INTERMISSION

Go away, Mr. Winter

Geri Parlin/Tribune staff

Old Man Winter has been in the habit of re-introducing himself weekly to the people of La Crosse — 8 inches of snow here, a little dip below zero there, a gusty wind at daybreak and slippery roads no matter which direction you drive.

It's not as if we weren't already well acquainted with Mr. Winter. He's one of those guests who came to visit around Thanksgiving and hasn't had the good manners to give his hosts any breathing room since.

Hints about overstaying his welcome have gone unheeded. Week after week of his blustery cold and inhospitable snow have made him a most unwelcome guest, but still he lingers, venting his spleen in ice storms and throwing temper tantrums that result in snowfalls that somebody else always has to clean up.

Children tolerate this surly visitor better than most adults. They put up with his sputtering snow tantrums and make snowmen out of them. They rejoice in no-school days and think this is one guest who can linger a little longer.

Mom and Dad may feel differently. Thanks to Mr. Winter, they're out there shoveling and blowing snow and trying to negotiate tricky intersections without embedding their vehicle in anyone else's vehicle. That, too, is a gift that Mr. Winter brings along whenever he visits.

It's not that Mr. Winter is entirely unwelcome. Sometimes, when his disposition is sunny, he takes his hosts along on snowmobile rides or goes skiing or ice skating with them. Followed by hot chocolate, that can be a pretty good thing to do with a guest.

But like any guest, Mr. Winter should know when to leave, and he obviously doesn't. He has whined and pouted and behaved himself most unreasonably. He just keeps hanging on, month after month, taking up the spare bedroom, letting in drafts and keeping a chill in the air no matter how hard the furnace works.

It's time for Mr. Winter to pack his suitcase. It's time to air out that room for Miss Spring, a much more congenial guest who brings along her own bouquet of flowers, even if they are accompanied by showers.

So consider this your notice to vacate, Mr. Winter. Pack your bags, gather up your snowstorms and get out of town.

You can call Geri Parlin at 791-8225. She'll be sitting by the phone waiting to hear from Miss Spring.

Holmen forms community foundation

By **ANASTASIA MERCER**
Of the Tribune staff

HOLMEN, Wis. — Community leaders and school officials in Holmen have combined efforts to create a foundation designed to improve the quality of life in the area.

The Holmen Area Foundation has been created to help individuals, corporations and other donors contribute to the future of Holmen, said Mike Drugan, one of the foundation's board members. The announcement was made Sunday at a press conference during Yes Holmen, the annual exposition of Holmen area businesses.

"It's a management organization which will take any donor's contribution and manage it with the donor's wishes in mind," Drugan reported.

He said the foundation will support educational, scientific, literary, artistic and other charitable efforts, and will not interfere with other fund-raising organizations.

"If anything, the foundation will be in a position to help all the community's organizations achieve their goals," he added.

Drugan said the idea for the foundation arose about two years ago when the school was trying to raise money to finish the school auditorium. About $30,000 was raised before the issue went to a referendum and was ultimately paid for by the taxpayers. Although the money was returned, the show of support convinced school officials and community leaders that the community could support a foundation, he said.

About $5,000 is currently in the fund — given by an anonymous donor for the foundation's start-up process. For more information about the foundation, call 526-1350, Ext. 350; or write to the Holmen Area Foundation, Box 432, Holmen 54636-0432.

Greenhouse effect: Profit

Farm future: Cold-climate greenhouses can grow produce all winter long

By **RICK BARRETT**
Lee Newspapers

Cathy Acherman of the Tribune staff

WORK IN PROGRESS: Roald Gundersen is working on building a solar greenhouse at his home near Coon Valley. Once everything is complete the greenhouse will supply some heat energy to the house and recycle wash water.

Roald Gundersen envisions a family farm under glass where fruits and vegetables grow in frigid Wisconsin winters.

His lush, almost tropical farm nestled in a snowbank sounds like a dream, but it's a reality on two sites in Cashton, Wis., and Canton, Minn.

"We've grown tomatoes even when it was 40 below outside," Gundersen said. "Hot weather crops can flourish in the cold, low-light of winter without a furnace."

Gundersen, an architect by profession, hopes to spread the gospel of cold-climate solar greenhouses throughout Wisconsin.

He says his veggies under glass could be the profit engines that many small farms are desperately seeking.

"For a business happy to see 5-percent profit margins, this could be a revolution," he said. "Wisconsin growers could compete with foreign and sunbelt growers year-round in a wide range of crops. Consumers will have fresher produce, numbering the days of the 2,000-mile (shipped) tomato."

Gundersen's solar greenhouses differ from traditional glass huts that lack insulation. They optimize winter light and can be built into hillsides, using the ground to stabilize temperatures. Shutters can be angled to reflect sunlight off snow, increasing the light by 140 percent.

At Badgersett Research Farm in Canton, daytime temperatures in the solar greenhouse hover in the 80s in February.

"It feels like Florida," Gundersen said. "When people step inside, they believe it."

Badgersett was Gundersen's first cold-climate greenhouse. It's a 1,600-square-foot building surrounded by mounded earth that features a southern exposure. It has a solar panel and wind-driven generator for lights, fans and water pumps.

It has shutters to control light and protect plants from cold nights. But it doesn't have a heating system, and in four years hasn't needed one.

"The shutters weren't lowered to insulate the glazing even when it was 35 below zero," Gundersen said. "That's because the inside temperature never fell below 39 degrees above zero."

Wisconsin's rolling hills and small farms are ideal for solar greenhouses. And being within 200 miles of 10 million urban residents makes it ideal for shipping fresh fruits and vegetables year-round.

"Wisconsin produce growers are prisoners of the seasons," Gundersen said. But "growers using solar greenhouses could open a billion-dollar market including Chicago and Minneapolis/St. Paul. Half-acre operations could support a family and would provide an opportunity for a husband or wife to stay at home while the other spouse works off the farm."

Gundersen's research is supported by an $18,940 grant from the Wisconsin Department of Agriculture, Trade and Consumer Protection. One of the research goals is to produce greenhouse construction plans that anyone can use with minimal labor and expenses.

"It sounds like a great idea," said Kristen Woodhouse, a Viroqua dairy farmer who is converting a three-generation dairy farm to a mushroom operation with a vegetable greenhouse.

Gundersen's greenhouses are surprisingly simple and can be built for less than $10 a square foot, including labor. The frames are made from black locust wood, the roofs from sheet metal, and the glass is regular thermo-insulated glazing angled to optimize sunlight.

"The cost of construction is comparable to standard four-season greenhouses, but it will more than pay for itself in energy savings," Gundersen said. "And unless the roof blows off, which is really not possible, this building pretty much can't freeze in the winter."

Traditional all-glass greenhouses haven't been a huge success in Wisconsin because their European designs don't mesh with cold climates.

"They are very energy dependent and can cost a fortune to heat," Gundersen said. "If a heating system fails, it can put you out of business."

Gundersen helped design Biosphere II, an experimental living station in the Arizona desert. But the ideas he is putting into practice now are more pragmatic.

"If we really learn to build, we will put materials that are available in abundance to their best use — uncut wood, dirt and straw are examples. The goal is to develop workable biosystems. It's more than just growing poinsettias under glass."

Solar greenhouses lend themselves to higher-valued fruits, vegetables, herbs and flowers that have to be shipped into northern states in the winter.

Farmers who can consistently grow fresh produce in the off-seasons benefit from higher prices and buyer contracts.

In Janesville, farmer Mike Finley grows strawberries in greenhouses, giving him a six-week head start on the summer harvest.

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ALONG THE MISSISSIPPI

Archaeology gives us the dirt on past cultures

By **ERNIE BOSZHARDT**
Mississippi Valley Archaeology Center

People have lived along the banks of the Upper Mississippi River for nearly 11,500 years.

Those people were Native Americans for the first 11,150 years, and their heritage was recorded in thousands of mounds and camps and villages along the river.

Archaeological studies of remains reveal dramatic changes through time, reflecting shifting climates, technological discoveries and population increases. Nonetheless, this same record demonstrates successful adaptation for a succession of cultures.

These begin with the earliest known inhabitants of the Upper Mississippi River, the Paleo Indians. They were big-game hunters living in groups of perhaps 25 that roamed the landscape in search of food. At that time, glaciers reached as far south as Lake Superior and the climate was cold and harsh.

But the glacial margins were relatively lush, supporting wooly elephants (both mastodon and mammoth), horses, camels, caribou and giant beaver weighing 500 pounds each. These megafauna animals were hunted or scavenged by the Paleo Indians, and their bones and 11,000-year-old stone spear tips have been found in tributary valleys along the Mississippi River.

As the glaciers receded northward, torrential floods swept the river and created the sand benches where La Crosse and other river towns are situated. By about 10,000 years ago, most of the megafauna had become extinct and a long severe drought began.

This led to the eastward expansion of the prairies, and with the grass came early forms of buffalo. These bison were larger than modern buffalo, and their remains have been found in bogs from Minneapolis to Buffalo County in Wisconsin. The Native Americans shifted their hunting strategies to the buffalo, and now are known as the Archaic Culture. Archaic spear tips of this time are long and slender, and many have been found throughout the northern plains from Wyoming to central Wisconsin, including along the Mississippi River.

Photo courtesy of Mississippi Valley Archaeology Center

DIGGING DEEP: The layer of shells found on this Mississippi River island archaeological dig has nearly 2,000 years worth of dirt atop it.

A climatic change about 4,000 years ago brought wetter conditions, and the archaeological record reveals a number of changes that begin at this time. These include increased use of flood plain resources, early gardening, the first use of clay pots, burial in cemeteries and the first construction of burial mounds. There also is evidence of long-distance trading of ceremonial artifacts and increasing populations.

These changes mark the beginning of the Woodland Cultures, and the Mississippi River was a center of Woodland activity. Camps and villages were established at nearly every flat spot along the river, including islands where clams were collected and baked.

Thousands of mounds once dotted the river margins and trade items included large flint knives from the Rocky Mountains and Black Hills, copper axes and ornaments from Lake Superior, and specially crafted pottery and pipes from the South. For unknown reasons, the trade network collapsed about 1,500 years ago, though Woodland people continued to live and bury their dead along the Mississippi River for another 500 years.

About 1,00 years ago a new series of changes occurred, including the introduction of the bow and arrow, corn agriculture and new kinds of pottery and other artifacts. These shifts mark the end of the Woodland Culture and the beginning of the Mississippian Culture, though Mississippians were probably descendants of Woodland people.

Mississippian people continued to harvest the flood plain resources of the river, and complemented their diet with corn, beans, squash, elk and deer. In the Upper Mississippi River, the culture was called Oneota.

Oneota populations tended to congregate in specific locations, and along the Upper Mississippi River the Oneota first lived at Red Wing, Minn., and later moved to La Crosse.

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