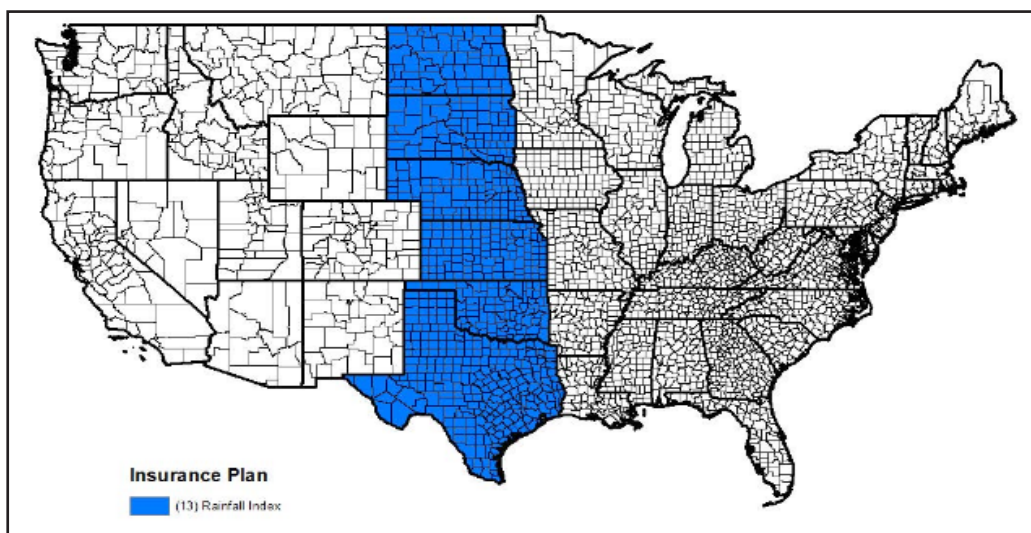


Figure 1. 2014 and Succeeding Crop Years: Annual Forage Availability. Source: Risk Management Agency

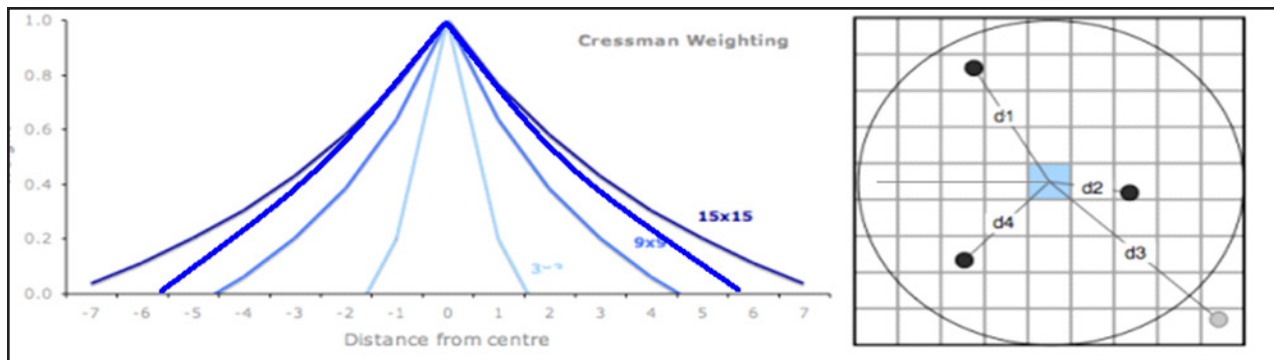


Figure 2. NOAA CPC Uses Weighted Averaging Method (Interpolation Process).

Source: <http://drought.unl.edu/portals/2/documents/emporiaworkshop/Jan2012GrazingMtg.pdf>

level measure. NOAA uses the closest four reporting weather stations to the grid for any given day to interpolate precipitation to the grid. Figure 2 illustrates the NOAA interpolation process.

Grid locations can be found by using the Grid Locator feature on the RMA website. The Grid Locator tool can be accessed directly through the following website: <http://ag-forceusa.com/rma/ri/af/maps> or through the following RMA website: <http://www.rma.usda.gov/policies/ri-vi/annualforage.html>. Once the RMA website is open, click on the Grid ID Locator, Decision Support Tool, and Historical Indices link as shown in Figure 3.

After clicking on the Grid ID Locator, Decision Support Tool, and Historical Indices link, the grid locator screen will open (as shown in Figure 4). Enter the location of the acreage to find the appropriate grid. Click on the Zoom to Grids button to see all of the grids in the area.

The grid ID and county are determined based on a point of reference selected by the producer. For non-contiguous insured acreage in a grid, a separate point of reference must be selected for the acreage. For contiguous acreage, if a producer wants to combine the acreage into one grid, a point of reference must be selected for the insured contiguous acre-

age. If a producer wants to separate the contiguous insured acreage into separate grids or counties, a point of reference must be established for each grid.

Producers are required to insure all insurable acres in the AF program (even if the acreage is not contiguous). To obtain coverage, producers will be asked to make several choices regarding the Growing Season, Coverage Level, Productivity Factor, Insurable Interest, Insured Acres, and Index Intervals.

Growing Season – Choose growing season 1 for crops planted from July 15 to December 15. Choose growing season 2 for crops planted from December 15 to July 15. Annual forage can be planted in both growing seasons on the same acreage in the same crop year but the same acres cannot be insured in more than one grid ID or county during a single growing season.

CAT Coverage – Producers can choose CAT coverage or buy-up coverage. The fee for CAT coverage is \$300 per county and it insures the interpolated precipitation at the 65 percent coverage level and 45 percent of the county base value. Producers must choose the appropriate insurable interest for the acreage. Insurable interest is the insured's percentage of the insured crop that is at financial risk. Input the number of acres to insure.

Annual Forage

The United States currently comprises about 954 million acres of farmland. The Annual Forage pilot program provides coverage to acreage that is planted each year and used as feed and fodder by livestock. This pilot program utilizes the Rainfall Index to correlate to this acreage. Also see livestock policies and resources.

2014

Rainfall Index (RI) - is based on weather data collected and maintained by NOAA's Climate Prediction Center. The index reflects how much precipitation is received relative to the long-term average for a specified area and timeframe.

- County Availability (PDF): Map | Text
- Basic Provisions (PDF)
- Policy Provisions (PDF)
- Insurance Standards Handbook (PDF)
- Grid ID Locator, Decision Support Tool, Historical Indices

Figure 3. RMA Grid Locator, Decision Tool, and Historical Indices Website.

Source: <http://www.rma.usda.gov/policies/ri-vi/annualforage.html>

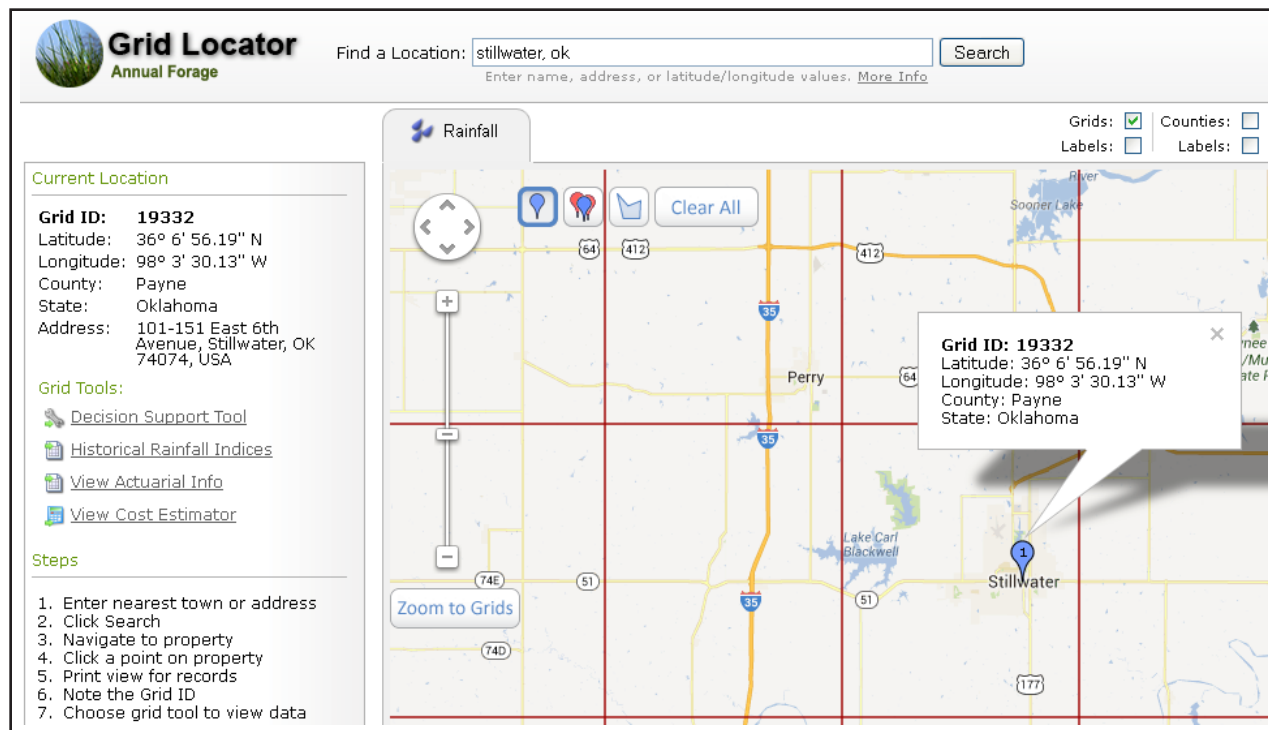


Figure 4. Grid Locator Website.

Source: <http://agforceusa.com/rma/ri/af/maps>

Buy-Up Coverage

Producers can purchase 70 to 90 percent coverage in 5 percent increments. The premium cost will increase with higher coverage levels.

Coverage Level

Producers must choose a coverage level of 70, 75, 80, 85, or 90 percent. Only one coverage level can be selected for each county and must be the same for each growing season.

Productivity Factor

Allows the producer to individualize their coverage based on the productivity of the acreage of the insured corp. Producers can choose a protection factor between 60 and 150 percent of the county base value. Only one productivity factor can be selected for the county by growing season. Producers will want to select the amount of protection based on the value that best represents the specific operation, as well as the productivity of the land and crop planted. The premium cost will increase or decrease depending on the protection factor selected.

Insurable Interest

Producers must choose the appropriate insurable interest for the acreage. Insurable interest is the insured's percentage of the insured crop that is at financial risk.

Insured Acres

Enter the number of acres to enroll in AF. The same acres cannot be insured in more than one grid ID or county. If acreage is located in more than one grid, producers can

choose to put all acreage in one grid or divide the acreage into separate grids.

Index Intervals: Percent of Value

In each growing season, there are six two-month intervals to insure. Producers must select three intervals when precipitation is important to their operation and crop planted. Producers must choose the percent of value for each interval (i.e. the percent of the guarantee to insure in each interval). Producers cannot choose two overlapping intervals (i.e. producers cannot choose both the Sept-Oct and Oct-Nov intervals). The total percentage of value insured in the three intervals must equal 100 percent. The percentages will be applied to all insured acres and grid ids in the county for each growing season. Insurance payments are calculated using NOAA CPC data for the grid(s) and the chosen index interval(s). If the final grid index is less than the trigger grid index, which is the coverage level times the expected grid index; a loss payment may be issued. This insurance product only provides coverage for a lack of precipitation and is based on the interpolated precipitation for the entire grid, not individual farms or ranches or specific weather stations. A producer may have low rainfall on his/her own farm and not receive a payment under the AF policy. The rainfall indices do not measure direct production or loss. A loss payment will only be issued if the final grid index is less than the trigger grid index. Additional information on the rainfall index can be obtained at the NOAA Web site: http://www.cpc.ncep.noaa.gov/products/outreach/research_papers/ncep_cpc_atlas/7/toc.html.

A decision support tool is available allowing producers to estimate premiums and indemnities from 1949 to the cur-

rent year to see how the program would have performed if they were enrolled in previous years. Producers can also view the historical rainfall indices for an area using the tool. AF insurance is best suited for producers whose production tends to follow and correlate to the historical average rainfall patterns for the grid so it is important for producers to look at the historical indices. Producers should review their past production records against the historical information to assist the producer in determining whether the product correlates to their production. Utilization of the producer's production records and the Historical Indices Tools will assist producers in selecting the optimal Index Intervals, Percent of Value assigned to each Index Interval, Productivity Factor and the Coverage Level that best mirrors their past production. The decision support tool can be found on RMA website: <http://www.rma.usda.gov/policies/pasturerangeforage/>

Decision Tool

Producers will need to answer the same questions when using the decision tool or when enrolling with a crop insurance agent. This section will explain how to use the decision tool to estimate premiums and indemnities under the AF program and will help producers understand data that they need to provide to a crop insurance agent (even if they choose not to use the decision tool). Producers must visit their local crop insurance agent to obtain current rates and coverage for the crop year in which they are enrolling. However, the decision tool is extremely useful to understand how the program works, estimate premiums and indemnities for prior years, and view historical rainfall indices.

Example – Producer Smith owns 100 acres of wheat intended for grazing located four miles south of Stillwater, OK that he wants to insure against drought. Go to the RMA's grid

locator website (Figure 5). Enter "Stillwater, OK" in the Find a Location box (Box #1). Find the location of the acreage on the map. Click on the Zoom to Grids button to see all of the grids in the area (Box #3).

Once the acreage is located, click on the Decision Support Tool (Box #2) or click on Historical Rainfall Indices to see rainfall indices from 1949 to the current year for the grid. Once the Decision Support Tool is open (Figure 6), fill in the information. If a grid was selected on the first screen, the location and grid should automatically be filled in. If not, enter it at the top of this screen (Box 1).

On the left of the screen (Box #2), enter the growing season, coverage level, productivity factor, insurable interest, insured acres, and sample year (remember, the tool can be used to evaluate payments in previous years but a crop insurance agent will need to calculate the premium for current insurable year). Enter the percentage of acreage to insure in each of the 3 intervals (Box #3). Click on calculate (Box #4). The results show that Producer Smith would have paid an insurance premium of \$327 and received an indemnity of \$1,001 (Box #5).

Try different options to evaluate the change in premiums and indemnities under various scenarios.

Once the decision support tool screen is open, click on the Graph tab (Box #6) to view historical rainfall indices. Select the range of years to display (Box #7). Select the type of information to display (Box #8). The historical rainfall screen shows data for the selected time frame (Figure 7). On this screen, for growing season 1, the first column labeled as 633 is the Sept-Oct interval; 634 is the Oct-Nov interval; 635 is the Nov-Dec interval; 636 is the Dec-Jan interval; 625 is the Jan-Feb interval; and 626 is the Feb-Mar interval. For growing season 2, the column labeled as 627 is the Mar-Apr interval, 628 is the Apr-May interval; 629 is the May-Jun interval; 630

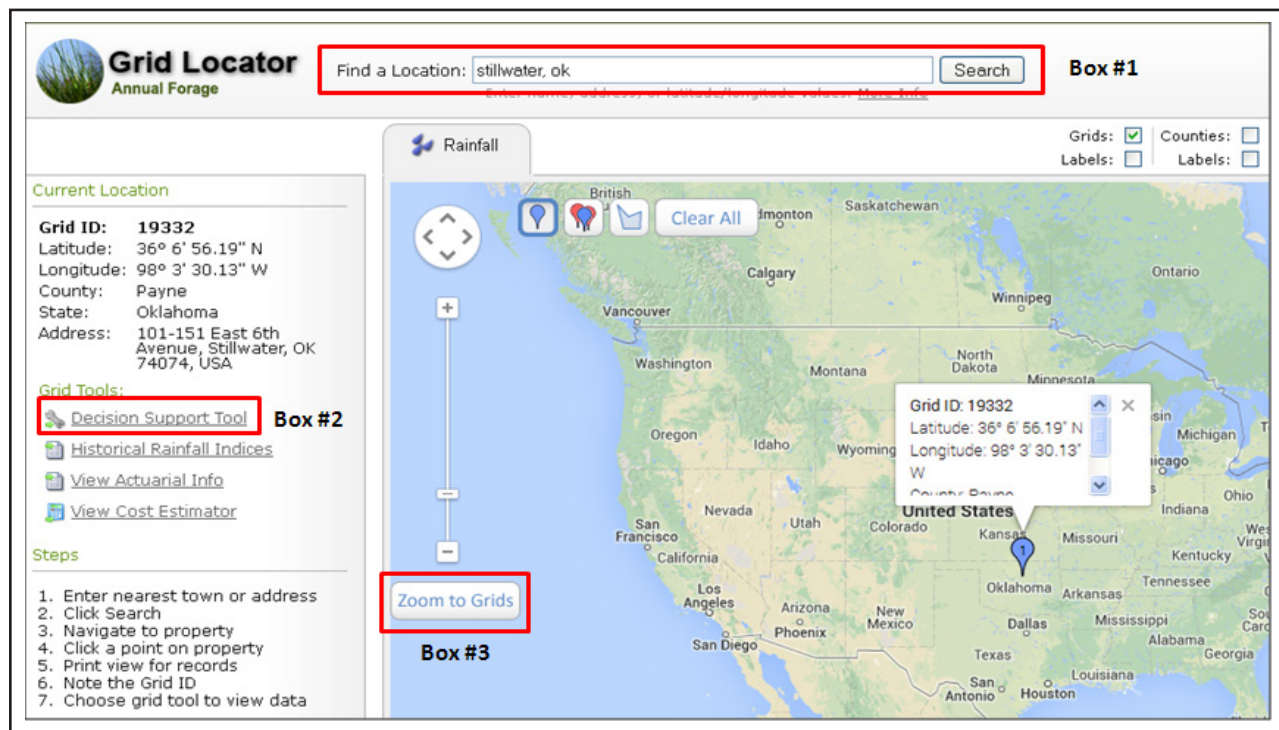


Figure 5. Grid Locator Example.

Source: <http://agforceusa.com/rma/ri/af/maps>

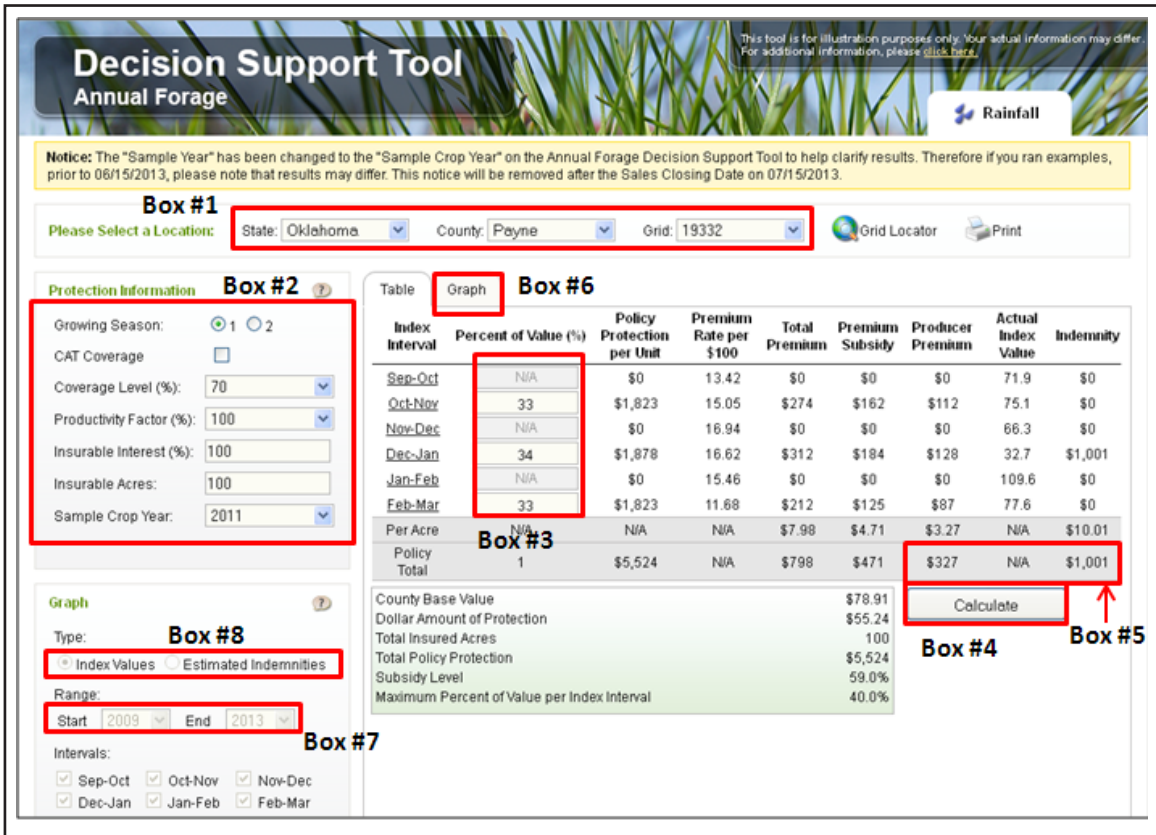


Figure 6. Decision Support Tool Example.
 Source: <http://agforceusa.com/rma/ri/af/dst>

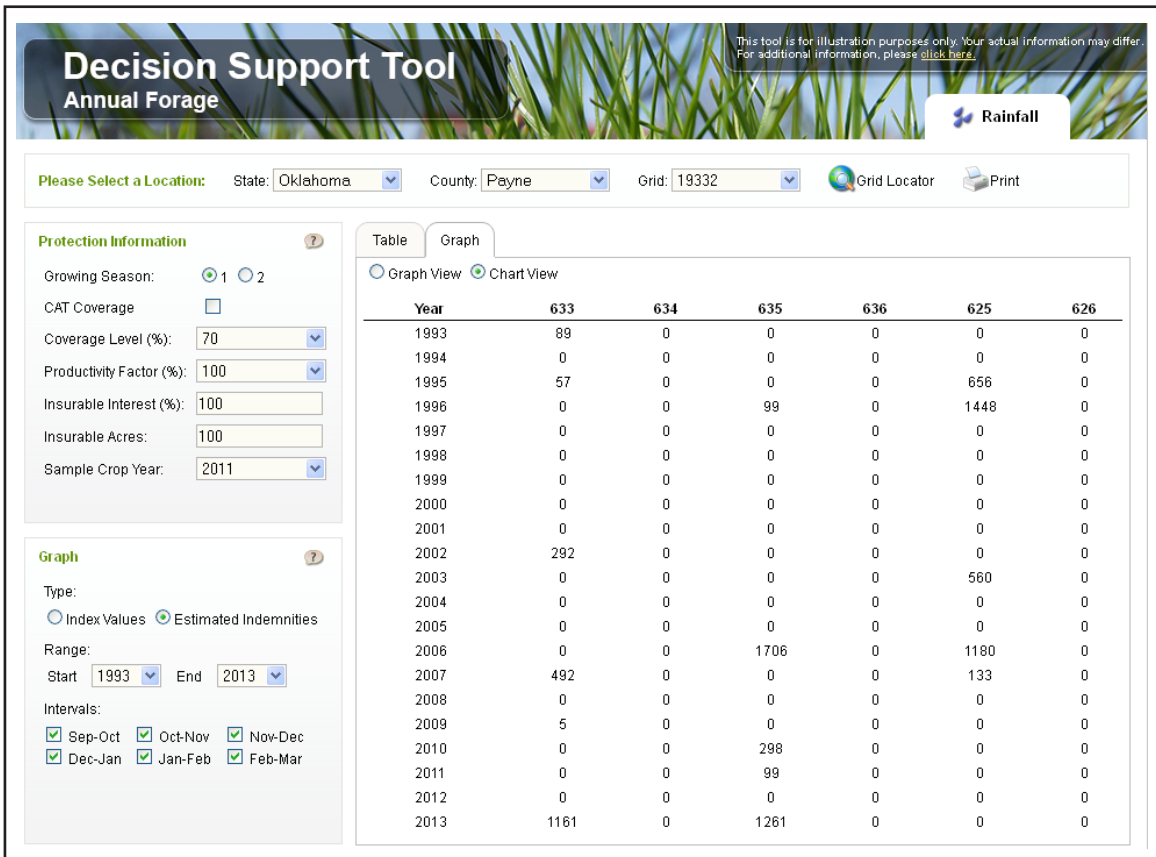


Figure 7. Historical Rainfall Indices.
 Source: http://agforceusa.com/rma/ri/af/dst?county_code=2189&grid_id=19332&state_code=40

is the Jun-Jul interval; 631 is the Jul-Aug interval; and 632 is the Aug-Sep interval.

For the example, the following information would be entered:

| | |
|--|---|
| Growing Season: 1 | Choose growing season 1 for crops planted from July 15 to December 15. |
| Coverage Level %: 70 | This can be 70, 75, 80, 85, or 90. |
| Productivity Factor %: 100 | This is used to either raise or lower the value of the insured coverage. This number can range from 60 to 150. |
| Insurable Interest %: 100 | Producer Smith owns the acreage. |
| Insured Acreage %: 100 | Total number of acreage being insured. |
| Sample Year: 2011 | Choose any year from 1949 to the current year. However, recent data from the current year will likely be missing. |
| Index Intervals: 33% in Oct-Nov, 34% in Dec-Jan, 33% in Feb-Mar. | Enter the % of acreage to insure in each of the three intervals. |

The producer selected these index intervals after reviewing the Historical Indices Tool along with their past production records. The months and percentages selected correlated well with their past production.

Sign-Up Deadline

To participate in AF, producers must submit an application to a crop insurance agent by July 15 for growing season 1 (i.e. crops planted between July 15 – December 15) and by December 15 for growing season 2 (i.e. crops planted between December 15 - July 15).

Producers should visit a crop insurance agent to enroll in AF or to obtain more information. To find a crop insurance agent, use the RMA agent locator tool at the following website: <http://www.rma.usda.gov/tools/agent.html> .

Eligibility & Additional Rules

Producers must insure all insurable acreage under AF. Producers can be ineligible to participate in AF if they have enrolled the particular acreage in other Government programs, especially conservation programs that prohibit them from grazing the land. For example, producers who enroll land in the Farm Service Agency's (FSA) Conservation Reserve Program agree to plant resource-conserving vegetative covers that would generally preclude grazing.

Producers may select only one coverage level and dollar amount of protection per acre for each of the insured crop types in the county. The dollar amount of protection per acre selected will be applied to each Grid ID and crop type. Producers are not required to report yield history or maintain production records for the AF policy. However, producers should continue to maintain production records in case an Actual Production History (APH) plan of multiple peril crop insurance becomes available in future years.

Acreage Reporting

An acreage report must be submitted for each growing season and should include: share, intended use, annual forage commodity, planting date, grid ID, FSA farm number, FSA tract number, and FSA field number. If an acreage report is not filed by the acreage reporting date, no coverage would be available for any index interval for the applicable growing season. The acreage reporting deadlines are:

- December 15 for crops planted between July 15 – December 15
- July 15 for crops planted between December 15 – July 15

AF Indemnities

Producers do not need to file a claim or submit any documentation for a loss under the AF policy. Payments will be made after precipitation data is collected for each interval and provided to RMA and crop insurance companies, which means that payments may be issued multiple times in a year. However, an indemnity will not be issued prior to the acreage reporting date.

Other Insurance Coverage

Producers are not allowed to obtain any other crop insurance policy authorized under the Federal Crop Insurance Act on their share of the insured crop for the same commodity (i.e. producers cannot insure wheat under both a yield protection policy and an AF policy in the same crop year).

The Oklahoma Cooperative Extension Service

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Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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