Heating and Cooling Puzzles

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A warm blanket of snow

Why is there less danger of crop damage on a sudden cold day if there is a good snow cover on the crops?

Heating meat with a "Sizzle Stik"

How can you get a roast to cook faster? Well, you can stick a metal rod into it as is commonly done in baking potatoes. Why does this work. There is a device called the "Sizzle Stik", however, which uses instead a hollow metal tube. Why would a hollow tube like this be better than a solid one?

Feeling cold objects

Shouldn't all objects at the same temperature feel like they *are* at the same temperature? You aren't reluctant to put your clothes on when they are at a room temperature of 21 °C, but how about sitting down naked in a dry bathtub at the same temperature? What's the difference?

Cast-iron cookery

There is an ancient kitchen mystique about cooking in cast-iron pots and pans as opposed to steel ones. Cooks, from the gourmet to the occasional, swear there is less sticking and better, more uniform cooking with the cast-iron pot. Is there any physical basis to that claim?

Pond freeze

Why does the top of a pond freeze before the middle and bottom? (There's more than one reason.) If this weren't so, ther would be virtually no fresh water fish outside the tropics.

Single pipe radiators

While most steam radiators have two pipes (one inlet and one outlet), there is one system in which there is only a single pipe. As if that were not strange enough, it is said that the steam and returning water in that single pipe are at the same temperature. If so, how does the radiator heat the room?