

# Ring's Reflections

by Bob Ring

## Beating the Summer Heat

Last month Pat and I camped out in our bedroom for days at a time. No, it wasn't a romantic holiday; it was because the darn air conditioning in the main part of the house bit the dust four times in ten days.

Each time the air conditioner went out, Pat and I watched our living area temperature rise, slowly but surely until we were driven upstairs to the bedroom where (thankfully) a second air conditioner continued to work.

It took four visits - and replacing everything in the main air conditioning unit except the air - for the repair guys to isolate an overheating problem in the fan motor that tripped a temperature switch, that blew a fuse ... You get the idea.

While we were ensconced upstairs with our basic survival gear - a laptop, iPad, smart phone, and chocolate cookies, we wondered how Tucsonans coped with hot summer temperatures before air conditioning was invented. Talking to a few older friends who grew up in Tucson, and doing a little internet research, we found some answers.

Husbands would send their families to the mountains or seashore if possible, while they hung on earning a living. That tradition continues today, with many Tucsonans getting the h\*\*\* out of town for the summer.

Those who stayed in Tucson had a few tricks to survive the heat. Some used hand held fans. Most of the cooking was done in the morning after breakfast, during the cooler part of the day.

Some people had sleeping porches, screened on the back of their house. Part of that group would hang wet sheets to gain a little relief from the summer heat. Others even wrapped themselves in wet sheets in front of an electric fan!

Pat remembers raising a young child in Phoenix where summer survival equipment included unlimited popsicles and frequent pool visits - yours or your neighbors. Doing housework in a bathing suit helped too. Pat reminds me that Phoenix is much hotter (especially at night) than Tucson and the sleeping porch idea there is a non starter.

Before we resumed our normal lives downstairs, we also researched the history of man's attempts to fight back against summer heat. Swamp coolers became generally available in the 1940s - removing heat from air blown through thin, water-logged layers of burlap or wood chips. But swamp coolers lose effectiveness in conditions of very hot temperatures and high humidity (i.e. monsoon season).

It was air conditioning that saved the day! Invented by Willis Carrier in 1902, air conditioners use chemicals, for example Freon, that easily convert from a gas to a liquid and back again. As the liquid changes to gas and evaporates, it extracts heat from the air around it.

Starting in 1925, initial applications of air conditioning included movie theaters, office buildings, department stores, and railroad cars. Do you remember the first building in Tucson to use air conditioning? Please let me know.

After World War II, window unit air conditioners appeared and then home central air conditioning. This is when I got lucky and terribly spoiled. My Dad worked for General Electric in the Room Air Conditioner Department; we got to try out all the new models while living in hot, humid Louisville, Kentucky.

I'll be ready to "beat the heat" during my next air conditioning catastrophe. My extensive research included a modern "how to" manual for sleeping comfortably on a hot night. Suggestions included using a fan to blow air over ice, using a hammock, wearing wet socks, and chilling your pillowcase. My favorite recommendation is getting a number of blocks of "blue ice," normally sold in supermarkets, freezing them during the day, and taking them to bed with you at night.

Online Sources: Hot Weather in the Old Days, Evaporative Cooling: History of Technology, History of Air Conditioning, How to Sleep Comfortably on a Hot Night.