

KUNI Radio Series “Unplugged”
Show #20: Energy Planting Tips for summer

From the Center for Energy & Environmental Education at the University of Northern Iowa, this is Pat Higby with a series of programs on KUNI to help you save energy.

As spring approaches we spend more time looking at seed catalogs and planning our gardens. We need to think about our yards, too, and how planting can reduce our energy use. Iowa is in the Temperate Region, where we usually try to funnel summer breezes toward our homes. But if your home is air conditioned all summer because of allergies, you may want to keep summer winds away from your house. If this is the case, consider planting a windbreak south of your home for summer, and another north or northwest for winter.

All homes will benefit from trees, which lower air temperature by both shading and evapotranspiration, the process by which they release water vapor. The air around trees can be as much as 9 degrees cooler than the sunny part of your yard, and the temperature directly below trees can be as much as 25 degrees cooler than air temperatures above nearby blacktop!

To shade your home in the summer, but allow the sun into your home in the winter you'll want to plant deciduous trees with high, spreading crowns on the south side. In Iowa during the summer the rising and setting sun is quite northerly, so on the northeast and northwest sides of your home you'll want to plant shade trees as well. Choose trees with crowns lower to the ground to block the low angle light from the early morning and late afternoon sun.

If your new home is on a bare lot, a large tree is a good investment. A 6 to 8 foot deciduous tree planted near your home will begin shading windows the first year. Depending on the species and the style of house, it will shade the roof in 5 to 10 years.

A trellis or lattice with a climbing vine is a quicker solution, providing shade during the first growing season. It will also admit cooling breezes to the shaded area. Consider it for your patio or deck area while waiting for shade trees to grow. Shrubs planted close to the house will also fill in rapidly and begin shading walls and lower windows within a few years. Keep them trimmed or planted far enough from the walls to prevent moisture from accumulating, however.

Another area to shade is your driveway, especially if it is blacktopped. Your goal is to reduce heat radiation and cool the air before it reaches your home's walls and windows. Finally, don't overlook your air conditioner. Keeping it shaded can increase its efficiency by as much as 10%.

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