El Nino Effects May Actually Reverse

(Continued from Page A1)

"media flood" about the issue and a lot of misinformation, according to the state climatologist.

But weather forecasters balk at putting the El Nino as solely responsible for the strange weather patterns globally.

"To ascribe El Nino as *the* cause of storms in southern California and as *the* cause of coastal flooding is about as ludicrous as the statements made at the presidential press conference (recently), with the economic report, attributing the success to one man, economically," said Knight. "Give me a break. Him and El Nino?"

But the El Nino has a great deal of impact on locations nearest to where it occurs, said Knight. The weather perturbation, which comes along about once a decade, has a greater impact on locations (such as southern California with the flooding) nearest the location of the warming.

However, this El Nino stands out because it has created a dramatically warmer winter than any in recent memory.

For instance, Knight noted, last month was the sixth warmest month in Pennsylvania and fourth on records dating back to 1895.

Last year, Pennsylvania experienced the 27th coldest year out of 103 years of record-keeping. It was the 19th driest. This data was taken from the NAtional Climate Data Center.

Second and third place winners in the 5-Acre Corn Club Contest. From left, Joseph Albright, 1997 winner, second place, ear corn class, hand harvest; James Hershey, 1997 champion third place, shelled grain class, 3-acre plus harvest size; and Lee Spangler, second place, 1997 champion, shelled grain, 3-acre plus harvest size.

Novembers have been interesting. November of 1995 was the third coldest for the state on record, November 1996 was the 4th coldest, and November 1997 the 14th coldest. Yet 1996 was the wettest year on record in Pennsylvania, with 53 inches of rain statewide on average and 75 inches in the state's southeast counties. Statistically, that's an event that happens once every 30,000 years, said Knight.

El Nino patterns have occurred in 1982 (the last big El Nino), 1977, 1940, 1911, and 1905. During that time, Pennsylvania overall experienced seven dry springs and one wet one, so the likelihood of a dry spring is "relatively high," said Knight.

But being able to predict what the precipitation will be very far in advance is difficult, Knight noted. "It's hard to be very precise about it," he said. Yet, if global warming has something to do with the El Nino, precipitation may be the issue rather than temperature.

Also, one historical figure that stood out is that, in the past 22 years, the state has experienced cool Septembers.

According to models, "September will be cool here — it seems to be the regime," Knight said.

Knight looked at the records of the El Nino years and compared them with the El Nino of 1997-1998.

What's interesting is how much this El Nino compares to 1982-1983. In December 1982, Pennsylvania residents experienced one of the mildest winter months on record, followed by dry conditions up and down the eastern seaboard. In August of 1983, there was a drought in the Carolinas.

However, in the winter of 1982-1983, the Atlantic water was much colder, compared to this winter, where it is warmer. Could this have an effect on the weather, since in February 1983, two feet of snow covered the southeast Pennsylvania region from a major Nor'easter? It's possible. And part of Knight's forecast. "There still could be significant snowfall," according to his forecast.

Forecasters can predict the weather in one of four ways:

• Persistence approach. It's one of the simplest methods to make a prediction. The theory is, "what it's been's what it will be," said Knight. "You may laugh, but it works more often than not." He noted that the summer of 1992 was wet, 1993 was dry, 1994 was wet, 1995 was dry, 1996 was wet, and 1997 was dry. So using this approach, 1998 could end up having a wet summer.

• The analog approach. What happened in past years forms a pattern. In four of the five past El Ninos, temperatures were above normal in Pennsylvania in December. The December 1977 El Nino was mild, followed by a winter with considerable snowfall. In eight previous El Nino Southern Oscillations (ENSOs, as meteorologists refer to them), in March, four of them were cold, three were normal, and one was mild. In seven out of eight times, March has experienced normal or below normal temperatures. In those same time periods, there were three cold springtimes, four normal, and one mild.

• Numerical approach. This involves analyzing and interpreting real-time atmospheric readings, ocean temperatures, and other factors. This model, ran in the summer of 1997, includes the Tropical SST Anomaly Forecast for 3 Sept. 1997, predicting a return to La Nina. This summer, temperatures are expected to warm up a bit, then return to cold, and it will continue to get colder and colder. The La Nina has a tremendous correlation with cold winters, Knight indicated.

• Statistical analysis approach. This looks at historical figures plus combines a numerical approach. This looks at model likelihoods based on real-time and historical data.

But even forecasters have their doubts about what models to believe.

According to Knight, even though numerical and statistical models predict precipitation for 1998 to be near or below normal in the summer, his instinct is for precipitation to be "above normal," he noted.

Knight noted that information on weather patterns for 60 counties will be available on the state's Internet website soon, with records on temperature, precipitation, growing degree days, and other information.

Soybean Conference

At the Crops Conference, soybean growers received information about new breeding programs at the University of Maryland.

According to Dr. W.J. Kenworthy, University of Maryland professor responsible for soybean breeding, new Roundup Ready soybeans have a yield range of slightly lower than conventional varieties. In one test planted at the Wye Research Center on June 24 and July 3, the highest yielding Roundup Ready variety was 43.2 bushels per acre. Conventional yields were 44 bushels per acre.

Kenworthy noted that, in speaking with seed representatives for the Roundup Ready varieties, the lower overall yield is only a temporary situation and should improve.

"It's an important new tool for weed management," he noted, providing a package of new herbicide management techniques that "really is pretty exciting."

He also spoke about grower's experience with tofu, or food- type soybeans, and with growing soybeans for a new venture, organic dairy products.

(Turn to Page A38)