

Ark

**PROJECT DIRECTOR SEES POSITIVE RESULTS**

# Stone Throwing Easing Against Unique Island Ark

(EDITOR'S NOTE: Much information is afloat about the Ark and its role on P.E.I. This second in a two-part series on alternative energy presents the criticisms and support of the Island's research laboratory at Spry Point.)

**HAILS ARK**  
But David Bergmarck of Miller Solsearch, involved in designing the Ark, says criticizing the Ark is like criticizing "a model T...the Ark has advanced the principles of solar energy across Canada. It represents a certain stage in the development."

**By ROSEANNE McCABE**  
**SPRY POINT** — The Ark may well be recovering from a streak of bad publicity. "The Ark is starting to prove to Islanders that we are doing something out here, that we're researching in areas to help people live in the future without being so dependent," says Dr. Ken MacKay, director of the Ark project.

The Ark was a big concept which did not translate well to the average homeowner. The solar collector panels used "were the coming thing. Instead of decreasing in price as we expected they increased in price," he said.

Noah couldn't have had half the trouble with his ark. Then again, Noah didn't have an active solar system or wind power system to flunk out. Nor did he have any reporters around to blab it if they did.

Bruce McCallum, former employee with the department of environment, also involved with the Ark's beginning, said the Ark has to be seen in its historical context.

**LOTS OF CRITICISM**  
The people at the Ark have had their fill of stone-throwing at their glass house.

"The ark was intended to be a first step in an extensive research station...in retrospect I see it as biting off more than they could chew."

Since the Ark opened in 1976 it has been criticized for being an expensive frill, for experimenting with projects already tried.

Tony Caffell, solar engineering consultant and former employee of the Institute of Man and Resources, says the Ark project has not been successful in turning its information over to the public.

And the media has found it difficult to forgive the faulty active solar system and wind system.

But in biology the Ark has been successful at growing vegetables year-round - one of their aims for self-sufficiency. The passive solar system has also worked well.

Yet the Ark has gained a positive national reputation. Norman Hall of Enersave says it's "interesting" how positive opinion of the Ark filters across Canada - while the negative remains.

"In fact we're building on the Ark experience to produce solar greenhouses using lower-cost glazing panels," he says, referring to his own company Renewable Energy Systems Ltd.

Gordon MacQueen, woodstove retailer on Malpeque road, is more blunt: the windmill system and solar collector system were "abysmal failures...someone has to say it."

**PROJECT CONTINUES**  
Away at the end of a clay road at Spry Point the Ark project continues.

And the incubated setting of scientists-at-work is not the answer.

The Ark was designed in 1975, was opened in 1976 in a ribbon-cutting ceremony by Prime Minister Trudeau, who dedicated it to the future of humanity.

"A few people will never solve a problem the masses create," he said, referring to prevalent energy-hungry attitudes.

The bioshelter built by the New Alchemy Institute, a U.S. based organization, was designed to be self-contained unit powered by wind and heated by the sun.

The Ark houses a research laboratory, living unit, family and commercial garden and fish farm.

Today the Ark, operated by the Institute of Man and Resources on a \$300,000 budget, is funded by Environment Canada and Energy Mines and Resources.

And Dr. MacKay after a lengthy interview and tour of the Ark says the Ark has been given a rough time in the past.

"We're researching self-sufficiency without claiming to be self sufficient," Dr. MacKay said, responding to criticism that the Ark was not self-sufficient, after claiming it was. He says the Ark is strengthening its research and demonstration role and has expanded to outside the building.

**BETTER PR**  
Public relations and information services have improved with extended visiting programs including visitations to schools.

Living quarters of the Ark are heated by solar heat and wood. The active solar is in

action again since this past week when leaking panels were repaired.

The solar greenhouse - the largest in Canada - houses 400 gallon fish tanks which serve for hatching, growing and keeping larger fish, as well as storing heat.

Waste from fish is used as natural fertilizer in vegetable growing in the greenhouse.

"It works...our yields are as good or better than those of Ontario greenhouses," Dr. MacKay says.

So within the greenhouse the heating system, the fish project and crops grown without chemicals or commercial sprays, along with pest control, has been successful. The greenhouse has operated through three winters, Dr. MacKay says.

In gardening outside, workers are continuing experimentation in biological food production. Workers have extended their fish project into outdoor ponds.

The Ark's greenhouse

operates on less than one-quarter the cost of heating a regular greenhouse. Regular greenhouses require heating in winter and cooling in summer - consuming more energy than a solar greenhouse designed to retain more consistent and controlled heat.

**EYE FUTURE**  
The Ark is now designing a new solar greenhouse potentially commercial. There are also plans by two commercial growers for solar greenhouses.

An optimistic Eric MacEwen, public relations officer for the Ark, says: "I can see solar greenhouses dotting the communities across the Island" in years to come.

Becoming independent in food production is fundamental to self-sufficiency on the Island, Mr. MacEwen said, because it means importing fewer things.

"We're demonstrating how we can be self-reliant."