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We can combat summer in the city

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Guest Column Opinion

Sun-baked Tucson is becoming a desert island - not the breezy, tropical type, but an "urban heat island." A hot topic recently as the springtime mercury soared to 109 degrees, the "heat island effect" is a scientifically documented urban sprawl byproduct.

But the outlook's not all fire and brimstone. There are energy-conserving measures residents and businesses can take to shrink urban living's effects. And a nice side-effect? They save money.

News reports say Tucson is hotter today than 50 years ago. But don't just take their word for it; step out for a sunset stroll in the 95-degree evening. Feel your own, hot proof.

According to the Heat Island Group, cities can be 8 degrees hotter than the surrounding countryside. When your "countryside" is a desert, the difference between a 105-degree day and a 113-degree day is palpable.

Metro-Tucson has grown to nearly 1 million people in the past 50 some years since it was much cooler; concrete and asphalt now snake into the desert where cacti and wildlife thrive.

Urban sprawl is not without heated consequence. And in a classic one-two punch, global warming also adds to Tucson's elevated mercury.

The main difference between today's Tucson vs. yesterday's is that the paved urban matrix is larger and more densely packed, so the city releases heat more slowly overnight.

Thousands of miles of concrete sidewalks, acres of black asphalt and hundreds of dark-roofed buildings absorb the sun's daytime heat and hang on to it overnight.

Add hundreds of thousands of rush-hour cars zipping across town, humming engines spewing heat onto blacktop, and suddenly nine or 10 hours sans sunlight isn't enough to cool things off.

There are many easy ways to combat the heat island effect - and save money. For example:

-Light-colored and reflective roof coatings deflect hot sun and reduce energy bills.

-Living roofs, like the one at the Ford Rouge Dearborn Truck Plant in Michigan, are better at cooling in summer and insulating in the winter.

-Landscaping to shade buildings, using such native desert trees as mesquites, willows and acacias, reduce heat gain and ambient temperatures while lowering energy costs.

-Drive less: car pool, walk, bike, take the bus.

-Parking lots and driveways can be built or retro-fitted as packed dirt or light-colored gravel.

-Use a cooler in lieu of an air-conditioner.

-Support plans - such as the Sonoran Desert Conservation Plan, a direct offshoot of the Endangered Species Act - to curb urban sprawl.

-A desert tree-planting initiative, "Trees for Tucson," sells native mesquite or desert willows for only $5. Call 250-8220.

Native desert trees cool air under their canopies by up to 10 to 15 degrees. Acting on the same principle as evaporative coolers, they draw water from the ground to their leaves where it evaporates.

Each step we take to combat the heat-island effect may seem as small or simple as a grain of sand - but gathered together in a city of nearly 1 million, let's build a mountain of cool relief.