MADISON, Wis.

ON Saturday, Sept. 30, 1972, 11 produce vendors set up shop in a street near Wisconsin's majestic white granite capitol. Customers quickly exhausted their meager stocks. A week later 85 fruit and vegetable sellers turned up, their stalls filling much of Capitol Square, to be mobbed by several thousand eager consumers.

Such were the modest beginnings of the Dane County Farmers' Market, now recognized as the largest in the nation by the North American Farmers' Direct Marketing Association, and still growing. This year, as the harvest in this fertile state neared a climax on Sept. 18, more than 20,000 people made their way from stall to colorful stall, from tomatoes to bison to apples to cheese, in an almost uninterrupted river of humanity. Counterclockwise along the sidewalks beneath the imposing dome they walked, towing wagons, pushing baby carriages and lugging bulging canvas or paper bags.

This is a farmers' market for farmers, run by the farmers themselves.

Everything sold must be grown in Wisconsin, and the sellers must actually have participated in the production of the goods. On this glorious late-summer day, with the sky a soaring canopy of robin's-egg blue, more than 300 farmers from 30-odd counties came to town, many of them driving through the night to get here by 6 a.m. (By comparison the Union Square Greenmarket in New York has only about 70 farmers in peak season, but it is part of a
network of 47 such markets in 33 locations in the city.)

The last of summer's bounty was mingled on the stands with fall fruits and the first tender root crops of winter. The growers said it had been a wet summer, bad for tomatoes, but you couldn't tell from those offered by Thomas M. Eugster of Old Stage Vegetable Gardens in Brooklyn, Wis., south of Madison. The tiny yellow Sungolds and the scarlet Goliaths, big as softballs, could not possibly have been sweeter.

"Look at them," said a shopper to his wife. "With those gigantic T's you could make a BLT without any B or L."

I walked around with my wife, Betsey, accompanied part of the time by Odessa Piper, the chef and proprietor of L'Etoile, a prize-winning restaurant on the square. A Midwestern Alice Waters, she introduced us to some of the farmers whose produce she uses in her kitchen, like Anne Topham of Fantôme Farm in Ridgeway, who makes a delectably creamy fresh French-style goat cheese; the Weston family, who grow more than 100 antique apple varieties on 16 acres near New Berlin, including hard-to-find English delights like Cox's Orange Pippin and Pitmaston Pineapple, as well as Esopus Spitzenberg, Thomas Jefferson's favorite; and Chuck and Jenny Anderson of Artesian Trout Farm, whose fish, raised in pure, icy water, have a much firmer texture than those reared in warmer water, which tends to make the trout sluggish and flabby.

Much of the produce was organic, and nearly all the vendors, Wisconsin being Wisconsin, were friendly, obliging people, a pleasure to talk with.
On one stand onions were carefully labeled with their varietal names, like Burgermeister and Stuttgarter. On another, a photographer’s Kodachrome dream, were piles of peppers hot and sweet, round and elongated, red, yellow, green and orange. At a third Ms. Piper lovingly rolled a spectacular purple cauliflower in her hand and pointed out a head of broccoli romanesco whose mass of pale-green spirals resembled coral. "Broccoli on acid," she called it.

Terry Romeo of Oxford had three enormous, fleshy, multilobed mushrooms on his table, each the size of a serving platter. He finds them growing on oak tree roots every two or three years, he said, always in the first three weeks of September. "We call them cauliflower mushrooms," he said, "$20 each." Ms. Piper bought one.

Great tubs of cosmos and sunflowers stood behind the fruits and vegetables, and at the dozen or so stands run by Hmong families, members of mountain tribes who settled in Wisconsin (and neighboring Minnesota) after the Vietnam War, fruits and vegetables were so scrubbed, carefully trimmed and artistically displayed, they might have been taken for flowers.

The Hmong farmers displayed bitter melons, pea sprouts, squash leaves, holy basil, little Thai eggplants and gnarled purple eggplants shaped like a witch’s hand. One Hmong woman showed me some sword-shaped leaves and asked me what they were; she said a friend had given the seeds to her mother without identifying them.

Thanks to years covering Southeast Asian wars, I was able to identify them as convolvulus, or water spinach, a vegetable much appreciated in the region.

We started the day, not long after dawn, at the cafe that occupies the ground floor of Ms. Piper’s restaurant. She bustled in a few minutes after 7, uncharacteristically late, shirtsleeves rolled, light-brown hair pulled back by a scarf serving as a headband. With my coffee I was eating one of the house’s flaky, delectable breakfast rolls, flavored with vanilla, coriander, allspice, clove and plenty of cinnamon. Ms. Piper told us she called them spice girls rather than spice swirls because she often puts a song by the British pop group of that name on the stereo to fire herself up in the morning.
"I have to work hard to keep my concepts from getting too cluttered," she said, "especially this time of the year, when there is so much good produce."

Ms. Piper, who started L'Etoile 28 years ago, comes naturally to her love of natural ingredients. She left high school in Hanover, N.H., a year early to live on a commune, gardening, cooking and preserving food starting at the age of 17, then moving to Wisconsin to live and work on an organic farm. Largely self-taught, she admits to harboring a certain suspicion of cooking schools, describing herself unconvincingly as "an idiot savant" in the kitchen.

Her culinary hero, she said as she pored over a list of items to buy at the market that morning, is Michel Bras, whose Michelin three-star restaurant outside Laguoile on the windswept Aubrac plateau in south-central France features spit-roasted local beef and "forgotten vegetables" on a glass plate decorated with herbs and flowers.

After checking the list, she slipped it onto a clipboard and handed it to Nina Camic, a wiry, Polish-born law professor at the University of Wisconsin who moonlights as the restaurant's "forager" or farmers' market purchasing agent, filling a little red wagon as she works the stalls.

The farmers are credited twice on the restaurant's menu, in the description of the dishes on the front and in an honor roll of producers on the back. Other local eating places have emulated Ms. Piper's farm-to-market-to-table style, including Lombardino's, for generations a straightforward red-sauce Italian restaurant, but now, under new ownership, a showcase for local produce like tomatoes, fennel and leeks.

A dazzling array of vegetables appear in L'Etoile's first courses at this time of the year, in a "sampler" of burstingly ripe heirloom tomatoes, including red Ping-Pong, orange Flame, Green Zebra, yellow Mattina and brownish Black Prince, all from Rink Da Vee's Shooting Star Farm near Mineral Point, and a salad of mostly wild funghi, including shiitakes, trumpets, cremini, oyster mushrooms and lobster mushrooms.
The menu's vegetarian slot was filled by a crunchy, deep-fried polenta fritter, given a flavor supercharge by sweet corn from Heck's Market in Arena.

Betsey flipped over her chicken breast with Napa cabbage, both from JenEhr Family Farm in Sun Prairie, which puts its poultry out to pasture. "Great skin, delicious meat," she said. "Real chicken flavor, which is rare in the United States."

One of our dinner guests, Iowa-born Sam Brown, ordered a pork chop, cut from Berkshire hogs that had been raised on grass by Tony and Sue Renger near Loganville, then brined for three days by L'Etoile's chef de cuisine, Tory Miller, a protégé of the New York chef Bill Telepan. The chop was served with potato pancakes, Gravenstein apple rings and spicy pork jus.

"The best pork I've ever tasted," Mr. Brown commented happily.

Me, I was too busy eating to talk, devouring a rib of grass-fed, dry-aged longhorn Highland beef from Fountain Prairie Farm in Fall River, which was edged by an incredibly flavorful (if dietetically dubious) ring of old-fashioned ivory-colored fat. I got through most of the mashed potatoes with blue cheese compound butter, too.

SO why Wisconsin? An early, well-developed environmental movement for one thing. A liberal political environment favoring economic cooperatives. And the soil itself, especially in the Driftless Area of southwestern Wisconsin. The glaciers that covered surrounding zones did not touch this one, which is blanketed with well-drained alluvial soil. Because it was an important lead-mining center, the federal government prohibited agriculture in the region until the 1840's, when it was settled by European immigrants with farming traditions.

New growers come into the market every year, and the 2004 rookie of the year, Ms. Piper told us, is one of her waitresses, Kristen Kordet, who grows tomatoes, Chioggia beets and rainbow chard with dazzlingly colored veins and stems.

Many stalls have been fixtures for years, however, like those that specialize in that most typical of Wisconsin products, cheese. Swimming
upstream against the tides of mass production, dozens of Wisconsin farmers and farm wives produce superb artisan cheeses in the European tradition, such as Fantôme’s chèvre, Hook’s sharp 10-year-old cheddar and Bleu Mont Dairy’s firm, tome-shaped wheels reminiscent of the cheeses of Switzerland, where the family of the proprietor, Willi Lehner, originated.

But the king of this particular mountain is Richard deWilde of the all-organic Harmony Valley Farms near the pretty town of Viroqua, who loads a 20-foot truck every Friday night and leaves for Madison at 2:30 Saturday morning, arriving about 5:30. On a beautiful day, he might sell $6,000 worth of vegetables or more, but cold, rainy weather cuts that in half, he said, "and the food pantry" - a charity - "loves us."

A bearded, keen-eyed, third-generation farmer whose grandfather was a buddy of J. I. Rodale, the pioneer organic farmer and publisher, Mr. deWilde grew up in South Dakota. He and his partner, Linda Halley, farm 90 acres planted in more than 60 kinds of vegetables with the help of their two sons and a number of hired hands. The farmers' market, he said, is his "show window," which has made the operation's name in the region and has enabled him to sell to restaurants in Madison, Chicago and Minneapolis, and also to run a Community Supported Agriculture plan, in which 450 local households pay for weekly delivery of three-quarter bushel boxes of assorted produce.

Harmony Valley Farms has even broken into big-time mainstream commerce. Mr. deWilde sells several cool-climate specialties - burdock, celeriac, daikon and three kinds of turnips - to Albert’s Organics, a wholesaler in Bridgeport, N.J., and a broader range of vegetables to 18 Whole Food supermarkets in the Chicago area.

"Some of my friends at the farmers' market complain about that," he said, "but they help to keep me going. They pay on time, and above market price."