In August 2006, the U.S. Department of Agriculture (USDA) announced that a government subsidized Pasture, Rangeland and Forage (PRF) risk management pilot insurance program would be available starting in 2007. During the sign-up period, 28.5 million acres were enrolled in the program, 20.9 of them in Texas alone. Based in part on this success, on September 6, 2007, the USDA announced that the program will expand into additional states. Policies covering the 2008 crop year will be sold by local crop insurance agents until November 30, 2007. Subsidy rates vary by the amount of coverage purchased.

Very little has changed with the fundamental mechanics of the insurance. Livestock producers may purchase PRF insurance protection on either grazing acres or hay acres. The insurance programs are based on an index of vegetation greenness or on a rainfall index, depending on the state or region. Only the rainfall index program is available in Texas.

The rainfall index program, which began in specific counties in Colorado, Idaho, Pennsylvania, South Carolina, North Dakota and Texas, has been expanded to include the entire state of Alabama. The vegetation greenness program index piloted in specific counties in Colorado,
Oklahoma, Oregon, Pennsylvania, South Carolina and South Dakota has expanded to include the entire state of Wyoming and specific counties in South Dakota and New York.

**Rainfall Index**

The rainfall index program was designed to protect the income potential of an insured plot. Producers are not required to insure all their acres, but may elect to insure only those acres important to their grazing program or hay operation. For this rainfall program, the crop year begins February 1 and is divided into 2-month intervals. Producers may insure their acreage for only those intervals when the risk of below-normal rainfall is the greatest; however, they must insure at least two intervals. The rainfall index program measures losses based on the amount of rain received as determined by the National Oceanic and Atmospheric Administration (NOAA) in a given interval and grid, compared to the historic average rainfall for the same interval and grid.

The rainfall index program is for a single peril—lack of precipitation—and covers either grazing or haying acres. Each pilot area is divided into 12x12-mile grids and assigned a rainfall index based on historical rainfall records (1948-2005) kept by NOAA.

Each county within the pilot area has been assigned a productivity value per acre based on the potential income per acre rainfall could generate. For example, the productivity value per grazing acre in Jack County, Texas, is $9.53 per acre. However, this value does not reflect an individual producer’s management of the land resources. To customize this productivity value, a producer can choose from 60 percent to 150 percent of this value based on his or her perception of the productivity of the insured plot. In effect, the producer tailors the value to fit his own management programs, such as past brush or weed control plans. Finally, as with most insurance programs, the producer selects an insurance coverage level of 70 percent to 90 percent in 5 percent intervals.

The crop production year is divided into six 2-month intervals beginning in February. These time periods (I—February to March, II—April to May, III—June to July, IV—August to September, V—October to November, and VI—December to January) are called index intervals. Producers must select at least two intervals in which precipitation is important for the production of the forage, such as April-May for spring and August-September for fall. No more than 50 percent or less than 10 percent of the acres to be insured may be entered in any one of the intervals selected and the sum of the acres by interval cannot exceed the total insurable acres.

Insurance payments to a producer are based on the deficit from normal precipitation within the grid and the intervals selected.

**Evaluating Rainfall Insurance**

While more information is available from local crop insurance agents, the following is a guideline for using an Internet-based tool to determine approximate premium costs and coverage:

1) **Find your 12x12-mile grid** at http://www.rma.usda.gov/policies/pasturerangeforage. Under the Rainfall Index, Grid ID Locator, click on Interactive Map. (NOTE: The initial grids shown are around College Station, Texas.) The easiest and fastest way to find your grid is to locate the search field on the left center of the screen, “Type a city name and click FIND.” In the search box, type the city closest to your ranch. For example, type in Perrin, Texas, and click Find. Confirm the city if more than one option appears.

2) **Move the map left/right/up/down** with the arrows on the borders of the map to locate your ranch.

3) **Center the grid** that includes your ranch. For example, center the map on grid #34837, Perrin, Texas.

4) **Under the heading “View data at this location,”** a producer can view all of the necessary data to complete an analysis. To go directly to the decision support tool that utilizes the data, click on item #2, Decision Support Tool. A set of input cells will come up. Fill in the blanks and select the sample year for which you would like information. Then click on **Submit Query** in the lower right corner. With this decision aid you can check the amount of an indemnity (if paid) for each of the 58 years from 1948 to 2006. For example, select 2006 as the sample year.
Figure 1 shows the cost/benefit relationship of insuring 1,000 acres of grazing land around Perrin, Texas, (grid #34837) at 90 percent coverage and 150 percent of the productivity value factor, with 300 acres in interval I (February–March), 300 acres in interval II (April–May), 200 acres in interval III (June–July), 100 acres in interval IV (August–September), 100 acres in interval V (October–November). No insurable acres were entered in interval VI (December–January). Notice that 2006 was selected as the sample year to see if an indemnity would have been paid. After the query is submitted, the upper right-hand box shows the county base value per acre, the dollar amount of protection per acre, total insured acres, total policy protection, and the subsidy level. The last two lines of the summary table show the per-acre and the total policy values. So, a producer would pay $1.11 per acre to protect potential income of up to $12.87 per acre.

In the sample year, 2006, the policy would have paid $0.97 per acre. In this example, the producer’s selected grid received more than 90 percent of normal rainfall during intervals I (144.5 percent), II (96.2 percent), IV (112.0 percent), and VI (102.8 percent), as listed in the column titled Actual Index Value. During intervals III (June-July) and V (October-November), rainfall received was only 58.7 percent and 84.9 percent of normal. During these two intervals, the producer would have been eligible for an indemnity payment.

In this example, a producer who purchased this insurance would have created his own protection value of $12.87 per acre. The total premium would have been $2.46 per acre. At a 90 percent coverage rate, the subsidy is 55 percent; thus, the cost to the producer for this insurance package would have been $1.11 per acre, plus a $30.00 administration fee. Because two of the selected intervals did not receive rainfall greater than his coverage rate of 90 percent, the producer was eligible for indemnity payments totaling $0.97 per acre for those intervals.

For specific details and links to the various components of these programs, go to http://www.rma.usda.gov/policies/pasturerangeforage/.