



Center Pivots Keep the Nelson Family Farm in the Green

By Ann Toner

Vernon Nelson's ancestors on both sides of the family tree homesteaded the tawny hills and plains of south central Nebraska.

Written for "Rainmakers: A Photographic Story of Center Pivots"

hard work, but they prayed that the good Lord would prosper the work of their hands.

But Vernon's Dad wanted to do more than pray for rain. He wanted green

"There was the drought years of 1934, 1936, 1937, 1938. He was tired of burning up!" says Vernon.

At first Vernon's Dad, and Vernon's older brother, Johnny irrigated with lath boxes dug into the ditch at the head of each furrow. By the time Vernon, born in 1944, was old enough to help, the lath boxes were piled behind the barn and the Nelsons were using old railroad brake linings to water their furrows.

By the early 1950s, the Nelsons were using siphon tubes to water the furrows. But the family was still only irrigating the 400 acres watered by the Platte River.

They wanted more green corn in their fields and less wheat, milo and fallow. Staying up with production technology meant buying more machinery and farm inputs. It took more productive acres to pay for those advances. So the Nelsons began to sink irrigation wells into the area's generous underground aquifer to water the dusty fields.

"We were the first to put a well down in one area where we rented a farm in 1952," says Vernon. "We irrigated 100 acres



From Sweden and from Ireland they came. Immigrants who planted their families and their crops in a new land ruled by searing summer heat, and the bite of winter cold. It was

crops in summer. He wanted irrigation.

He moved his family to a different farm in 1941 because it had access to Platte River water from the recently-completed Tri-County Canal.

and harvested 13 three-rings of ear corn (about 110 bu./acre). We still have a picture of it.

"Dryland, it produced maybe 40 bushels. The neighbors just went nuts. The next year, there were wells going in all over the place."

At first, the Nelsons used the wells to irrigate with gated pipe. It was time-consuming. And it



required flat land and a lot of man-hours to do the irrigating.

Vernon remembers going with his Dad to see a center pivot in operation. "It was fascinating to see and it still is. How they circle and travel in and out of hills. I still love to watch them."

"We bought our first center pivot in 1973," recalls Vernon. "It was an under-trussed Valley water drive. It didn't work very well for us so we sold it and put in an electric pivot."

Vernon says, "We put in on rougher ground that would have cost us \$400/acre to cut and level it for gated pipe. It would have wrecked the land."

"Pivots have made a lot of ground into farm ground," agrees Troy Lindstrom, Vernon's son-in-law, a partner in the farming operation that also includes Vernon's son, Christopher. "You can trash farm no-till soybeans and corn, just plant, spray, harvest. The soil doesn't blow and it doesn't wash. And it saves a lot of man-hours."

Since the first pivot in 1973, the Nelsons have installed several pivots in fields too rough for furrow irrigation. And they've converted some of furrow-irrigated land to pivots, too.

Older-model high pressure pivots have been updated to low-pressure drop nozzle pivots that use less energy and

made it possible to grow perfect corn in those sandy hills."

Ironically enough, some of the Nelsons' best crops were in 2001, 2002, and 2003—three of the driest summers the area has seen since the 1950s. They broke field records all three years. Vernon credits lack of disease pressure, the no-till farming possible under pivot irrigation, and center pivot irrigation which can make several circles to water a field in the time it takes gravity irrigation to water a similar field one time.

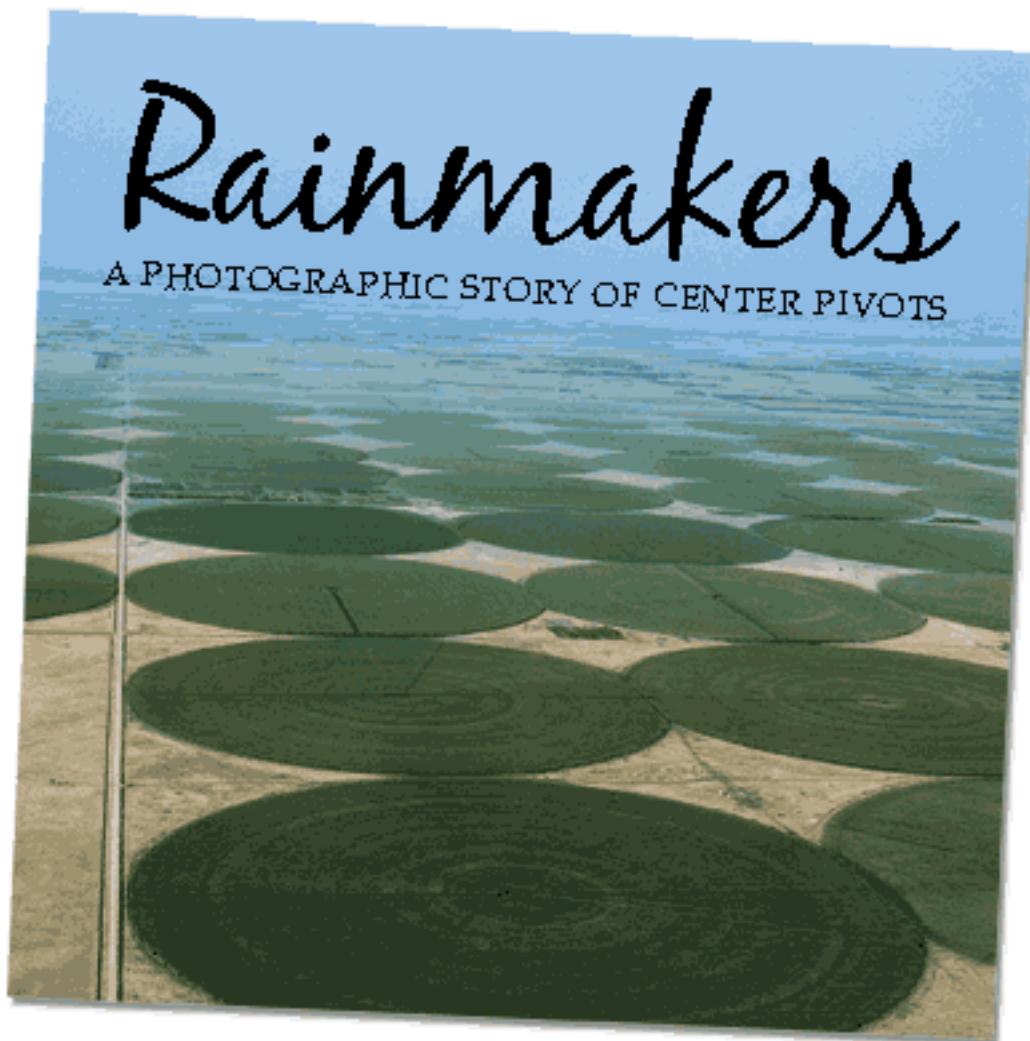
"We have ten pivots. We hope to add another 10 pivots or so in the next few years," Vernon said in the summer of 2003. "The labor savings are tremendous." Without the

pivots, family members couldn't farm a total of 3,000 acres with just one part-time employee.



water the crops more efficiently than the early pivots.

But the "*Ta-shick, ta-shick, ta-shick*" those first pivots made are a great sound to a farmer living in an arid climate," Vernon says. "Center pivots



"Rainmakers: A Photographic Story of Center Pivots" is available for purchase directly from The Groundwater Foundation and at speciality bookstores nationwide.



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