

Food Crisis: The great farmland disappearing act . . .

America's rich farmlands are being eaten away as the population spills out from the big cities. The three articles on this page examine the problems facing the country as it heads toward the 21st century and a possible food shortage.

Plowed under!

Urban sprawl threatens food

As the country builds up and out from its cities, farmland is disappearing at the rate of three million acres every year. That's the word from the National Agricultural Lands Study (NALS) released by the U.S. Department of Agriculture and other government agencies.

The annual loss includes one million acres of prime farmland, with the richest, flattest soils that produce the best yields at the lowest cost. But prime farmland is also attractive for other uses.

Each day, four square miles of America's best farmland are covered over — by housing tracts, highways, airports, businesses, parking lots or man-made lakes, the NALS says. Put together, a year's loss could form a corridor from New York to California half a mile wide.

"I think the important thing Americans should be learning is that our good farmland in this country has a limit," said Robert Gray, who directed the NALS project and now is with the American Farmland Trust. "We have 540 million acres of pretty good farmland out of a land base of 2.2 billion acres, and that 540 million acres is our ace in the hole."

The study recommends that the country add to the 413 million acres now in cropland, and it has identified 127 million acres of good potential cropland now mainly in forest, pasture or rangeland.

The NALS estimates that to keep up with expected world food demand by

the year 2000, U.S. farmers may have to cultivate an extra 85 to 140 million acres. Already the yield of one in every three acres harvested is shipped overseas, giving agricultural exports — some \$40 billion worth in 1980 — a big role in the national balance of trade.

IN THE MEANTIME, the land losses continue. The NALS says that if farmland conversion continues at the 1967-77 rate, Florida — producer of half the world's grapefruit and one-fourth the world's oranges — will lose nearly all its important farmland by the end of the century. California would lose 15 percent of its agricultural lands. Noting that citrus fruit, like many crops, depends on special micro-climates, Gray said, "If you lose those places you're not going to grow oranges in Kansas."

Changing population patterns have increased the pressure on farmland. The nation has more smaller families, and many of them are heading for a home in the country. "Over 40 percent of housing constructed during the 1970s was built in rural areas," the study reported, adding that 12 million new households are expected in non-metropolitan areas between 1977 and 1995.

As people move farther from city centers, they take up more space. Thomas J. Barlow of the Natural Resources Defense Council cited Minnesota's Twin Cities metropolitan region: The first million residents occupied about 180 square miles of land, but the second million took up an additional 550 square miles. When the area gets its third million, probably by 1990, they'll occupy an extra 1,600 square miles — almost 10 times as much land per capita as the first million. "The pattern applies to many cities," he said.

THE ARRIVAL of new residents in rural areas can set off a chain of events. The need arises for government services such as sewer, water, police and schools. The value of the land goes up, and often so do taxes. That can be decisive, farmers are finding themselves taxed out of their home counties.

Other conflicts can arise. People seeking the bucolic life and liveliness of the countryside will move right

Other efforts to protect farmland include voluntary agricultural districts; agricultural zoning, adopted by Hawaii and 270 local governments; the purchase or transfer of development rights on farmland; and comprehensive management plans.

alongside a farm, and all of a sudden they'll discover there are odors they never had in the city. Those people may file suit against the farmer or get local governments to restrict farming practices.

As farms disappear from an area, so do farm equipment and supply stores. Remaining farmers may fall into what the agricultural lands study calls the "impermanence syndrome" — seeing the approach of urbanization, they figure there's no long-range future in their farms and they stop practicing soil conservation or making needed repairs.

UNCLE SAM shares in the blame for the loss of farmland. The NALS named about 90 federal programs "that contribute to the conversion of agricultural land," prime among them are those run by the Department of Housing and Urban Development, the Farmers Home Administration and the Economic Development Administration. The study found that only two federal agencies — the Environmental Protection Agency and the USDA — have policies to consider the effect of their programs on farmland.

The study calls for a federal policy on agricultural lands and says that the government shouldn't help pay for development of good farmland but should offer incentives such as lower interest rates to encourage development elsewhere.



NATIONAL GEOGRAPHIC SOCIETY

A farmer plows his land just across the road from a fast-food restaurant — a sign of the times in America.

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More research urged

Experiments key to food production

Basic scientific research, conducted by state experiment stations linked to universities, is the foundation on which the future in food production should be built, a former university educator believes.

Glen Salisbury, director emeritus of the University of Illinois Agricultural Experiment Station, told a conference group at Boyne Mountain that the "State Agricultural Experiment Station and its corollary for technology transfer to users is one of the great social inventions of all time. For animal agriculture, and many other segments of agriculture, it has been a world leader."

More than 200 scientists, educators, food producers and public policy makers met in Boyne Falls to debate and discuss the role of food and other products from animals in filling human needs in the 21st Century.

Ten groups, each made up of at least 20 conference participants, are working to establish research goals for animal agriculture during the next century. Their recommendations will be published by this fall and will be used to organize support and funding for the proposed research.

SALISBURY FOCUSED his speech on the part of state agricultural experiment stations in performing basic scientific research and solutions to problems faced by agriculture. He stressed the importance of the tie to land-grant schools, noting that the university environment provided agriculture with scientists "educated in the best of modern basic science."

However, agricultural research and the universities' experiment stations face a real dilemma which will continue into the future, Salisbury said. Both need more money to support their work, yet each may decide how to spend the funding in different — and conflicting — ways.

Young scientists at universities frequently can get caught in the fray, Salisbury said. "When they enter university employment they hear two drums sometimes sounded in different

cadence. One is that of the internal promotion and rewards system. The other, he added, is the "evidence of service to agriculture."

But the two are not always the same and may not reflect similar values, or, sometimes, Salisbury contended, "they relate only randomly."

"We produce young scientists who are right up to snuff in terms of basic science, but what they must do to maintain and promote their reputations, jobs and salaries often has 'very little to do with productive agriculture."

SCIENTIFIC RESEARCH, he emphasized, must stand as "the scouting party for ought to be done in food production for the future."

But scientists at state experiment stations cannot continue to provide leadership unless they can count on adequate funding from national and state governments.

"During that period of my life devoted to research management," Salisbury said, I soon learned that an agricultural experiment station has to concentrate on the sciences basic to its endeavor and was something like a livestock feeding operation. It has a maintenance requirement just to keep it alive.

"It is only when an information-generating organism, which it is, has sustenance beyond its maintenance requirement that it can be productive."

In fact, said Salisbury, experiment stations are less productive than they have been in the past. And that will change only when the importance of their basic scientific work is recognized and supported.

"I interpret the recent fall-off in productivity of the station as society's failure to provide all of the necessary nutrients to meet both its maintenance requirements and nutrients for production," he concluded.

"Clearly, if the state stations are to produce the evidence and multivariate and interacting human needs of the 21st Century, effective means must be found to finance the expanding research that the future demands."



GARY CASKEY/staff photographer

Schultz farm employee Kathy McLennan weighs strawberries — but for how long?

Strawberry fields forever? Roy hums another tune

By Bob Gordon
staff writer

The strawberries are gone. The peas will be gone in about a week. The soybeans will go to Ohio in a couple of months.

Roy Schultz plans to retire after 35 years of farming off Lilley Road in Canton.

The 65-year-old started with chickens and sweet corn in 1946. In the '50s, it was milking cattle. The '60s brought beef cattle. In the '70s and into the '80s, it was pick-your-own strawberries and vegetables, which attracted throngs of area residents.

Roy has the looks and stature of a hard worker. His strong frame is the product of long years of grueling but productive work, as are the cracks in his deeply tanned hands.

THE SCHULTZ'S farm is 80 acres of "some of the best land in Wayne County," as Roy tells it. At one time, he had 300 acres, including the land Plymouth-Salem High School is on.

The farm is just south of Mettetal Airport. Planes taking off over the farm are a reminder of the encroach-

ing development that's slowly squeezing out farmers in Canton.

"I've watched five planes crash over the years," said Roy.

He has sold all but two acres and the house to Penz Development of Southfield. The land has been rezoned light industrial.

Roy's son-in-law, Dennis Wilkin, plans to rent the land from Penz and farm it until it is developed.

Joe Block of Penz predicts Wilkin will have a long career at the farm. He sees no development there until "Canton gets a tax base."

Roy began farming with his father on their farm in Dearborn and fondly recalls riding to the Eastern Market in Detroit with him on a horse drawn wagon at age 9.

FOR ROY and his wife Tilly, some things have changed. He points to a tractor he bought in 1946 that's still in regular use.

As advancements in technology made farms more productive, Roy says, "The public has benefited, (but) the farmer still just makes a living."

Roy's grandson, Mike McLennan, 13, was out in the field on a tractor plow-



BOB WOODRING/staff photographer

Roy Schultz looks at the fields he has toiled over for more than 30 years.

ing under picked over strawberry plants so soybeans could be planted the next day.

"He's only a little guy there, but when it's business time, he's a man," said Roy, adding that "every day you wait is one day off the growing season."

Roy is not optimistic about the future of farming in Canton, and says, "If there was a future in this, we would gladly turn it over," to his son-in-law.

HE CITES rising property taxes and the necessity of increasingly larger plots of land for the same return, due to the increase in productivity, as the

main causes behind local farmers getting out of the business. From 1946 to the present, Roy has seen his property taxes increase by 150 times. A bushel of corn doesn't buy what it used to, he says.

Roy looks forward to his free time.

He golfed in Florida during the winter months but never had a chance to play in the Detroit area because farming required so much of his time. "This isn't a business that you can do less. It's too confining," he said.

Roy and Tilly will travel some in their mobile home, enjoy their four married daughters and 10 grandchildren.