

A 73-Year-Old Ecovillage in the Land of Ice and Fire

By Albert Bates

1800 words

A little over an hour from the airport the roads narrow down to two lanes, and our tour group comes upon a crossroads and a community building with large blue letters: “Borg.” No relation to *Star Trek*, just an Icelandic town hall and post office. Turning off on the dirt road we pass lush fields of grass and frolicking Icelandic ponies, their long manes and tails catching the wind. A little ways up the road a sign marks the driveway to Sólheimer by announcing the availability of food and lodging. We descend down the drive and pull up to the parking area beside the large glass building, once a greenhouse, now a restaurant and coffee shop, in the world’s oldest ecovillage.

Just up the hill near the sculpture garden is the geothermally heated swimming pool and the original community dining hall, dating back to the early 1930s. It still bears the Anthroposophic-style, hand-carved wooden trim of that period. We choose instead to stroll downhill, past the constructed wetlands that handle sewage and greywater for this community of 70-80 residents. We’re headed to the greenhouses and nurseries that supply fresh vegetables year-round, and the plots of diverse young tree seedlings and saplings that are part of the ecovillage’s national reforestation efforts. Gummi, who guides our group through this sweet young forest of pine and birch, tells us how Sólheimer came into being.

When I used to think of Iceland I imagined a barren volcanic island covered with snow, populated by the descendants of the Vikings, still speaking a dialect close to the original Norse. This was the place, the *Sagas* said, that sent the Berserkers in long ships to the coasts of Europe where they raped, plundered, and pillaged, wearing nothing but sword belts and shields.

Though just 1300 miles from the North Pole, temperatures are pleasant, not much different from Boston. The difference, of course, is that Iceland’s winter lasts a bit longer than most places. Three hours of daily sunlight in December can give cabin fever new meaning. The old style of housing, still found in some remote fishing villages, was largely earth-sheltered. Driftwood posts and beams supported a slate or flat-stone-shingled roof

cloaked with turf, which extended to a high berm that enclosed three sides of the building. Tunnels sometimes connected houses throughout a village, making snow shoveling unnecessary.

Abundant geothermal energy and the national grid made this kind of hobbit-house obsolete in the second half of the 20th century, and today the country's 300,000 permanent residents are housed in separate rectilinear houses and apartment buildings in cities and towns that look much the same as many parts of Scandinavia.

The connection to Scandinavia goes back a long time. Although Iceland was originally settled by Celtic missionaries on their regular circuits between Ireland and the St. Lawrence valley from the sixth to eighth centuries, C.E., the Celts were run out by the Norse at the end of the ninth century. The Viking town of Islendingabok was built in 874 near what they called Smoky Bay ("Reykjavik" in Icelandic), taking the name from the steam venting from thermal springs.

The Viking clans assembled a parliament in 930 at Thingvellir, an outdoor amphitheater overlooking the Oxoro River. The Norse parliament members perched on canyon walls where the Atlantic Plate rises 70 meters as it continues to inch Iceland away from Europe. Over the centuries Denmark eventually came to rule Iceland, and remained until 1944, when the island was occupied by Nazi Germany. After the war, because of its valuable strategic position as a forward base for B-52s to reach Moscow over the Pole, Iceland became an independent country and host to NATO.

The island country has a harsh, rugged, landscape, with geysers, volcanoes, and cinder fields stretching from the base of mountain glaciers to its rocky shores. The overall warming of Earth's climate affects the island profoundly, with receding ice cover, frequent flooding, and the greater availability of crops and foliage. While throughout the 20th century visitors joked "If you get lost in an Icelandic forest, stand up," new stands of timber, much of it started as seedlings at Sólheimer, now cover many once-barren hillsides. Sea-grass is being planted on eroded soils to begin the reforestation succession.

At one time birch and willow covered up to a quarter of the country. Then overcutting trees or charcoal and the introduction of sheep (but you love those Icelandic sweaters don't you?) removed virtually the entire forest cover, causing severe erosion of the tillable land. People began abandoning their farms in the 18th century, and out-migration to Reykjavik continues today. Some 450 native plant species, brought by winds, currents, birds, or icebergs after the last Ice Age, have survived competition from the 90 exotic species introduced by the colonists. Unknown other species have been lost to history. Another tale can be told of the Icelandic fishing fleet

and the heedless decimation of the marine fisheries, from whales to cod. If ever a place needed ecovillages, it's Iceland.

Sólheimer is blessed by a hot spring that generates near boiling water at prodigious rates—12-15 gallons per second. This is more than adequate to provide central heating and hot water and to supply a large number of greenhouses that grow vegetables and nursery trees year-round. Gummi tells us the hot spring is what originally attracted Sesselja Hreindis Sigmundsdottir, the community's founder, to this remote location in the Icelandic countryside.

In the late 1920s Sesselja wanted to create an Anthroposophical care center for developmentally challenged children after becoming familiar with the philosophy of Rudolf Steiner and Karl König. She founded Sólheimer in July of 1930 at the age of 28. But raising handicapped children with “normal” children, bathing them in the warm springs, serving vegetables grown in winter, and giving everyone useful work as they matured scandalized her neighbors. Steady pressure from concerned government agencies culminated in an order from Parliament in 1946 to close her school. The order was never enforced however, because the Allies took Kaflavik air base from the Germans and dissolved the Parliament. Help from the Reykjavik Lions Club and other supporters allowed Sesselja to continue her work, and as more settlers arrived and took up her cause, the village grew.

Today nearly half of all residents are what might be considered handicapped, but all are able to work to the best of their abilities in Sólheimer's numerous production shops: woodcarving, candle making, ceramics, weaving, oil painting, herbal soap and shampoo, and paper making. Sólheimer encourages individual artistic expression and gives its residents ways to provide practical income for the community. Sólheimer also generates business from its tree nursery and organic and Biodynamic agriculture, including hydroponic vegetables in steam-heated greenhouses. Guest houses, the café, and the gift shop add to community income.

In 2002 Sólheimer opened Sesseljuhus (“Sesselja's House”) Iceland's first ecocenter, named in honor of Sesselja on the 100th anniversary of her birth (she passed on in 1974). The ecocenter's primary function is to offer environmentally-related courses in a setting that demonstrates green technology. The interior theater seats 100, and exhibit halls, smaller conference rooms and offices are all wired for Internet, sound, and film projection. The thoroughly earthquake-resistant building substitutes cement with rammed earth, and uses sustainably-harvested timber products for trusses, a variety of natural materials for insulation, recycled tire rubber for floorboards, and driftwood for

interior paneling and trim. It's 100 percent PVC-free. It has a wet composting toilet, energy-efficient lighting, earth-chilled and geothermal-warmed air circulation, and heat recovery, solar photovoltaic, and geothermal electricity systems, as well as several innovations not seen before.

One of these innovations is a five-stage reuse of geothermal water before final discharge. Water enters from a nearby hot well at 180° (83°C) (a new well was drilled after the 2000 earthquake reduced the flow of the original well). The water is harnessed by a Varmarafali bimetallic converter which passes cold water over an opposing microcircuit, which generates an electrical current based on the temperature differential. The initial prototype is small, but a next-stage 1 kW Varmarafali generator will eventually supply much of the power for the building's interior lighting, airflow, and film projection. Given Iceland's enormous geothermal and snow resources, practical, no-moving-parts devices like the Varmarafali converter which tap temperature differential are a significant advance over the steam-turbine methods currently used in Iceland.

Second-stage water leaves the Varmarafali at 176° (80°C) and is used for hot water in the kitchen and bathrooms, or alternatively run through the radiant heating system. Third-stage water is captured in the greywater drains and from radiator exhausts at 140° (60°C) and run through a heat exchanger for convective air flow at the underground point of entry for incoming air. Fourth-stage water at 95-105° (35-40°C) is sent under the outdoor walkways (for de-icing) and thence flows by gravity into the biological digestors and constructed wetlands where, still warm, it keeps useful microflora active year-round.

Petur Sveinbjarnarson, president of Sólheimer's nonprofit foundation, has done a magnificent effort of attracting favorable publicity and bringing aboard corporate sponsors for improvements like Sesseljuhus. When I last visited in 2002 Iceland's daily newspaper issued a full color, eight-page Sunday supplement on Sólheimer that went free with all the paper's editions throughout country. In 2002 an image of Sesselja at Sólheimer was honored on an Icelandic postage stamp. However, where there is acclaim there is also reaction, and Petur has suffered some unwarranted personal attacks on TV and radio. The complaints range from the outlandish: Sólheimer embezzles government money and drugs its handicapped residents so it needn't care for them, to the merely concerned: Sólheimer spends funds for ecological buildings and sculpture gardens instead of hiring staff to care for more disabled people. Recently there have also been some unfavorable audits by government agencies complaining about everything from the lack of uniformity in coffee cups to the low caregiver-to-patient ratios. There are

concerns that, as a tax-exempt nonprofit entity receiving government support, Sólheimer's industries compete with taxed for-profit businesses.

None of these complaints are new. Many are nearly identical to the complaints Sesselja dealt with in the 1930s and 1940s. However, Sólheimer is threatened by governmental controls, and Petur suggests that to assist with his efforts to resolve these issues, he welcomes donations, tours by visitors, and favorable media recognition, perhaps for being the oldest ecovillage, or perhaps for being maybe the best example of an ecovillage anywhere in the world.

Albert Bates is International Secretary of the Ecovillage Network of the Americas (ENA), and director of Ecovillage Training Center at The Farm in Tennessee and co-editor of this issue. ecovillage@thefarm.org.

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Pull quotes:

If ever a place needed ecovillages, it's Iceland.

The same batch of geothermal spring water generates electricity, supplies hot water to kitchen, bathrooms, and radiant heat, runs through a heat exchanger, and de-ices the walkways.

In 2001 an image of Sesselja at Sólheimer was honored on an Icelandic postage stamp.

sidebar:

Why Camphill Communities Are Ecovillages

by Jan Martin Bang 440 words

In Camphill Communities (which are also based on the Anthroposophical principles of Rudolf Steiner), most of us live in large extended families consisting of villagers (mentally handicapped people) and non-handicapped co-workers. We live together in large residences, sharing our lives, our meals, our living rooms, and our bathrooms. Everyone, co-workers and villagers alike, work in a variety of workplaces. In my community, Solborg Camphill Village in Norway, these include a Biodynamic farm,

extensive vegetable gardens, a bakery, a weavery, a large forest for timber and firewood, herb growing and drying, and a cheese-making workshop. I have eaten meals at Camphill communities where the table came from the carpentry shop, the tablecloth from the weavery, the plates and cups from the pottery, the candles (which are lit at every meal) from the candle shop, and virtually all the food, including bread, milk products, jams, vegetables, herb teas, honey, and meat and meat products.

This self-sufficiency is not an end in itself, but rather a way of saving money, and ensuring that each person is employed doing something that is useful to the village. In mainstream society, mentally handicapped people are usually marginalised and “looked after” and so denied an active and useful role. In the world of Camphill, every person has something to contribute, and feels self-worth even when fetching the milk or laying the table.

The farms and gardens in Camphill Villages are always Biodynamic, producing food of the highest quality while nurturing both soil and wildlife. Generally the organic waste from the kitchens is composted. Horse transport is quite common, being very efficient and low cost at a village scale. Many use a wastewater treatment method with ponds, reedbeds, and “Flow Form” water cascades. Buildings are largely constructed out of natural materials.

Camphill Villages are true ecovillages, and I believe we would score higher on GEN’s Community Sustainability Assessment Tool, both socially and ecologically, than many communities that actively identify themselves as ecovillages. (*See p. _.*) We are largely self-sufficient: We eat home grown, organic food; often recycle, compost, and treat our own waste; and attempt to integrate a spiritual world view into our everyday lives. We strive to create fellowship in our economic life, and a flexible equality into our social sphere. In short, Camphill ecovillages offer a self-reliant, deeply satisfying, sustainable way of life.

Excerpted from the author’s presentation for the International Communal Studies Association Conference, 2001.

Jan Martin Bang lived in a kibbutz in Israel for 16 years, where he was active in the Green Kibbutz movement. He and his family now live at Solborg Camphill Village in Norway.