

Book Review

Losing Our Cool

Stan Cox, author

In Losing Our Cool, Stan Cox shows indoor climate control is colliding with an out-of-control outdoor climate. Air conditioning (AC) is approaching 20 percent of year-round electricity consumption in the United States (US), the highest percentage in history. Reporting from some of the world's hot zones, Cox documents the surprising ways in which air-conditioning changes human experience. Though

it may save lives, the AC may be altering the body's sensitivity to heat; rates of infection, allergy, asthma and obesity; and, even our sex lives.

Some interesting facts Cox states in his book are as follows:

- The US uses as much electricity for air conditioning as is currently consumed by all 930 million residents of the continent of Africa.
- AC is responsible for a quantity of carbon dioxide equivalent to every household driving a car an average of 7,000 miles a year.
- Fifty percent of American's electricity comes from coal fired plants.
- Refrigerants for an AC unit, chlorofluorocarbons commonly referred to as CFCs, create environmental issues on multiple levels from air quality to the proper disposal of canisters.
- Many office building windows are sealed because of air conditioning. Since windows can't be opened to integrate fresh air into circulation, there is an increase of respiratory illnesses.
- AC is a contributing factor to obesity. As people are staying indoors during warm periods, they aren't going outside to exercise.
- Vitamin D is a nutrient our bodies derive from limited and safe exposure to sunlight. Because people stay indoors more often and for longer periods of time, people are showing an increase in deficiency of Vitamin D.

Here are some things we can do to cool our buildings a better, "greener" way:

1. Use light-colored, more reflective roofs and exterior walls.
2. Plant more trees to shade buildings, and install green roofs made of vegetation and plants.
3. Consider the use of alternative cooling methods such as solar-powered AC, ground sourced heat pumps, evaporative cooling or wind towers.
4. Reduce AC energy consumption by simply turning up your thermostat setting a few degrees.
5. If a room is occupied, then use floor and ceiling fans. If unoccupied, turn off the fans. They're not only wasting energy, but fans are effective when air is blown onto your skin, otherwise the heat produced by a fan's motor actually heats the room.
6. Switch all incandescent bulbs to either compact fluorescent lamps (CFLs) or light-emitting diodes (LEDs). Up to 90 percent of the energy used to power an incandescent, traditional light bulb is actually spent on creating heat, not light.

Tanis Roelofs interviewed reader Greg Sidon for insight about a book which Mother Nature Network hails as, "One of the ten 'must-read' books of 2010."