



Bert Weir and Joy Allan stoke their masonry heating stove.

By Darlene Wroe with photos by Cody Storm Cooper

Whether living in a traditional house or cottage far off the grid, like Ron Taylor of Seguin Township, or choosing to explore an alternative method of construction such as straw bale, like Bert Weir and Joy Allan of McKellar Township, sources of heat and power are critical issues.

With rising energy costs, and concerns about the reliability of delivery of the services, an increasing number of people are exploring alternatives. They're finding that a combination of energy sources and strategies can work well to cut costs significantly, while keeping warm in Canadian winters.

In 2002, Mr. Weir and his wife, Joy Allan con-

structed their unique home using an alternative building material.

Hemp straw, used for its toughness, was baled in the usual baling method, and stacked as bricks within a wooden skeleton frame of walls. Cement was used to plaster the exterior and interior of the walls. The result was about three feet of insulation in the walls with the cement absorbing both the exterior warmth of the sun and the interior warmth of the heating sources. Solar panels provide the energy source for electrical requirements in the house, and for heating domestic water. A masonry wood stove in the open-concept home needs only to be lit twice a day, burning four hours in total, to provide 24 hours of heat. The masonry wood stove

also heats water which is circulated by pipes through the floors, and a propane boiler provides back-up. High 10-foot ceilings allow the heat to flow more freely through the house.

High south-facing windows allow the winter sun to add its "passive solar heating" warmth to the home, while a deep eavestrough ensures that the summer sun, located a little higher in the sky, is blocked to prevent excess heat from entering the home on hot summer days. A propane boiler and a gas-powered generator are also on hand to provide further back-up. As an additional conscious effort to sidestep the need for electricity, the couple choose not to use electrical appliances such as toasters. A wood cookstove is also used.