Herald-Citizen

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SUNDAY READER

SECTION B

HERALD Citizen

Way Back When

Hydrant parkers to be arrested

By BOB McMILLAN
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Looking back in history, here were some of the happenings in the Cookeville area for the week of Jan. 8-14 as recorded in the pages of the Herald-Citizen:

1935

Cookeville's volunteer firemen had a lively discussion over automobiles, parade entrances, and the abuse of power during their annual meeting at the sportsmen dining room at the TPI Cafe this week.

It came after Fire Chief Jess Peacock talked about the department's 78 fire calls last year (An average of 11 firemen showed up at each blaze). Peacock said that fire hydrants are getting to be a problem for firemen.

More specifically, motorists are parking in front of the hydrants despite a new city law forbidding it. The new law also forbids motorists from driving their cars over fire hoses during a fire. It bombs there's. Peacock said something's got to be done about motorists parking their cars wherever they want.

Mayor Ezra Davis was there and told the firemen he's ordered police to arrest anyone caught parking their car in front of a hydrant.

But the firemen wanted to know about a certain "prominent citizen" who is telling police he'll park where he pleases and will get any officer fired who doesn't like it.

Mayor Davis told the cops of firemen, "I've seen too much partiality shown men of prominence during my lifetime. I'm disgusted with it."

If anyone parks in front of a fire hydrant, he'll be arrested, Davis repeated. (Jan. 14, 1935)

1942

You've a moocher and there's no air raid. Quick! What do you do?

A page one article this week told readers across Putnam County the proper procedure for handling actors full of students if a flight of Japanese or Germans or Italians raids their schools here and the bombs come tumbling down.

First, don't let students leave the school. Quickly get them away from windows and open doorways where they are vulnerable to "high explosive blasts and falling fragments from anti-aircraft shells."

Meanwhile, parents were told that if an air raid hits Putnam County to stay home or at power lines. Best set tight.

In other news items, Ideal Cleaners told patrons in an ad this week that they will probably soon have to bring their own clothes to the laundry and pick them up as well.

Wartime restrictions forbid the sale of new tires or commercial trucks used to take goods to private households. And the tires are starting to wear thin on the cleaner's delivery truck. They'll have to park it soon if they can't get retreads. America is saving its rubber supply for Army jeeps and trucks and for gas masks. (Jan. 13, 1942)

1953

"It's the stain-sized car that women love to drive," says the ad for the new Chrysler Windsor. You can get one at Mills-Jay Williams Motor Co. on Holly Street in Monterey, says on ad in this week's edition.

And no wonder women love to drive the Windsor. "It's a sanctuary of steel." It has that "famous Spitfire engine to pull you out of tight spots in a hurry." And with the new power steering system, women won't have to fight the wheel.

The Windsor is "beautifully styled" as well. "It's a delight to look at parked at your front door." And its new shock absorber system "swallows up the worst road bumps. They "wouldn't make a baby" riding in a Windsor.

While you're on the lot looking over the Windsor, take a gander at Chrysler's New Yorker Deluxe. "It's more car than you ever believed could exist," says the ad.

"It has a beauty that is splendidly its own, splendidly right." And the car has that "Orbaflow ride that goes you not just better control, but a new kind of control, a new sense of safety."

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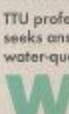
Water

We take clean water for granted, but residents of developing countries like Bangladesh are drinking water with arsenic in it

TTU professor seeks answers to water-quality crisis



HOSSAIN

While millions of his native countrymen in Bangladesh, at least half the rural population, suffer from arsenic poisoning in their drinking water, Faisal Hossain works to find an efficient and affordable solution to manage the crisis.

Arsenic, the "king of poisons" slipped in quietly throughout the ages, now poses a grave danger to at least half of the rural populations of Bangladesh and other countries with similar geologic studies in India, Vietnam, Cambodia and Mexico.

"We are working on borrowed time," said Hossain, a Tennessee Tech civil and environmental engineering professor. "We need accelerate priority testing of the rural drinking water systems in order to reduce the risk that arsenic poses to villagers."

Already 93-60 million people in Bangladesh are exposed to toxic levels of arsenic through water drawn from shallow wells. Hossain says these could disturbing from weathered rocks and soils. In the 1960s, farmers and villagers began drilling shallow wells, which were cheaper but more susceptible to arsenic buildup, after the government encouraged a switch from surface water to ground water for drinking.

In the early 90s, the poisoning reached epidemic scale and continues to worsen. According to the World Health Organization, long-term exposure to arsenic via drinking water causes cancer of the skin, lungs, bladder and kidneys, as well as skin changes such as pigmentation abnormalities and hyperkeratosis, a thickening of the skin.

Hossain and colleagues at the University of Connecticut, University of California-Davis, and Bangladesh's Rajshahi University and Engineering University have set a goal to devise an efficient and low-cost way to identify and shut off the poisoned wells. [illegible] about a dollar and requiring 30 minutes of testing time). These kits, however, tend to have large errors in reporting the results.

"For one particular brand, we observed that the kit had only a 10 percent chance of correctly detecting a safe well. This means that 90 percent of the time the villagers use the kit they are likely to get the false impression of an unsafe well being safe. It's akin to an HIV-infected person being tested negative and told not to worry anymore," said Hossain.

The rampant and large-scale use of such kits without knowledge of their reliability is alarming not just for Bangladesh, but for other developing countries that are considering these inexpensive [illegible] "Arsenic social studies indicate that villagers would rather travel far away once a day to collect their daily requirement of safe drinking water than be burdened with a water treatment system that is difficult to maintain."

Hossain and his colleagues are currently working on an adaptive model that can pick up patterns on how the arsenic varies so that only a few wells have to be accurately tested in order to predict if others are safe or unsafe. The group employs two sister theories, Chaos and Fractals, which some researchers doubt can be applied to this problem.

"Even though the patterns may seem random at first sight, nonlinear nature often times has a tendency to repeat itself on the basis of a 'code' that lurks behind this apparent randomness – the order hidden in randomness is called Chaos. [illegible] like small versions of the next larger section and the same all the way to the whole. This describes the phenomenon called Fractals," said Hossain. "We learn about the whole by studying the smaller sections.

"By flagging a safe cluster of wells, or by shutting down unsafe clusters, we can provide villagers a rapid, socially and financially more convenient choice to travel to a safe well," he said.

"Our recent work has revealed that it is indeed possible to connect the theory of chaos to improve prediction characteristics of arsenic wells. This is probably something that the scientific community has not witnessed up to now as far as the arsenic problem is concerned," he said.

"Now, think of a bead of cauliflower, you pull one section out and it looks very much like a small version of the next larger section and the same all the way to the whole. This describes the phenomenon called Fractals," said Hossain. "We learn about the whole by studying the smaller sections.

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"Such results are always bound to raise a few eyebrows among skeptics and believers of chaos theory alike," chuckled Hossain.

As a firm believer in serving calamity affected society, Hossain emphasizes that when a large portion of the rural population continues to suffer from the arsenic calamity, the more fortunate ones with time to brainstorm and think unconventional ways have the responsibility to critically assess any novel approach until a long-term structural solution is found for Bangladesh.

Children feed camels at the Gabtoli cattle market in Dhaka, Bangladesh. Many of the children of Bangladesh daily drink water with too much arsenic in it. A Tennessee Tech professor is looking for a solution to the problem.

AP Photo/Rafiqur Rahman

On the Web:

More information about Hossain's work is at http://web.tntech.edu/fhossain.

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