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Whole Village 20725 Shaws Creek Road Alton, ON LON 1A0 (519) 941-1099

www.wholevillage.org info@wholevillage.org

The Whole Villager

Whole Village is a Sustainable Farm Community

We are a group of people from a variety of backgrounds, singles and families, who have come together to build an ecovillage, creating an ecologically and environmentally sensitive farming community based on biodynamic principles and practices.

The Whole Villager is our quarterly newsletter, designed to keep our associates and friends up to date about our project and to help them develop stronger ties with our farm community. We plan to share information regarding community living, sustainable agriculture and land sstewardship to promote our mission, vision and guiding pricniples.

Construction is Underway on Shaws Creek Road

Whole Village now possesses a building permit and the financing for construction. All the suites for phase one of the project have been spoken for by financially committed members. The site has been graded, filled and compacted and a 100 foot well has been dug. After six months of discussions to review the design, the costs, and all matters of environment- friendly engineering, the group held their final vote. As this newsletter goes to press, the construction is poised to begin officially on June 9th.

The construction team consists of Denis (the architect), Jeff (construction site superintendent) and Jan (contract administrator). Working together and with regular input from Whole Village members, this team will coordinate subcontractors, paid workers and a pool of volunteer laborers. Jeff has begun preparing on-site facilities for paid and unpaid laborers: a mess tent, composting outdoor toilets, and camping facilities which will enable some individuals to stay overnight on the farm.

Michelle is the Village contact for anyone interested in volunteering their time and talent to the construction. Volunteers will also be needed to help support the regular farming and land stewardship activities that are an on-going part of the project. Contact Michelle (905-866-4160, michelle@wholevillage.org) if you want to inquire about these volunteer opportunities.

Construction site is being prepared

Whole Villagers: A Profile of the People by Sue Berlove

Three years ago this August, I attended an orientation session at 20725 Shaws Creek Road, anxious to get involved with Whole Village. Over the next year which included participation in many long meetings--- I made several decisions about my involvement: First, I agreed to chair the Communications Mandate Group and edit the *Whole Villager*. Next, I decided that I was not ready to live on the farm at this point in my life. And finally—but most importantly—I realized that I had become very attached to this group of dedicated individuals and that they deserved my on-going support.

I want to introduce you to this remarkable group of people. The individuals who will be living on the farm range in age from 11 months to 65 years and represent single, married, gay and straight lifestyles. They are seemingly average Canadians who possess skills in farming, construction, teaching, banking, architecture, and computer technology.

Brenda, a 60 year old environmental activist and retired public school teacher, was raised on a farm in rural Ontario. She just sold her house in Burlington in preparation for moving to Whole Village to fulfill her dream to "walk the talk" of environmentalism. Two other teachers have been attracted to the project: Mary is a retired high school teacher; Andrew plans to continue teaching in French immersion.

The community also includes two families with kids. Vic and Jane have five children who still live at home. Jane wants to continue home schooling her children while Vic expects to commute from the farm to his high tech job in Waterloo. Walker and Ishta may immigrate to Canada from England with their baby Asher and see Whole Village as a place where they can raise a family with other environmentalists.

Several people are making the exodus from Toronto and big city life. Martha is a retired university professor; Mairy, her partner, is a computer professional who will continue to work from her home-based business . Jamie just sold his Toronto home, quit his managerial position with an automotive company and plans to make bee-keeping his focus of activity when he moves to Shaws Creek Road. Laszlo, a financial planner by profession, already lives up at the farm and contributes his calm rational personality to the many business decisions that are being made daily. Michelle has left her job in customer service at a large Toronto-based bakery and will move into the new building when it is complete. Meanwhile, she is using her people skills to coordinate the activity of the many volunteers who have been attracted to the project.

Peter, a retired university prof from Sudbury, and his wife Shantha, a Revenue Canada employee, host of a radio program, and a former restaurateur, will come to pursue an active lifestyle, with heritage seed production and educational projects as their main focus.

Denis is the project's architect with extensive experience in green building design. He has worked diligently over the past five years to render architectural drawings of the new building. This has involved producing several renditions of the proposed structure to reflect the wishes of the Villagers and liaising with the municipality to satisfy their zoning requirements. Denis plans to use his space in the new building for his architectural practice.

Jeff is the experienced farmer in the group. He has over 20 years experience in organic farming, land stewardship and environmental activism. Jeff has been working on behalf of Whole Village members to manage various aspects of the project over the past five years.

There are many other people who play important roles in the community. At least four should be mentioned by name, since they are living in the old farmhouse: Alta, the master-cook and guardian of animals, Shelley, the environmental activist carpenter, and Jay and Laura, responsible for the CSA garden this year.

What makes this group so unique is their willingness to make significant life changes and their commitment to each other. They collectively possess patience, perseverance and dedication to community-building and sustainability. I have seen the group leap many hurdles-- practical, political and interpersonal. At each phase of development they have been able to bring their differences to the table and to channel their collective energy into building a shared dream. I hope reading this snapshot has drawn you closer to the project and motivates you to visit the farm, meet the members and give some of your time to the project. I think you will find them as inspirational a group as I do.

A profile of the people:

Educational Partnership Benefits Local Highschool Students

Whole Village and staff at Robert F. Hall Catholic Secondary School (in Caledon East) developed a unique partnership program this spring—one that they hope will be ongoing. The school chaplain and teaching staff were interested in creating some type of spiritual retreat for their students, one that would help them develop a closer connection with the earth and learn about sustainability first hand. School staff and Whole Village members cooperated in the development of a unique one day program. Students were introduced to the Whole Village project with a slide presentation on Earth Day and invited to spend a school day out on the farm. Eight groups of students came out to the farm on different days during the month of May.

The program consisted of small group activities that exposed the students to various aspects of the farm. They had the opportunity to participate in gardening, composting and soil preparation, transplanting trees, construction of ecological buildings and hospitality. Each of these activities offered students the

Students learning on the job

opportunity to learn about environmentally friendly practices and the values associated with sustainability.

At the end of the project, all those involved felt that it had been a rewarding experience and that the students had gained a great deal of insight into environmental issues. Both teachers and students expressed interest in further personal involvement in the project. Whole Villagers felt a sense of accomplishment in having successfully hosted their first educational initiative, while also building community ties.

ECO-FEATURES OF AN ENVIRONMENTALLY FRIENDLY FARMHOUSE

From the project's beginning, Whole Villagers have been committed to creating housing that would reduce their collective ecological footprint. The group has always hoped to be in a position to set an example for others wishing to embark on eco-friendly construction. However, new ecofriendly technologies are often expensive to utilize and the cost of construction is an important consideration when the individuals involved have modest financial resources. Juggling these sometimes contradictory objectives has been a challenge which the community has faced head on.

So, what kind of technology will Whole Village be employing? At the end of the day, how close have they come to realizing their green dream?

There are several essential engineering considerations that must be addressed in creating a green structure. These include: establishing clean sources of energy to heat and power the building, reducing energy loss, and using water and treating waste in ways that preserve the existing ecosystem.

<u>Generating Heat.</u> Active Solar technology will be used to heat the building and produce warm water. This involves constructing solar hot water panels to collect heat from the sun, using this heat as it is available (on sunny days) and storing surplus heat in large insulated tanks for use when needed.

Windows are being installed in strategic locations to allow the direct heat of the sun to penetrate the living space. The windows have fiberglass frames and will be double or triple glazed with a low E coating. They are filled with argon gas between the layers to help moderate excessive warmth in summer and protect the inhabitant from the bitter winter winds .

There will be no basement on this building. Instead, the floor contains a system of hydronic (radiant) heating. Water mixed with antifreeze is warmed by a central heat pump and circulated through 20,000 feet of tubing that is built into the floor. The heat pump is the main source of heat for the building. The insulation rating under the floor is equivalent to R20. And the final technology being used to heat the building is a masonry heater, which will be installed in the large common area . This heater is an extremely efficient wood-burning unit that is fired twice a day and will augment the heat supply in winter.

<u>Decreasing heat loss</u> is a secondary strategy used in passive solar technology. The walls, floors and roof will be constructed with special structural insulated panels. These 4 by 9 foot panels are 9 inches thick and designed to carry the weight of the building while minimizing heat loss. Unlike conventional walls, these panels are built without wood struts and completely filled with polystyrene foam. This eliminates convection currents in and through the walls while preventing heat loss by conduction (called thermal bridging). The wall insulation is rated at R35.

The building will have a "green roof." When completed, this structure allows for particular kinds of plants to actually grow on the roof. Once the special structural insulated roof panels have been erected, there will be several layers added on top to allow for waterproofing, drainage, the creation of a root barrier and formulation of a growing medium comprised of soil, peat and vermiculite. This design will allow the building to blend into its surroundings while remaining cool in the summer and warm in the winter. This gives the complete roof assembly an insulation rating of R50.

Electricity will be needed to power energy efficient light fixtures, appliances and the central heatpump. It will be supplied by a set of solar photovoltaic panels that are made from silicon and designed to produce up to 30 kWh of electricity a day. The electricity produced by the PV panels will be augmented by a wind generator that is expected to produce up to 30 % of the electrical power for the building. Whole Village will still be connected to Hydro One's electrical grid and will buy the extra electricity it needs. Any surplus power will run the electrical meter backwards as it flows onto the main grid. A system of net metering monitors the amount of electricity provided by Hydro and calculates the amount of energy returned to the grid. It is possible that the surplus will key the net usage to nil.

Water supply and waste treatment: A 100 foot well has already been drilled on the property to access groundwater for drinking. The group debated the use of composting toilets and decided against using this technology. Instead, low flush toilets will be installed. The waste will be treated with one septic tank, to provide primary sewage treatment. Instead of constructing a tile bed as the second stage of treatment, an engineered wetland system will be created. This involves creating three "underground" cells that are each 36 square meters in size and composed of layers of sand and gravel. The cells as constructed are 1.5 meters tall and will be incorporated into the landscape as small grassy knolls. This method of waste treatment is well proven and will be reviewed by the Ministry of Environment.

There have been compromises required, in order to address the many practical aspects of constructing a new building. The environmentally friendly building, once completed, will represent the best efforts of a dedicated group of environmentalists, and the goal of living lightly on the land has been met to the satisfaction of Whole Village members. This seems like a positive step in the community's goal to "reduce their collective ecological footprint."

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Architect's rendering of the floor plan for the eco-friendly farmhouse

Photos of the Construction Site and Community Life:

Grading the location of the new farmhouse

Planting fruit trees during a workbee

Moving firewood

Whole Village receives "Conservation Award of Merit" from Credit Valley Conservation

Fresh Organic Produce Available

This year's community vegetable garden is being supported by 25 CSA members who have each purchased a share of the season's produce. If you want to buy a share, contact Jay at the farm (or at wvfarm@direcway.com). Jay will also be selling produce every Saturday at Orangeville's Farmers' Market. So, if you want to buy Whole Village produce and you aren't a member, look for him in Orangeville!