



The Energy~Efficient Old House

By Clem Labine

WHILE IT IS IMPORTANT for the old-house owners to pay attention to energy conservation, it's equally important that we not rush in thoughtlessly and tack on every gimmick that's being hustled by fast-buck salesmen. Much of energy conservation is common sense. Significant savings can be made by changing habits—without ever touching the house.

OWNERS OF HISTORIC HOUSES, especially, should beware of taking steps in the name of energy conservation that will either alter the architectural character of the house or else harm the fabric of the structure. There are often less drastic methods that can achieve comparable results. For instance, re-examine the way you operate the house. These pointers seem self-evident, yet most of us have developed profligate habits that are a carry-over from the era of cheap energy.

HERE ARE JUST a few checkpoints against which you can measure your own energy-consciousness;

(1) In winter, set thermostats at lowest possible settings. Insulate yourself with sweaters (that's easier and cheaper than insulating the house.)

(2) In summer, utilize natural cooling as much as possible before turning on the air conditioner (more on this later).

(3) Don't heat (or cool) rooms that aren't in use. Close off areas of the house that aren't being occupied.

(4) Reduce levels of illumination. (Contemporary interiors are over-lit by historical standards, anyway.) Besides the power consumed by lighting, heat from the lights adds to the cooling load in summer. If you are using an air conditioner, it puts you in the position of using electricity to make heat (in the air conditioner) to remove the very same heat.

(5) Heating plant should be cleaned regularly for maximum fuel efficiency. If you can't do this yourself, have a service man to do it. The hot water tank should be flushed once a month to get rid of the sediment that accumulates at the bottom and which reduced heat transfer. If the furnace is an old coal boiler adapted to oil, consider replacing it with a new unit with higher fuel efficiency.

IN ADDITION to the above, there are a series of "soft technology" operational steps that were common in the old days, but which fell into disuse in the era of cheap energy. These steps help you control the environment within the house without heavy capital expense or consumption of energy.

SPRING LECTURE SERIES

At the Carriage House at Governor Moses
Wisner Historic House, 405 Oakland Avenue, Pontiac

Tuesday Evenings — 7:30 P.M.

MARCH 23

"Tudor Revival in Southeastern Michigan"
Dr. John Cameron, Professor of Architecture
at Oakland University

A new lecture and beautiful slide presentation describing Tudor architecture in southeastern Michigan.

APRIL 27

"Judge Charles H. Wisner and the Red Devils"
Charles Hulse of Flint

Early automobiles built at the turn of the century by Judge Wisner and other early "Red Devil" automobilists of the Flint and Pontiac areas are portrayed. The exploits of these enthusiasts are colorfully described.

MAY 25

"A Dollar House is No Bargain"
Charles and Katherine Hagler of Ypsilanti

The Haglers reveal with lecture and slides the many problems they encountered in buying and restoring an old historic house

ADMISSION

Members — Free

Non-members — \$2.00 each lecture

\$5.00 complete lecture series

For further information call Wisner House - 338-6732

A LONG-TERM STEP is the planting of deciduous (leaf-shedding) trees on the south and west sides of the house. The leaves shield the house from the sun in summer—and provide additional cooling vapors through transpiration. Evergreen trees planted on the side of the house facing prevailing winter winds can also act as a windbreak.

SHUTTERS, window shades, drapes and window awnings are old-fashioned—but effective—devices to control interior house climate. These devices are used to counter the fact that single-thickness window glass can allow an enormous amount of heat to enter—or escape from—a house.

IN THE SUMMER, the old-time householder would open up the house in the morning to let it fill with cool night air. Then as the sun began to heat things up, shutters and window shades would be drawn on the sunny side—and perhaps awnings let down also.

Continued on page 3

VICTORIAN CHRISTMAS HUGE SUCCESS

Evergreens and red bows were everywhere as the Society celebrated its traditional Victorian Christmas Week at Pine Grove.

Open house was held on Sunday, December 6th and it is estimated that we enjoyed the largest attendance ever. Tours were enjoyed by the guests and musical entertainment was furnished by "The Merrie Madrigals" from Tuesday Musicale. Margaret Ann Jackson conducted her old-fashioned children's program in the one-room schoolhouse and played to capacity crowds. The program, which followed a theme of "Teddie Bears", was repeated several times to accommodate the standing-room only audiences. Margaret Ann also assembled and had on display in the schoolhouse a very large collection of "Teddie Bears" of all sizes and shapes.

Our new displays in the museum rooms of the carriage house were also proudly shown to our visitors who concluded their visit with mulled cider and cookies served in the carriage house.

Part of the Victorian Open House celebration included the annual drawing for a beautiful hand made quilt. The winner of the quilt, who chose to remain anonymous, promptly donated it to the Society to be held as a permanent accession in honor of Edna Bondurant who has been the dedicated leader of the quilting project for many years. Mrs. Malcolm (Lillian) Kahn was the winner of the drawing for the dressed bisque doll which was also made by Edna Bondurant.

On Tuesday, December 8th a capacity audience enjoyed the Candlelight Musicale. Champagne and punch were served as a pleasant prelude to a program of holiday music presented by Charles A. Wilson, Mrs. Robert Bommarito and Mrs. Charles H. Hall. Coffee and cookies were served at the conclusion of the musical program.

Finally, a new activity added to our Victorian Christmas Week was a great success. over 300 school children, senior citizens and other interested persons enjoyed tours of Pine Grove during the week following Victorian Open House.

Sales in the Potpourri Shoppe were brisk during all of the Christmas activities. Our supply of goods for sale was enhanced by the furnishing of



"The Merrie Madrigals" Sing at Victorian Open House

many hand-made items by our busy volunteers.

Our thanks go out to the dozens of volunteers who worked uncounted hours to make our holiday celebration a huge success.

ENERGY TALK HIGHLIGHTS JANUARY BOARD MEETING

The January board meeting of the Society was concluded with a very informative talk concerning our nation's energy supply.

Thomas Rugh, head of public relations for Consumers Power Company's Pontiac area office, spoke on the topic "Energy Supply - Now and in the future". He pointed out that our nation's present reserve of natural gas is a 10 year supply, whereas the reserves of our nearest neighbors, Canada and Mexico, exceed a 30 year supply for each. We were told of the work in progress to provide alternative sources of gas through synthetic processes and further exploration for natural gas. The need for energy conservation was emphasized by his dramatic presentation of current facts and figures.

GM MEN'S CLUB AIDS SOCIETY

The General Motors Men's Club of Pontiac recently donated \$600 to be used by the Society. Through their generosity we were able to purchase fifty folding chairs and three folding tables which were badly needed for meetings and exhibits.

SUSAN METZDORF SUFFERS PAINFUL INJURY

Susan Metzdorf, that dynamo of energy who has contributed much work and lively spirit to our Society, recently fell on ice and suffered a very serious and painful leg injury.

She has been hospitalized and is expected to be out of action for several months. Our sympathy goes out to her and we wish her a speedy recovery.

PINEGROVE CLOSED TO TOURS DURING WINTER MONTHS

In an effort to conserve energy and reduce the rising utility costs, the Society recently decided that Pinegrove would not be open for tours during the mid-winter months. From mid-December until April no tours will be conducted.

The office and library is open for business during this period, however, and the other business of the Society, such as board and committee meetings is proceeding as usual.

SORORITY GIVES DONATION

A check for \$250 was received from the Michigan Zeta Chapter of Pontiac of Alpha Delta Kappa Sorority. This money will be used to purchase a new bookcase for the library.

CRAFTS MEETINGS

Our crafts people are meeting every Wednesday in the Wisner house loft from 9:30 a.m. to 2:30 p.m. Bring your lunch and craft ideas. Join the fun. As a special attraction, Edna Bondurant is teaching quilting techniques.

WELCOME NEW MEMBERS

We welcome the following new members. Their interest in the Society and its activities is deeply appreciated.

ACTIVE MEMBERS:

Mrs. Frank Allen
Mr. and Mrs. Donald McEvoy
Mr. and Mrs. James H. Clippard
Ms. Betty Cooper
Mrs. Kenneth Ealy
Mrs. Thomas C. Fitzpatrick
Mr. and Mrs. Russell A. Grover
Mrs. Robert Johnson
Mr. and Mrs. Dennis D. Kendrick
Mrs. Patricia Maurer
Mrs. Jean Milton
Mr. and Mrs. Warren C. Spatz, Jr.
Miss Lee Tuttle

LIFE MEMBER:

Rex Lamoreaux

IN MEMORIAM

We regret to report the death of the following members:

Dolly E. Ayers
Mrs. Maynard Slater

NEED & DREAM LIST

The following is a list of items which we need or would like to have at Pinegrove:

Snow shovels
Scissors
Wire Cutters
Manikens (Petite Ladies, Men and Children)
Artificial Meats (To hang in the smoke house)
Hurricane Lamps
Fireplace Screen (Black Iron, 1850-1870's Vintage for the parlor, call the office for dimensions)
Canister Set (For Wisner House Kitchen)
Tall, oblong, plastic trash basket with lid (For Wisner House Kitchen)
Adding Machine
Chalk Board for Carriage House
City Directories
Old Pontiac Newspapers
1982 Wall Calendars

A donation of any of these items will be greatly appreciated. If you wish, you may also take a charitable tax deduction for such gifts.

POTPOURRI SHOPPE ARRIVALS

The 21" Ethel bisque doll kits, which have been sought by many of you, have just arrived and are now on sale in the potpourri shoppe.

VISIT OUR NEWLY COMPLETED COUNTY ROOM EXHIBIT IN THE CARRIAGE HOUSE.

RECENT INTERESTING ACCESSIONS

Mrs. James Burke
City Director of Pontiac; Royal Oak and Ferndale and Book: **The Brook.**
Mrs. Aaron D. Riker
Framed picture of the late Dr. Aaron D. Riker
Mrs. Paul Atkins
Book: **The Social Mirror**
Mr. and Mrs. Bartlett Wager
Michigan History magazines and Oakland County Directory.
Mrs. W.E. Jackson
Schoolhouse desk; picture; card table and chairs and Book: **Life and Death in Rebel Prisons.**
Mrs. Leland Forman and Mr. Gaylor Forman
Book: **All About Franklin**; copies of old photographs; Franklin, MI Memorial Day pamphlet.
Mr. Rex Lamoreaux
Currier & Ives Print; Fibre Measure No. 2 bushel; Bisque floral basket and numerous tools.
Mrs. Marian Beardslee Raymond
Account book belonging to Cornelius Sutton; magazines, glasses and shoe buckles.
Mr. William Knowlton
Oak rain barrel, originally for Whiskey.
Mrs. Richard C. Hewitt
Book: **The Story of a Village Community.**
Mrs. L. Dunlap Estate
Numerous clothing articles; furniture; tools; publications and ephemera.
Mrs. Charles F. Roush
Formal clothing of the 1900's.
Mrs. Allen E. Priestley
Booklet: **Fabrics for Historic Buildings.**
Mrs. Jack Dekker
Manuscript: **The Story of Braeburn.**
Mrs. H.T. Rombough
Quilts; Ediphone; clothing and furnishings.
Mr. Maxwell Doerr
Plat Book of Twp. of Pontiac, City of Pontiac and Plat Book of towns of Waterford, West Bloomfield, Bloomfield and City of Sylvan Lake.

VOLUNTEERS CONTRIBUTE

Did you know that between November 3rd and December 17th, 1981 our volunteers contributed over 600 hours of work? It is the efforts of such dedicated people that keeps our Society alive and healthy. Thanks to all of you.

Energy-Efficient Continued...

CONVERSELY, in winter, shutters and heavy drapes can be closed to prevent radiant heat losses to the cold side of the house. But on the sunny side, everything is pulled back from the windows to let the sun's warming rays stream in.

FIREPLACE DAMPERS are also an operational control. On warm days, the dampers can be opened to allow warm air to rise up the chimney, which promotes air circulation. On cold days, of course, the dampers should be closed to prevent heat from escaping.

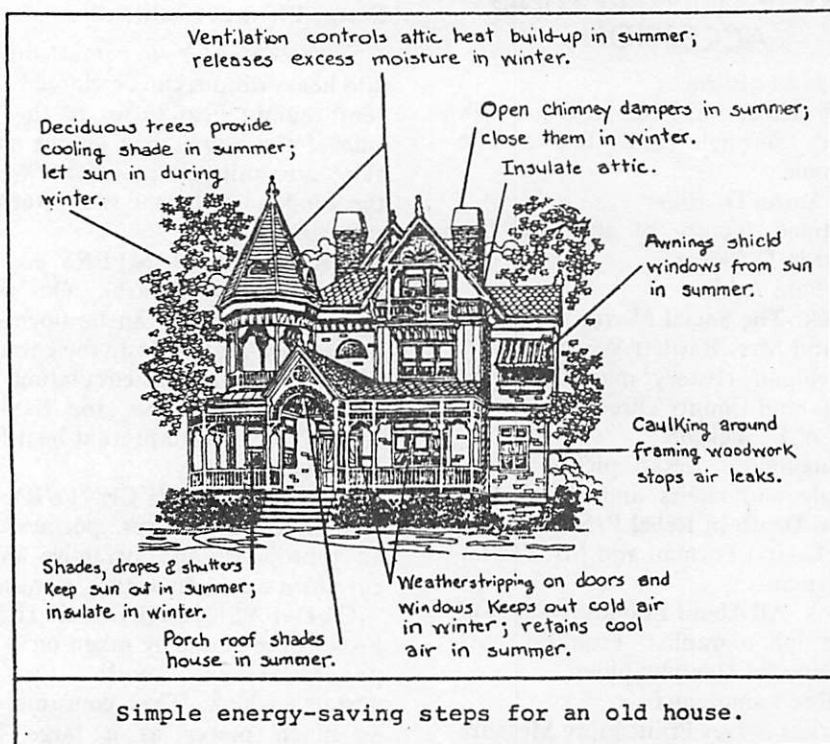
FOR LATE 19TH CENTURY and turn-of-century houses, portieres are an appropriate and attractive way to cut down on drafts within a house.

OLD-FASHIONED CEILING FANS have suddenly taken on a very practical—as well as a nostalgic—look. They consume only as much power as a large light bulb...and far less than an air conditioner. On all but the hottest days, the cooling provided by a ceiling fan is adequate. And there's another energy-saving aspect to ceiling fans: During the winter, a ceiling fan can help warm a high-ceilinged room. That's because hot air tends to rise and collect in a stratified layer at the top of a tall room. Running a ceiling fan at low speed recirculates the hot air back to the floor level—evening out the temperature in the room and lowering the fuel demand on the furnace.

RADIATORS should get special attention; efficient transfer of heat from the radiator to surrounding air is critical to fuel conservation. Dust or clean radiators at least once a month during the heating season. Avoid painting radiators if possible; use radiator covers instead. If it is necessary to paint, use the special paint designed for this purpose. If an old radiator is crusted with paint, it would be a good idea to strip it. If you have a strong friend, the easiest way to strip a radiator is to remove it and take it to a shop that has a sand-blasting rig.

YOU CAN INCREASE heat output from a radiator by placing a small fan on the floor and aiming it at the radiator.

EXTERIOR PAINT COLOR has an impact on energy efficiency. In southern areas where cooling is the primary consideration, light colors reflect more of the sun's heat, keeping the walls cooler. In northern areas, where heating is the primary con-



Energy-Efficient Continued...

sideration, darker colors will absorb more of the sun's heat during the winter. Of course, paint color selections has to take into account aesthetics and historical precedent.

BECAUSE HEATED AIR rises, much of the heat loss from a house is through the roof. Every old house will benefit from attic insulation. Technical problems are few because it usually is possible to get the proper vapor barriers installed. It is essential that any insulated attic have proper ventilation to prevent condensation of moisture. Best way to insulate an attic is to put insulation between the attic floor joists with vapor barrier facing down. Worse place to install insulation is between the rafters directly against the roof boards. This doesn't allow for adequate ventilation under the roof.

INSULATION IN THE SIDE WALLS of an old house should be the LAST energy-saving step tried. Because of the difficulty of installing adequate vapor barriers, side wall insulation can cause serious paint peeling and rot problems. Consider side wall insulation only after every other step in this article has been tried and the resulting energy savings evaluated.

UNHEATED CRAWL SPACES under a house can benefit from insulation.

SINGLE-THICKNESS WINDOW GLASS plus gaps around old sash account for large heat losses. So storm windows are a logical energy-saving step. The only problem is finding windows that don't detract from the

house's appearance. It is almost impossible to find wooden storm windows these days, so most of us have to come to terms with aluminum. Just avoid the raw aluminum look. Aluminum windows now come in a variety of pre-baked finishes. If you can't find a color that is compatible with your trim paint, buy white or the color that is closest to your desired color, and then paint them yourself.

CONDENSATION is frequently a problem with storm windows on old houses. If the storm windows leak cold air, you may find condensation on the inside windows. Usual solution: Caulking thoroughly between the storm window and the exterior window frame.

IF CONDENSATION OCCURS on the inside of the storm windows, it means that loose-fitting inside sash is leaking moisture-laden air into the space between the two windows. Usual solution: Using rope-type caulk to seal around the inside sash.

AIR LEAKING THROUGH small cracks and holes in a building's exterior is a major source of heat loss (as well as heat gain in summer). Reducing air infiltration involves a methodical series of steps:

- On wood structures, make sure that the exterior paint film is in good condition.

- On masonry structures, make sure that the mortar is sound. Repaint if necessary. Avoid, however, application of masonry sealers—except in highly unusual circumstances. Sealers can trap moisture in masonry walls and cause accelerated deterioration.

- Caulk all construction joints with a high-quality acrylic or butyl caulk. Fill all holes in exterior wood with putty or glazing compound.

- Caulk gaps in interior woodwork—especially where it butts plaster surfaces—and around electrical outlet boxes where necessary. You can tell which interior gaps need filling by passing your hand along the woodwork on a cold winter day. Chances are you'll be amazed by the amount of cold air you feel squirting into the room.

- Insert strips of felt between wide gaps in floorboards that allow cold drafts. Felt is better than any solid filler because it can expand and contract with the boards.

- Weatherstrip around doors and windows. This is especially important where there are no storm windows to cut down on drafts.

- On very old houses, check for gaps where the roof rafters meet the side walls. They may be big enough that you'll have to stop them up with fitted blocks of wood.

DON'T WORRY if you don't stop 100% of the air infiltration—a house has to take in **some** fresh air to replace oxygen used by respiration and combustion.

SOME PEOPLE SEEM TO FEEL that all they have to do to solve the energy crisis is to switch to burning wood in a fireplace or stove. Besides the fact that a fireplace is the least efficient of all home heating systems, there is an additional fallacy in the switch-to-wood syndrome.

YOU CAN ONLY FEEL ENERGY—VIRTUOUS if: (1) You are burning only fallen wood; or (2) You are managing your own woodlot and are growing as much wood as you are burning.

TREES, although renewable, are not an infinite resource. There are many countries—including China—that have been stripped virtually bare of trees by wood-burning householders.

REGARDLESS OF THE SOURCE of the energy, the old-house owner's first priority should be to make your house consume LESS. If no one has ever fitted up your home for maximum energy savings, you should be able to save at least 25-40% of your annual energy consumption by following the steps outlined in this article.

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