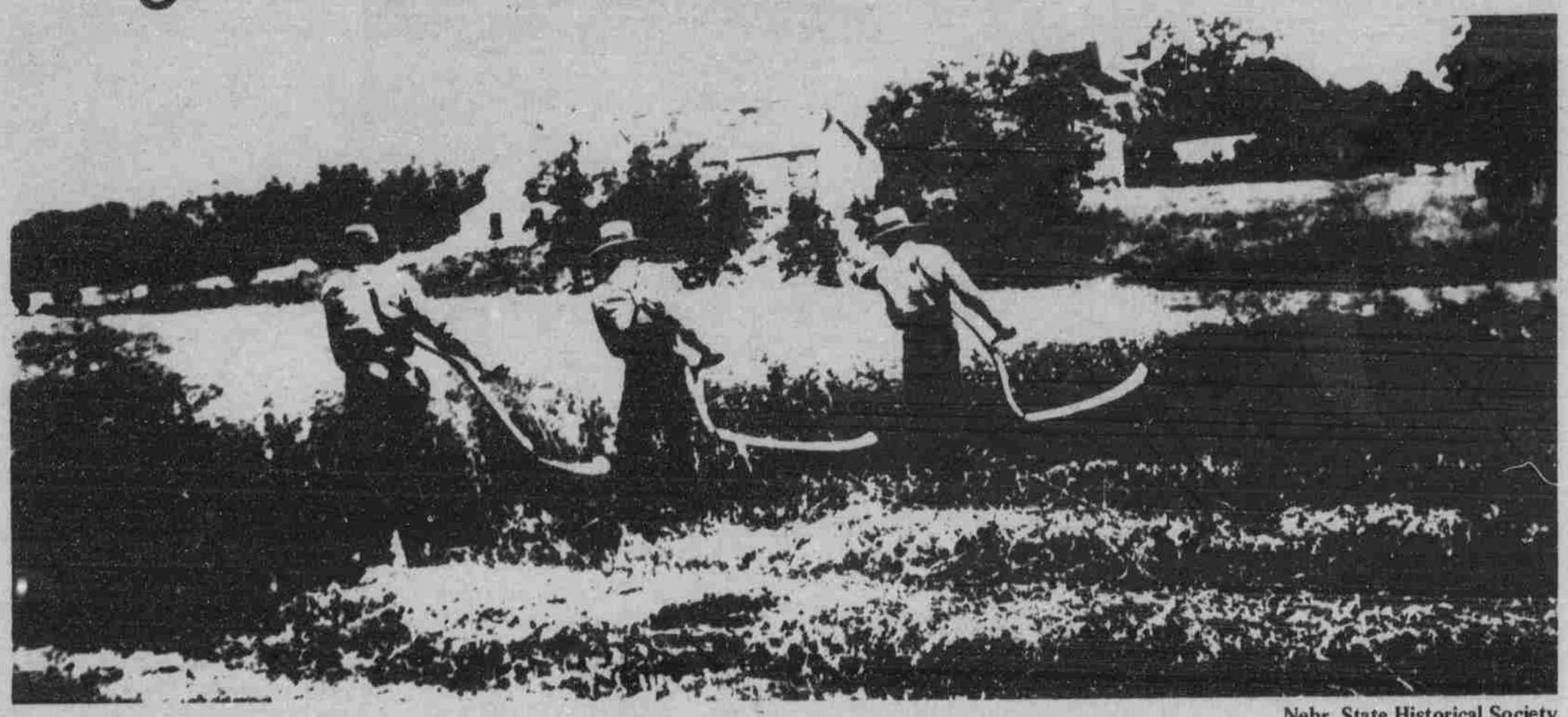
Agriculture: the state's standard-bearer



Nebr. State Historical Society

Cool, early spring predicted to lower crop yields

Spring is about two weeks late and because of this, there probably will be a low yield on many grain crops across Nebraska, Ron Radenz, assistant director of the State-Federal Agency of Statistics said last week.

Characteristic of the late spring are cool temperatures and cloudy skies, he said. In addition, poor moisture supplies last fall and winter snowstorm damage has delayed spring planting in some parts of Nebraska, he said.

Radenz also said there is a possibility of a good yield of corn, sorghum and soybean crops in Eastern Nebraska. But, he said, it's too early to make accurate predictions.

A report on the crop and harvest outlook for spring will be released May 9, he added. By then, "a fairly accurate picture should be available," he said.

So far this year, the wheat crop outlook has been poor to fair across the state, he noted.

In addition, the seed supply in Nebraska is "shorter than normal because crop yields were down last year," Raden said.

For example, in some parts of Nebraska, there was no corn yields because of the drought he said.

The crops that were lost were started in good soil just like this year's crops will be, he said. This examplifies the difficulty in making crop forcasts early in the season, he added.

"But for the most part, there should be no trouble in getting seed unless there is a lot of replanting to do this spring" he said.

"Farmers may not always get the hybrid they want, but they should be able to get seed," he said.

Radenz also noted that there is a fertilizer shortage in Nebraska this year. Locally the supply should be adequate, he said, but there could be a severe shortage nationally.

The shortage is caused primarily by a "nitrogen problem in Nebraska because supplies are pretty tight," he said.

He projected the fertilizer shortage to continue through 1980.

UNL Agronomist, Don Sander, agreed that there isn't a fertilizer surplus in Nebraska and added that there should be an "adequate supply if farmers are willing to pay the price."

"I'm sure there would be a serious shortage if the price was lower and farmers could plant as much as they wanted and needed," he said.

Average farm income $61,374

By Deb Gray

To talk about Nebraska without the farmer is like talking about a heaven without a god or the Rolling Stones without Mick Jagger. It is the state's largest industry. One out of two people are affected directly by farm production.

Nebraska leads the nation in total acreage devoted to farm production, according to Glenn Dreuscher, Nebraska state director of agriculture. Ninety-eight per cent of the state's available farm land – 48 million acres – is devoted to food production.

The Sandhills, once a desert area, is now an oasis for cattle ranchers, Kreuscher said.

"The story of the Sandhills is one of the greatest success stories in the history of agriculture," Kreuscher said. "At one time it was the great American desert. Now it raises top heards of beef."

Drought affects

Through irrigation, the Sandhills opened "an aspect of agriculture never thought of by the pioneers."

The average farmer in Nebraska farms 687 acres of land. Each farm takes in $61,374 in cash receipts, $14,819 of that income. The individual totals add up to the state's largest source of cash income.

The 1974 drought will affect this year's income, according to Doug Murfield, state-federal agriculture statistician. Every dollar loss for the farmer means a five-and-a-half dollar loss in the state's economy, he said.

Corn is Nebraska's largest cash crop, Murfield said. Nebraska exports about 40 per cent of its corn. Much of this corn stays within the United States. California is a big market – Nebraska exported 60 million bushels of corn to that state last year, Murfield said.

Sorghum and wheat are the other major cash crops in the state, Murfield said.

More cattle slaughtered

Cash receipts from livestock – primarily cattle – comprise over half of Nebraska's agricultural production. Nebraskans slaughter more cattle than any other state, Kreuscher said. Between 75 to 80 per cent of Nebraska beef is sent outside the state.

UNL research is production oriented, Kreuscher said. Much of the research is devoted to genetic research, UNL professors working to come up with lines of wheat best suited to the Nebraska climate.

Nebraska geography is unique, Kreuscher said, because "it's where the corn belt meets the range." It's the only Midwestern state that grows a variety of cash crops instead of specializing in one crop such as corn or wheat. Besides corn and wheat. Nebraska also produces the largest great northern bean crop in the country.

Major setbacks

Corporate farming is not necessarily a bad thing, Kreuscher said. "Why shouldn't agriculture have some of the tools that business has?" he asked.

The continued pressure for money will make this year a crucial one for farmers, Kreuscher said.

Cattle ranchers have suffered major setbacks during the last several years – losses which they haven't recovered. Last year ranchers lost one billion dollars in livestock revenue.

"If the drought continues, and the depressed situation continues, then it will be hard for the farmer to establish credibility for loans. The farmer is in a real financial vise at a time in history when the world needs all the food it can get.

From crop protein to food products

Their blank faces staring out to well-fed Americans aroused sorrow and anger throughout the country. These million who die daily from starvation.

The Biafra tragedy will continue to spread across the world, according to Dr. Lowell Satterlee, associate professor of food science and technology.

"If we can't keep up with the demand now, how can we in the future unless we develop other food sources?" he asked. And that's what Satterlee and his researchers are doing – finding new ways to utilize plant and animal protein.

Using Nebraska agricultural products, Satterlee extracts protein from some products not now associated with human consumption. Then those proteins are added to existing foods.

Alfalfa is one of these sources, since it has four times the protein of soybeans, Satterlee said. Soybeans now are used to make texturized vegetable protein (TVP) which is used to extend and fortify meats.

Yeast is another high source of protein. Concentrates developed from yeast are already on the market, Satterlee said.

Amoco Co. – "The gas companies have gotten into the food business," he said – is already selling a yeast concentrate. Synthesized yeast protein is used in combination with soy in meat products and in soup, baking and flavoring products.

Since food is a marketable item, Satterlee said his research is also aimed at the export market.

In a past project, Satterlee said he studied grain distillation, of which alcohol is a high source of protein, he said.

The fermentation process creates more protein, Satterlee said, since yeast, a high source of protein, uses only the sugar from grain products.

Satterlee said the alcohol-concentrate protein produced is a thing of the future. "We're developing a store of knowledge so if world demand for food gets too tight in the future, man has the technology in his disposal to come up with other food sources."

Money for his research, he said, comes primarily from the National Science Foundation, the State of Nebraska (through the Department of Economic Development and the Department of Agriculture) and from industry.

Research now is concentrated on pasta and emulsified meat products.

"We're studying sausage now and how soy goes into it. Do we have anything we could use better than soy that would give the meat a better flavor?"

Satterlee said the rewards of his work outweigh the cost of research.

"Economically, we could pay for our research with any one of these products. They all have tremendous potential. Besides, I have a feeling that we're doing something for mankind. In the next ten years, with an increasing world population, we're going to have a real shortage. We have only a seven year's surplus of wheat now," he said.