

Heat wave in North America shows infrastructure deficit

by Marcia Merry Baker

Don't blame it on the heat. The mounting death toll and property damage resulting from the mid-July heat wave across North America show the gaping shortfall of infrastructure, in particular for power use ratios in the residential, agricultural, and transport sectors. In addition, livestock and other farm losses reflect the marginalization of agriculture as a direct result of years of domination by the food cartel companies.

During the second week of July, large parts of the United States posted temperatures over 100°F, and many locations went over 105°. The duration of the worst period was mostly July 13-17. For some locations, unprecedented temperatures were recorded; and for most places, this has been the hottest period since the 1980 heat wave. Loss of life and economic damage are inevitable in such adverse weather, but the scale of the losses now posted in the United States stems strictly from the lack of adequate infrastructure.

Relief agencies usually declare an emergency when temperatures stay at 100-105°F for two consecutive days. These conditions covered areas where close to half the U.S. population lives, and also the states where cattle, hogs, and poultry are produced.

The death toll is still being tallied from the heat wave, with the lack of adequate housing, air conditioning, electricity, and water supplies, and the lack of safe mass transport contributing directly and indirectly to the toll. Several children and pets died in locked cars. As of July 20, several days after the heat spell had broken, news accounts reported more than 700 deaths nationally due to the heat wave. This number is higher than the U.S. annual death toll from heat for an average year, which, in recent years, has ranged from 148 to 1,700.

Likewise, many mass deaths of livestock have occurred mostly because of lack of shelter, power, water, and other means at hand to protect them. And because of the vertical

integration of production of poultry and hogs, mass kill-offs occur in the "factory farms" when there are infrastructure problems in cooling or heating.

Many cities are reporting their worst death tolls ever from the heat, with Chicago in the lead, and dozens dead in New York, Philadelphia, and Washington, D.C. The number of dead in Chicago alone totalled 376 as of July 18. The ultimate count is expected to exceed 500. Most are elderly, young, and poor who expired in their homes from the heat. Emergency morgue arrangements had to be made. Refrigerated trucks and funeral homes are holding the bodies, and mortuary students are assisting the county medical examiner.

How could this happen?

The response of some Chicago city and Illinois state officials is typical of how elected politicians responded in many locations. They asked, "How could this happen?" and called for an investigation. But the lack of in-depth infrastructure of all kinds (hospital beds, morgues, pathology labs, electricity supplies) is typical of the situation all across the country.

Thousands of cattle died in the heat in the midwestern farm counties. Accurate estimates are available only on a county and state level. However, the rendering companies in the Midwest reported calls to pick up thousands of dead animals, but there were too many for the companies to handle, and so farmers resorted to burying carcasses. One Nebraska rendering company alone picked up between 1,000 and 1,500 dead farm animals the week of the heat wave in Nebraska, Iowa, Kansas, and Missouri; it turned away dozens of farmers' calls.

Also, there were thousands of chickens lost, with the largest kill-offs reported on the Delmarva Peninsula (Delaware, Maryland, Virginia).



Chicago's infrastructure problems did not begin with the heat wave of 1995. Shown here is a scene from the flood of April 1992, when the failure to maintain and modernize the city's infrastructure took a deadly toll.

Accounts from Chicago and from some of the emergency farm state locations illustrate how the question of infrastructure is crucial.

Chicago and the farm states

In Chicago, the human resources division had only eight vehicles and 60 staff with which to respond to calls for assistance, because of budget cuts. But even more important than the limited response capability, is the systematic vulnerability of the population to harm because of substandard housing and low electricity supplies per household. Chicago has more than 443,000 residents age 60 or over, and thousands live in poor conditions.

In northwest Chicago, power outages hit 41,800 customers of the utility supplier Commonwealth Edison Co. The Illinois Commerce Commission held a hearing on July 18, and an investigation is under way of both this outage episode, and whether the company is in general properly maintaining its power grid. Some people were without electricity for 12 hours; some were lacking it for three days.

Another dramatic example of the lack of power is the case of the crisis at Chicago's Cook County Hospital, where indoor temperatures reached into the 90s. To cut costs, the hospital had contracted with Commonwealth Edison to go onto a "conservation" program—and use less than a certain amount of power in order to get a cheaper rate. During the heat wave, the operating rooms became ovens. Patients had to be sprayed with water, and fanned in order to be kept cool.

Typical of the situation in the cattle states was the plight of counties in southwestern Iowa. About 1,200 cattle died from the heat in Montgomery, Pottawattamie, and Shelby

counties during July 10-15. The farmers with water tankers and sprayers, joined by rural volunteer fire companies' trucks and hoses, saved all they could. The numbers of animals saved correlates directly with which farm operations had access to people, equipment, water, and electricity to protect the creatures.

For example, Rod Bentley, a farmer in Macedonia, Iowa, lost dozens of cattle, but he would have lost more without his own sprayer tank truck, and the response of the local fire company that answered his call and hosed down the cattle. Other farmers had no such means. According to the July 15 *Hastings Tribune*, Bentley reported that "in this neighborhood, hundreds have been lost." He said of his situation, "When something like this happens, you find out what small-town service is like when you need it. You have overwhelming response in the country."

The lack of basic infrastructure kills

Both the urban and rural examples show the role of basic infrastructure during times of peak need. Look at electricity: All the arguments used to justify scaling down electric generating capacity and supplies per household and per square kilometer to the level of "average" electric loads, are refuted by the loss of life for want of adequate electricity when and where needed.

Overall, as of 1995, the United States has entered a period where the potential peak demand for electricity exceeds the available resources. This is the result of the cumulative effect of the declining installation of capacity (turbine generators, power transformers), and, in particular, the cancellation of nuclear plants that were on the drawing boards 20 years ago.

On July 15, Con Edison reported a record demand for electricity in New York City, despite the fact this was a Saturday, when demand is routinely lower than on weekdays. High demand and outages were the prevailing pattern throughout the heat wave.

The lack of power-generating capacity to keep up with demand has been masked until now by the worsening depression. Up until the 1960s, the manufacturing sector used to account for half of the consumption of electricity in the United States. As the "bubble" economy of financial speculation started to displace manufacturing output, manufacturing's share of electricity consumption has fallen to 30%. Increasing percentages of electricity have been consumed by the commercial and domestic sectors. But the decline of capacity has been so great, that any peak demand—heat waves, cold snaps, which are to be expected in U.S. latitudes—now results in power outages.

On a per capita basis, U.S. electric generating capacity ceased rising per capita as of 1985, and during five of the six years from 1987 to 1992, it declined. Electricity generating capacity has dropped from about 2.8 kilowatts per capita down to 2.6 in only four years.

Food production vulnerable

The role and condition of agricultural infrastructure, which includes power and electricity, may not be so apparent to the average person. But the lack of basic infrastructure makes farm operations and the food supply system needlessly vulnerable to bouts of severe weather or other strain.

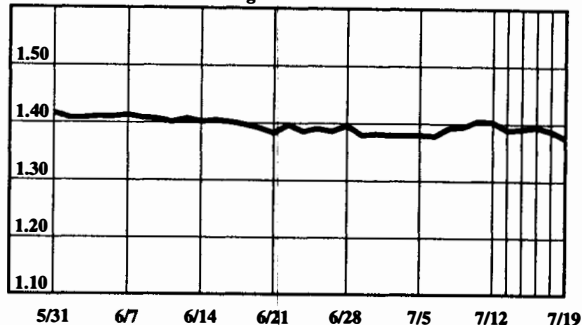
Worse, the shift of U.S. agriculture to crop monoculture (cultivation of one crop, instead of a number of crops) and concentration of livestock—mega—"factory farms" of poultry or hogs—add to the vulnerability. These shifts are the direct result of recent decades of self-serving actions by the international cartel of food-processing and commodities companies—Cargill Inc., Archer Daniels Midland (ADM), Pillsbury (Grand Metropolitan), Louis Dreyfus, Continental, Bunge, ConAgra, IBP, and a few others. Against all anti-trust statutes, these companies have dictated the characteristics of livestock for slaughter, crops, etc., the volume they will buy, and the price they will pay for farm commodities, and also the conditions of farm production.

The result, for example, is that 99% of all chicken consumed in the United States is processed by the cartel companies. The independent poultry farmers who produce the poultry bear the burden of debts to cover the difference between their farm costs of production (for buildings, electricity use, feed, and so forth), and the low prices they receive from the cartel. To try to survive, the farmers have flocks in the thousands. To cut costs, some farmers only use fans to try to provide temperature control, not air-conditioning. Or, they are limited in their electrical supplies. On the Delmarva Peninsula, over 1 million chickens died in the heat because of such conditions.

Currency Rates

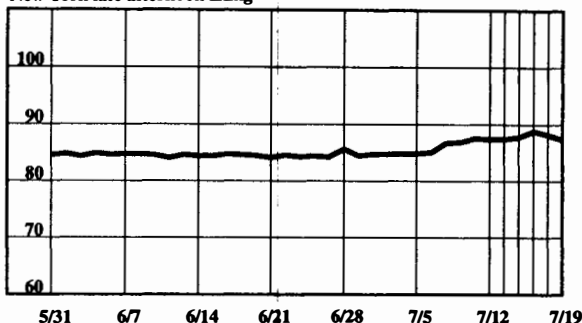
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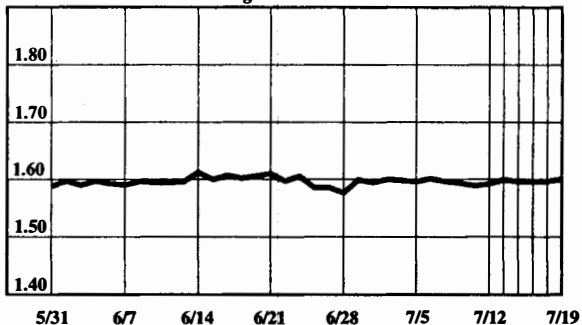
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