RECIPES from CAROLYN SWART

SIMMERED FRESH PORK CHOPS

Chop a medium-sized onion and saute in a large frying pan until tender. Next, place the fresh pork chops in the pan and add enough water to cover the bottom of the pan (or a little higher). Add about a quarter cup of wine or sherry, cover the pan, and simmer until done.

To make gravy, remove the chops from the pan and keep in a warm place. Have ready equal amounts of flour* and cold milk mixed thoroughly together. Mix this into the juice in the pan and stir constantly until gravy comes to a boil. Add a little more water or milk if desired and let it come to a boil again. Serve the gravy over the pork.

*Whole wheat flour thickens gravy just as well as white flour does—keep away from that white flour, folks!

NUTRITIONAL BREAKFAST DRINK

1 cup raw milk
1 spoon non-instant milk powder
1 spoon nutritional yeast
½ banana
1 egg
a few drops vanilla
a sprinkling of nutmeg

Put all of the above ingredients in a blender and whirl until smooth and frothy.

This drink tastes especially delicious as compared to some other nutritional drink recipes that I have made and had a hard time "getting down."

WINTER TOSSED SALAD

Unless you've got lots of extra money (and most of us don't) it's ridiculous to make a tossed salad during the winter months with the price of iceberg lettuce, tomatoes, and cukes being out-of-sight. Instead, try using seasonal vegetables which are much better buys. Here's a combination I especially enjoy:

Green cabbage - leaves separated and torn into pieces.
Radishes, celery, carrot - cut thin
Onion - chopped
Turnip - cut in thin, matchstick pieces
Dressing - mayonnaise, lemon juice, paprika, salt and pepper.

To add more protein to a salad, add chopped nuts, grated cheese, and hard-boiled eggs.

To add lots of iron, use fresh spinach leaves as the green.

Hint: Tossed salads seem most tasty and enjoyable when the basic green is torn into medium bite-sized pieces and the other veggies are sliced fairly thin or cut into fine strips. Take the time, it's worth it.

A Report: Conference on Energy-Conserving Solar Heated Greenhouses

Many of us are interested in solar heating of the structures we live in, and the organic growing of the vegetables we consume. At the basis of this interest is our desire for a healthier environment and a non-destructive lifestyle (i.e., recyclable, non-polluting fuels and an end to non-organics being incorporated into our ecosystems).

The weekend of November 19-20, 1977 I attended a Conference on Energy-Conserving Solar Heated Greenhouses which attempted to address both these issues. As far as I know, this is the first meeting of this kind, and there was much excitement in the air (as there always is when people come together to share their ideas). The conference was held at Marlboro College, Vermont and was sponsored by Total Environmental Action, New England Solar Energy Association, Maine Audubon Society, and Energy Research Group of Marlboro College in cooperation with Friends of the Sun, Vermont Recycled Greenhouses, and Kalwal Corporation. Many more people attended than I had anticipated (over 300), and the speakers included over 30 investigators. It is impossible to relate all that was presented, but I will try to briefly describe what stood out to me.

The Keynote Address was by Tom Lawand of the Brace Research Institute, McGill University. He talked of his own pioneering work with greenhouses, and proved his statement "there is nothing new under the sun" by showing slides of very early structures using solar principles. (One example was a few-hundred-year-old European live-in solar green house.)

Bill Yanda of Santa Fe, New Mexico described how he and his wife go around the country giving solar greenhouse workshops. People in communities organize materials and a site before Yanda gets there. When he arrives he oversees a two-day construction project, which results in a greenhouse. Bill believes strongly that a concrete example to a community of what can be done is important in getting projects of this kind going.

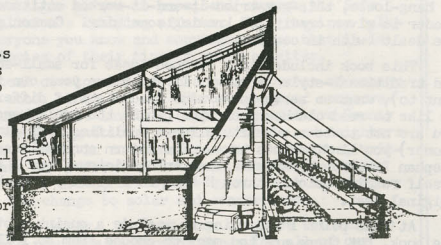
A CONCRETE EXAMPLE TO A COMMUNITY OF WHAT CAN BE DONE IS IMPORTANT IN GETTING PROJECTS OF THIS KIND GOING.

Doug Tuff of Hineburg, Vermont gave a convincing presentation of the advantages of passive solar systems over active solar systems. His evidence favored passive systems in such areas as efficiency, maintenance, and economics. If you respect simplicity, as I do, Doug's talk was heartwarming.

Dave MacKinnon of Rodale Press and The Museum of Northern Arizona made me reconsider light in a new "light". His presentation was entitled Light Levels in Solar Greenhouses and dealt mainly with the differences and utilization of direct light, diffused light, and reflected light. Apparently reflected light is necessary to completely light a solar greenhouse (usually only the south wall is transparent), yet it creates hot spots which will overheat plants. He suggests a system which allows reflected light to first pass through diffusing materials, and moveable insulation on north, east, and west walls for more flexibility. He brings up the important point that a well designed solar greenhouse for the winter can end up being completely useless in the summer. Another opportunity here for creative work to be done.

The most eye-opening presentation for me was by Abby Rockefeller and Carl Lindstrom of Clivus Multrum, Cambridge, Massachusetts. They described a system they had developed for greywater (all waste water except toilet material) use in the greenhouse. They have devised a method of using greywater to water and fertilize greenhouse plants while "purifying" the greywater and reclaiming heat (since most greywater is warm when it is released). This is recycling at its best.

An original (yet not totally convincing to me) design was a parabolic aquaculture/greenhouse described by Davis Staub and Evan Brown of the Ecotope Group, Seattle, Washington. They seem very experienced in organic gardening and innovative housing design. They, like the New Alchemists, are looking more towards total ecosystem design, yet I find their aquaculture set-up in need of much overhaul. The back of their greenhouse is made of large parabolic-shaped supports coated on the inside with reflective material. Sun enters the greenhouse and is concentrated by the parabolic reflectors toward an in-ground water tank. The water tank will store heat and hopefully support an aquatic ecosystem. Terrestrial plants grow in the space between the water tanks and the front of the greenhouse.



Ark Section through Barn, Rock Storage and Greenhouse Areas. Solar-Algae Aquaculture Ponds are in Two Rows Down the Middle.

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The last speakers were, most appropriately, from the New Alchemy Institute. Kalhi Ryan talked of "Life Within the Bioshelter", and Earle Barnhart of "Bioshelters". They gave an inspiring and educational presentation dealing with the total ecosystem greenhouses which the New Alchemy Institute has been experimenting with. Much Much of what they said is best explained in the recently published New Alchemist's Journal #4 (which I encourage you to obtain). The New Alchemists are scientists with a rare wholistic outlook, dedicated "to restore the lands, protect the seas, and inform the Earth's stewards". Their greenhouses combine terrestrial plants, aquaculture systems, animal controls and pests, and man. They are striving to achieve the stability and durability of a mature ecosystem with the productivity of a young ecosystem. The New Alchemists look at every aspect of their greenhouses, and try to match and create conditions for the myriad of plants and animals which inhabit their "arks". In the words of the New Alchemists: "We seek solutions that can be adopted by individuals or small groups who are trying to create a greener, kinder world. Our major task is the development of ecologically derived forms of energy, agriculture, aquaculture, housing and landscapes that will encourage a repopulation and revitalization of the countryside."

"WE SEEK SOLUTIONS THAT CAN BE ADOPTED BY INDIVIDUALS OR SMALL GROUPS THAT ARE TRYING TO CREATE A GREENER, KINDER WORLD"

For me, the conference ended on an uplifting and positive note. All agreed that there should be more meetings like this in the future, and there is talk of a western solar-heated greenhouse conference before long.

One purpose of this article is to inform; the other is for me to reach out to those with common interests. If you have any questions about this conference, or just feel like talking about solar greenhouses and related fields, please write to the address below:

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Box 91
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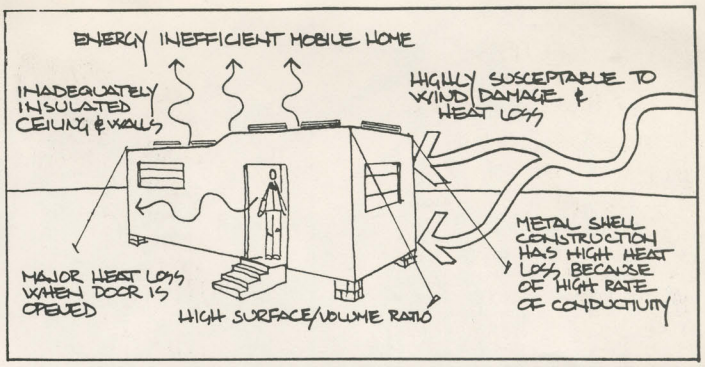

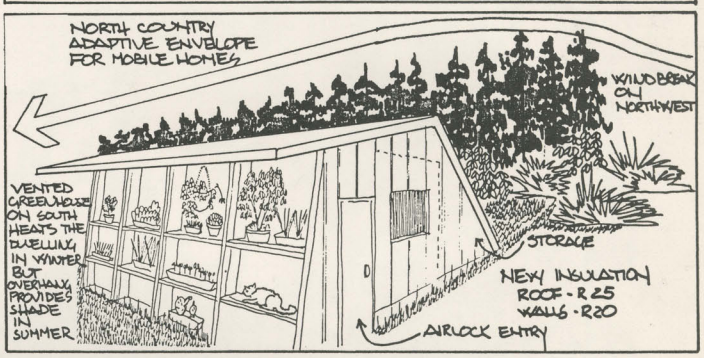

ADAPTIVE ARCHITECTURE and MOBILE HOMES • Terry Krinsky

One measure of a good home is the degree to which it adapts to its regional location and specific site conditions. Early European settlers in the North Country built simple log structures or post and beam dwellings with steep gable roofs. These structures, built with local materials and the help of neighbors, are highly adapted to our snowloads and windloads. Simple and functional dwellings such as these create a local character that reflects our own particular combination of forest types, stone quarries, sawmills, forges, climate and personalities that may exist nowhere else.

Current and projected energy shortages emphasize the need for an adaptive North Country architecture. New insulation materials and wood heating systems are easily accommodated into these traditional houses with a resultant gain in energy efficiencies and comfort. The need and opportunity for adaptation between house and site has never been higher.

However, the Comprehensive Land Use Plan for St. Lawrence County indicates a significant trend away from highly adapted dwellings. Specifically, mobile homes accounted for 52% of all new housing in the county between 1960-1970. This popularity is, of course, due to the initial low investment and short term costs of ownership as well as the immediacy of occupancy. Today, St. Lawrence County has one of the highest proportions of mobile home dwellers in the nation. The fact is mobile homes are not particularly designed or outfitted for North Country conditions. The same basic mobile home unit may be sold in both St. Lawrence County and Florida. As part of the Comprehensive Land Use Plan, the staff of the County Planning Board has suggested that it may be possible for owners of existing mobile homes to increase the adaptation of their dwellings to both regional and on-site conditions. This is suggested only as a remedial program for existing mobile homes - it is not to be an endorsement for future mobile home proliferation.

ORIENTATION

Most mobile homes have been sited parallel to the road frontages regardless of the relation to sun and wind. Mobile homes are mobile! The units can be rotated to face south.

FUNCTIONAL PLANTINGS

Windbreaks of native evergreens planted on sculpted earthmounds are a simple yet effective way to reduce the windload on mobile homes. These should be located in the path of winter winds, in most cases northwest of the dwelling.

ADAPTIVE 'ENVELOPE'

A functional envelope can be owner-built around an existing mobile home. Additional insulation here will increase the energy efficiency of the dwelling. The heat loss associated with the high surface/volume ratio of the typical mobile home will also be tempered. Less of a burden is placed upon the heating system, thereby decreasing the high fire hazard risk usually associated with mobile homes. An integral vented greenhouse on the south side will help heat the dwelling on cold clear days and expand the available living space during warmer seasons. A foyer entry will eliminate heat losses when entering or leaving the house. More storage space is available. Sloped roofs will shed snow and ice; windloads can be accommodated. The mobile home itself will be protected from direct exposure to weathering so the life span of the unit will be increased.

Visually the envelope can take on the elevations of a typical gable house or be designed to maximize solar collection and minimize windloads as the unit in sketch does. In any case, local materials, rough-sawn lumber, and recycled windows will keep costs down and reinforce community character.

Many mobile home owners have already made alterations or additions to their dwellings. Typically these have been shed-roof rooms added to gain extra living space. The money spent on these additions, if used to finance an adaptation program would probably be returned over the years in lower heating costs, lower depreciation rates, and lessened fire hazards. Also, the visual and functional benefits to the lifestyle of the occupants are additional incentives to adapt to the realities of the North Country landscape.